

Ethiopia Socioeconomic Panel Survey 2021/22

SURVEY REPORT

September 2023



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Table of Contents

Acknowledgements	x
List of Acronyms	xi

Chapter I **Survey Objectives, Design, and Implementation 1**

1.1 Background and Objectives	2
1.2 Survey Design	3
1.3 Implementation: Training and Fieldwork.....	6
1.4 Organization of the Report	6
List of Tables for Chapter I.....	7

Chapter II **Education 9**

2.1 Access to Education.....	10
2.1.1 School Enrollment	10
2.1.2 Out of School.....	13
2.1.3 School Types	14
2.1.4 School Proximity	15
2.1.5 Absenteeism	16
2.2 Literacy	17
2.3 School Expenses	19
List of Tables for Chapter II.....	21

Chapter III **Health 27**

3.1 Access to Health	28
3.1.1 Prevalence of Illness	28
3.1.2 Disability.....	29
3.1.3 Child Undernutrition.....	29
3.2 Healthcare Services.....	30
3.3 Health Insurance Penetration and Health Expenditure	32
List of Tables for Chapter III.....	34

Chapter IV	
Water, Sanitation and Hygiene (WASH)	39
4.1 Drinking Water.....	40
4.1.1 Source of Drinking Water	40
4.1.2 Accessibility	42
4.1.3 Sufficiency.....	44
4.2 Sanitation.....	45
4.3 Hygiene.....	48
List of Tables for Chapter IV.....	49
Chapter V	
Household Energy Profile and Use	53
5.1 Access to Electricity.....	54
5.1.1 Source of Light	54
5.1.2 Source of Fuel.....	56
5.2 Energy Expenditure.....	58
5.3 Electric Power Outages	60
List of Tables for Chapter V.....	62
Chapter VI	
Time Use, Employment, Nonfarm Enterprises and Other Income.....	65
6.1 Time Use	66
6.1.1 Collecting Water and Fuelwood	66
6.1.2 Agriculture Activity.....	67
6.1.3 Nonfarm Enterprise Activities.....	67
6.1.4 Casual, Part-time and Temporary Works.....	67
6.1.5 Work for Salary and Wages.....	68
6.2 Employment.....	68
6.2.1 Total Employment.....	68
6.2.2 Wage Employment	70
6.2.3 Self-employment	72
6.3 Non-Farm Household Enterprise	73
6.3.1 Ownership, Characteristics and Business Operation.....	73
6.3.2 Marketing.....	75
6.3.3 Constraints to Growth.....	76
6.4 Other Income	77
List of Tables for Chapter VI.....	78

Chapter VII	
Consumption, Food Security and Shocks	89
7.1 Household Expenditure.....	90
7.1.1 Total Annual Consumption Expenditure	90
7.1.2 Food Items.....	90
7.1.3 Frequently Purchased Non-Food Food Items	92
7.1.4 Clothing, Household Durables, Ceremonial Expenses, Donations and Contributions.....	93
7.2 Food Insecurity Experience.....	94
7.3 Shocks and Coping Mechanisms.....	95
7.3.1 Shocks.....	95
7.3.2 Coping Mechanisms.....	96
List of Tables for Chapter VII.....	97
Chapter VIII	
Agriculture.....	105
8.1 Agriculture Households	106
8.2 Crop Farming.....	107
8.2.1 Land Tenure	107
8.2.2 Fields and Field Size	107
8.2.3 Use of Inputs.....	108
8.2.5 Crop Disposition	111
8.3 Crop Damage and Prevention Practices.....	112
8.3.1 Preharvest Crop Damages	112
8.3.2 Postharvest Crop Loss and Reasons	113
8.4 Livestock.....	114
8.4.1 Livestock Types Owned.....	114
8.4.2 Livestock Disposition	115
8.4.3 Livestock Vaccination Coverage	115
List of Tables for Chapter VIII.....	116
Chapter IX	
Agriculture by Urban Households	123
9.1 Urban Households in Agricultural Activities	124
9.2 Crop Farming.....	126
9.2.1 Land Tenure and Crop Fields	126
9.2.2 Crop Planting Practices.....	127
9.2.3 Input Use	127
9.3 Livestock Farming	128
List of Tables for Chapter IX.....	130

List of Figures

Figure 2.1	School enrolled population, by gender, over time.....	10
Figure 2.2	Preprimary enrollment (age 4-6 years), by place and gender, over time	11
Figure 2.3a	In school and out of school, girls aged 7-18 years, by place, over time.....	12
Figure 2.3b	In school and out of school, boys aged 7-18 years, by place, over time	12
Figure 2.4	Intake and enrollment rate by place, over time	12
Figure 2.5a	Out of school children (7-18 years old), by place and region, 2022	13
Figure 2.5b	Out of school children (7-18 years old), by region and gender, 2022	13
Figure 2.6a	Type of school, by place and wealth, 2019	14
Figure 2.6b	Type of school, by place and wealth, 2022	14
Figure 2.7a	Distance to school for primary students, by place, over time	15
Figure 2.7b	Distance to school for secondary students, by place, over time	15
Figure 2.8a	Proportion of absenteeism, by place, over time	16
Figure 2.8b	Reason for absenteeism, by place, over time	16
Figure 2.9a	Female literacy rate, by place and by wealth, over time.....	17
Figure 2.9b	Male literacy rate, by place and by wealth, over time	17
Figure 2.9c	Literacy rate, by place and age, 2022.....	18
Figure 2.9d	Literacy rate, by gender and age, 2022	18
Figure 2.10a	Average household education spending per pupil (spatially adjusted), by level, place, and gender, 2022	19
Figure 2.10b	Average household education spending per pupil (spatially adjusted), by level and region, 2022	20
Figure 3.1a	Prevalence of self-reported illness, percent, by place, over time	28
Figure 3.1b	Prevalence of self-reported illness, percent, by wealth, over time	28
Figure 3.1c	Prevalence of self-reported illness, percent, by place, age, and gender, 2022	29
Figure 3.1d	Child stunting, wasting and underweight, by place and gender, over time	30
Figure 3.2a	Access to healthcare service, by place and wealth, 2022	31
Figure 3.2b	Type of health facility, by place, over time	31
Figure 3.3a	Health insurance penetration, by place, over time.....	32
Figure 3.3b	Community health insurance penetration, by region, over time	32
Figure 3.4a	Average household health spending per visitor member (spatially adjusted), by age and place, 2022	33
Figure 3.4b	Average household health spending per visitor member (spatially adjusted), by age and region, 2022	33

Figure 4.1	Access to drinking water, over time.....	40
Figure 4.2a	Source of drinking water, by place, over time.....	41
Figure 4.2b	Source of drinking water, by region, 2022	41
Figure 4.2c	Source of drinking water in dry and rainy seasons, by wealth, 2022	42
Figure 4.3a	Drinking water accessibility, by place, over time	43
Figure 4.3b	Drinking water accessibility, by wealth, 2022	43
Figure 4.4a	Improved water sufficiency, by place, over time	44
Figure 4.4b	Improved water sufficiency, by region, 2022.....	44
Figure 4.4c	Sufficiency of water from improved sources, by wealth, 2022	45
Figure 4.4d	Sufficiency of water from improved sources, by population density, 2022	45
Figure 4.5a	Access to sanitation, by place, over time.....	46
Figure 4.5b	Access to sanitation, by region, 2022.....	46
Figure 4.5c	Access to sanitation, by wealth, 2022	47
Figure 4.6a	Shared toilets (improved and unimproved), by place and wealth, 2022	47
Figure 4.6b	Shared toilets (improved only), by place and wealth, 2022.....	47
Figure 4.7a	Access to hygiene, by place, 2022.....	48
Figure 4.7b	Access to hygiene, by wealth, 2022	48
Figure 5.1	Access to electricity, over time	54
Figure 5.2	Household source of light, by place, over time	55
Figure 5.3a	Household source of light, by wealth, 2022	56
Figure 5.3b	Household source of light, by housing characteristics, 2022	56
Figure 5.4a	Household source of fuel, by place, over time	57
Figure 5.4b	Household source of fuel, by wealth, 2022	57
Figure 5.4c	Household source of fuel, by housing characteristics, 2022	57
Figure 5.5a	Share of households reported energy expenses, by place, over time	58
Figure 5.5b	Average energy expenditure, by place, over time (in 2019 prices).....	58
Figure 5.6a	Expenditure share of energy sources to the total energy expenditure, by place, 2022.....	59
Figure 5.6b	Expenditure share of energy sources to the total energy expenditure, by wealth, 2022	59
Figure 5.7	Electric power outage frequency, by place, over time	61
Figure 5.8	Electric power outage frequency, by region, over time	61
Figure 6.1a	Time spent on collecting water and fuelwood, by age, place, wealth, and gender, 2022	66
Figure 6.1b	Engagement in various activities in the last seven days, by age and gender, 2022.....	67

Figure 6.2a	Employment, by place and gender, over time	69
Figure 6.2b	Employment and gender gap, by region, 2022.....	69
Figure 6.3a	Employment by economic sectors, by place and gender, over time	69
Figure 6.3b	Distribution of employment by economic sectors, by place and wealth, over time	69
Figure 6.4a	Wage employment, by gender and wealth, over time	70
Figure 6.4b	Wage employment, by age and gender, 2022	70
Figure 6.5a	Wage employment, by wealth and industry type, 2022	71
Figure 6.5b	Annual wage value in 2019 price by sector, over time.....	71
Figure 6.6a	Type of employment, by place, gender, and wealth, 2022	72
Figure 6.6b	Self-employment, by industry and wealth, 2022	72
Figure 6.7a	Nonfarm enterprises ownership by place, by wealth, over time	73
Figure 6.7b	Nonfarm enterprises ownership by region, over time.....	73
Figure 6.8	Nonfarm enterprises age, by ownership gender, 2022.....	74
Figure 6.9a	Nonfarm enterprises' working place, over time.....	75
Figure 6.9b	Source of start-up capital for nonfarm enterprises, 2022.....	75
Figure 6.10a	Market destinations for household enterprises, 2022	76
Figure 6.10b	Seasonal business operation, 2022.....	76
Figure 6.11	Constraints to operation and growth of NFEs, by place, 2022.....	76
Figure 6.12a	Households receiving other incomes, by place and wealth, over time	77
Figure 6.12b	Source of other incomes, over time	77
Figure 7.1	Average annual household consumption expenditure per adult equivalent in Birr, over time	91
Figure 7.2	Food items consumed by households, over time (Share of the food item to the total food consumption budget; top 15 items; 7 days recall)	91
Figure 7.3	Most frequently purchased non-food items, 30 days recall, over time.....	92
Figure 7.4a	Proportion of households who purchased non-food items & made contributions, 12 months recall, over time.....	93
Figure 7.4b	Average annual expenditure on less frequently purchased non-food items & contributions, over time.....	94
Figure 7.5	Prevalence rates of food insecurity experience (% of households), 2022.....	95
Figure 7.6	Top 10 shocks, over time.....	96
Figure 8.1	Households participating in agricultural activities, over time	106
Figure 8.2	Land tenure of farm households, over time	107
Figure 8.3a	Average number of field holdings, over time	108

Figure 8.3b	Average size of land holding, over time.....	108
Figure 8.4a	Households that used improved seed for at least one crop, over time.....	108
Figure 8.4b	Households that used improved seeds on at least one plot, by crop type, over time	108
Figure 8.5a	Households that applied fertilizer on at least one crop field, over time	109
Figure 8.5b	Households that applied fertilizer, by crop type and fertilizer type, over time.....	109
Figure 8.6a	Households that applied chemicals in at least one crop field, over time.....	110
Figure 8.6b	Households that applied chemicals in at least one crop field, by crop type, over time	110
Figure 8.7	Utilization of harvest, by major crops, 2021/22	111
Figure 8.8a	Prevalence of preharvest crop damage, 2021/22.....	112
Figure 8.8b	Reasons for crop damage, 2021/22	112
Figure 8.9a	Occurrence of postharvest crop loss, 2021/22	113
Figure 8.9b	Share of postharvest loss from total harvest, 2021/22	113
Figure 8.10	Livestock-owning households by type, over time.....	114
Figure 8.11	Livestock breed (exotic hybrid), over time	114
Figure 8.12	Livestock vaccinations and other preventive care, over time	115
Figure 9.1	Urban households participating in any farming activity, 2021/22	124
Figure 9.2a	Urban households participating in crop farming, 2021/22	125
Figure 9.2b	Urban households participating in livestock farming, 2021/22.....	125
Figure 9.3a	Land tenure type, by place, 2021/22.....	126
Figure 9.3b	Average number of fields per household, by place, 2021/22.....	126
Figure 9.4	Planting practices: share of plots covered by crops, 2021/22.....	127
Figure 9.5a	Crop fields that applied improved seeds, by place of residence and crop type, 2021/22.....	128
Figure 9.5b	Crop fields that applied fertilizers, by place of residence and crop type, 2021/22.....	128
Figure 9.6	Types of livestock holdings of urban households, 2021/22	129
Figure 9.7	Livestock breed (exotic hybrid), 2021/22	129
Figure 9.8	Purpose of livestock farming, by livestock type, 2021/22	129

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List of Acronyms

AgSS	Agriculture Sample Survey
BMGF	Bill and Melinda Gates Foundation
CAPI	Computer Assisted Personal Interview
EA	Enumeration Area
ERSS	Ethiopia Rural Socioeconomic Survey
ESPS	Ethiopia Socioeconomic Panel Survey
ESS	Ethiopian Statistical Service
LSMS	Living Standards Measurement Study
LSMS-ISA	Living Standards Measurement Study – Integrated Surveys on Agriculture
WASH	Water, Sanitation and Hygiene



Chapter I

Survey Objectives, Design, and Implementation

Highlights

- The Ethiopia Socioeconomic Panel Survey (ESPS) is a collaborative project of the Ethiopian Statistical Service (ESS) and the World Bank.
- The project is generously supported by the Bill and Melinda Gates Foundation through the Living Standards Measurement Study–Integrated Surveys on Agriculture (LSMS-ISA) project.
- The survey is integrated with the ESS’s Annual Agricultural Sample Survey (AgSS); the rural households surveyed in the ESPS are a subsample of the AgSS sample households.
- The objectives of the ESPS include development of an innovative model for collecting agricultural data, interinstitutional collaboration, and comprehensive analysis of welfare indicators and socioeconomic characteristics.
- The 2021/22 ESPS (ESPS-5) is a follow-up of the 2018/19 survey (ESPS-4). It interviewed 4,999 households.
- This report presents the results of ESPS-5 and dynamics of selected indicators.

1.1 BACKGROUND AND OBJECTIVES

BOX A. OBJECTIVES OF THE ESPS

Specifically, the ESPS is designed to:

- Develop an innovative model for collecting agricultural data in conjunction with household data;
- Build capacity to generate a sustainable system for producing accurate and timely information on households in Ethiopia;
- Inform a model of interinstitutional collaboration between the Ethiopian Statistical Service, relevant federal and local government agencies, and national and international research and development partners; and
- Generate a comprehensive analysis of the income, well-being, and socioeconomic characteristics of households in Ethiopia.

The Ethiopian Socioeconomic Panel Survey (ESPS) is a collaboration of the Ethiopian Statistical Service (formerly Central Statistics Agency) and the World Bank. It is financially supported by the Bill and Melinda Gates Foundation (BMGF) through the Living Standards Measurement Study—Integrated Surveys on Agriculture (LSMS-ISA) project.

The objective of the LSMS-ISA is to collect multi-topic, household-level panel data to improve agriculture statistics and generate a clearer understanding of the link between agriculture and other sectors of the economy (Box A). The project also aims to build capacity, share knowledge across countries, and improve survey methodologies and technology (Box B).

BOX B. INNOVATIONS IN THE ESPS

The ESPS incorporates several innovative approaches:

- Integrating household welfare and agricultural data;
- Creating a panel data set that can be used to study welfare dynamics, the role of agriculture in development, and changes over time in health, education, and work activities;
- Collecting information on the network of buyers and sellers with which a household interacts;
- Expanding the use of GPS units to measure agricultural land areas;
- Involving multiple actors from government, academia, and the donor community in drafting and implementing the survey and analyzing the results;
- Applying computer-assisted personal interviewing (CAPI); and
- Creating publicly available micro datasets for researchers and policy makers.

The fifth wave was implemented after the onset of the COVID-19 pandemic, and during a period of conflict, drought, as well as a locust invasion in some parts of the country. The circumstances impacted the geographic coverage of this round. As a result, the survey was not implemented in the Tigray region and a few other places due to security reasons.

The various questionnaires included in the survey collected information at the individual, household, and community levels. In addition, the agriculture questionnaire collected detailed agronomic information at the plot level. The information covered a wide array of topics, including education, health, water and sanitation, energy, financial inclusion and digital finance, employment, crop and livestock agriculture, household-owned businesses, household transfers and taxes, consumption, food insecurity experience, shocks, and coping strategies. By highlighting the progress made since the 2018/19 survey, this report presents key findings on selected areas of households' socioeconomic statistics. It is very important to take into account the implications of the COVID-19 pandemic, as well as the impacts of the conflict, drought, and locust invasion when comparing the results of ESPS-4 (2018/19) and ESPS-5 (2021/22).

1.2 SURVEY DESIGN

A. Sampling

The ESPS is designed to collect panel data on a range of household and community characteristics linked to agricultural activities, in both rural and urban areas. The first wave was implemented in 2011/12, the second wave in 2013/14, and the third wave in 2015/16. The first wave (originally referred to as the Ethiopia Rural Socioeconomic Survey [ERSS], but since retitled ESPS-1), covered only rural and small-town areas. The second and the third waves, ESPS-2 and ESPS-3, added samples from large town areas.¹ ESPS-2 and ESPS-3 are nationally representative.

Because the panel was refreshed in the 2018/19 round, ESPS-4 is the first wave or baseline of a new panel and ESPS-5 is the second round using the refreshed sample. Sampling for ESPS-4 was based on the 2018 pre-census cartographic update of enumeration areas (EAs). The ESPS-4 sample is a two-stage stratified probability sample. Rural ESPS-4 EAs are the subsample of the AgSS² EA sample.. The first stage of sampling for urban areas was selecting EAs directly from the urban EAs in each region using probability proportional to size (PPS) systematically. This is designed to automatically

¹ The ESS defines small towns based on estimates from the 2007 Population Census; a town with fewer residents than 10,000 is categorized as small; all others are considered large. The small and large town classification used in this survey is due to the expansion of the sample size between Waves 1 and 2.

² The AgSS EAs were selected based on probability proportional to the size of population (PPS) from rural EA sample, which is stratified by zone. The first stage of sampling in rural areas entailed using simple random sampling to select EAs—the primary sampling units—from the 2018 AgSS EA sample.

produce a proportional allocation of each region's urban sample by zone. Once the sample EAs were selected, they were categorized as urban or rural using power allocation, which is closer to proportional allocation.

The second stage of sampling involved using systematic random sampling to select households to be surveyed in each EA. From the rural EAs, a subsample of 10 agricultural households was selected from the households selected for the AgSS,³ and two nonagricultural households were selected from the non-agriculture households in each EA. Note that in ESPS-4, 10 agricultural households per EA were sampled even when there was only one or when there were no non-agriculture households.⁴

For urban areas, a total of 15 households were selected per EA regardless of the households' economic activity. The households were selected using systematic random sampling from the total households listed in that EA.

ESPS-4 planned to interview 7,527 households from 565 enumeration areas (EAs). Table 1.1a shows the distribution of sample EAs and households by region and urban and rural strata: 316 EAs were sampled from the rural AgSS and 249 from the urban EAs. A total of 6,894 households from 535 EAs were interviewed (Table 1.1b).⁵

ESPS-5 covered 438 EAs and interviewed 4,999 households (Table 1.1b). The survey was not implemented in the Tigray region and some other EAs due to security reasons. Detailed information about the fieldwork implementation is provided in the survey's Basic Information Document.⁶

B. Questionnaires

The ESPS-5 survey consisted of the following questionnaires. The *household questionnaire* was administered to all households in the sample, and several modules were administered to each eligible household member. The household questionnaire elicits information on education; health (including anthropometric measurements for children); time use and labor; financial inclusion; ownership of and user rights in assets; food and nonfood expenditures; household nonfarm activities and entrepreneurship; shocks; safety nets; housing conditions; physical and financial assets; credit; tax and

³ For AgSS, random systematic sampling was used to pick 20 agriculture households, defined as households that are involved in farming, livestock activities, or both.

⁴ In previous waves, if there was only one, or there were no non-agriculture households in an EA, two more agricultural households were selected and interviewed. This means the number of agriculture households surveyed per EA varies with the number of non-agriculture households in the EA.

⁵ Out of the total 6,894 households 6,770 were interviewed with all modules and the remaining 124 households were interviewed only during the post-planting visit.

⁶ The Basic Information Document aims to provide detailed information about how the 2021/22 ESPS was conducted and discussed the sampling design, survey implementation, challenges and recommendations, data management, and public data access. <https://microdata.worldbank.org/index.php/catalog/3823/download/49208>

transfer; and other sources of household income. In addition, the following new topics were included in this round: dietary quality, food insecurity experience scale, agriculture in urban areas, and climate risk perception. Household location is georeferenced in order for ESPS data to be seamlessly added to other geographic data sets in the future.

The *community questionnaire* was administered to a group of community members to collect information on the socioeconomic indicators of the EAs where sample households are based.⁷ The community questionnaire elicits information on infrastructure; community organizations; resource management; changes in the community; key events; community needs, actions, and achievements; and local retail prices. In addition, a module on agricultural mechanization and video-based agricultural extension was added in this round.

The three *agriculture questionnaires—post-planting, post-harvest, and livestock questionnaires*—were administered to all household members engaged in agricultural activities. An agricultural *holder* is a person who exercises management control over the operations of a holding and makes the major decisions about resource allocation. Holders have technical expertise and are economically responsible for the holding, which they may operate as owner and/or manager. Thus, it is possible to have more than one holder in a single household—the owner and the manager, and in those cases, the agriculture questionnaire is administered to both.

The post-planting and post-harvest questionnaires were completed in those households where at least one member was engaged in crop farming on land, whether owned or rented. Both questionnaires collected information on land ownership and use; farm labor; inputs use; GPS land area measurement and coordinates of household fields; agriculture capital; irrigation; and crop harvest and utilization.

The livestock questionnaire interviews were used in households where at least one member was engaged in raising livestock. Information on animal holdings and costs; as well as the production, cost, and sales of livestock byproducts were collected.

⁷ Because the community questionnaire does not collect sociological information, the data cannot be used to represent communities in Ethiopia. It simply collects information that is common to the EA households selected for inclusion in the survey.

1.3 IMPLEMENTATION: TRAINING AND FIELDWORK

A. Training

Six training sessions were held for ESPS-5: two (in July 2021 and February 2022) for Training of Trainers and four (in August, September, and October 2021 and March 2022) for field staff enumerators and supervisors. All six sessions emphasized not only the content of the questionnaires and *Survey Solutions* CAPI, but also their practical applications in data collection and supervision. All the trainees had survey and CAPI experience, and most had participated in other ESS surveys.

B. Fieldwork

ESPS-5 was conducted in two visits, following the AgSS field schedule and in a single visit in urban areas. For rural households, in the first visit which occurred between September 2021 and January 2022, the post-planting agriculture, livestock, and crop cut questionnaires were administered. In the second visit, between April and June 2022, the post-harvest agriculture, household, and community questionnaires were administered. For urban households, there was a single visit between April and June 2022 to administer the household and community questionnaires.

1.4 ORGANIZATION OF THE REPORT

This report is a statistical abstract that describes the results related to some of the major socioeconomic variables covered in the 2021/22 survey. In addition, it presents the dynamics of selected indicators by comparing the 2018/19 and 2021/22 values. The report is organized as follows:⁸

- Chapter II – Education
- Chapter III – Health
- Chapter IV – Water, Sanitation and Hygiene
- Chapter V – Energy
- Chapter VI – Time Use, Labor Employment, Non-Farm Enterprises and Other Income
- Chapter VII – Consumption, Food Security and Shocks
- Chapter VIII – Agriculture
- Chapter IX – Agriculture by Urban Households

⁸ This report is supplemented by two other reports based on the ESPS-5 data that cover financial inclusion and the tax and transfer modules.

LIST OF TABLES FOR CHAPTER I

TABLE 1.1A
Baseline Sample EAs and Households by Region and by Urban and Rural

Region	Urban		Rural		Total	
	Sample EAs	Sample Households	Sample EAs	Sample Households	Sample EAs	Sample Households
Tigray	19	285	35	420	54	705
Afar	15	225	31	372	46	597
Amhara	19	285	43	516	62	801
Oromia	20	300	45	540	65	840
Somali	17	255	36	432	53	687
Benishangul Gumuz	16	240	30	360	46	600
SNNP	18	270	42	504	60	774
Gambella	20	300	22	264	42	564
Harari	24	360	18	216	42	576
Addis Ababa	53	795	-	-	53	795
Dire Dawa	28	420	14	168	42	588
National	249	3,735	316	3,792	565	7,527

Source: ESPS 5.

TABLE 1.1B
Completed Interviews of EAs and Households by Region and by Urban and Rural

Region	ESPS-4 (2018/19)						ESPS-5 (2021/22)					
	Urban		Rural		Total		Urban		Rural		Total	
	EAs	HHs	EAs	HHs	EAs	HHs	EAs	HHs	EAs	HHs	EAs	HHs
Tigray	19	283	35	398	54	681	-	-	-	-	-	-
Afar	15	225	29	321	44	546	11	133	11	119	22	252
Amhara	18	271	43	487	61	758	19	254	37	403	56	657
Oromia	20	300	45	486	65	786	19	249	38	398	57	647
Somali	17	255	35	356	52	611	17	208	34	339	51	547
Benishangul Gumuz	13	195	19	207	32	402	8	100	10	106	18	206
SNNP	18	269	40	423	58	692	17	224	42	433	59	657
Gambella	20	300	19	209	39	509	20	235	19	189	39	424
Harari	24	360	18	191	42	551	23	256	18	188	41	444
Addis Ababa	52	778	-	-	52	778	53	644	-	-	53	644
Dire Dawa	28	419	14	161	42	580	28	371	14	150	42	521
National	244	3,655	297	3,239	541	6,894	215	2,674	223	2,325	438	4,999

Source: ESPS 5.



Chapter II

Education

🔍 Highlights

- Total enrollment rate of the school-age population remained at 64% between 2019 and 2022. However, in urban areas, the proportion of boys and girls enrolled in primary education increased by about eight percentage points over the same period.
- In 2022, the preprimary enrollment rate for ages 4 to 6 was 11% for both sexes. A wider gap exists between rural (10%) and urban (40%) areas.
- About 36% of the school-age population was out of school. In rural areas, 40% of the school-age population was out of school, and this remained unchanged between 2019 and 2022. In urban areas, the out of school population for both boys and girls declined from 25% to 18% over the same period.
- Government schools remained the primary destination for students (95%) over the period.
- In 2022, about 71% of primary and 65% of secondary students reached the nearest school in less than 30 minutes.
- Absenteeism was common in rural areas, increasing from 10% in 2019 to 15% in 2022.
- The literacy rate is higher among males, younger household members, and in urban areas.
- About 96% of households with children enrolled in school incurred education expenses in 2022. The average expenditure for those who paid was 2,612 Birr.

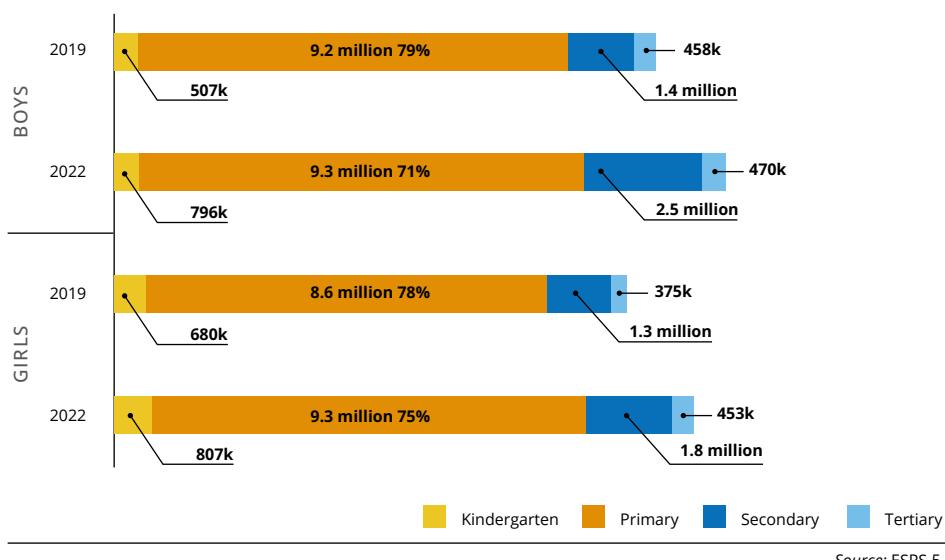
2.1 ACCESS TO EDUCATION

2.1.1 School Enrollment

As of 2022, there were 25.4 million students enrolled in school, compared to 22.6 million in 2019 (Figure 2.1). Of the total student population, primary school students made up 79% in 2019 and 73% in 2022, while secondary school students increased from 13% in 2019 to 17% by 2022. Consistently, the proportion of boys' enrollment in primary school decreased from 79% in 2019 to 71% in 2022, while their enrollment in secondary school increased from 12% to 19% over the same period.

In terms of total enrollment, the number of students in kindergarten or 'O-Class' increased from 1.2 million in 2019 to 1.6 million in 2022 (Figure 2.1). Notably, the enrollment of boys went up by 57% compared to girls, which increased by 19%.

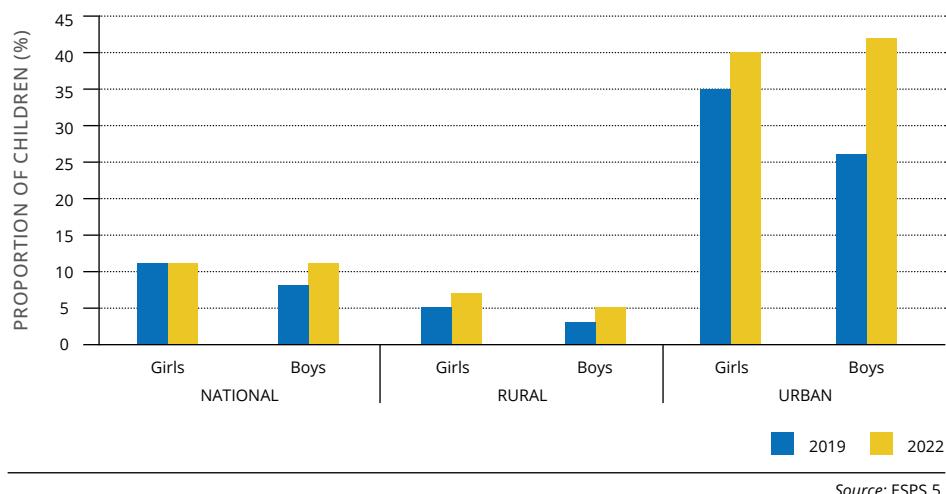
FIGURE 2.1
School enrolled population, by gender, over time



A. Preprimary school enrollment

In 2022, the preprimary enrollment rate for official school-age children (4-6 years old) was 11% for both boys and girls (Figure 2.2). This is an increase from 8% in 2019 for boys, while the enrollment of girls did not change.

FIGURE 2.2
Preprimary enrollment (age 4-6 years), by place and gender, over time



Source: ESPS 5.

There is a wider gap in access to preprimary schooling between rural and urban children. For example, in 2022, less than 10% of rural children were enrolled in preprimary education, while four out of ten boys and girls in urban areas were enrolled in preprimary school. Moreover, preprimary enrollment has been increasing in urban areas; for example, the enrollment rate for boys increased from 26% in 2019 to 42% in 2022.⁹

B. Primary and secondary school enrollment

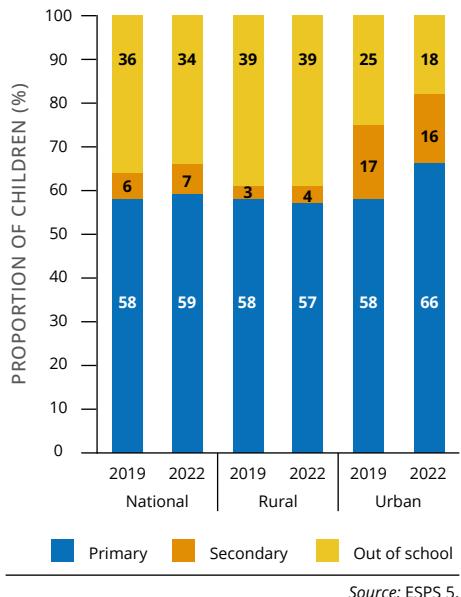
For the school-age population (7-18 years old), enrollment in 2022 was 66% for girls and 64% for boys (Figure 2.3a & 2.3b). The overall gap between girls and boys in access to education is minimal; however, that gap becomes more pronounced when analyzed from the rural/urban perspective (Figure 2.3a & 2.3b). For example, in 2022, the proportion of both boys and girls in secondary school was less than 5% in rural areas, while 13% of urban boys and 16% of urban girls were enrolled in secondary school.

While the primary school enrollment of girls in rural areas remained the same over time, the rate for boys decreased by five percentage points. However, the primary school enrollment rate in urban areas has been improving across the board. For example, the proportion of urban girls in primary school increased from 58% in 2019 to 66% in 2022, and from 61% to 68% for boys during the same period.

⁹ See Table 2.5 for all 2019 and 2022 comparisons reported in this chapter.

FIGURE 2.3A

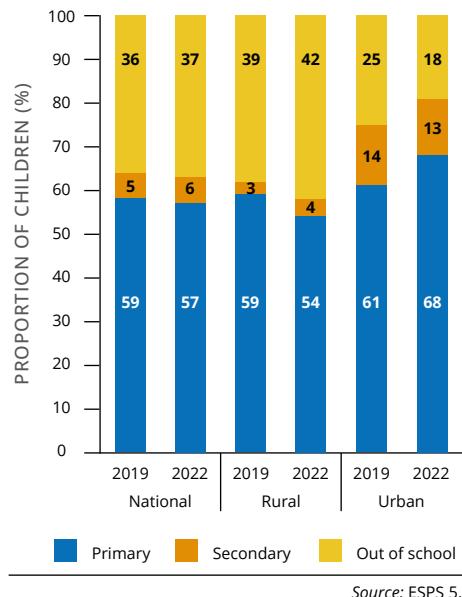
In school and out of school,
girls aged 7-18 years, by place, over time



Source: ESPS 5.

FIGURE 2.3B

In school and out of school,
boys aged 7-18 years, by place, over time



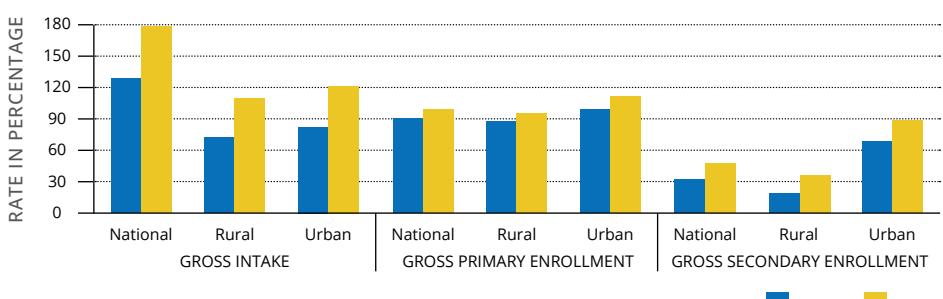
Source: ESPS 5.

C. Gross enrollment rates

The gross intake rate to Grade 1 grew from 128% in 2019 to 178% in 2022 (Figure 2.4). This growth was apparent in both urban and rural areas. Similarly, the gross enrollment rate in primary education grew by nine percentage points over the same period (from 90% to 99%). Although the gross enrollment rate in secondary education grew over this period, it's still below 50%. Another notable observation is the gap in secondary gross enrollment between rural and urban areas. In 2022, the secondary gross enrollment rate for urban areas was 88% while it was only 36% in rural areas.

FIGURE 2.4

Intake and enrollment rate by place, over time



Source: ESPS 5.

2.1.2 Out of School

About 36% of the school-age population (7-18 years old) was out of school¹⁰ in 2022 (Figure 2.3a). The out of school rate varies by place and region. For example, four out of ten children were out of school in rural areas compared to two out of ten in urban areas. In 2022, the out of school rate was lowest in Addis Ababa (10%) and highest in Afar (60%). When deconstructed by gender, this difference was comparable across all regions, except in Afar, Dire Dawa, and Benishangul Gumuz, where the out of school rate was up to 15 percentage points higher for boys (Figure 2.5b).

Between 2019 and 2022, the proportion of children out of school showed a slight decline for girls but stayed mostly the same for boys (Figure 2.3a & 2.3b). In rural areas, the proportion of girls and boys out of school was 39% in 2019, however, in 2022, this increased to 42% for boys and remained at 39% for girls. In contrast, the share of out of school children in urban areas decreased substantially for both boys and girls, from 25% to 18% between 2019 and 2022.

The likelihood of being out of school for children decreases as the wealth status of the household increases, and this trend is consistent for both boys and girls (Table 2.1). In 2022 for example, 46% of boys from the bottom 20% were out of school, while only 17% from the top 20% were out of school. The same is true for girls: 44% of girls from the bottom 20% and 20% from the top 20% were out of school.

FIGURE 2.5A
Out of school children (7-18 years old), by place and region, 2022

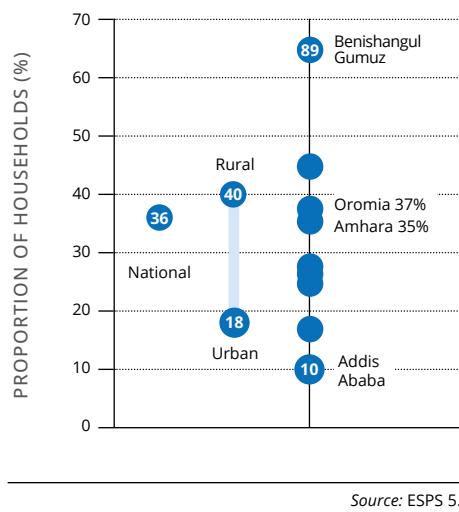
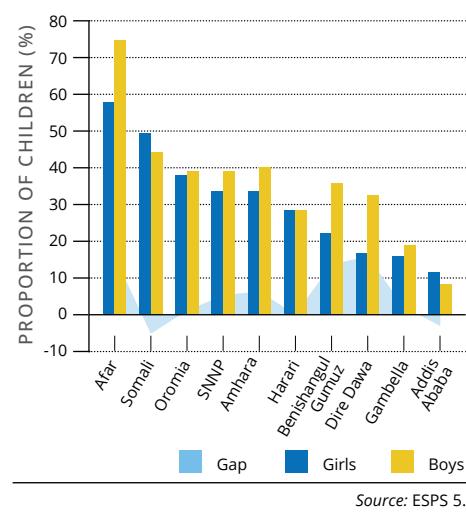


FIGURE 2.5B
Out of school children (7-18 years old), by region and gender, 2022



¹⁰ Students with age 7-18 and enrolled in preprimary education are out of school. However, school-age children who enrolled in higher education are neither considered out of school nor in school.

2.1.3 School Types

Almost all primary and secondary students were enrolled in government schools, and these schools remained the primary destination for students between 2019 and 2022 (Figure 2.6a & 2.6b). Five percent were registered in non-government schools, and the majority tend to be from urban areas and wealthier households.

For example, in 2022, about 13% (down from 21% in 2019) of students from the top 20% enrolled in private schools, while only one percent from the bottom 20% were in private schools. Enrollment in private, NGO, and other non-public schools remained low in all regions (Table 2.2), however, it is relatively higher in regions that are predominantly urban (e.g. Addis Ababa (34%), Harari (19%), and Dire Dawa (20%)).

FIGURE 2.6A
Type of school, by place and wealth, 2019

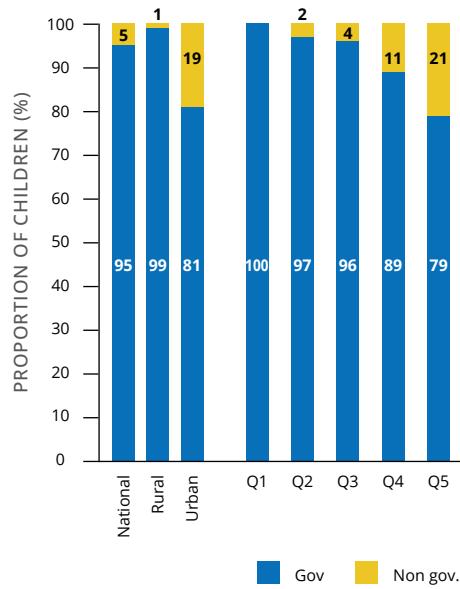
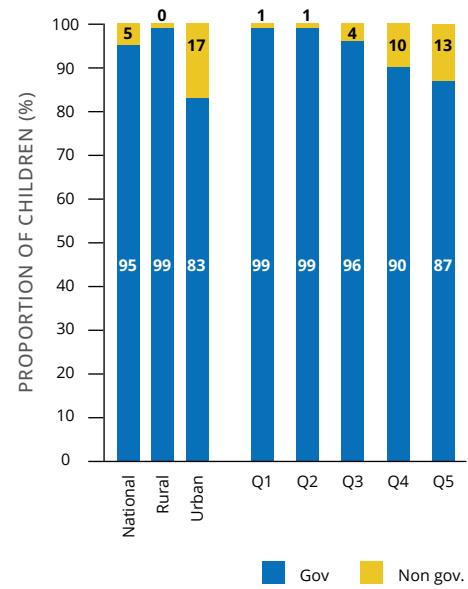


FIGURE 2.6B
Type of school, by place and wealth, 2022



Source: ESPS 5.

Source: ESPS 5.

2.1.4 School Proximity

In 2022, about 71% of primary and 65% of secondary students arrived at the nearest school in less than 30 minutes¹¹, on average, (Figure 2.7a & 2.7b). Over time, students' proximity to primary school showed no change, while the share of secondary school students who traveled more than an hour to the nearest school increased from 5% in 2019 to 10% in 2022.

FIGURE 2.7A
Distance to school for primary students, by place, over time

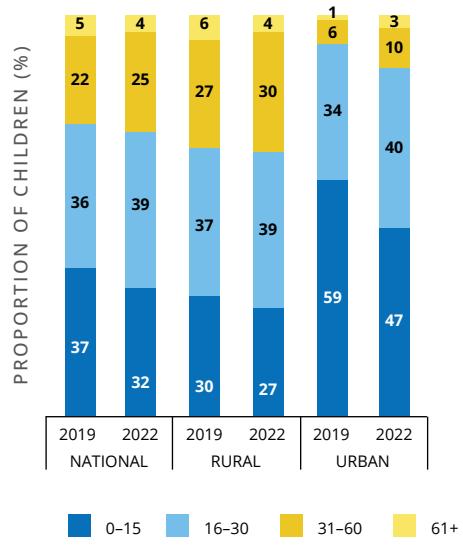
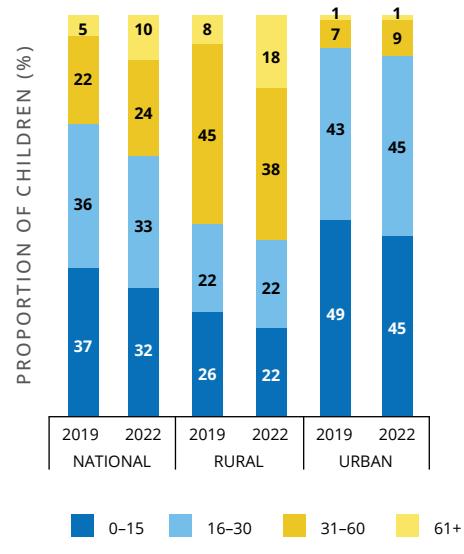


FIGURE 2.7B
Distance to school for secondary students, by place, over time



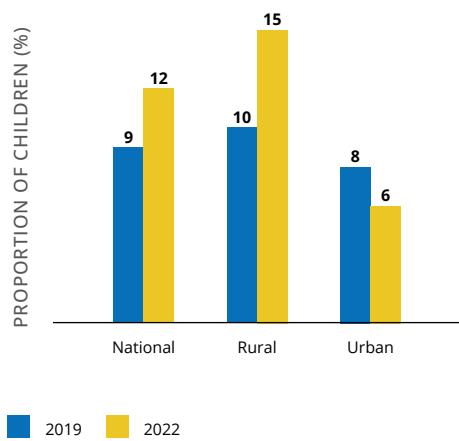
Moreover, children in urban areas had a much shorter commute, and in rural areas, students tended to live closer to primary schools than to secondary schools. For example, in 2022, about 34% of primary school students and 56% of secondary students in rural areas traveled more than 30 minutes to get to the nearest school.

¹¹ Proximity to school for current students is measured in minutes, regardless of the mode of transportation used.

2.1.5 Absenteeism

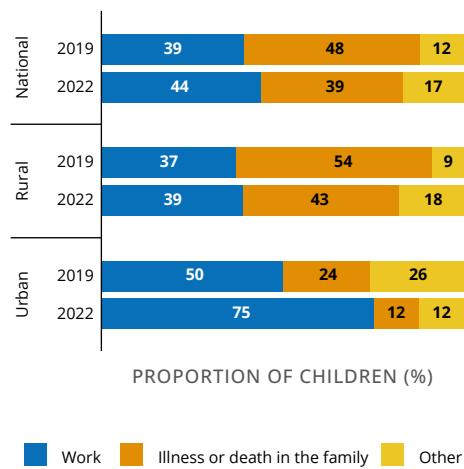
Absenteeism¹² was less than 9% in 2019 and 12% in 2022 (Figure 2.8a). It is more common in rural areas; the absentee rate among students in rural areas increased from 10% in 2019 to 15% in 2022 and decreased slightly from 8% to 6% over the same period in urban areas.

FIGURE 2.8A
Proportion of absenteeism, by place, over time



Source: ESPS 5.

FIGURE 2.8B
Reason for absenteeism, by place, over time



Source: ESPS 5.

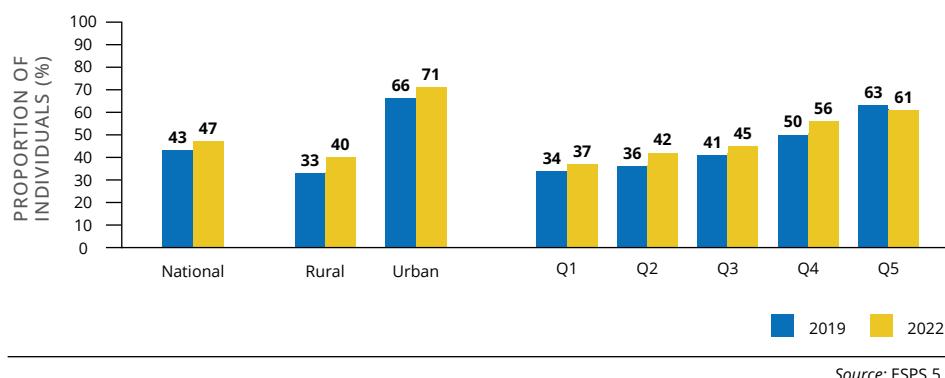
Illness or death in the family (48%) were the most common reasons given for being absent in 2019, and work (44%) was the most common reason given in 2022 (Figure 2.8b). However, illness or death in the family remained the common reason for absenteeism in rural areas, and it accounted for 54% in 2019 and 43% in 2022. In contrast, students in urban areas cited work as the main reason for the absences from school, and this accounted for 50% in 2019 and 75% in 2022. In predominantly urban regions, absenteeism is low: Addis Ababa (2%), Harari (5%), and Dire Dawa (8%), and notably, the leading cause of being absent from school in these regions was work (Table 2.3).

¹² Absenteeism: defined as a student missing class for more than a week, continuously, during the last semester. It is calculated for primary and secondary students.

2.2 LITERACY

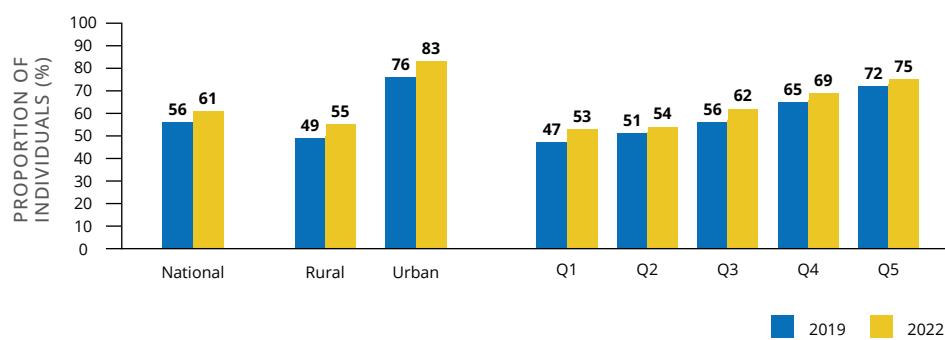
Information on literacy, i.e., the ability to read and write in at least one language, was collected for all household members five years and older, and this relies on self-reported data - no tests were conducted. Males reported higher levels of literacy at all levels. In 2022, six out of ten males reported being literate, compared to less than half (47%) of females (Table 2.4). Moreover, more people living in urban areas said they were literate, though the literacy rate is growing in rural areas. The literacy rate for females in rural areas increased from 33% in 2019 to 40% in 2022 and from 49% to 55% for males. The trend is similar in urban areas; between 2019 and 2022, literacy increased by five percentage points for females and seven percentage points for males.

FIGURE 2.9A
Female literacy rate, by place and by wealth, over time



Source: ESPS 5.

FIGURE 2.9B
Male literacy rate, by place and by wealth, over time



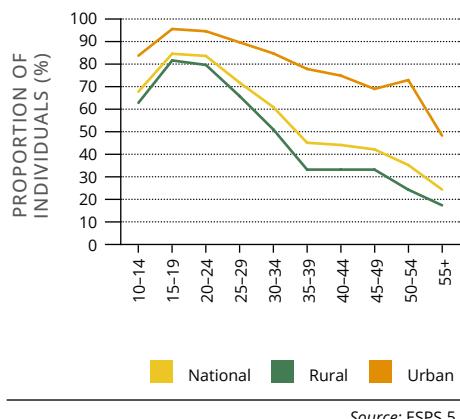
Source: ESPS 5.

People living in wealthier households are more likely to be literate (Figure 2.9a and 2.9b). However, the literacy rate along the wealth distribution increases faster for males than for females. For example, the literacy rate among females in the bottom 20% of households increased from 34% in 2019 to 37% in 2022, while the literacy rate among males from the same group increased from 47% to 53%, over the same period.

Across regions, Addis Ababa had the highest literacy rate, with 86% for females and 92% for males (Table 2.4). On the other hand, in Afar and Somali, only less than 40% of people said they could read and write. Moreover, the female literacy rate lags by almost 15 percentage points across all regions.

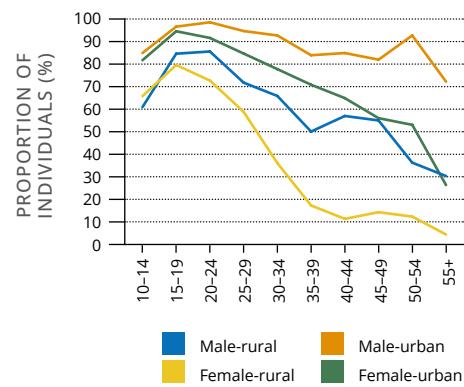
As of 2022, the youth population (15-19 and 20-24 age groups) was the most literate: the literacy rate was 86% among 15 to 19 year olds and 84% among 20 to 24 year olds (Figure 2.9c). Less than five percent of the youth population in urban areas reported being illiterate. The rural and urban literacy gap existed across different age groups and widened as age increased. For example, at 15-19, the literacy gap between the rural and urban populations was 13 percentage points, however, the literacy rate of the urban population aged 50-54 was 36 percentage points higher than the same group in the rural areas.

FIGURE 2.9C
Literacy rate, by place and age, 2022



Source: ESPS 5.

FIGURE 2.9D
Literacy rate, by gender and age, 2022



Source: ESPS 5.

In 2022, being unable to read and write was more common for females in rural areas, and they had the lowest literacy rate across all age groups (Figure 2.9d). Interestingly, after age 30, the literacy rate for this group declined rapidly. However, females in urban areas are better-off in literacy; the literacy rate was 95% for the 15-19 age group and 92% for the 20-24 age group, while it was 80% for the former and 73% for the latter age group among females in rural areas. Overall, males in urban areas were more literate than any other group, particularly the youth group, which was almost 100% literate.

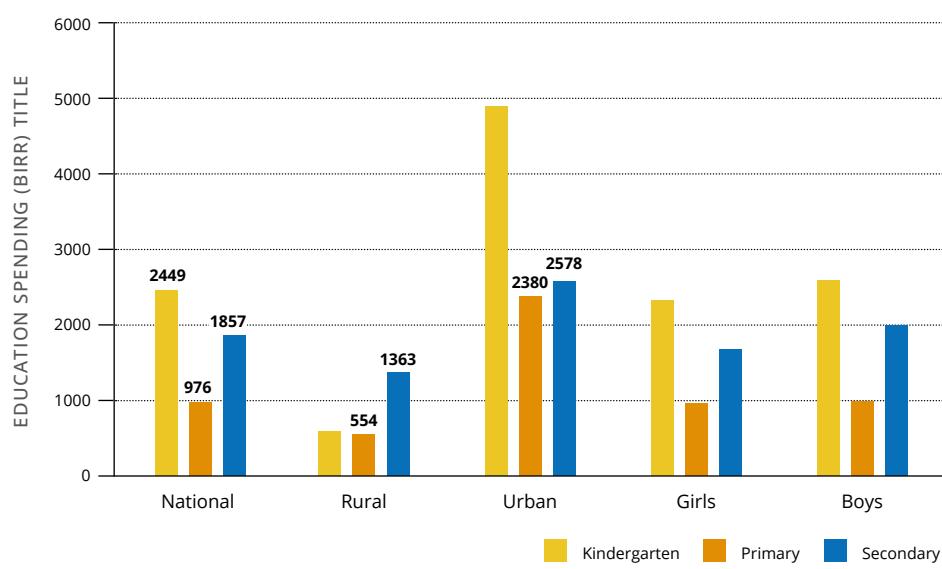
2.3 SCHOOL EXPENSES

In 2022, approximately 96% of households with children in school (from kindergarten to secondary) incurred education-related expenses such as tuition, registration fees, school uniforms, and supplies. By grade level, the households' yearly expenditures per pupil were the largest for pre-primary (2,449 Birr), followed by secondary students (1,857 Birr) (Figure 2.10a). Notably, spending for primary students was the lowest (976 Birr).

Expenditure on schooling is higher in urban areas. In 2022, school spending for rural primary students was 554 Birr compared to 2,380 Birr for urban students. Interestingly, there isn't much variation in the education expenditure between girls and boys across different education levels.

Education spending is higher in predominantly urban regions. Based on the 2022 evidence, in Addis Ababa, Harari, and Dire Dawa, households spent more on all levels of education per pupil (Figure 2.10b). Moreover, there was a noticeable difference between primary and secondary education spending in most regions, with the exception of Addis Ababa, Somali and Harari. For example, in Addis Ababa, primary education had the largest share of household spending on education (8,690 Birr), while in other regions, household spending on secondary education is higher.

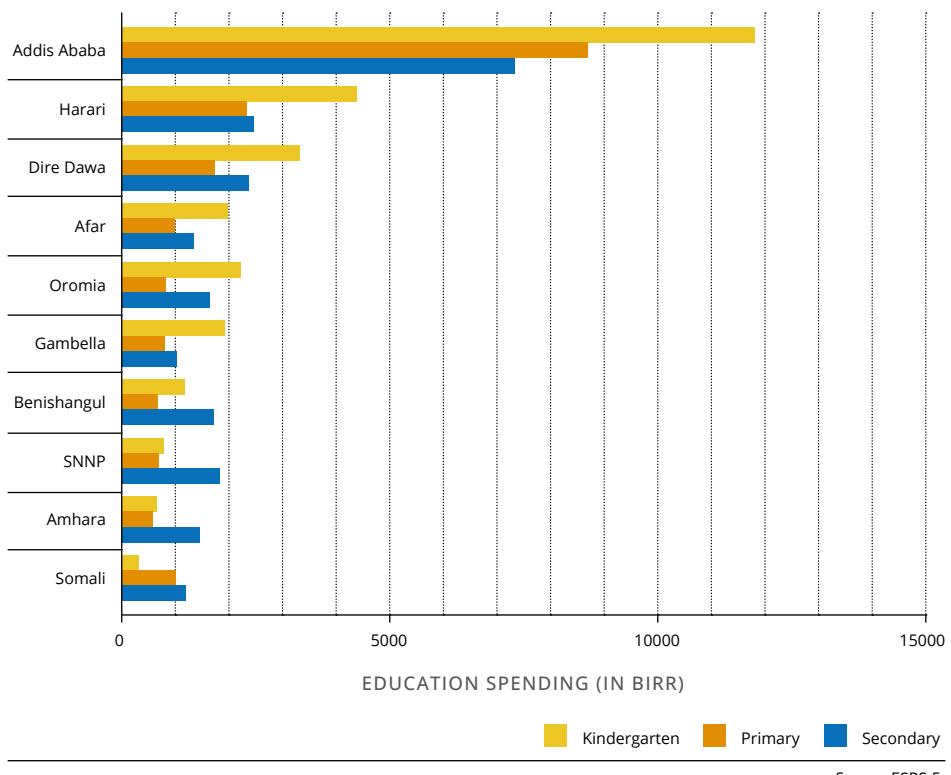
FIGURE 2.10A
Average household education spending per pupil (spatially adjusted), by level, place, and gender, 2022



Source: ESPS 5.

FIGURE 2.10B

Average household education spending per pupil (spatially adjusted), by level and region, 2022



LIST OF TABLES FOR CHAPTER II

TABLE 2.1

School Enrollment (ages 7-18), by Gender, Level, Region, and Place of Residence, 2022, Percent

	Male			Female		
	Not Enrolled	Primary	Secondary	Not Enrolled	Primary	Secondary
Afar	70.8	26.9	2.3	55.4	40.9	3.7
Amhara	38.2	54.9	7.0	32.3	58.6	9.1
Oromia	37.2	58.2	4.6	35.9	58.8	5.3
Somali	41.8	54.2	4.0	46.9	50.5	2.6
Benishangul Gumuz	33.7	51.1	15.2	20.6	59.8	19.6
SNNP	37.3	56.2	6.5	32.3	60.8	6.9
Gambella	17.7	73.5	8.8	15.3	70.0	14.7
Harari	27.0	62.8	10.3	26.5	61.8	11.7
Addis Ababa	8.3	73.6	18.2	11.1	73.6	15.2
Dire Dawa	31.1	61.2	7.7	16.5	64.8	18.7
Rural	42.1	53.7	4.2	38.7	56.9	4.4
Urban	18.5	68.2	13.3	17.7	66.4	16
National	37.4	56.6	6.0	34.3	58.9	6.8
Q1	46.1	50.1	3.8	43.7	52.6	3.7
Q2	42.7	53.3	4.1	36.5	59.3	4.3
Q3	31.3	58	10.7	27.9	64.6	7.5
Q4	34.1	59.5	6.5	30.5	59.9	9.7
Q5	17.2	75.3	7.5	19.7	65.0	15.4

Source: ESPS 5.

TABLE 2.2

School Types and Travel Time to School Enrolled Students (ages 7-18), 2022, Percent

	Travel Time (minutes)									
	School Type		Primary				Secondary			
	Gov.	Non gov.	0-15	16-30	31-60	61+	0-15	16-30	31-60	61+
Afar	94.3	5.7	65.8	24.4	8.1	1.7	42.1	56.7	1.3	0.0
Amhara	97.9	1.5	33.1	27.8	30.9	8.3	35.2	34.6	14.6	15.6
Oromia	96.4	3.6	31.9	40.1	24.3	3.8	35.9	27.8	21.9	14.4
Somali	97.3	2.7	24.3	52.0	18.5	5.2	39.4	36.5	15.7	8.4
Benishangul Gumuz	98.2	1.4	47.4	48.7	3.1	0.9	26.7	22.2	38.5	12.6
SNNP	94.8	5.2	27.0	45.9	26.3	0.8	20.7	36.2	41.5	1.6
Gambella	92.7	7.3	46.0	23.6	25.5	4.9	41.3	28.3	19.9	10.5
Harari	81.0	19.0	49.1	40.6	8.9	1.5	44.6	42.5	10.5	2.5
Addis Ababa	65.6	34.2	50.0	32.7	16.2	1.1	40.6	35.7	22.4	1.4
Dire Dawa	80.5	19.6	43.4	34.8	21.4	0.5	35.1	58.0	4.5	2.5
Rural	99.4	0.4	27.1	38.9	29.8	4.3	21.8	21.8	38.4	18.1
Urban	83.1	16.8	47.1	39.7	10.2	3.0	44.5	45.3	8.8	1.4
Nation	95.1	4.7	31.9	39.1	25.1	4.0	32.4	32.8	24.5	10.3
Q1	99.3	0.7	23.7	37.6	37.3	1.4	29.4	14.5	46.5	9.7
Q2	98.6	1.4	33.2	41.3	19.1	6.4	55.3	19.4	18.4	7.0
Q3	95.7	3.7	32.7	42.1	20.0	5.2	36.3	20.2	24.4	19.1
Q4	90.4	9.6	32.8	41.3	22.1	3.8	16.7	55.6	18.4	9.4
Q5	87.2	12.8	44.7	30.9	20.7	3.8	30.9	51.3	15.4	2.3

Source: ESPS 5.

TABLE 2.3

Reasons for Absenteeism, Students (Ages 7-18) by Gender, Region, and Place of Residence, 2022, Percent

	Enrolled Students Absent	Reason for Being Absent		
		Work	Illness or Death in the Family	Other
Afar	20.8	27.1	72.0	0.9
Amhara	12.5	45.9	47.5	6.6
Oromia	14.1	39.7	37.7	22.6
Somali	13.1	15.3	20.7	64.0
Benishangul Gumuz	24.5	50.1	49.2	0.8
SNNP	10.2	58.0	34.6	7.3
Gambella	9.1	81.4	15.5	3.1
Harari	5.0	90.1	6.9	3.0
Addis Ababa	2.2	91.9	0.0	8.1
Dire Dawa	8.2	70.9	27.9	1.2
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Rural	14.9	39.4	42.9	17.6
Urban	5.6	75.5	12.1	12.4
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National	12.5	44.4	38.7	16.9
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Q1	9.4	29.1	49.3	21.6
Q2	15.4	40.0	46.0	14.0
Q3	13.8	45.8	40.1	14.1
Q4	11.7	47.3	31.3	21.4
Q5	13.3	71.7	16.0	12.3

Source: ESPS 5.

TABLE 2.4
Literacy by Age Group, Place of Residence, and Region, 2022, Percent

	Male						Female					
	Age Category						Age Category					
	Total	5-9	10-14	15-19	20-29	30+	Total	5-9	10-14	15-19	20-29	30+
Afar	37.4	9.7	35.1	30.6	62.9	35.2	32.0	16.5	36.5	41.6	58.1	20.7
Amhara	62.3	24.6	76.7	93.8	80.0	55.3	47.1	18.6	86.1	90.7	74.5	20.7
Oromia	59.7	18.9	62.8	89.2	86.7	56.9	45.8	18.0	68.5	83.3	70.2	25.6
Somali	48.1	41.4	67.1	62.5	55.4	38.9	36.9	33.7	54.2	72.7	50.1	19.7
Benishangul Gumuz	72.3	27.4	76.6	89.8	91.2	75.8	47.7	6.9	69.6	85.6	80.7	29.0
SNNP	62.0	12.4	58.7	85.9	92.8	61.0	44.7	22.1	57.3	80.5	75.1	22.6
Gambella	72.7	40.8	89.4	87.3	85.5	70.5	54.0	21.3	89.4	89.8	79.9	33.5
Harari	78.2	46.3	80.4	94.2	88.8	79.0	61.4	45.7	78.0	76.6	76.6	53.5
Addis Ababa	91.5	75.0	97.4	99.1	99.2	95.1	85.7	75.3	98.9	97.6	95.3	82.8
Dire Dawa	78.1	35.5	78.9	88.0	97.4	77.4	61.9	35.9	76.6	96.4	82.4	51.0
Rural	54.5	16.9	61.2	84.7	79.6	49.2	39.8	17.0	65.8	80.3	66.5	16.3
Urban	83.1	46.1	85.0	96.6	97.1	84.7	71.0	44.0	82.3	94.8	88.5	59.7
National	61.1	22.1	66.1	87.3	84.1	58.2	47.0	21.9	69.4	83.7	72.3	27.2
Q1	52.7	13.2	52.8	84.0	84.9	45.4	37.2	14.7	57.2	76.5	63.0	13.4
Q2	53.6	17.4	66.3	80.0	78.9	49.1	41.7	12.9	66.6	82.7	66.4	19.8
Q3	62.4	23.0	71.8	89.5	80.1	56.7	45.3	28.0	75.5	86.1	67.4	23.5
Q4	68.6	27.9	69.2	95.5	87.7	67.8	55.6	29.9	81.6	89.9	76.0	35.8
Q5	74.9	43.8	84.0	93.9	89.4	76.2	61.5	36.4	79.3	90.2	88.7	48.4

Source: ESPS 5.

TABLE 2.5
The dynamics of selected Education indicators between 2019 and 2022

Indicators		National	Rural	Urban
Enrollment				
Preprimary school enrollment	Boys	3.69*		15.62**
	Girls			
Primary and secondary school enrollment: boys	Primary		-5.65*	7.04*
	Secondary			
Primary and secondary school enrollment: girls	Primary			8.41**
	Secondary			
School type				
Primary	Government			
	Non-Government			
Secondary	Government			
	Non-Government			
School proximity				
Primary	0-15			-11.72*
	16-30			
	31-60			
	61+			
Secondary	0-15			
	16-30			
	31-60			
	61+	6.08*		
Absenteeism		4.91*		
Reason for absenteeism	Work			25.79*
	Illness/death			
	Other			-13.70*
Literacy				
	Male	4.9**	5.09**	6.67**
	Female	4.32**	6.38**	4.67*

Note: The numbers are differences in percentage points. * and ** denote statistically significant for mean separation test at 0.05 and 0.01 levels respectively. Shaded areas are where the differences were not significant.

Source: ESPS 5 and ESPS 4.



Chapter III

Health

🔍 Highlights

- The prevalence of self-reported illnesses was about 14% in 2022. This is similar in rural and urban areas, as well as for male and female household members. Illness varies by age, and in general, is higher among older household members.
- About one percent of individuals in the 5-17 age group had a disability, with the prevalence increasing with age. For all disability categories within the oldest group of 51+, disability prevalence among females was about twice that of males.
- Forty-five percent of children aged 6-59 months were stunted, 13% wasted, and 27% underweight, and these rates were higher in rural areas than in urban areas. While the rate of children who were stunted and underweight declined between 2019 and 2022, the rate for wasting increased in rural areas.
- Over three-quarters of individuals who reported a need for healthcare services received it. Access to healthcare services was higher in urban areas and among wealthier households. Health centers, clinics and hospitals remained the major healthcare service providers.
- Health insurance penetration reached 48%, almost all of which was via the community-based health insurance program (46%). Between 2019 and 2022, community-based health insurance coverage jumped by 24 percentage points.
- Annual household health expenditures among children aged 0-9 years averaged 824 Birr in 2022. Health expenses generally increased with age, with the elderly (60+) having the largest annual health expenditure of 2,782 Birr.

3.1 ACCESS TO HEALTH

This section summarizes the survey's findings on the prevalence of self-reported illnesses in the four weeks preceding the survey implementation, as well as disability and child nutritional status at the time of the survey.

3.1.1 Prevalence of Illness

The prevalence of self-reported illnesses was approximately 14% in 2022, up from 13% in 2019¹³ (Figure 3.1a). It was similar in rural and urban areas and for male and female household members. However, it varied slightly by income, with more individuals from the higher income group reporting illnesses (Figure 3.1b). On average, there was a six-percentage point difference between individuals from the bottom 20% (Q1) and those from the top 20% (Q5). Substantial variation was observed when the results were disaggregated by age. The prevalence of self-reported illnesses was in general higher among older household members (Figure 3.1c). This holds for both male and female household members. Prevalence was highest among individuals in the 60+ years age group and lowest in the 10–17 years age group.

FIGURE 3.1A
Prevalence of self-reported illness, percent, by place, over time

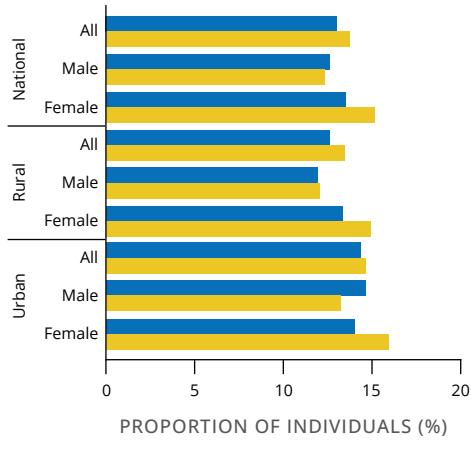
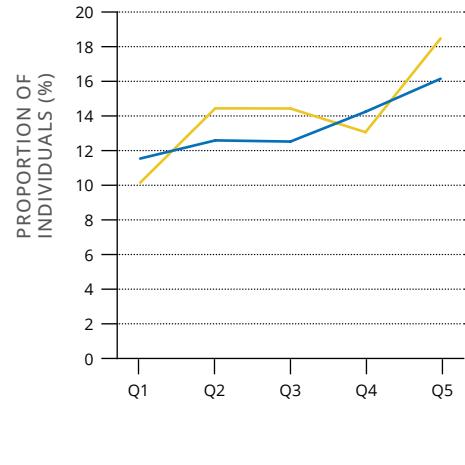
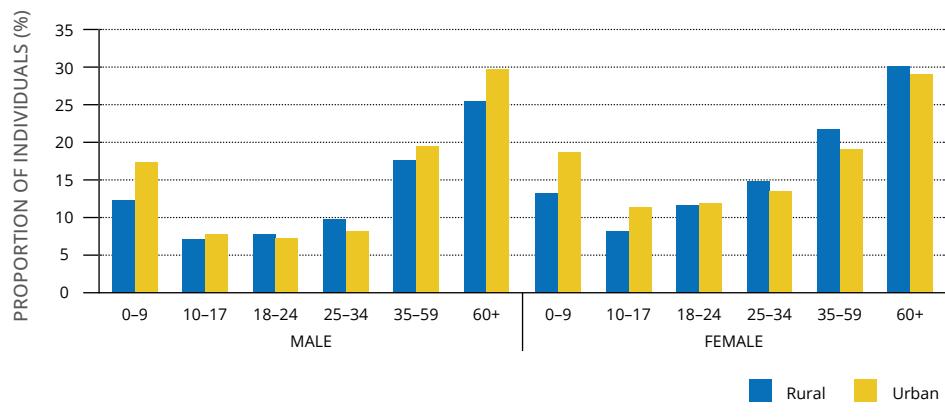


FIGURE 3.1B
Prevalence of self-reported illness, percent, by wealth, over time



¹³ See Table 3.4 for all 2019 and 2022 comparisons reported in this chapter.

FIGURE 3.1C
Prevalence of self-reported illness, percent, by place, age, and gender, 2022



Source: ESPS 5.

3.1.2 Disability

Information on health difficulties was collected from all members of the household aged 5 and older. These include hearing, seeing, walking or climbing, remembering or concentrating, self-care (washing, dressing, and feeding), and communicating or understanding. Approximately one percent of individuals in the youngest age group had a disability (Table 3.1, Panel A). The prevalence was slightly higher, approximately two percent, for the next age group (18–50 years old) (Table 3.1, Panel B). However, health difficulties were more common among the oldest, i.e., the 51 years and older age group (Table 3.1, Panel C). Another observation in the disability status of the oldest group is that it is higher among females than males. The health difficulties reported by females was about twice that of males. This difference was observed in all the six health categories.

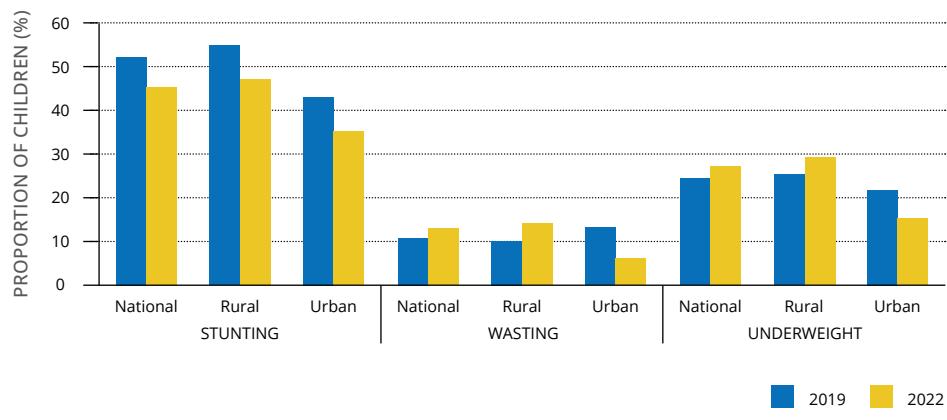
3.1.3 Child Undernutrition

Stunting, wasting, and underweight were measured for all children aged 6–59 months.¹⁴ Nationally, in 2022, of children ages 6–59 months, 45.2% were stunted, 12.9% wasted, and 27.2% underweight¹⁵ (Figure 3.1d). As expected, all three indicators of malnutrition were higher in rural areas.

¹⁴ The WHO 2006 growth standards were used to assess children's height-for-age, weight-for-age, and weight-for-height; children with scores two standard deviations below the median (-2SD) for the reference population are considered moderately malnourished; children with height-for-age z-scores less than -2 are moderately stunted (short for their age), those with weight-for-age z-scores less than -2 are moderately wasted (thin for their age), and children with weight-for-height z-scores less than -2 are moderately wasted (thin for their height).

¹⁵ These under-5 nutritional status indicators are not directly comparable with results from other surveys such as the Ethiopia Demographic and Health Survey because the ESPS result is for children aged 6–59 months old. It doesn't measure children aged 0–5 months old who are in general less stunted than older children. As a result, the ESPS results are higher.

FIGURE 3.1D
Child stunting, wasting and underweight, by place and gender, over time



Source: ESPS 5.

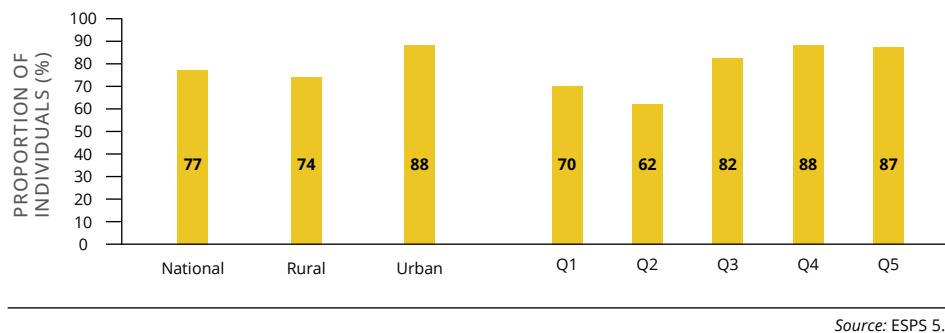
While stunting and underweight point estimates were comparable between male and female children, wasting was about four percentage points higher among males (14.7%) than females (11%). The trend in child undernutrition indicators changed over the 2019–2022 period. Between 2019 and 2022, stunting declined by about seven percentage points, especially in rural areas. While wasting remains the same in rural areas, it declined by seven percentage points in urban areas.

3.2 HEALTHCARE SERVICES

In 2022, about 77.4% of individuals who disclosed a need for healthcare services reported that they had received it. Access to healthcare services was higher in urban areas than in rural areas. It was also higher among individuals from higher income households (Figure 3.2a).

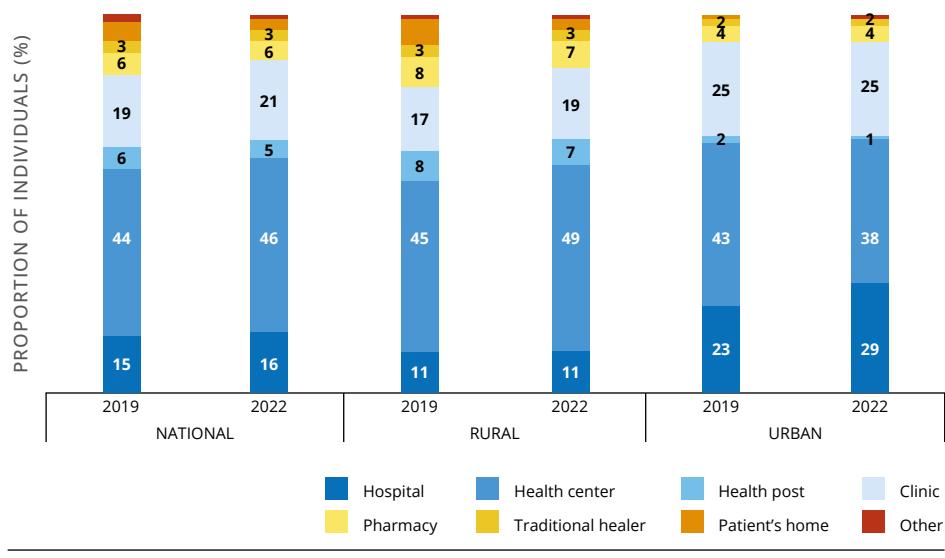
About 46% of those individuals who reported healthcare needs reported receiving services in health centers (Figure 3.3b). Clinics were the second most visited health facility in rural areas, while in urban areas, it was hospitals. Health posts were more important in rural areas (7%) than in urban areas (1%). About the same proportion of the individuals in rural and urban areas reported receiving services at pharmacies.

FIGURE 3.2A
Access to healthcare service, by place and wealth, 2022



Source: ESPS 5.

FIGURE 3.2B
Type of health facility, by place, over time



Source: ESPS 5.

3.3 HEALTH INSURANCE PENETRATION AND HEALTH EXPENDITURE

In 2022, the proportion of people with health insurance reached 48% at the national level (Figure 3.3a). Almost all of this insurance penetration was due to participation in the community-based health insurance program (46%), with the remaining covered by private- (1%) and employer- (1%) based insurance schemes. A larger share of people in rural areas (52%) than in urban areas (35%) had access to health insurance, the vast majority of which is attributed to differences in the coverage of the community-based health insurance program. Between 2019 and 2022, community-based health insurance penetration jumped by 24 percentage points.

FIGURE 3.3A
Health insurance penetration, by place, over time

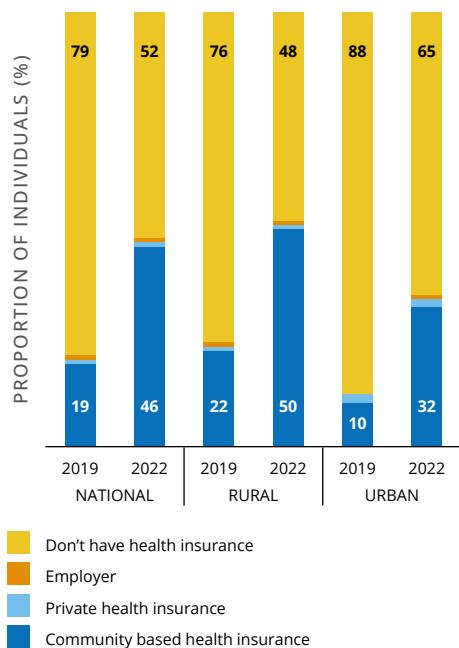
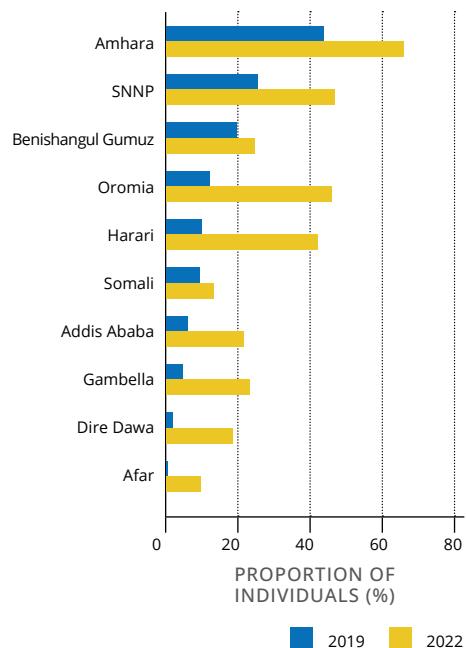


FIGURE 3.3B
Community health insurance penetration, by region, over time



Source: ESPS 5.

Source: ESPS 5.

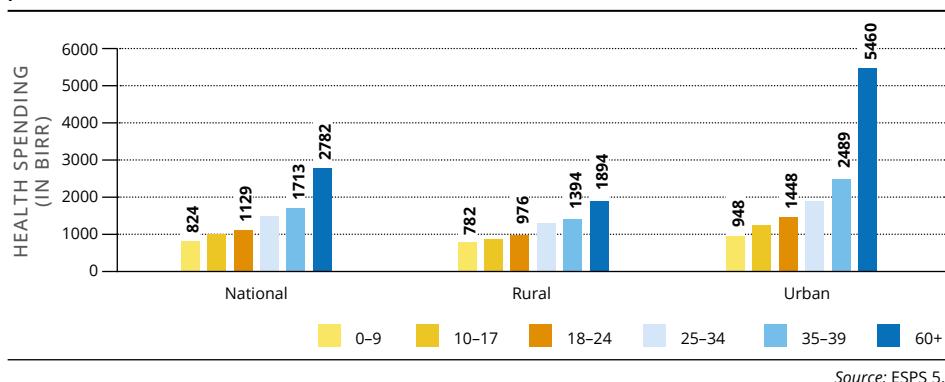
Regional differences in health insurance penetration range between two-thirds of the population covered in Amhara, to 1 in 10 insured in Afar (Figure 3.3b). Besides Amhara, SNNP (47%), Oromia (46%) and Harari (42%) had better insurance coverage. Somali with 13% and Dire Dawa with 19% join Afar in the bottom three regions with low insurance coverage.

About 79% of household members consulted with a health practitioner and/or suffered from an illness or injury, and therefore incurred health expenses in 2022. The average annual spending on health for those who paid was 3,430 Birr. Health spending was highest among the elderly segment of the population. Annual household health expenditures per visitor among elderly people (60 years and above) was 2,782 Birr in 2022 (Figure 3.4a). Health spending on children (0-9 years) was the smallest (824 Birr), however, this increased with age. This pattern was maintained in rural and urban areas, however, households in rural areas appeared to spend less on health than those in urban areas.

Health spending on children (0-17 years) is smaller compared to other age groups across all regions (Table 3.3). Oromia and Amhara are the top two regions where household health spending is the highest among children. Health spending on adults and the elderly (35 years and above) is higher in predominantly urban regions.

FIGURE 3.4A

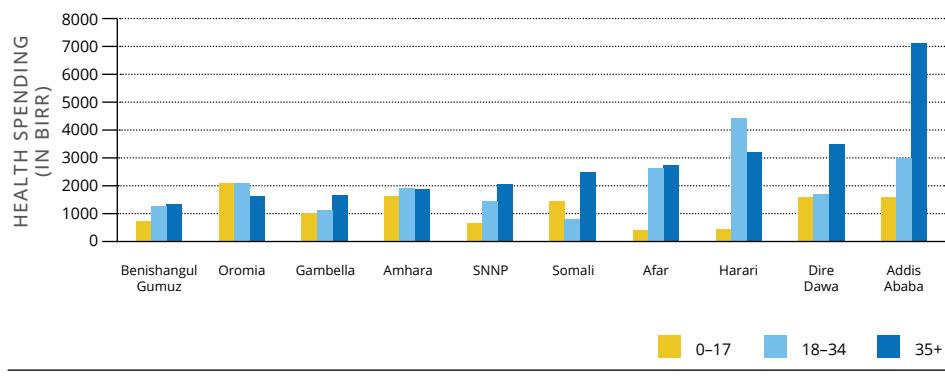
Average household health spending per visitor member (spatially adjusted), by age and place, 2022



Source: ESPS 5.

FIGURE 3.4B

Average household health spending per visitor member (spatially adjusted), by age and region, 2022



Source: ESPS 5.

LIST OF TABLES FOR CHAPTER III

TABLE 3.1

Health Problems in the Past 4 Weeks, by Gender, Age Group, Region, and Place of Residence, 2022, Percent

	Male					Female				
	Age Group					Age Group				
	All	0-9	10-17	18-59	60+	All	0-9	10-17	18-59	60+
Afar	17.4	13.6	8.0	19.3	39.8	21.9	22.5	18.3	20.0	56.5
Amhara	13.2	14.3	11.2	11.4	30.3	16.1	14.5	12.6	16.4	28.3
Oromia	11.8	13.7	6.5	11.7	23.5	15.8	16.8	7.3	17.3	29.5
Somali	5.3	3.2	3.3	7.0	5.7	6.0	5.5	3.5	5.2	26.8
Benishangul Gumuz	21.5	27.4	14.1	21.3	21.4	24.5	30.3	11.8	25.6	32.0
SNNP	13.0	11.6	5.5	15.1	30.2	14.7	9.8	7.9	18.1	32.9
Gambella	24.0	34.0	12.6	22.5	39.1	25.6	31.4	18.2	24.8	36.5
Harari	13.5	16.1	10.4	11.9	29.9	17.7	8.0	10.0	21.5	36.1
Addis Ababa	11.6	18.0	3.2	9.1	30.1	12.1	14.0	8.8	11.2	22.5
Dire Dawa	11.1	10.9	6.8	10.7	27.9	11.2	10.1	3.3	12.3	23.6
Rural	12.0	12.2	7.1	12.3	25.4	14.9	13.2	8.1	16.9	30.0
Urban	13.2	17.3	7.7	12.4	29.6	15.9	18.6	11.4	15.2	29.0
Ethiopia	12.3	13.0	7.3	12.3	26.2	15.1	14.1	8.8	16.4	29.7
Q1	10.3	9.1	4.4	12.1	27.7	9.9	7.6	4.1	12.1	34.8
Q2	11.9	13.5	8.0	11.1	24.0	16.8	17.9	10.1	18.7	20.4
Q3	12.7	17.1	6.5	11.3	32.2	16.2	16.3	10.6	17.1	25.3
Q4	10.7	9.8	4.7	11.4	24.0	15.6	16.2	8.6	15.1	34.9
Q5	17.7	18.4	21.0	16.2	23.4	19.3	16.1	14.8	20.1	31.6

Source: ESPS 5.

TABLE 3.2
Disability Prevalence, Percent, by Age Group and Place of Residence, 2022

	Hearing		Seeing		Walking/ climbing		Concentrating or remembering		Self-care		Communicating or understanding	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
PANEL A: AGED 5-17												
Rural	0.7	0.6	0.6	0.6	0.5	1.6	1.2	0.6	0.5	0.5	0.8	0.7
Urban	0.3	0.3	1.0	0.7	0.1	0.3	1.1	0.6	1.3	1.2	0.5	0.8
National	0.6	0.5	0.7	0.6	0.4	1.3	1.2	0.6	0.7	0.6	0.7	0.7
PANEL B: AGED 18-50												
Rural	1.6	2.3	2.6	3.2	2.7	2.6	2.3	1.8	1.5	1.4	0.9	1.1
Urban	0.7	1.4	2.4	3.8	1.7	2.0	1.1	1.8	0.8	0.9	0.9	0.9
National	1.4	2.0	2.6	3.3	2.5	2.5	2.0	1.8	1.3	1.3	0.9	1.1
PANEL C: AGED 51+												
Rural	12.1	19.4	22.1	25.5	13.4	18.4	5.7	12.7	6.6	11.5	2.7	6.5
Urban	8.4	8.6	18.6	26.3	12.2	19.0	6.6	10.8	6.0	8.2	4.2	5.0
National	11.3	16.9	21.4	25.7	13.1	18.6	5.9	12.2	6.5	10.8	3.0	6.2

Source: ESPS 5.

TABLE 3.3

Visitors by Health Facility Type, Region, and Place of Residence, 2022, Percent

	Hospital	Health Center	Health Post	Clinic	Pharmacy	Traditional Healer	Patient's Home	Other
Afar	28.5	36.6	14.2	9.8	3.2	2.0	5.6	0.2
Amhara	13.8	61.7	2.3	9.1	5.6	6.1	0.8	0.6
Oromia	14.1	40.2	7.3	28.8	2.7	2.9	4.0	0.2
Somali	25.9	48.0	17.2	1.4	3.3	0.0	4.3	0.0
Benishangul Gumuz	6.9	41.3	15.5	16.5	15.0	3.6	1.2	0.0
SNNP	16.3	43.3	1.9	23.4	11.6	0.7	2.1	0.8
Gambella	18.8	36.3	2.1	25.4	16.8	0.1	0.2	0.3
Harari	45.6	16.9	1.8	25.0	7.7	1.7	1.2	0.1
Addis Ababa	39.2	35.1	1.2	21.5	1.0	2.0	0.0	0.1
Dire Dawa	31.2	43.9	13.3	4.4	3.5	0.8	0.9	2.1
<hr/>								
Rural	11.3	49.2	6.6	19.2	6.5	3.5	3.3	0.4
Urban	29.0	37.9	1.2	24.6	4.5	1.9	0.5	0.5
<hr/>								
National	16.1	46.1	5.1	20.7	6.0	3.0	2.5	0.4
<hr/>								
Q1	8.7	58.2	6.2	13.2	8.9	1.6	2.2	0.9
Q2	7.0	41.8	7.2	24.0	5.1	10.0	4.6	0.3
Q3	17.9	47.8	7.1	18.0	5.3	2.5	1.0	0.5
Q4	22.6	44.6	3.1	19.6	4.8	1.3	3.4	0.5
Q5	21.1	40.6	2.7	26.9	6.2	0.8	1.8	0.1

Source: ESPS 5.

TABLE 3.4
The Dynamics of Selected Health Indicators between 2019 and 2022

Indicators	National	Rural	Urban
Prevalence of Illness			
Male			
Female			
Child Undernutrition			
Stunting	-6.85*	-7.74*	
Wasting			-7.01*
Underweight			
Health Facility			
Hospital			5.89*
Health Center			
Health Post			
Clinic			
Pharmacy			
Traditional Healer			
Patient's Home			
Other			
Health Insurance			
Community Based Health Insurance	24.36**	24.52**	21.22**
Don't Have Health Insurance	-24.27**	-24.08**	-22.28**

Note: The numbers are differences in percentage points. * and ** denote statistically significant for mean separation test at 0.05 and 0.01 levels respectively. Shaded areas are where the differences were not significant.

Source: ESPS 5 and ESPS 4.



Chapter IV

Water, Sanitation and Hygiene (WASH)

🔍 Highlights

- Seventy-four percent of the population (about 73 million people) had access to drinking water from improved sources.
- Only 26% of the population had access to improved sanitation facilities. Unimproved toilets and open defecation practices are the primary types of sanitation services in the country. Seventy-five million people, about 74%, used either an unimproved toilet facility or practiced open defecation.
- About a third of households (33%) reported the availability of a handwashing facility in their residence.

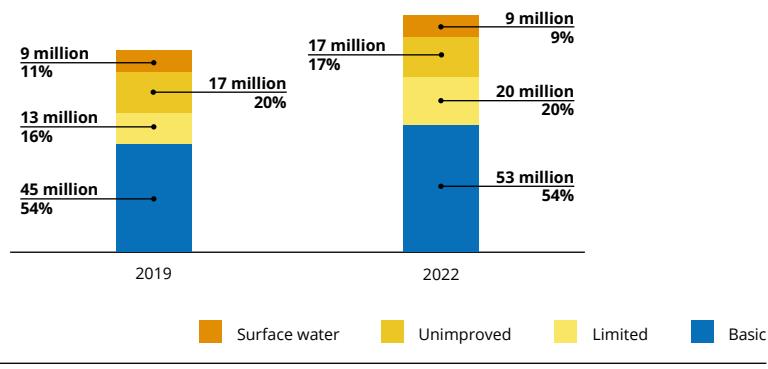
4.1 DRINKING WATER

4.1.1 Source of Drinking Water

In 2022, over 74% of the total population (about 73 million people) had access to drinking water from improved sources (Figure 4.1).¹⁶ Of this group, 73% had access to basic services and 27% to limited services.

Over the three years, due to progress in both basic and limited services, the overall improvement in access to drinking water from improved sources increased from 70% in 2019 to 74% in 2022.¹⁷

FIGURE 4.1
Access to drinking water, over time



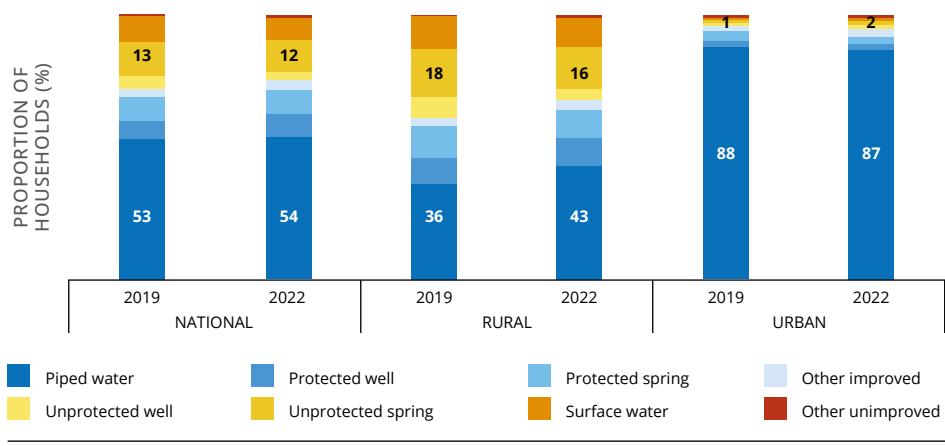
Source: ESPS 5.

Access to improved water is higher in urban areas than in rural areas (Figure 4.2a). However, access in rural areas increased by seven percentage points from 62% in 2019 to 69% in 2022 (Figure 4.2a), and this has narrowed the rural-urban gap. Moreover, in 2022, access to piped water reached 43% in rural areas, up from 36% in 2019. Predominantly urban regions including Addis Ababa, Dire Dawa and Harari have better access to basic level services than other regions. In contrast, access was 48% in Somali, 58% in Afar, and 73% in Amhara (Figure 4.2b).

¹⁶ This chapter follows the JMP service ladder. The household drinking water ladder defines four service levels. Safely managed level of service is not considered in this chapter, as the surveys considered here (ESPS-4 & ESPS-5) did not measure fecal and chemical contamination. The analysis here therefore covers the basic, limited, unimproved and surface levels. Basic service level is the ability to access improved drinking water in 30 minutes or less, and this includes supply on premises. The next on the ladder is limited service level which is the ability to access improved drinking water with a collection time exceeding 30 minutes. Moreover, access to water from improved sources did not appear affected by seasonal differences, therefore, unless otherwise mentioned, the results in this section are based on access during the dry season.

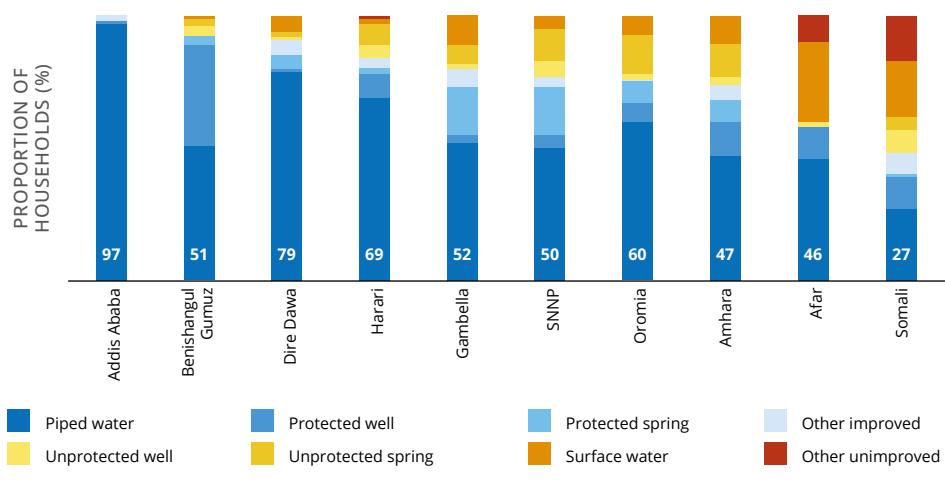
¹⁷ See Table 4.3 for all 2019 and 2022 comparisons reported in this chapter.

FIGURE 4.2A
Source of drinking water, by place, over time



Source: ESPS 5.

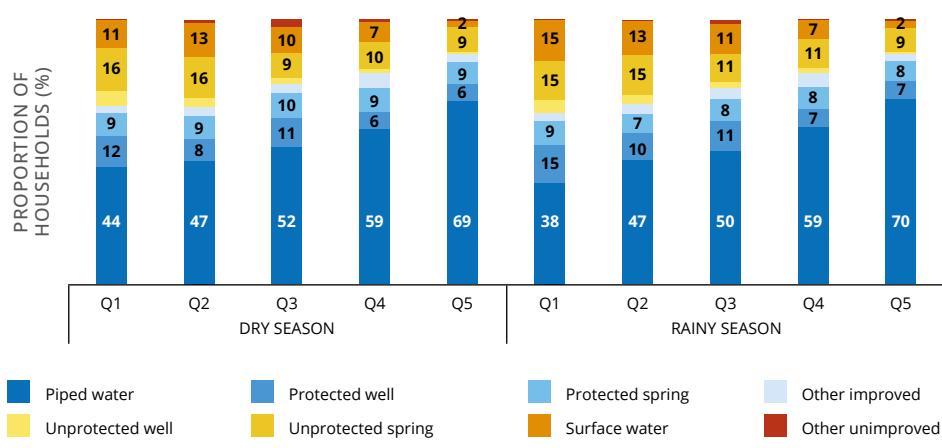
FIGURE 4.2B
Source of drinking water, by region, 2022



Source: ESPS 5.

Eighty-seven percent of households from the top 20% reported access to drinking water from improved sources compared with 68% from the bottom 20%. The gap varies by source type (Figure 4.2c). For example, for piped sources, there is a 25-percentage point gap between the richest and the poorest households. The trend is the same during the rainy season¹⁸, as a higher share of wealthier households drink from improved sources, while poorer households drink water from unimproved sources. However, there is a trend that households from the bottom 20 percent shifted from piped sources to other sources during the rainy season.

FIGURE 4.2C
Source of drinking water in dry and rainy seasons, by wealth, 2022



Source: ESPS 5.

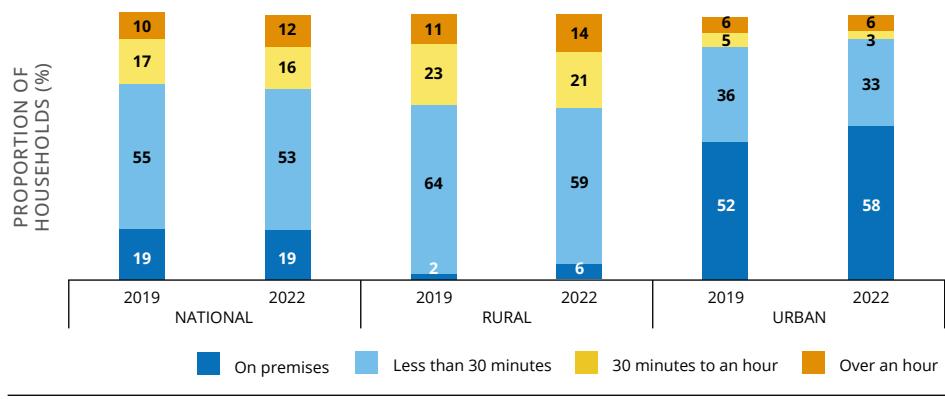
4.1.2 Accessibility

Accessibility refers to the time required for a trip to the water collection point, queueing, and a trip back home. In 2022, 19% of households collected drinking water on premises and 53% of them accessed water in less than 30 minutes regardless of the type of source. Accessibility remained unchanged between 2019 and 2022 (Figure 4.3a).

The distance to the collection point varies by place of residence. Many rural households get their drinking water from springs and lakes, and therefore spend more time getting to and from the collection point. Very few households in rural areas have their water source located on their premises. For example, in 2022, only six percent of rural households had

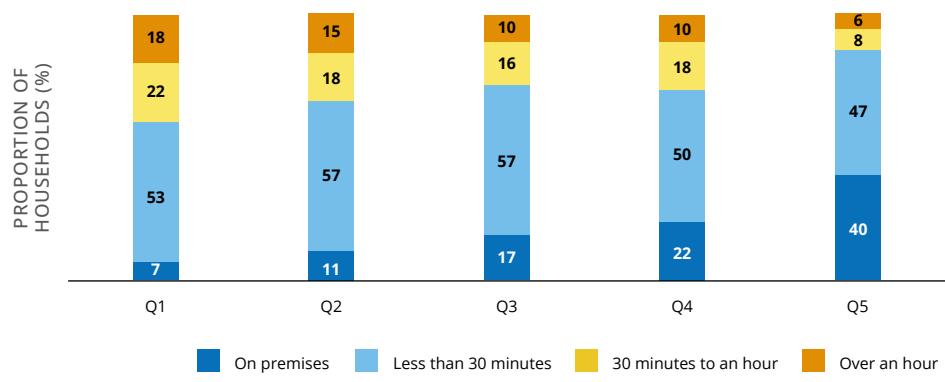
¹⁸ The Ethiopian Socioeconomic Panel Survey collected data from households on where they are accessing drinking water during the dry and rainy season.

FIGURE 4.3A
Drinking water accessibility, by place, over time



Source: ESPS 5.

FIGURE 4.3B
Drinking water accessibility, by wealth, 2022



Source: ESPS 5.

their water source on the premises compared with 58% of urban households. However, over the three years, in rural areas, accessibility on premises increased from 2% to 6%.

Wealthier households spent less time collecting water, as 87% of households in the top 20% have their sources of water on their premises or within a collection window of up to 30 minutes (Figure 4.3b). In contrast, only 60% of households in the bottom 20% access their water source on their premises or within 30 minutes. The gap almost doubles (33%) when only sources that are located on premises are considered.

4.1.3 Sufficiency

Access to improved sources alone is inadequate if the quantity of water from these sources is not sufficiently available.¹⁹ Nationally, 72% of households reported sufficient availability in 2022, down from 79% in 2019 (Figure 4.4a).

Over the three years, water sufficiency decreased both in rural (nine percentage points) and urban (12 percentage points) areas. In 2022, more rural (79%) than urban (57%) households reported water availability in sufficient quantity (Figure 4.4b). Sufficiency is better in some regions than others. For example, 90% of households in Benishangul Gumuz reported sufficient availability of drinking water. In contrast, in Addis Ababa, where all households have access to water from improved sources, only 56% reported sufficient availability of water (Figure 4.4b).

FIGURE 4.4A
Improved water sufficiency, by place, over time

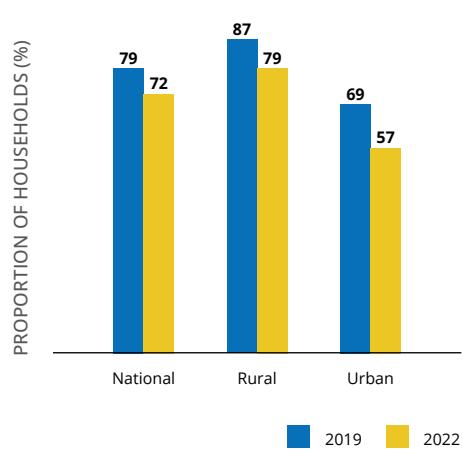
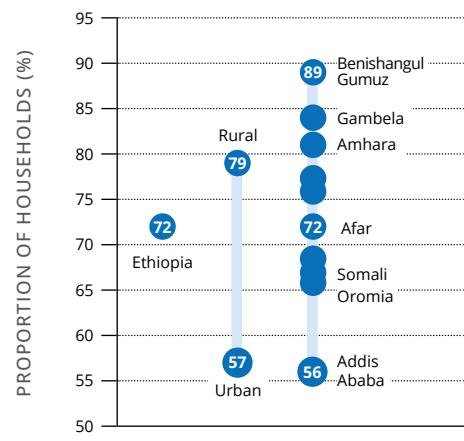


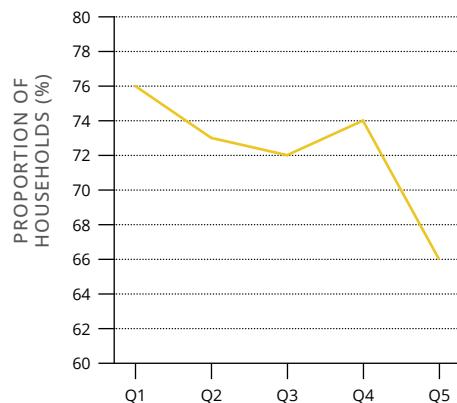
FIGURE 4.4B
Improved water sufficiency, by region, 2022



Households in the bottom 20% are more likely (76%) to access improved drinking water in sufficient quantities (Figure 4.4c). Similarly, relatively less densely populated areas have a higher probability of having sufficient water supply. For example, on average, 75% of households in areas with less than 1000 inhabitants per km² have drinking water sufficiency (Figure 4.4d).

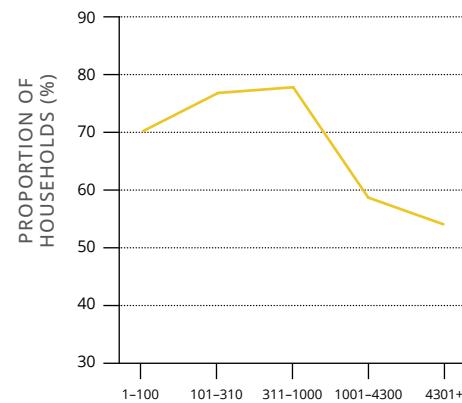
¹⁹ Sufficiency here refers to the availability of enough drinking water from improved sources in the 30 days preceding the survey.

FIGURE 4.4C
Sufficiency of water from improved sources, by wealth, 2022



Source: ESPS 5.

FIGURE 4.4D
Sufficiency of water from improved sources, by population density, 2022



Source: ESPS 5.

However, only 56% of households have sufficient drinking water in areas with greater than 1000 inhabitants per km². Hence, wealthier households and households living in very densely populated areas have difficulty accessing improved drinking water in sufficient quantities.

4.2 SANITATION

In 2022, only 26% of the population (about 23.5 million people) had improved sanitation facilities (Table 4.2).²⁰ The majority, 74% of the population (about 74.8 million people), relied on unimproved sanitation facilities or open defecation. Access to improved sanitation facilities was 58% in urban areas and 15% in rural areas.

The share of households using unimproved sanitation increased from 39% in 2019 to 46% in 2022 (Figure 4.5a). In rural areas, the use of unimproved sanitation increased by eight percentage points over the three years. More than half of the urban households use a form of improved sanitation facility. The share of urban households using a basic sanitation facility increased from 22% in 2019 to 28% in 2022 (Figure 4.5a).

²⁰ Sanitation facility type is classified based on the JMP service ladder. Safely managed sanitation facility is not classified as a service in this report, as there is not enough data in ESPS on sanitation extraction and safely disposed of onsite or removed and treated off-site. Basic sanitation service refers to the use of improved toilette facilities that are not shared with other households. Limited sanitation service refers to the use of improved toilette facilities that are shared with other households.

FIGURE 4.5A
Access to sanitation, by place, over time

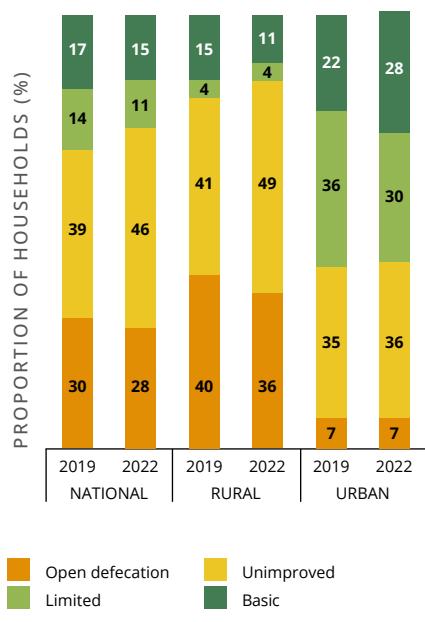
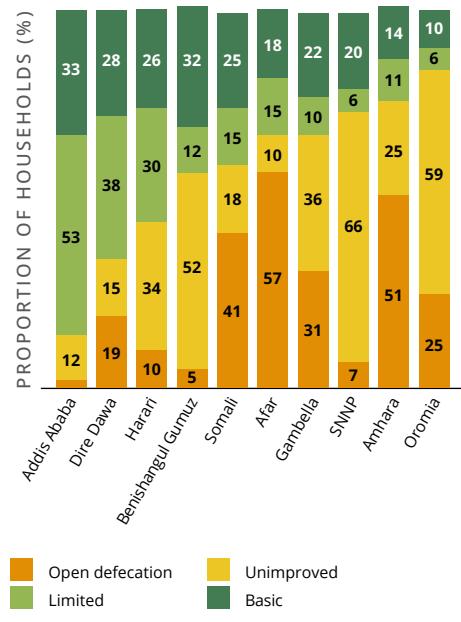


FIGURE 4.5B
Access to sanitation, by region, 2022



Source: ESPS 5.

Source: ESPS 5.

Households in predominantly urban regions generally have improved sanitation facilities, though the majority share the facility with other households (Figure 6.5b). For example, in Addis Ababa, 86% of the households use improved toilet facilities and 62% of them share the facility with other households.

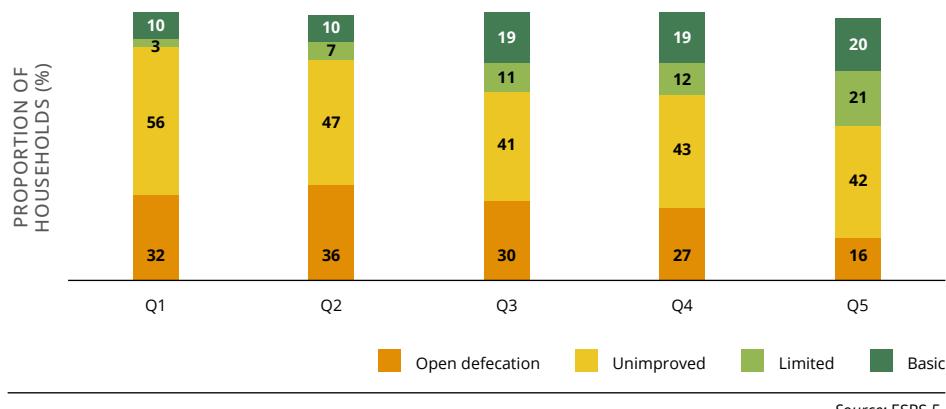
Access to improved sanitation facilities is limited in other parts of the country. For example, more than half of the households in Afar practice open defecation, while unimproved toilet use is common in SNNP. Similarly, the majority of the population in Oromia and Amhara use unimproved sanitation or practice open defecation.

Over 80% of households in the bottom 40% of the consumption quintile use either unimproved toilet facilities or practice open defecation (Figure 4.5c). However, unimproved toilet facilities are not uncommon across the distribution, as about four out of ten households in the top 60%, 40%, and 20% use this.

Toilet sharing, i.e., the use of a toilet facility by multiple households, is common practice in the country. Figure 4.6a shows sharing arrangements for any sanitation facility (improved or unimproved). In 2022, about 23% of households that reported having any type of

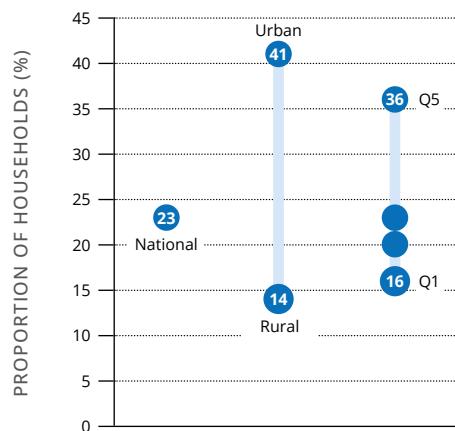
toilet facility shared it with another household. Sharing arrangements also vary by type of facility. For example, for improved types, 41% of households shared it with another household (Figure 4.6b), and this practice is more common in urban areas where approximately 52% of households reported shared arrangements.

FIGURE 4.5C
Access to sanitation, by wealth, 2022



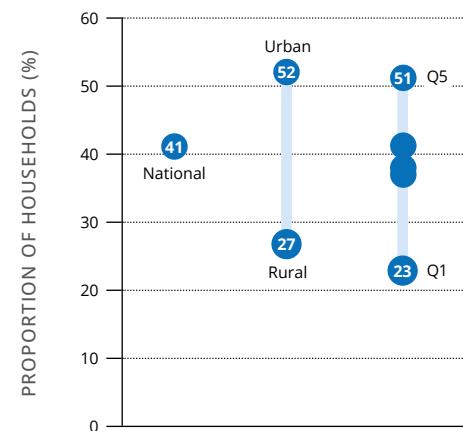
Source: ESPS 5.

FIGURE 4.6A
Shared toilets (improved and unimproved), by place and wealth, 2022



Source: ESPS 5.

FIGURE 4.6B
Shared toilets (improved only), by place and wealth, 2022



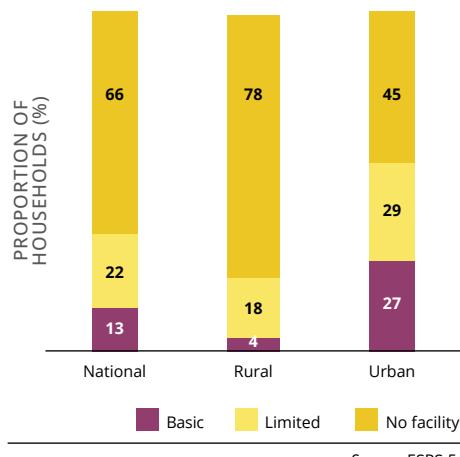
Source: ESPS 5.

4.3 HYGIENE

In 2022, only one-third of households reported the availability of a handwashing facility in their residence (Figure 4.7a).²¹ Moreover, the prevalence of basic hygiene services is very low in the country and worse in rural areas (4%). The availability of a handwashing facility is more common in urban areas (55%) than in rural areas (22%).

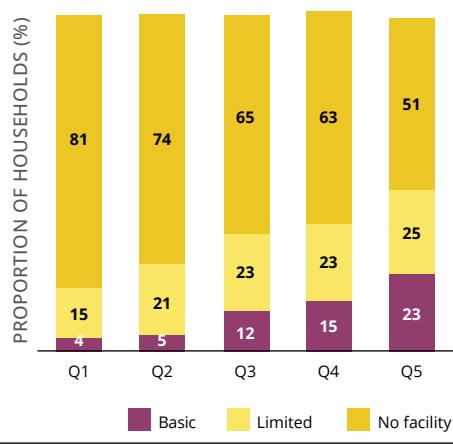
Availability of these services also varies by the household's wealth (Figure 4.7b). For example, about 50% of households in the top 20% of the consumption quintile reported availability of basic or limited services compared to approximately 19% of households in the bottom 20%.

FIGURE 4.7A
Access to hygiene, by place, 2022



Source: ESPS 5.

FIGURE 4.7B
Access to hygiene, by wealth, 2022



Source: ESPS 5.

²¹ This section applies the JMP's hygiene service ladder. Households with a handwashing facility with soap and water available on-premises meet the criteria for a basic hygiene service. Households that have a facility but lack water or soap will be classified as having a limited service, and distinguished from households that have no facility at all (no service). Hygiene | JMP (washdata.org) [accessed on 4/15/2023]

LIST OF TABLES FOR CHAPTER IV

TABLE 4.1
Household Drinking Water Source by Place of Residence, 2022, percent

	Dry Season			Rainy Season		
	National	Rural	Urban	National	Rural	Urban
Water source						
Water piped into dwelling	3.5	0.7	11.4	3.6	0.7	12.1
Water piped into yard / plot	14.3	3.5	45.2	14.8	3.6	46.8
Water piped to neighbor	6.6	4.4	12.9	6.4	4.3	12.4
Water piped to public tap standpipe	29.2	33.9	16.0	27.5	31.7	15.7
Tube well / borehole	2.6	3.1	1.1	2.3	3.0	0.2
Protected dug well	8.6	11.0	1.9	10.0	12.8	1.9
Piped water kiosk/ retailer	0.5	0.2	1.3	0.5	0.2	1.2
Protected spring	9.1	11.4	2.5	8.1	10.4	1.5
Bottled water/ SACHET	0.6	0.4	1.2	0.5	0.3	1.1
Rainwater	0.3	0.1	0.7	0.8	0.6	1.3
Total improved	75.3	68.6	94.2	74.5	67.7	94.1
Unprotected dug well	2.9	3.6	0.9	2.8	3.3	1.2
Unprotected spring	12.1	15.7	1.8	12.2	15.9	1.8
Tanker truck/ cart with small tank	1.1	1.2	1.0	0.5	0.5	0.5
Surface water	8.5	10.8	2.1	9.7	12.3	2.3
Other	0.2	0.2	0.1	0.3	0.3	0.3
Total unimproved	24.8	31.4	5.8	25.5	32.3	5.9
Time to water source						
< 15 min	44.9	31.8	82.4	45.5	31.9	84.3
15–30 min	27.0	33.2	9.3	28.3	35.2	8.6
31–45 min	9.3	12.1	1.5	9.4	12.2	1.3
46–60 min	7.1	9.2	1.2	6.7	8.6	1.1
61–90 min	6.5	7.7	3.2	5.7	6.9	2.3
91–120 min	2.3	2.8	0.7	2.4	3.0	0.7
> 120 min	2.9	3.4	1.7	2.2	2.3	1.7

Source: ESPS 5.

TABLE 4.2

Household Toilet and Hand-Washing Facilities by Place of Residence, 2022, percent

Toilet Facility	National	Rural	Urban
Flush to piped sewer system	1.5	0.1	5.4
Flush to septic tank	2.7	0.3	9.6
Flush to pit latrine	4.7	1.7	13.2
Flush to open drain	0.4	0.1	1.2
Flush to do not know where	0.6	0.1	2.0
Pit latrine with slab	15.9	12.6	25.6
Twin pit with slab	0.1	0.1	0.1
Composting toilet	0.2	0.2	0.0
Any improved	26.0	15.1	57.1
Pit latrine without slab	19.8	20.8	17.2
Twin pit without slab	0.6	0.3	1.3
Open pit	24.5	27.3	16.3
Bucket	0.2	0.1	0.4
Container-based sanitation	0.0	0.0	0.1
Hanging toilet/latrine	0.8	0.8	0.5
No facility/field/forest	28.2	35.7	6.8
Other	0.1	0.0	0.3
Unimproved	74.0	84.9	42.9
Shared toilet facility	22.7	13.5	40.9
Handwashing Facility			
In dwelling	4.6	2.9	7.6
In yard / plot	12.3	8.9	18.1
Mobile object	17.5	10.4	29.6
None	65.6	77.9	44.7

Source: ESPS 5.

TABLE 4.3
The Dynamics of Selected WASH Indicators between 2019 and 2022

Indicators	National	Rural	Urban
Access to drinking water			
Basic			
Limited			
Unimproved			
Surface water			
Sources of drinking water			
Piped water			
Protected well			
Protected spring			
Other improved			
Total Improved	7.97**		
Unprotected well	-2.55*	-3.97*	
Unprotected spring			
Surface water			
Other unimproved			
Accessibility			
On premises	3.12**		
Less than 30 minutes			
30 minutes to an hour			
Over an hour			
Sufficiency	-7.62**	-8.54*	-11.43**
Access to Sanitation			
Open defecation			
Unimproved	6.55*	8.06*	
Limited	-3.42**		
Basic		6.09**	

Note: The numbers are differences in percentage points. * and ** denote statistically significant for mean separation test at 0.05 and 0.01 levels respectively. Shaded areas are where the differences were not significant.

Source: ESPS 5 and ESPS 4.



Chapter V

Household Energy Profile and Use

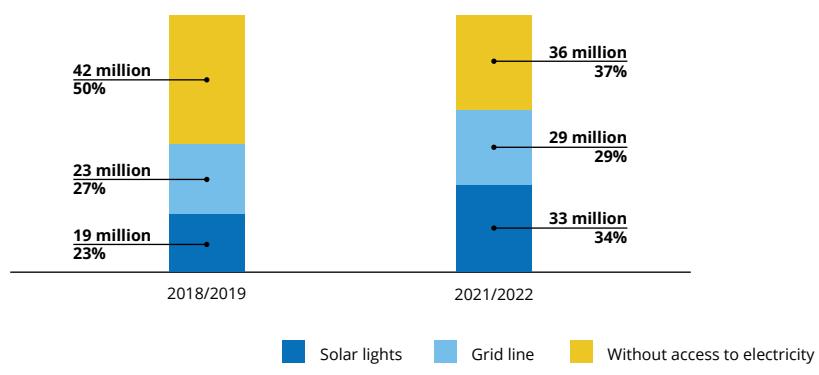
Highlights

- As of 2022, 63% of the Ethiopian population has access to electricity; it was 50% in 2018/19.
- Over the years, solar energy penetration has increased. Notably, solar energy as a source of light increased from 21% in 2019 to 33% in 2022.
- Households mainly use electricity for light, while cooking is mainly done with firewood.
- Eighty-three percent of households rely on firewood for cooking; however, it is more widely used in rural areas (91%) than in urban areas (59%).
- The average monthly energy expenditure has increased from 157 Birr in 2019 to 211 Birr in 2022.
- The frequency of interruptions in electric power has decreased substantially in the last three years. In 2019, 85% of households reported interruptions (for three or more times a week) compared to 42% in 2022.

5.1 ACCESS TO ELECTRICITY

In Ethiopia, the share of the population with access to electricity increased from 50% in 2019 to 63% in 2022.²² This increase is mainly driven by solar energy. Access to electricity from grid lines remains the same over time, while access to electricity from solar sources increased by 11 percentage points.

FIGURE 5.1
Access to electricity, over time



Source: ESPS 5.

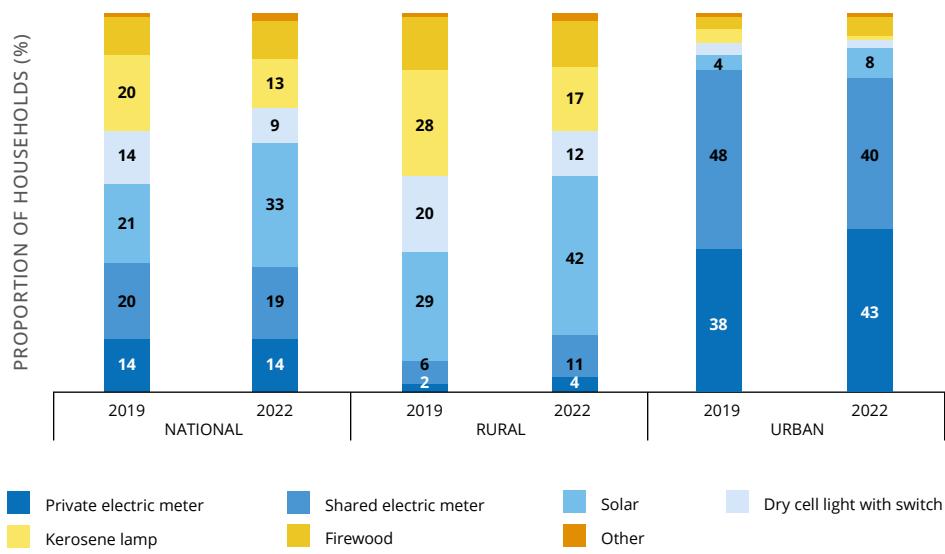
Access to electricity also improved in rural areas. Over the three year period, grid line access in rural areas increased by seven percentage points and solar users increased by 11 percentage points (Table 5.2). Moreover, solar energy is common in rural areas. In 2022, for example, among rural populations that have access to electricity, 75% are solar users, while 92% of the population in urban areas rely on grid lines as their primary electricity source. Moreover, four out of ten people in urban areas access electricity from a shared electric meter.

5.1.1 Source of Light

In 2022, sixty-five percent of households reported electricity (grid line or solar energy) as the primary source of light (Table 5.1). This is up from 54% in 2019 (Figure 5.2). As mentioned earlier, the recent improvements in access to electricity, especially in rural areas, resulted from the introduction of solar energy. The share of households connected to grid lines as a source of light remained at 33% in 2019 and 2022.

²² See Table 5.2 for all 2019 and 2022 comparisons reported in this chapter.

FIGURE 5.2
Household source of light, by place, over time



Source: ESPS 5.

In urban areas, electricity from a grid connection is the most prevalent source of light, and in 2022, about 83% of households with access to electricity relied on this source. In the same period, about 57% of rural households had access to electricity, up from 37% in 2019. Though solar energy remains the main source of light in rural areas and accounted for 74% of the electricity use in 2022, the share of connected households to the grid lines increased by seven percentage points between 2019 and 2022. Non-electric sources, such as kerosene lamps and firewood are still important sources of light and energy in rural areas. For example, in 2022, three out of ten rural households relied on solar energy for light.

As expected, access to electricity is correlated with the household's wealth status. For example, eight out of ten in the top 20% have access to electricity, while more than half of households from the bottom 20% do not (Figure 5.3a). This positive association between electricity access and wealth status is especially true for the grid line source of electricity. However, solar energy use is common among middle-income households; among households in the middle 60%, four out of ten use solar energy as their light source. This implies minimal solar energy penetration at the top and bottom of the wealth distribution.

A grid line connection is more prevalent among households living in a dwelling with three or more rooms (Figure 5.3b). For example, only 26% of households living in a single room reported having access to electricity via a grid line, compared to 44% of households living in a dwelling with three or more rooms. Moreover, firewood as a source of light is more common in one or two room houses, as 17% of households living in a single room used firewood for light, compared to 5% among households living in dwellings with three rooms or more.

FIGURE 5.3A
**Household source of light,
by wealth, 2022**

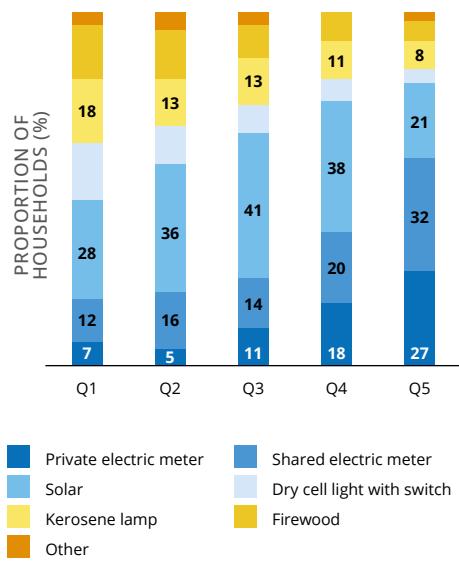
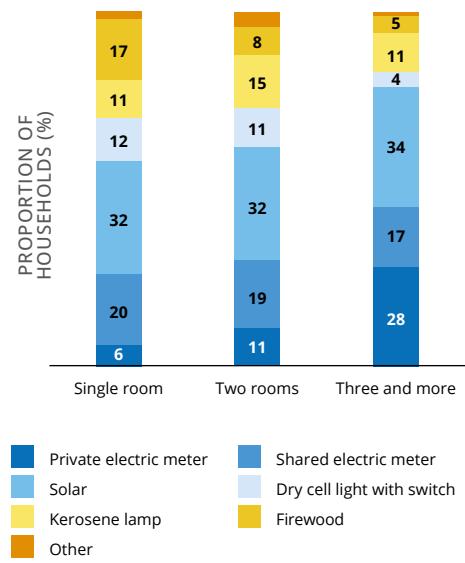


FIGURE 5.3B
**Household source of light, by housing
characteristics, 2022**



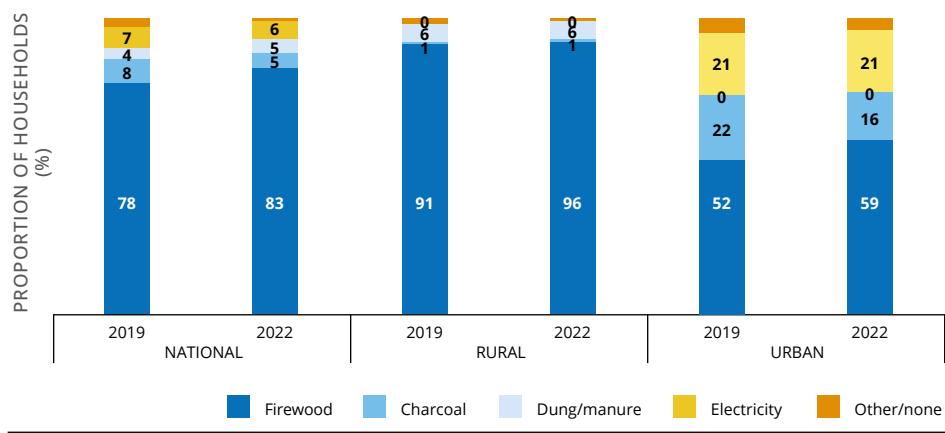
Source: ESPS 5.

Source: ESPS 5.

5.1.2 Source of Fuel

Firewood is the primary source of energy for cooking. At the national level, 83% of households, in 2022, depended on firewood for cooking, up from 78% in 2019 (Figure 5.4a). Households in rural areas used firewood at a much higher rate than households in urban areas (91% versus 59%) (Table 5.1). However, in urban areas, firewood users increased by seven percentage points over the three years (Figure 5.4a). Electricity is the second most important source of energy for cooking in urban areas with about 21% of urban households using this source. However, this option is almost non-existent in rural areas. Although access to electricity increased over the three years between 2019 and 2022 (Figure 5.1), firewood still remains the most important source of energy for cooking. This is because improvements in access can be attributed to an expansion in solar energy, which is mostly used for lighting.

FIGURE 5.4A
Household source of fuel, by place, over time



Source: ESPS 5.

Firewood is widely used as a source of fuel across the different wealth strata. For example, among the bottom 80% of households, at least eight out of ten households used firewood for cooking (Figure 5.4b). As indicated earlier, electric cooking is not very common overall, and even less so in urban areas. By wealth status, even among the top 20 percent of households, only 14% of them used electricity for cooking.

For households with a traditional kitchen or without a kitchen at all, firewood is the main source of fuel energy for cooking. More than 80% of households in either of these categories reported using firewood as a fuel (Figure 5.4c). However, in households with a modern kitchen inside the dwelling, electricity is the predominant energy source for cooking (70%).

FIGURE 5.4B
**Household source of fuel,
by wealth, 2022**

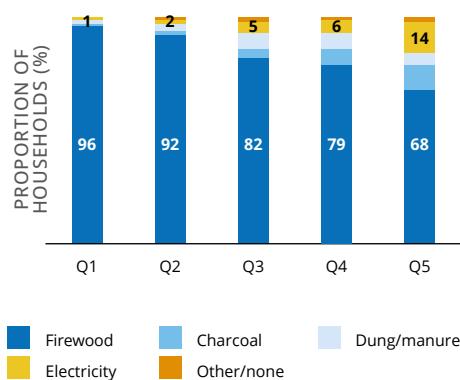
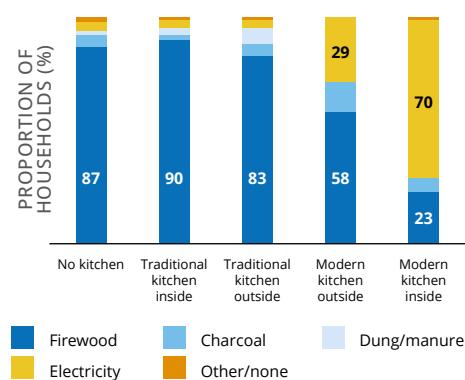


FIGURE 5.4C
**Household source of fuel, by housing
characteristics, 2022**



Source: ESPS 5.

Source: ESPS 5.

5.2 ENERGY EXPENDITURE

About half of the households consumed energy²³ from their own production or received as a gift (Figure 5.5a). In 2022, fifty-one percent of households reported incurring energy expenses, which means the other half used their own sources, collecting firewood (Figure 5.5a).

FIGURE 5.5A
Share of households reported energy expenses, by place, over time

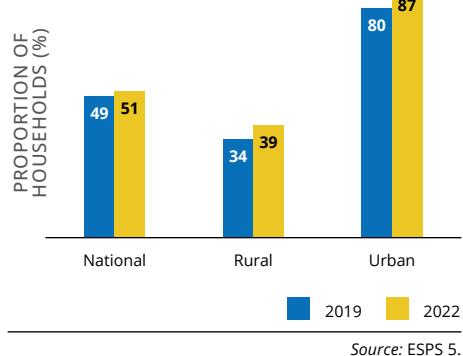
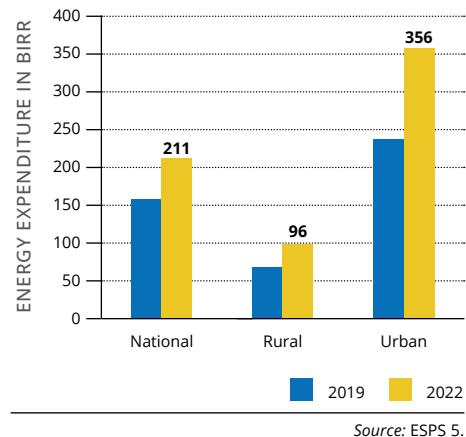


FIGURE 5.5B
Average energy expenditure, by place, over time (in 2019 prices)



This varies substantially by place of residence, as urban households consume more commercialized energy sources than rural areas. Eighty-seven percent of households in urban areas and 60% in rural areas incurred energy expenses in 2022.

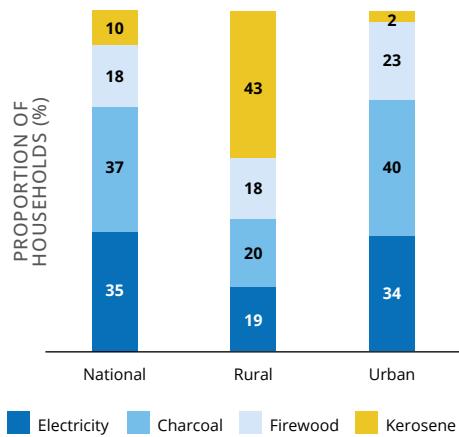
The average monthly energy expenditure in Ethiopia increased from 157 Birr in 2019 to 211 Birr in 2022 (Figure 5.5b)²⁴ Household energy expenditure increased in both rural and urban areas, however, the average expenditure in urban areas was more than threefold the rural average. For example, in 2022, the average energy expenditure in urban areas was 356 Birr, while this was only 96 Birr in rural areas.

Firewood and charcoal make up a huge share of energy expenditure, and in 2022, households (mostly in urban areas) spent 55%, on average, of their total energy expenditure on these items (Figure 5.6a).

²³ Energy expenses in this survey consider only actual payments made by the households. Those collected by households (e.g., firewood, charcoal, cow dung etc.) are not included.

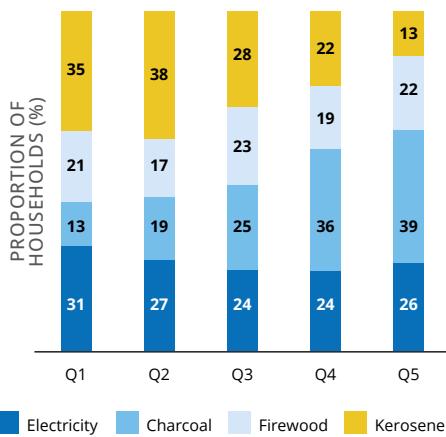
²⁴ The values are in 2018 prices and are only for those households that reported any expenses.

FIGURE 5.6A
Expenditure share of energy sources to the total energy expenditure, by place, 2022



Source: ESPS 5.

FIGURE 5.6B
Expenditure share of energy sources to the total energy expenditure, by wealth, 2022



Source: ESPS 5.

Rural households spent most of their energy budget on kerosene. The difference might be due to the fact that rural households collect their own firewood and therefore do not need to purchase it.

Spending on energy sources differs with the wealth status of households. For example, the bottom 20% of the population spent more on kerosene, while the top 20% spent more on charcoal. The bottom 20% spent 35% of their total energy expenditure on kerosene and 13% on Charcoal, while the top 20% only spent 13% on kerosene and 39% on Charcoal (Figure 5.6b).

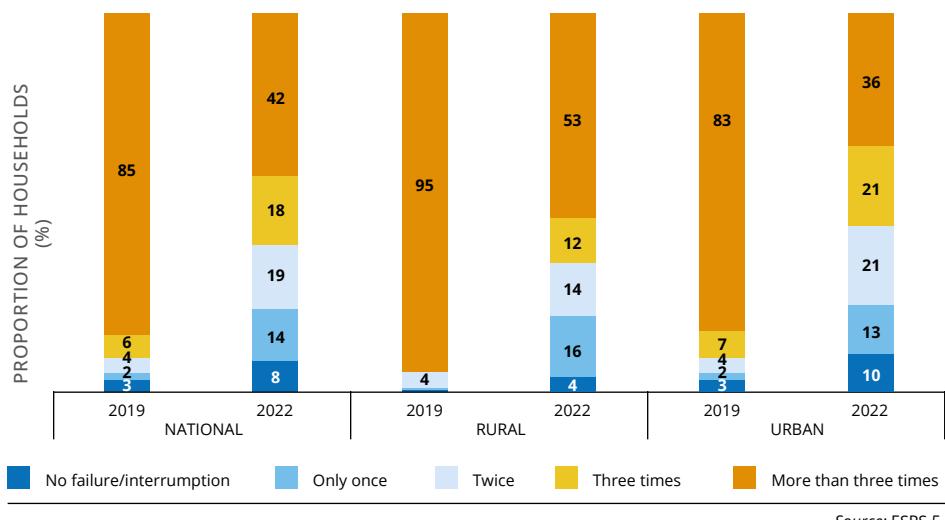
5.3 ELECTRIC POWER OUTAGES

Electric interruptions or power outages used to be commonplace in Ethiopia, but substantial improvements have since been made. Eighty-five percent of households in the country with access to electricity experienced power interruptions more than three times a week in 2019. In 2022, only 42% of these households reported interruptions of this scale (Figure 5.7).

This improvement is evident in both urban and rural areas. In 2019, power failure was almost universal in rural areas, however, in 2022, only half of rural households reported having experienced power failure more than three times a week. In 2022, only four out of ten households reported power failure, as opposed to eight out of ten households in 2019.

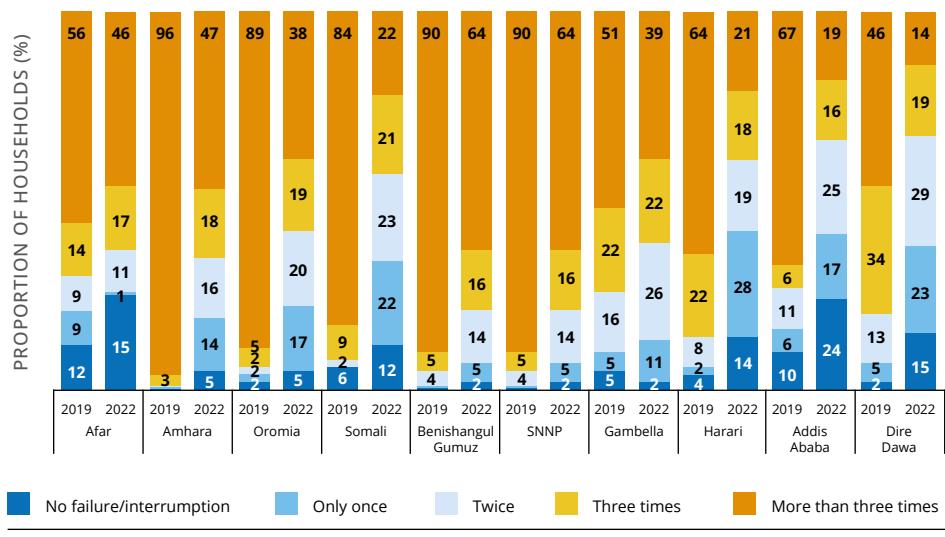
Over the three years, there have been substantial improvements in some regions. In Somali, Oromia, Amhara, and Addis Ababa, power outages decreased by 50 percentage points during this period (Figure 5.8). For example, in Amhara, while power outages were very frequent in 2019, the frequency decreased by 50 percentage points in 2022. As of 2022, only two out of ten households experienced power failure more than three times a week in urban-dominated regions (with the exception of Somali), Addis Ababa, Dire Dawa, and Harari. In Somali, only 22% of households experienced persistent power interruptions in 2022.

FIGURE 5.7
Electric power outage frequency, by place, over time



Source: ESPS 5.

FIGURE 5.8
Electric power outage frequency, by region, over time



Source: ESPS 5.

LIST OF TABLES FOR CHAPTER V

TABLE 5.1

Household Source of Light, Electricity Cost and Disruptions, and Source of Fuel by Place of Residence, 2022, Percent

	National	Rural	Urban
Main source of light			
Private electric meter	13.8	3.6	42.8
Shared electric meter	18.8	11.4	39.9
Solar	32.8	41.6	7.5
Dry cell light with switch	9.2	11.7	1.9
Kerosene lamp	12.7	16.7	1.3
Firewood	10.3	12.1	5.3
Other	2.4	2.8	1.4
Monthly payment for electricity			
None	19.3	12.8	22.7
1–50 Birr	36.6	62.9	22.9
51–100 Birr	13	15.1	12
101–500 Birr	23.7	9.2	31.2
> 500 Birr	7.4	0.1	11.2
Electricity interruptions (last 7 days)			
None	8	4.1	10
One	13.8	16.3	12.5
Two	18.7	14.3	21
Three	18	12.4	20.8
Four or more	41.6	52.9	35.7
Source of fuel for cooking			
Collected firewood	71	86.9	25.8
Purchased firewood	12.4	5.2	32.9
Charcoal	5	1.1	16
Crop residue/leaves	0	0	0.1
Dung/manure	4.9	6.5	0.4
Electricity	5.6	0.1	21.3
None	0.7	0.1	2.6
Other	0.4	0.1	1

Source: ESPS 5.

TABLE 5.2
The Dynamics of Selected Energy Indicators between 2019 and 2022.

Indicators	National	Rural	Urban
Access to electricity (Population)			
Without access to electricity	-12.60**	-18.24**	
Grid line		6.89**	
Solar lights	10.52**	11.35**	
Sources of light			
Private electric meter		1.74*	
Shared electric meter		5.23**	-7.70**
Solar	12.05**	12.73**	
Dry cell light with switch	-4.95**	-7.86**	
Kerosene lamp	-7.66**	-11.64**	-2.34**
Firewood			
Other	1.26*		2.18*
Sources of fuel			
Firewood	5.4**		6.99**
Charcoal	-3.00**		
Dung/manure			
Electricity	-1.25*		
Other/None	-1.66**	-1.35**	
Electric power outages			
More than three times	-43.71**	-41.81**	-47.71**
Three times	11.90**	8.67**	14.31**
Twice	14.83**	13.19**	16.56**
Only once	11.81**	16.07**	10.17**
No failure/interruption	5.16**	3.88**	6.67**

Note: The numbers are difference in percentage points. * and ** denote statistically significant for mean separation test at the 0.05 and 0.01 level, respectively. Shaded areas are where the tests were not significant.

Source: ESPS 5 and ESPS 4.



Chapter VI

Time Use, Employment, Nonfarm Enterprises and Other Income

Highlights

- Collecting water and fuelwood is mainly the responsibility of adult female household members. Adult females in rural areas spend about an hour per day collecting water and fuelwood, while it takes adult females in urban areas only about 20 minutes.
- A large segment of the population is engaged in agriculture, as more than half of males and a third of females spend their time in agriculture.
- Rural areas experienced a slight contraction in total employment between 2019 and 2022 for both males and females.
- Across time and place, the share of employed females appeared to be lower compared to males. In 2022, seven out of ten males worked, while less than half of females were employed.
- Wage employment is prevalent among males and the wealthier population. The proportion of males working for a wage and salary is more than twice that of females.
- The standard type of employment in rural areas is self-employment, accounting for 90% of the employed population. The agriculture sector is home to the majority of self-employed people, as eight out of ten work there.
- The share of households running nonfarm enterprises increased from 23% in 2019 to 27% in 2022. Nonfarm enterprises are prevalent in urban areas.
- The average firm age is six years, and about 40% of firms have been in operation for less than three years since their establishment.
- The share of households receiving other income increased from 30% in 2019 to 36% in 2022, with the most notable source being transfers and/or gifts (27%).

6.1 TIME USE²⁵

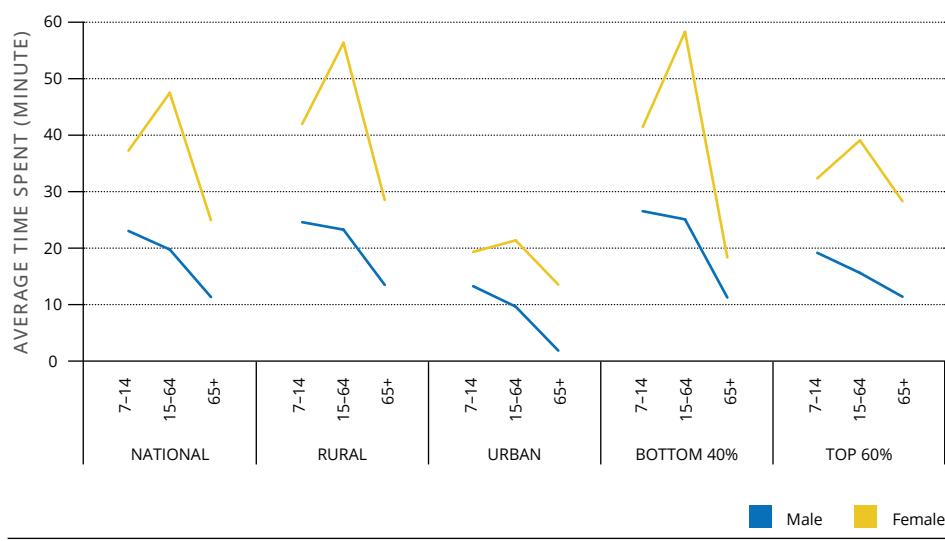
6.1.1 Collecting Water and Fuelwood

In 2022, among household members aged seven years and above, 57% of females participated in collecting water and fuelwood activity daily, while only 26% of males engaged in this activity (Table 6.1). The female-male participation gender gap is higher in rural areas (37 percentage points) than in urban areas (11 percentage points).

Somali had a smaller gender gap after Addis Ababa, where this activity is uncommon – only a 3% participation rate. The gender gap also exists across different levels of households' wealth status. For example, in the bottom 40% of households, six out of ten females collected water and fuelwood, while this was the case for only three out of ten males.

On average, a female spent 45 minutes collecting water and fuelwood, while this same activity took only 20 minutes for a male (Table 6.2). Across different levels of demographic and socioeconomic conditions, females spent more time on this activity than males (Figure 6.1a). For example, adult females in rural areas and from the bottom 40% spent a longer time (about an hour) collecting water and fuelwood than other groups. On the other hand, boys' (7–14 years old) spent more time on this activity compared to other male age groups.

FIGURE 6.1A
Time spent on collecting water and fuelwood, by age, place, wealth, and gender, 2022

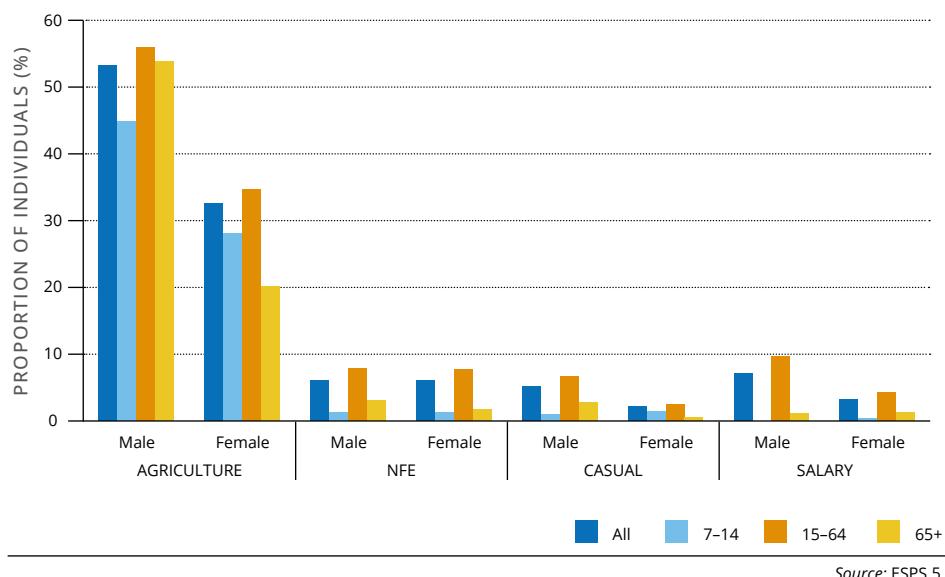


Source: ESPS 5.

²⁵ This section depends on the past seven-day reference period.

FIGURE 6.1B

Engagement in various activities in the last seven days, by age and gender, 2022



Source: ESPS 5.

6.1.2 Agriculture Activity

A large segment of the population engages in agricultural activities; 53% of males and 33% of females spent time in agriculture-related activities (Figure 6.1b). In Amhara, SNNP, and Oromia, more than half of the males were engaged in agriculture (Table 6.3). The proportion of girls aged 7–14 involved in agricultural activities was higher compared to other female age groups.

6.1.3 Nonfarm Enterprise Activities

Among household members, engagement in nonfarm enterprises is minimal. In 2022, only 6% of males and females spent time in the sector (Figure 6.1b). Participation was higher among the 15–64 age group, irrespective of gender. There was a higher prevalence of this activity in urban areas and among wealthier households (Table 6.4). Interestingly, there was no gender difference across regions at all levels.

6.1.4 Casual, Part-time and Temporary Works

Casual, part-time, or temporary work appeared to be rare for both males (5%) and females (2%) in 2022 (Figure 6.1b), however, the activity was more common in urban than in rural areas (Table 6.5). Gambella and Somali had higher participation rates of casual labor compared to other regions.

6.1.5 Work for Salary and Wages

Salary and wage payment work is uncommon, as only 7% of males and 3% of females spent time on such activity in 2022 (Figure 6.1b). The gender gap was more significant in urban areas and among wealthier households. For example, 20% of urban males worked for a salary and wage, compared to only 10% for urban females (Table 6.6). Predominantly urbanized regions have a larger proportion of their population working for salary and wage, e.g., in Addis Ababa, 30% of males and 21% of females engaged in such work.

6.2 EMPLOYMENT

6.2.1 Total Employment

The share of the employed population²⁶ was 56% in 2022, down from 58% in 2019 (Table 6.7).²⁷ While the share decreased by five percentage points in rural areas over the same period, it stayed mostly the same in urban areas (Figure 6.2a). The employment contraction in rural areas mainly happened among females.

The employment share for females is lower than for males, and this has been the case over time and across place of residence. For example, both in 2019 and 2022, less than half of the female population worked, while seven out of ten males worked (Figure 6.2a). Though Amhara had a higher share of the working population (63%), the share of the male working population (77%) was much higher than the share of the female working population (49%) (Figure 6.2b).

Across all regions, the gender gap has persisted over the years. Between 2019 and 2022, Afar, Benishangul Gumuz, and Gambella showed an increase in the share of the employed population; however, this increase comes entirely from the male group (Table 6.7). In 2022, the top three regions with a higher gender gap were Afar, Amhara and SNNP (Figure 6.2b). Employment in the agriculture sector decreased from 76% in 2019 to 71% in 2022, while non-agriculture employment increased by five percentage points (Figure 6.3a).

²⁶ Employed population is estimated from 7 years and older population on those who worked at a farm or paid job or business or who were working unpaid at a household business in the last seven days prior to the survey day for at least one hour. This includes household business owners and paid family workers.

²⁷ See Table 6.10 for all 2019 and 2022 comparisons reported in this chapter.

FIGURE 6.2A
Employment, by place and gender,
over time

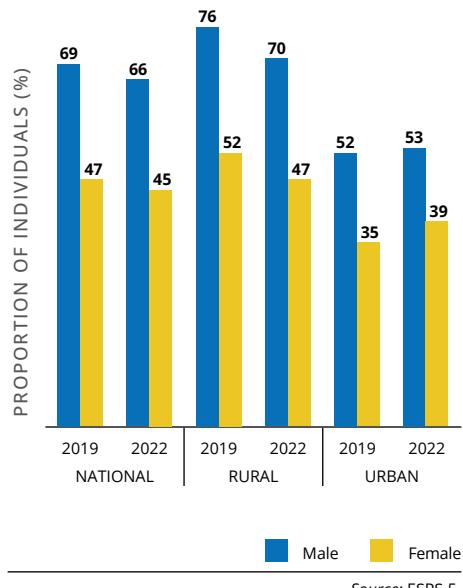


FIGURE 6.2B
Employment and gender gap,
by region, 2022

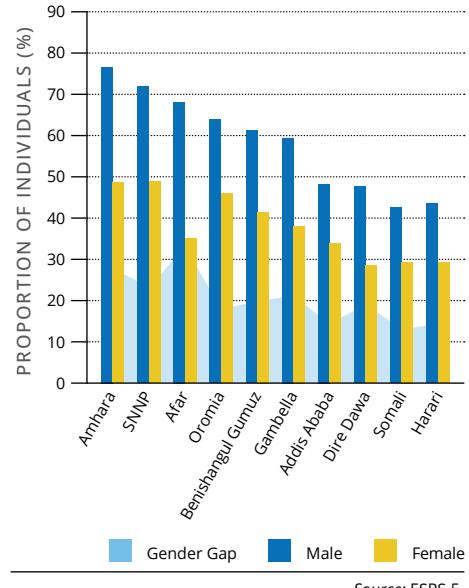


FIGURE 6.3A
Employment by economic
sectors, by place and gender, over time

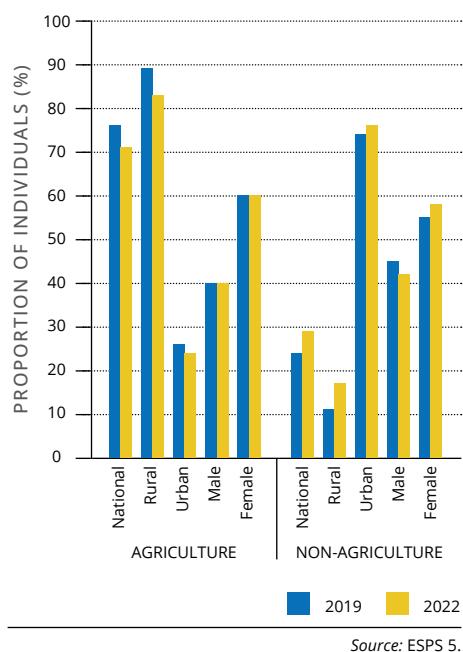
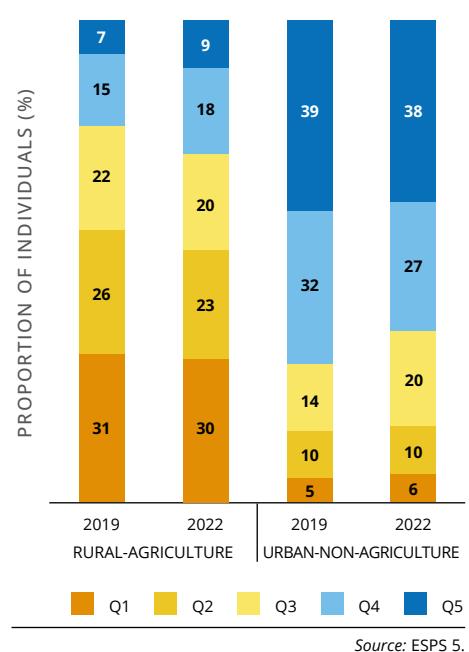


FIGURE 6.3B
Distribution of employment by economic
sectors, by place and wealth, over time



However, such dynamics are mainly seen in rural areas. Notably, the share of employed people in the agriculture sector remained the same for both sexes over time. In contrast, the share of males in the non-agriculture sector slightly increased by three percentage points, while the share of females decreased by the same percentage.

The majority of employed people in rural areas work in the agriculture sector and are mostly the poorest segment of the population (Figure 6.3a & 6.3b). Wealthier households' engagement in the agricultural sector is minimal, however, their share of engagement in this sector increased slightly between 2019 and 2022 from 15% to 18% in Q4 and 7% to 9% in Q5.

In urban areas, employed people mainly work in nonagricultural sectors (Figure 6.3a). These non-agricultural sectors employed a higher share of the wealthier urban population; however, the share decreased between 2019 and 2022 (Figure 6.3b). For example, there was a five-percentage point reduction among the quantile four group (32% to 27%).

6.2.2 Wage Employment²⁸

The share of the population in the wage employment sector remained about the same in 2019 and 2022. The share of working wage employment is higher for males and the wealthier population. Moreover, the share of the male population in wage employment increased by two percentage points between 2019 and 2022 (Figure 6.4a).

FIGURE 6.4A
Wage employment, by gender and wealth, over time

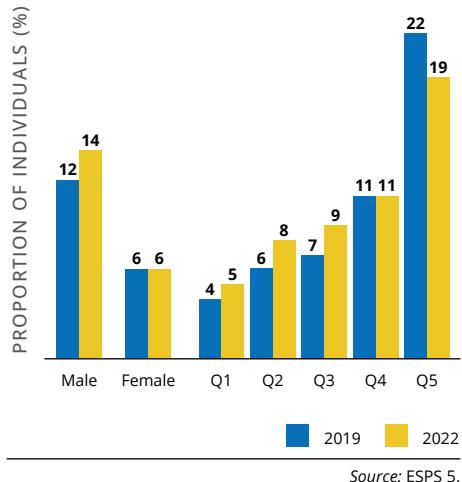
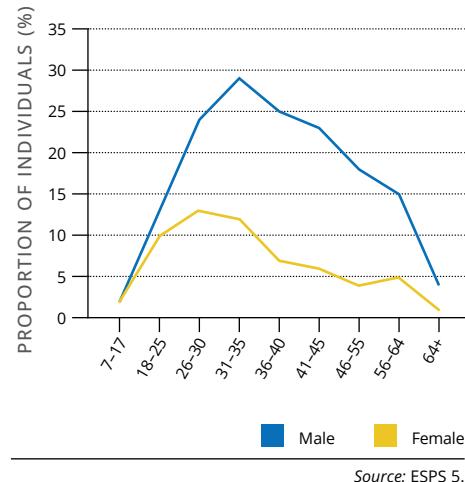


FIGURE 6.4B
Wage employment, by age and gender, 2022



²⁸ Wage employment data reference period is 12 months, and it includes temporary jobs with salary. The temporary job section in ESPS questionnaire does not have industry classification. ESPS industry classification considers and groups all temporary jobs as *Other*, and it is applied accordingly during the discussion of this chapter.

Females join the sector slowly compared to males. In 2022, when one moves from the 18–25 to 26–30 age group, the share grows by only 24 percentage points for females, while it grows by 81 percentage points for males (Figure 6.4b). Moreover, females start dropping out of wage employment at age 30 and quickly withdraw from the market. This is not the case for males; their share continues to grow and doesn't begin declining until about 36 years.

The service sector is the primary provider of wage employment (Figure 6.5a). Across all distributions, half of the wage employees work in the service sector except for the bottom 20%, where more than half of the people engage in casual work.

FIGURE 6.5A
**Wage employment, by wealth
and industry type, 2022**

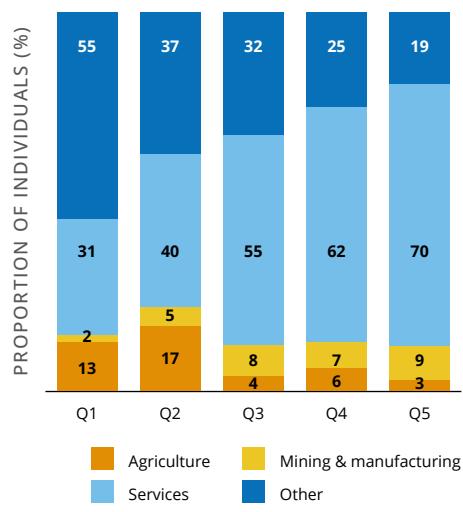
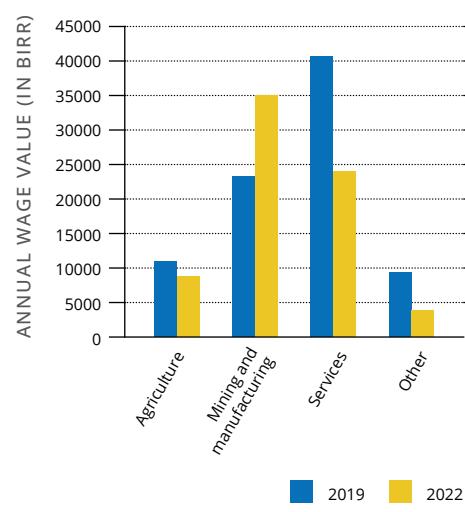


FIGURE 6.5B
**Annual wage value in 2019 price by sector,
over time**



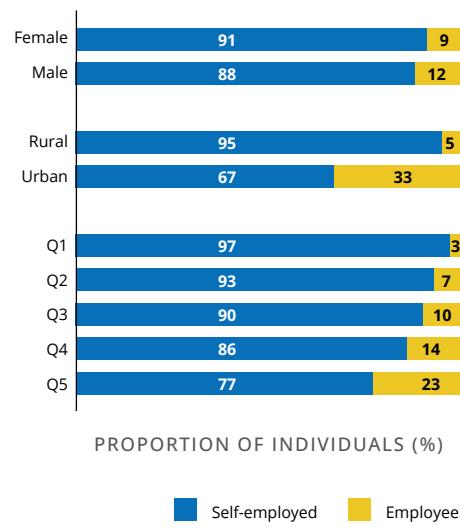
In 2022, seven out of ten people from the top 20% worked in the service sector. In contrast, wage employment is not common within the agriculture, mining and manufacturing sectors. The proportion of wage workers in the mining and manufacturing sectors was relatively higher among the top 60% of the population compared to the bottom 40%. The bottom 20% mainly engaged in other types of work, as more than half of them worked in these sectors.

In 2022, the average annual wage value was highest in the manufacturing sector, with employees earning 35,955 Birr (Figure 6.5b). Notably, the real average wage value from the service sector decreased from 40,000 Birr in 2019 to 24,000 Birr in 2022.

6.2.3 Self-employment

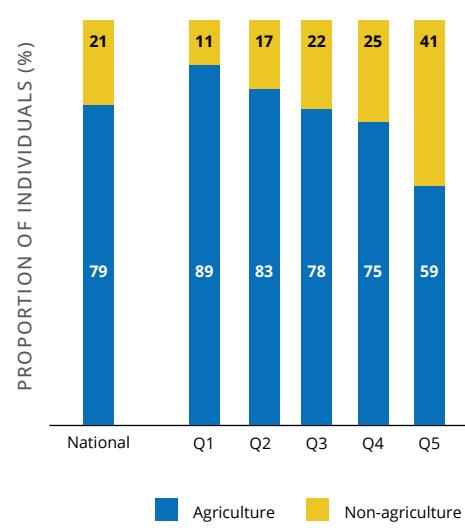
There is no gender difference in this type of employment. Nine out of ten employed people were self-employed²⁹, and this was higher in rural areas than in urban areas (Figure 6.6a). However, compared to rural areas and other wealth status categories, working as an employee was more common in urban areas and among the top 20% households.

FIGURE 6.6A
Type of employment, by place, gender, and wealth, 2022



Source: ESPS 5.

FIGURE 6.6B
Self-employment, by industry and wealth, 2022



Source: ESPS 5.

The agriculture sector was the home of self-employment, with eight out of ten employed people working in this sector (Figure 6.6b). This is true across the income distribution, except for the top 20% households, where 41% of them worked in the non-agriculture sector.

²⁹ Self-employment is defined as a job where the workers spend more time as an own-account worker and/or contribute to the family work. Otherwise, it is classified as an employee who spends more time working for payment and casual/temporary work.

6.3 NON-FARM HOUSEHOLD ENTERPRISE³⁰

6.3.1 Ownership, Characteristics and Business Operation

In 2022, about one-quarter of households owned non-farm enterprises (household enterprises), mostly in urban areas. Ownership of non-farm enterprises increased from 23% in 2019 to 27% in 2022 (Figure 6.7a). Notably, the increase happened across all classifications, with the most considerable rise observed in urban areas (38% to 48%). The incidence of non-farm enterprise ownership was expectedly higher among the top 60% of households.

Non-farm enterprises ownership rate was highest in Benishangul Gumuz and lowest in Somali (Figure 6.7b). Benishangul Gumuz, Afar, and Dire Dawa were the top three regions where the ownership rate increased between 2019 and 2022.

FIGURE 6.7A
Nonfarm enterprises ownership by place, by wealth, over time

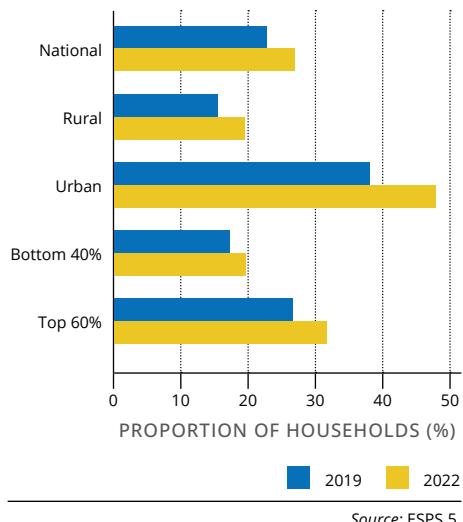
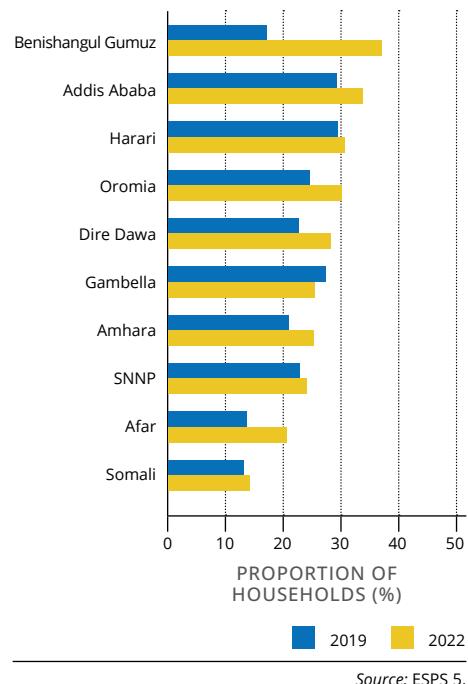


FIGURE 6.7B
Nonfarm enterprises ownership by region, over time

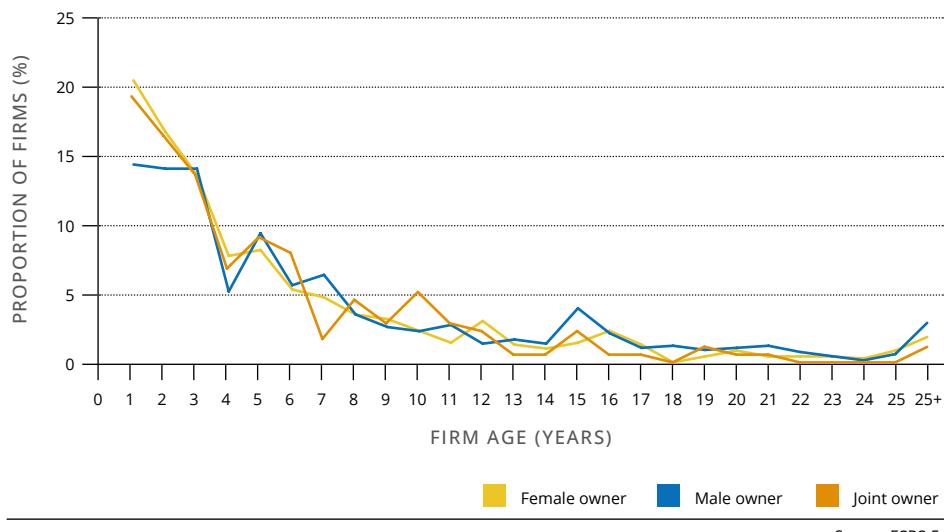


³⁰ Non-farm household enterprises in rural and urban areas refer to small informal or formal businesses providing a wide range of goods and services from the household residence, nearby shops, or on a market. In urban areas, these are household enterprises. ESPS collects data from households running/operating at least one enterprise in any form and sector about the type of the business, the growth dynamics, income, and challenges from growth.

In 2022, nonagricultural businesses and processed agricultural products were the most common household-level enterprises (Table 6.8). This is true across all regions, except in Dire Dawa and Addis Ababa, where taxi and pick-up trash services were the second most common nonfarm activity. In Harari, trading on the street or in a market was the second most common nonfarm enterprise activity.

These enterprises were young, as the average firm age in 2022 was just six years. About four out of ten firms have been in operation for less than three years, implying that most enterprises are startups (Figure 6.8). Interestingly, among these startups, the share of female-owned enterprises was higher than male-owned enterprises. As they age, the life span of a household enterprise decays, irrespective of gender, implying a high drop-out rate.

FIGURE 6.8
Nonfarm enterprises age, by ownership gender, 2022



Source: ESPS 5.

The typical business places for these enterprises are either inside a residence, local market, mobile, or by the roadside. The share of businesses operating in these places increased from 68% in 2019 to 74% in 2022 (Figure 6.9a).

On the other hand, the share of enterprises operating in non-residential business-based premises and shops in commercial areas decreased by five percentage points over the years.

The start-up capital of household enterprises was mainly financed through either agricultural income (44%), credit from the informal sector (19%), or nonfarm income from self-employment (17%) (Figure 6.9b).

FIGURE 6.9A
Nonfarm enterprises' working place, over time

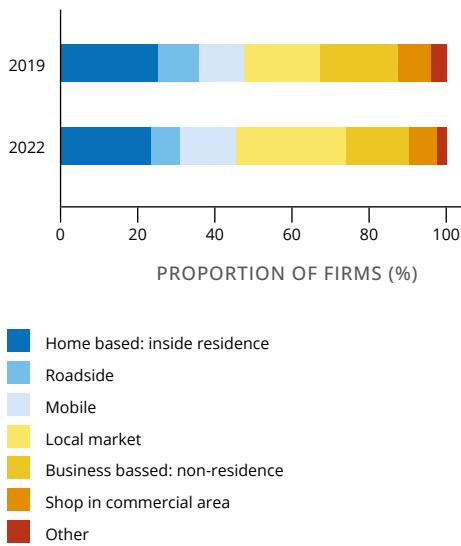
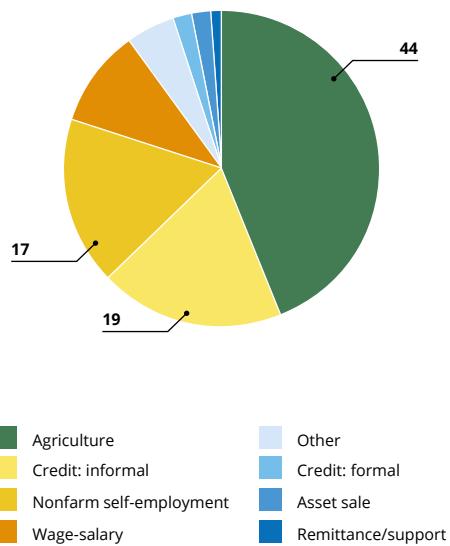


FIGURE 6.9B
Source of start-up capital for nonfarm enterprises, 2022

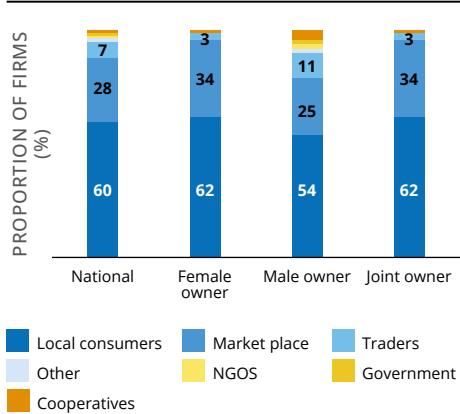


6.3.2 Marketing

The household enterprises mainly target local consumers and passers-by (60%), followed by customers in marketplaces (28%) (Figure 6.10a). This customer targeting strategy remains the same across all owners, except that marketing interaction with traders is more common among male-owned firms (11%) compared to female- and jointly-owned firms (3%).

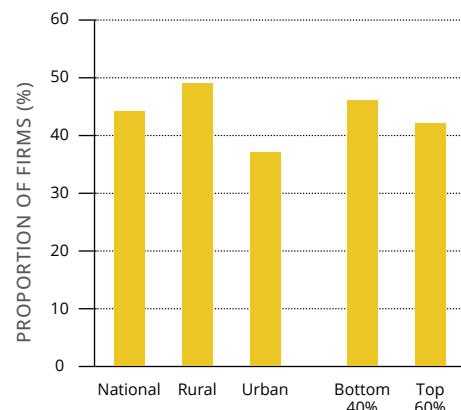
About 44% of the household enterprises operate during selected seasons (Figure 6.10b). The seasonality of businesses is typical in rural areas, with almost half of the firms operating seasonally (Figure 6.10b). Moreover, seasonality is higher among enterprises run by the bottom 40% compared to the top 60%.

FIGURE 6.10A
Market destinations for household enterprises, 2022



Source: ESPS 5.

FIGURE 6.10B
Seasonal business operation, 2022

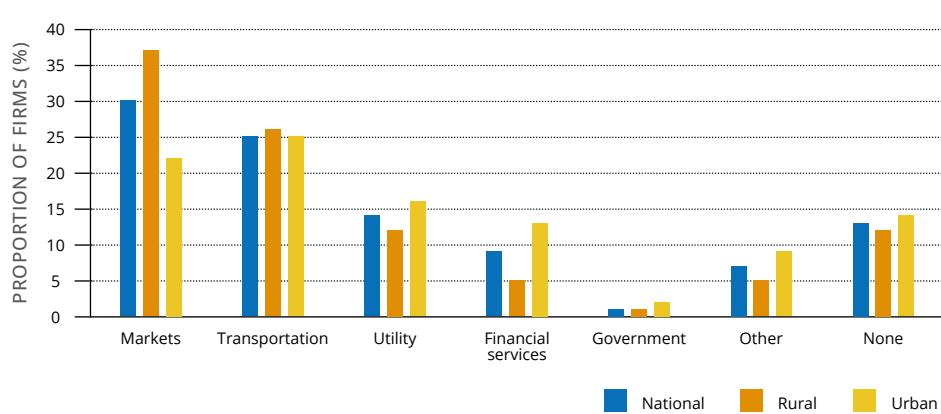


Source: ESPS 5.

6.3.3 Constraints to Growth

Only 13% of household enterprises have never encountered constraints to growth and operation, and this is consistent across urban and rural areas (Figure 6.11). Market- and transport-related constraints were very common constraints to growth and operations among household enterprises. About 30% reported that market-related constraints were the main challenge to operation and growth, and this was more widely reported in rural areas than in urban areas. In urban areas, the more commonly reported constraints were related to electricity (11%) and financial services (13%) (Table 6.9).

FIGURE 6.11
Constraints to operation and growth of NFEs, by place, 2022



Source: ESPS 5.

6.4 OTHER INCOME

More households received other income³¹ in 2022 compared to 2019, as the share of such households increased by six percentage points from 30% in 2019 to 36% in 2022 (Figure 6.12a).

FIGURE 6.12A
Households receiving other incomes, by place and wealth, over time

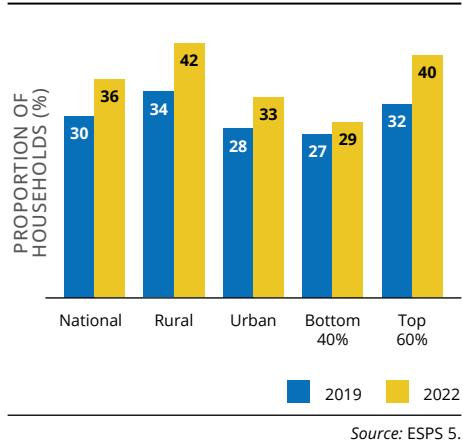
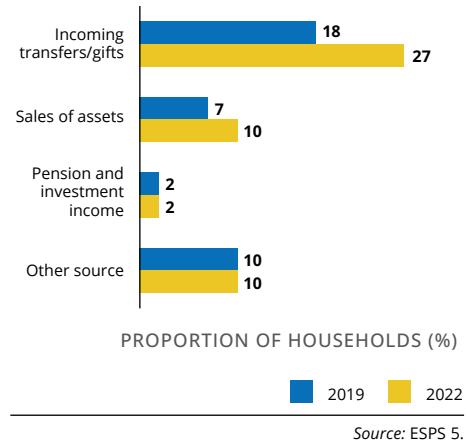


FIGURE 6.12B
Source of other incomes, over time



However, the most significant increase happened in wealthier households and urban areas (eight percentage points). In 2022, the largest source of other income was incoming transfers/gifts, as 27% of households received either cash, food, or non-food in-kind items (Figure 6.12b).

³¹ Other income sources include transfers/gifts, sales of assets, pensions, and related.

LIST OF TABLES FOR CHAPTER VI

TABLE 6.1

Time Spent Collecting Water and Fuelwood per Day by Gender, Region, Place of Residence and Wealth Status, 2022, Percent

	Male				Female			
	All	7-14	15-64	65+	All	7-14	15-64	65+
Afar	18.9	15.8	20.3	9.7	44.2	23.0	50.2	50.3
Amhara	15.5	21.1	14.5	7.3	54.6	46.1	59.0	24.2
Oromia	26.5	30.7	25.9	6.4	59.8	48.2	65.2	32.5
Somali	46.8	38.7	49.6	45.1	59.3	50.7	63.1	47.2
Benishangul Gumuz	10.7	20.1	7.9	9.1	64.2	54.1	67.1	60.0
SNNP	36.8	50.0	33.3	17.6	65.8	59.1	69.0	41.2
Gambella	29.7	27.4	31.0	9.4	65.8	49.7	70.7	41.0
Harari	14.1	19.9	13.4	1.0	37.0	29.8	39.6	19.9
Addis Ababa	1.3	0.4	1.6	0.0	4.0	3.3	4.3	1.3
Dire Dawa	9.7	13.9	9.1	3.0	28.2	22.7	29.5	25.1
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Rural	29.6	34.6	28.8	13.5	67.1	55.2	72.6	36.1
Urban	14.0	21.2	12.7	2.2	25.0	23.2	26.0	14.6
Top 60%	22.8	30.2	21.6	8.2	51.0	41.2	54.5	33.3
Bottom 40%	29.6	33.6	28.7	16.3	64.0	54.7	69.1	26.4
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National	25.9	32.0	24.7	11.4	57.0	48.6	60.9	31.0

Source: ESPS 5.

TABLE 6.2

Time Spent Collecting Water and Fuelwood per Day by Gender, Region, Place of Residence and Wealth Status, 2022, Minutes

	Male				Female			
	All	7-14	15-64	65+	All	7-14	15-64	65+
Afar	18.2	9.3	21.4	2.9	46.2	18.6	54.1	50.2
Amhara	10.9	13.2	10.7	5.4	38.9	35.1	41.6	14.5
Oromia	17.3	19.6	17.2	2.4	38.8	30.9	42.6	17.7
Somali	67.7	60.3	69.1	87.7	84.0	66.1	89.9	107.7
Benishangul Gumuz	3.5	7.7	2.2	4.6	42.6	28.6	47.4	17.1
SNNP	26.4	33.6	24.7	11.3	59.2	50.0	63.0	41.8
Gambella	17.1	10.3	18.8	16.9	38.2	26.4	42.0	16.7
Harari	12.6	17.8	11.9	1.9	27.4	17.2	30.5	15.1
Addis Ababa	0.4	0.0	0.5	0.0	2.8	1.5	3.1	1.2
Dire Dawa	12.1	17.7	11.2	3.8	32.5	27.7	33.6	30.1
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Rural	23.1	24.5	23.2	13.5	51.9	42.0	56.4	28.6
Urban	10.9	17.2	9.7	1.6	20.8	19.4	21.6	13.3
Top 60%	16.2	19.4	15.6	11.2	37.4	32.3	39.3	28.2
Bottom 40%	25.0	26.5	25.0	11.2	52.7	41.5	58.4	18.3
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National	20.2	23.1	19.8	11.2	44.5	37.4	47.7	24.9

Source: ESPS 5.

TABLE 6.3

Time Spent on Agricultural Activities in the Past 7 Days by Gender, Region, Place of Residence and Wealth Status, 2022, Percent

	Male				Female			
	All	7-14	15-64	65+	All	7-14	15-64	65+
Afar	42.7	50.5	39.7	60.2	19.8	32.3	16.9	0.4
Amhara	63.0	64.4	63.4	51.8	36.6	44.1	36.5	8.4
Oromia	53.6	42.4	57.7	54.4	32.1	26.1	34.2	30.3
Somali	30.9	23.6	32.8	40.4	21.6	18.4	23.7	1.4
Benishangul Gumuz	35.3	27.2	36.2	72.9	24.8	11.7	27.0	66.3
SNNP	61.9	45.7	66.8	73.7	40.8	24.1	46.7	30.7
Gambella	38.4	22.5	42.0	50.0	24.6	19.1	26.4	13.0
Harari	11.8	6.2	13.8	0.7	5.4	4.7	5.8	1.2
Addis Ababa	1.0	0.5	1.0	3.2	0.3	0.0	0.3	0.0
Dire Dawa	14.6	11.4	16.0	1.1	5.8	9.3	5.3	0.4
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Rural	65.3	53.0	70.0	59.7	39.6	33.3	42.5	25.3
Urban	13.6	10.4	13.8	27.6	9.9	7.6	10.8	3.7
Top 60%	49.1	45.3	49.6	58.5	30.2	26.4	31.6	22.4
Bottom 40%	57.8	44.3	63.6	46.3	35.2	29.3	38.3	15.5
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National	53.1	44.8	55.8	53.7	32.5	28.0	34.6	20.1

Source: ESPS 5.

TABLE 6.4

Time Spent on NFE Activities in the Past 7 Days by Gender, Region, Place of Residence and Wealth Status, 2022, Percent

	Male				Female			
	All	7-14	15-64	65+	All	7-14	15-64	65+
Afar	6.2	0.0	8.1	0.0	6.0	0.1	7.0	24.4
Amhara	5.8	0.5	7.2	5.1	6.0	0.5	7.7	2.2
Oromia	5.5	0.5	7.6	0.8	6.5	1.6	8.5	0.0
Somali	4.1	5.4	3.9	0.0	3.0	0.6	4.0	2.5
Benishangul Gumuz	11.6	0.6	14.8	13.3	5.0	0.0	6.3	7.1
SNNP	6.4	2.4	7.9	4.5	5.2	1.8	6.5	1.1
Gambella	8.8	2.0	10.8	0.0	8.9	0.0	11.5	0.4
Harari	9.6	0.1	12.5	0.0	8.1	1.5	10.1	0.0
Addis Ababa	12.6	0.4	15.8	5.1	8.5	0.4	10.2	5.4
Dire Dawa	8.3	0.0	10.5	3.6	9.6	1.3	11.4	6.7
<hr/>								
Rural	3.6	0.9	4.6	1.2	3.7	1.1	4.7	1.0
Urban	14.3	2.5	17.3	11.0	13.3	1.9	16.7	4.2
Top 60%	8.7	1.5	10.9	4.3	8.1	1.4	10.2	1.4
Bottom 40%	3.1	1.0	4.0	1.0	3.5	1.2	4.5	2.5
<hr/>								
National	6.1	1.2	7.8	3.0	6.0	1.3	7.7	1.7

Source: ESPS 5.

TABLE 6.5

Time Spent on Casual, Part-Time, or Temporary Work in the Past 7 Days by Gender, Region, Place of Residence and Wealth Status, 2022, Percent

	Male				Female			
	All	7-14	15-64	65+	All	7-14	15-64	65+
Afar	4.6	0.0	6.0	0.0	0.3	0.0	0.4	0.0
Amhara	5.1	1.8	6.1	2.8	1.4	0.1	1.8	0.0
Oromia	5.2	0.0	7.2	1.8	3.0	2.0	3.4	1.2
Somali	7.3	2.9	8.2	17.7	3.9	6.0	3.1	1.3
Benishangul Gumuz	4.1	0.4	5.4	0.0	2.5	0.3	3.3	0.0
SNNP	4.5	1.4	5.7	0.0	1.1	0.5	1.4	0.0
Gambella	7.7	0.1	9.9	0.0	1.3	0.0	1.6	0.0
Harari	6.0	0.2	7.6	2.1	2.3	0.1	2.9	0.0
Addis Ababa	4.4	0.1	5.6	0.0	1.6	0.0	2.0	0.0
Dire Dawa	6.1	0.7	7.7	0.0	1.2	1.0	1.3	0.5
<hr/>								
Rural	4.3	0.7	5.7	2.7	1.9	1.2	2.2	0.6
Urban	7.6	1.5	9.3	3.4	2.8	2.5	3.0	0.0
Top 60%	6.6	1.3	8.1	4.6	2.7	1.6	3.1	0.7
Bottom 40%	3.4	0.5	4.6	0.0	1.4	1.3	1.5	0.0
<hr/>								
National	5.1	0.9	6.6	2.8	2.1	1.4	2.4	0.5

Source: ESPS 5.

TABLE 6.6

Time Spent Working for Salary or Wages in the Past 7 Days by Gender, Region, Place of Residence and Wealth Status, 2022, Percent

	Male				Female			
	All	7-14	15-64	65+	All	7-14	15-64	65+
Afar	14.7	0.0	19.3	3.7	6.8	0.0	9.0	0.0
Amhara	8.2	0.0	11.0	1.0	2.3	0.7	2.9	0.0
Oromia	5.0	0.0	7.1	0.2	2.1	0.6	2.6	2.7
Somali	2.4	0.0	3.3	0.0	0.6	0.0	0.9	0.0
Benishangul Gumuz	14.1	0.0	19.0	0.0	5.0	0.0	6.6	0.0
SNNP	5.3	0.6	7.2	0.0	2.7	0.0	3.7	0.0
Gambella	10.0	0.0	12.8	0.0	1.3	0.0	1.7	0.0
Harari	16.1	0.4	20.5	6.8	8.1	0.0	10.5	0.0
Addis Ababa	29.6	0.0	37.5	11.4	21.1	0.1	26.1	4.3
Dire Dawa	17.4	0.0	21.3	19.1	9.1	0.1	11.4	0.0
<hr/>								
Rural	3.0	0.2	4.2	0.0	1.1	0.5	1.3	0.0
Urban	20.3	0.0	25.9	5.6	10.1	0.0	12.9	5.0
Top 60%	10.4	0.2	13.7	1.6	5.2	0.4	6.6	1.8
Bottom 40%	3.2	0.1	4.5	0.2	0.9	0.4	1.1	0.0
<hr/>								
National	7.1	0.1	9.7	1.1	3.2	0.4	4.2	1.2

Source: ESPS 5.

TABLE 6.7

Total Employment by Gender, Region, and Place of Residence, 2019 and 2022, Percent

	2019		2022			
	Total	Male	Female	Total	Male	Female
Afar	47.3	57.7	36.9	53.0	68.0	34.9
Amhara	64.9	81.0	49.7	62.5	76.5	48.5
Oromia	57.2	69.6	45.0	54.7	63.7	45.8
Somali	40.9	47.9	33.5	36.4	42.4	29.3
Benishangul Gumuz	47.9	53.6	41.9	51.5	61.2	41.4
SNNP	61.8	69.0	55.0	60.0	71.8	48.8
Gambella	44.5	52.0	37.0	49.2	59.3	38.0
Harari	38.7	47.7	30.3	36.5	43.5	29.2
Addis Ababa	40.3	47.1	35.2	40.6	48.2	33.8
Dire Dawa	43.0	50.5	36.0	38.2	47.5	28.5
Rural	63.6	75.5	51.7	58.7	70.3	47.0
Urban	43.0	51.9	35.3	46.2	53.3	39.3
National	58.0	69.5	47.0	55.7	66.3	45.2

Source: ESPS 5.

TABLE 6.8

Types of Nonfarm Enterprises by Region and Place of Residence, 2022, Percent

	Any NFE	Nonagricultural Business/ Services from Home/ Shop	Processed Agricultural Products (flour, tella, enjera...)	Trading on a Street or in a Market	Services and Goods Sold	Professionals	Taxi/ Pickup Truck	Bar/ Restaurant	Other Small Business
Afar	20.6	13.9	1.1	1.9	0.0	0.0	0.9	1.0	3.8
Amhara	25.2	8.3	4.8	3.4	2.2	1.1	1.4	0.4	4.6
Oromia	30.0	11.0	7.8	4.5	2.2	0.6	1.2	0.9	4.2
Somali	14.1	6.6	2.3	2.2	0.8	0.1	0.2	0.3	4.2
Benishangul Gumuz	37.0	14.2	8.4	5.6	2.8	0.1	6.1	0.3	4.0
SNNP	23.9	10.7	5.1	2.6	1.9	0.4	2.0	0.3	4.5
Gambella	25.3	10.1	7.2	4.4	3.0	0.9	0.5	3.9	3.9
Harari	30.5	15.1	2.7	9.1	0.8	0.9	3.0	0.4	5.4
Addis Ababa	33.6	20.4	1.1	4.5	0.3	2.5	5.6	0.6	3.7
Dire Dawa	28.2	14.2	3.5	3.2	0.9	0.0	5.2	1.2	3.9
Rural	19.4	6.7	5.2	2.2	2.2	0.4	1.0	0.3	3.1
Urban	47.7	21.4	7.4	8.0	1.1	1.6	3.5	1.6	7.9
National	26.8	10.6	5.7	3.7	1.9	0.7	1.6	0.6	4.3

Source: ESPS 5.

TABLE 6.9

Constraints to Operation and Growth of NFEs by Place of Residence, 2022, Percent

	Ethiopia	Rural	Urban
Electricity	8.4	6.2	10.8
Telecommunication	0.9	1.4	0.4
Water	4.8	4.9	4.6
Postal service	0.9	1.3	0.4
Transportation	25.3	25.7	24.9
Financial services	8.9	5.4	12.8
Markets	29.9	36.7	22.2
Government	1.3	1.1	1.5
Safety	0.6	0.7	0.5
Technology	0.2	0.0	0.4
Registration and permits	1.0	1.3	0.8
Taxation	1.4	1.0	1.8
Other	3.6	2.0	5.4
None	13.0	12.5	13.7

Source: ESPS 5.

TABLE 6.10

The Dynamics of Selected Labor and Other Income Indicators between 2019 and 2022

Indicators	National	Rural	Urban
Total employment			
Total	-4.91*		
Male	-5.20*		
Female			
Wage employment			
Male			
Female			
Non-farm enterprise ownership			
All Household	4.08*	4.01*	9.77**
Bottom 40%			
Top 60%	5.14*		
Other income			
All Household	6.15*		8.93**
Bottom 40%			
Top 60%	8.83**		

Note: The numbers are differences in percentage points. * and ** denote statistically significant for mean separation test at 0.05 and 0.01 levels respectively. Shaded areas are where the differences were not significant.

Source: ESPS 5 and ESPS 4.



Chapter VII

Consumption, Food Security and Shocks

Highlights

- In 2022, the national average of the annual household consumption expenditure per adult equivalent was 17,000 Birr.
- The region with the smallest consumption expenditure was Somali (15,000 Birr), and Harari had the largest (28,000 Birr).
- As a share of the household's total food consumption budget, teff had the largest in urban areas and maize had the largest in rural areas.
- Clothing and shoes were the most important nonfood items bought in 2022. Households also spent substantial amounts on ceremonies, laundry soap, kerosene, fuel wood, charcoal, transportation, taxes, and levies.
- Approximately 41.5% of households experienced moderate or severe food insecurity and 9.2% of households experienced severe food insecurity.
- Major shocks that negatively impacted households were, in order of impact, the unusual rise in the price of food items, the unusual rise in the price of inputs, and draught. To cope with these major shocks, households mainly depleted savings or sold livestock.

7.1 HOUSEHOLD EXPENDITURE

7.1.1 Total Annual Consumption Expenditure

Figure 7.1 presents the average annual household consumption expenditure per adult equivalent in 2019 and 2022. The graph shows household spending on several food and non-food items that were reported as consumed or used by the household.³² At the national level, the average annual household expenditure in 2022 was 17,000 Birr. There are considerable variations by place of residence and region (Table 7.1). For example, in 2022, the average annual consumption expenditure by a household in urban areas was 25,000 Birr compared to 14,000 Birr in rural areas. By region, Somali had the lowest spending at 15,000 Birr, while Harari had the highest at 28,000 Birr.

In comparing the results of the two surveys (2019 and 2022) presented in Figure 7.1, we see how household spending has not changed significantly over time in all regions but in Addis Ababa.³³ In Addis Ababa, the real spatially adjusted household consumption expenditure (in adult equivalent) declined by 23% from Birr 29, 858 in 2019 to Birr 22, 937 in 2022.

7.1.2 Food Items

The top five items with the largest share of the total food budget are teff, maize, wheat, coffee, edible oil and *khat* (Figure 7.2 and Table 7.2). In 2022, the share of the food budget for these items ranged from about 5% for edible oil to 11% for teff. In this profile, rural and urban households differ. Teff has the largest share of the food budget in urban areas with 14%, while maize has the largest share (10%) in rural areas (Table 7.2).

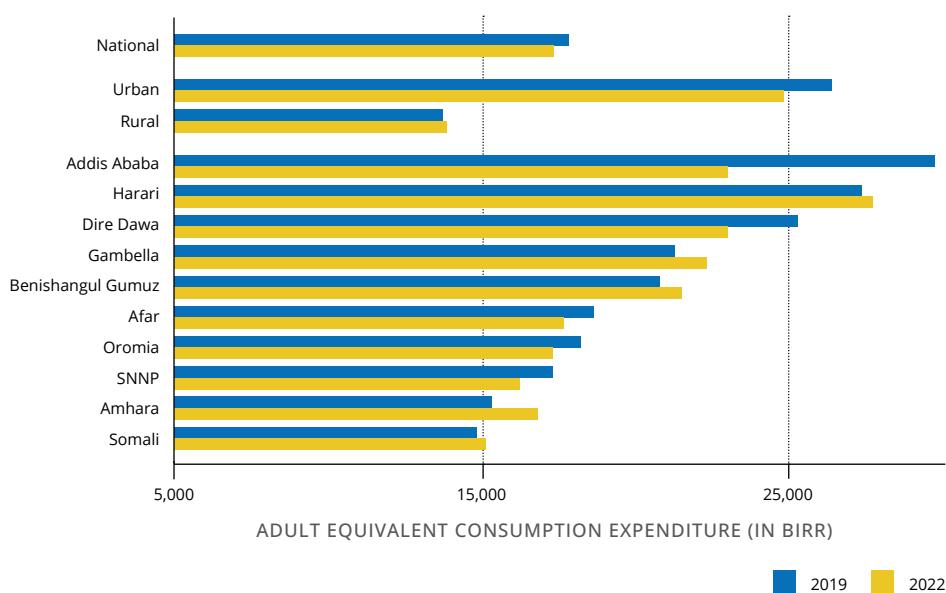
Over half of households reported that they consumed the following items: salt, onion, edible oil, coffee, red pepper (*berberie*), wheat, maize, teff, sugar, green pepper, and potato. While the pattern is similar for rural and urban households, the proportion of households that reported the consumption of these items is greater in urban areas for almost all items (Table 7.2). Exceptions are maize, barley, sorghum, milk, *khat*, *kocho* and haricot beans.

³² The amount reported is expenditure on consumption of food and non-food items. These consumed or used items were either purchased or produced (own consumption) by the household. The value of consumed or used items that were provided as a gift to the household is also included in the total consumption expenditure. The values are per adult equivalent and spatially adjusted. In addition, the 2022 values are adjusted to the 2019 prices.

³³ The change is only significant in Addis Ababa.

FIGURE 7.1

Average annual household consumption expenditure per adult equivalent in Birr, over time



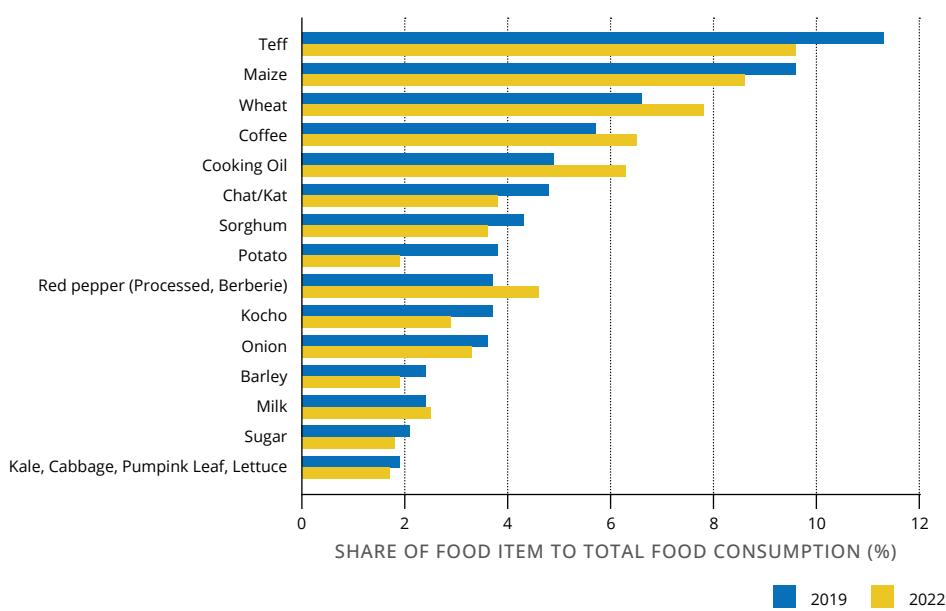
Note: Total expenditure includes the household's spending on food and non-food items. The values are at 2019 prices and spatially adjusted.

Source: ESPS 5.

FIGURE 7.2

Food items consumed by households, over time

(Share of the food item to the total food consumption budget; top 15 items; 7 days recall)



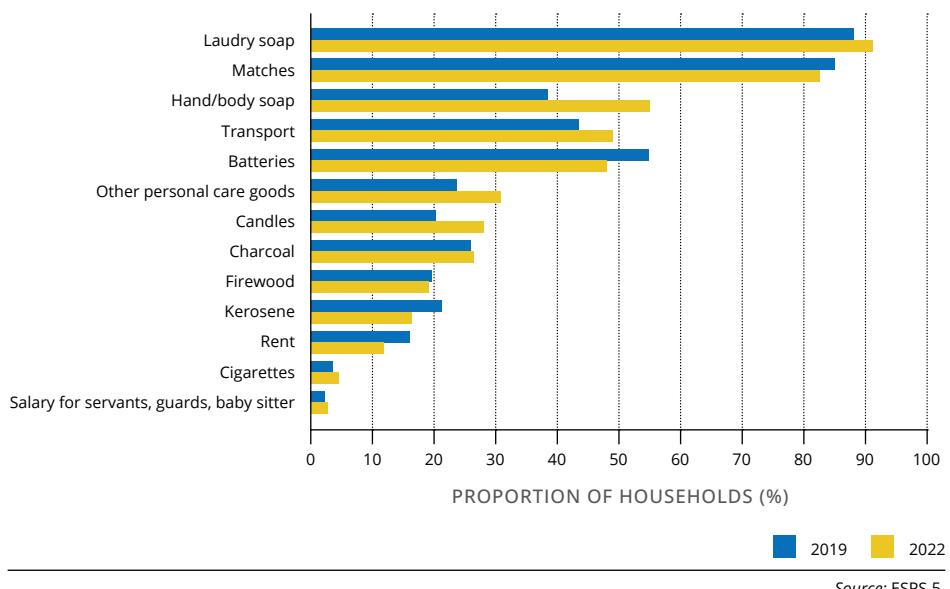
Source: ESPS 5.

7.1.3 Frequently Purchased Non-Food Food Items

The most frequently purchased items presented in Figure 7.3 and Table 7.3 are based on a one-month recall. Accordingly, the households were asked to provide information about the expenditure on these items in the 30 days preceding the survey. The result shows that more households reported spending on these items in 2022 than in 2019. The difference is substantial for some items, such as, house rent, charcoal and fuel wood, candles, hand and body soap and other personal care items.

The most bought and used non-food items are laundry soap and matches; over 80% of households reported using these items in the 30 days preceding the survey (Figure 7.3). Expenses on hand and body soap, charcoal, batteries, and transportation were also reported by over half of the households. However, by budget size, the top three items in 2021/22 were house rent, transportation expenses and charcoal (Table 7.3).

FIGURE 7.3
Most frequently purchased non-food items, 30 days recall, over time



Source: ESPS 5.

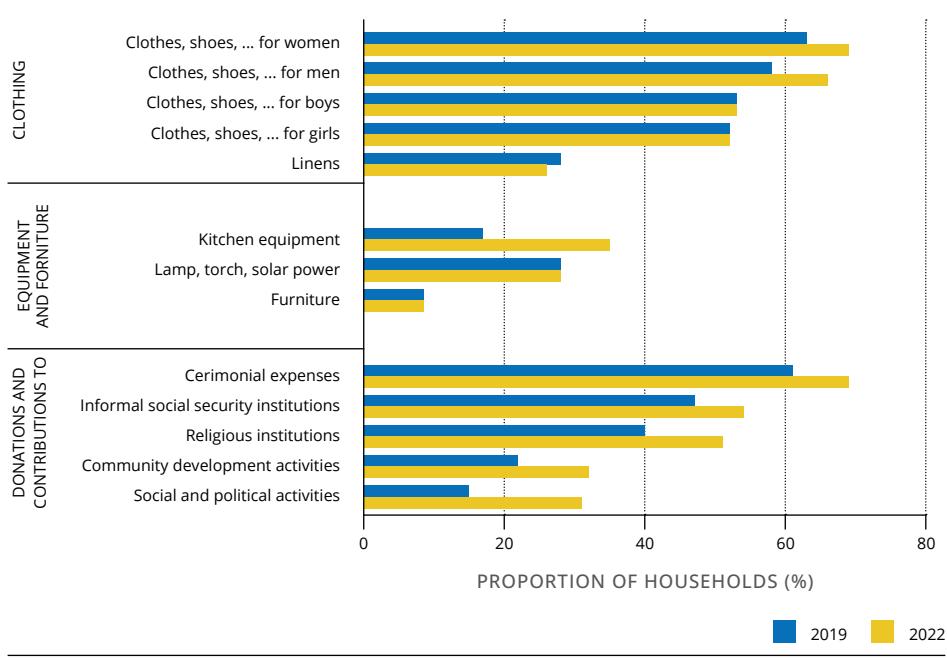
7.1.4 Clothing, Household Durables, Ceremonial Expenses, Donations and Contributions

Less frequently purchased non-food items included in the survey's consumption expenditure module are clothing, kitchen equipment and furniture, as well as the household's contributions and donations to community development programs, religious institutions, and other agencies (Figures 7.4a & b and Table 7.4). These are based on a 12-month recall.

Similar to the most frequently purchased items (presented in Fig 7.3), more households reported spending on these items in 2022 than in 2019. In 2022, the average spending on these items ranged from 151 to 2,758 Birr (Table 7.3). In 2022, households mostly spent on ceremonial expenses, followed by clothing.

FIGURE 7.4A

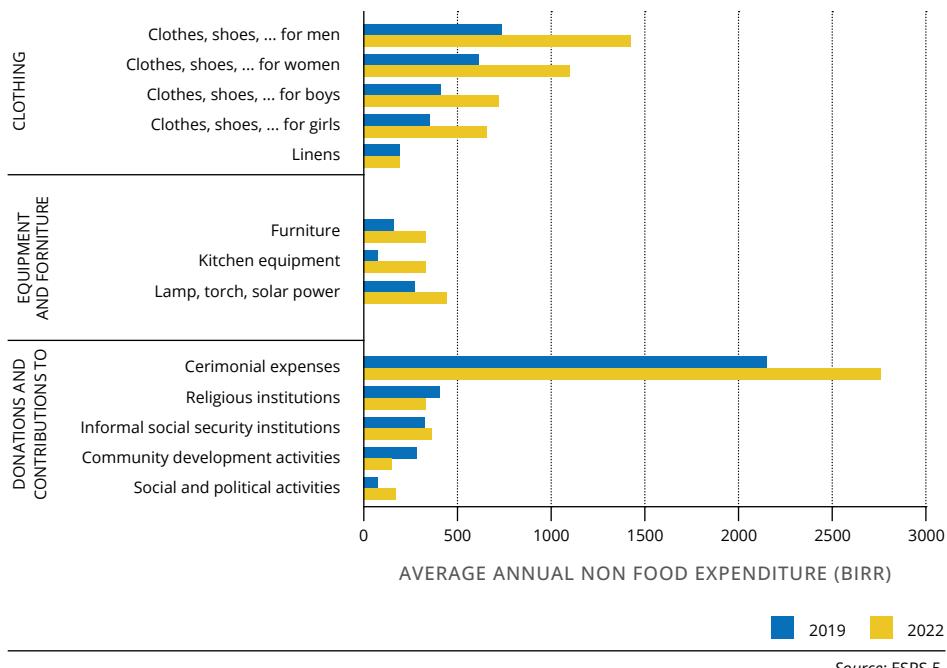
Proportion of households who purchased non-food items & made contributions, 12 months recall, over time



Source: ESPS 5.

FIGURE 7.4B

Average annual expenditure on less frequently purchased non-food items & contributions, over time



Source: ESPS 5.

7.2 FOOD INSECURITY EXPERIENCE

In the 2021/22 round, the survey measured the household's food insecurity experience using the Food Insecurity Experience Scale (FIES) which has eight questions.³⁴ The questions were implemented at the household level, i.e., food insecurity experienced by anyone in the household in the 30 days preceding the survey. Figure 7.5 and Table 7.7 present the results at the national level, for rural and urban areas, by region, and by the household's income level.

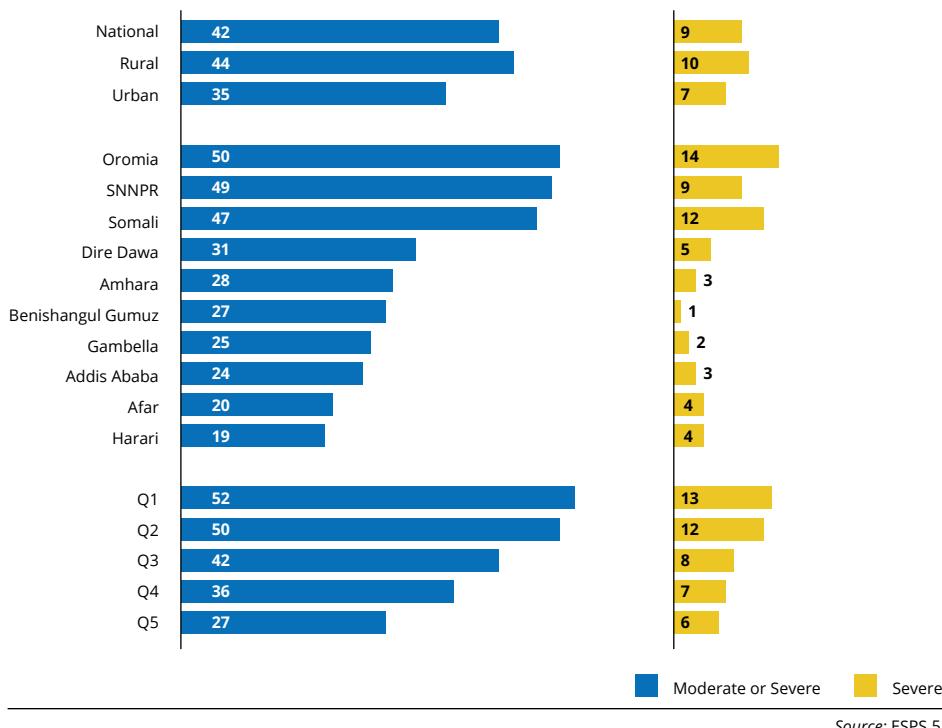
The figure shows that approximately 41.5% of households experienced moderate or severe food insecurity and 9.2% of households experienced severe food insecurity. There are substantial regional differences, as well as differences between rural and urban areas. For example, more households in rural areas experienced food insecurity than those in urban areas. Similarly, there is a wide range by region, from 50.3% in Oromia to 18.9% in Harari. By income status, as it might be expected, food insecurity is experienced at a

³⁴ FAO: The Food Insecurity Experience Scale: Voices of the Hungry:
<https://www.fao.org/in-action/voices-of-the-hungry/fies/en/>

much higher rate by households in the poorest quintile (Q1). However, households in all income groups reported experiencing food insecurity, even in the richest category where over one in four households reported having experienced food insecurity.

FIGURE 7.5

Prevalence rates of food insecurity experience (% of households), 2022



Source: ESPS 5.

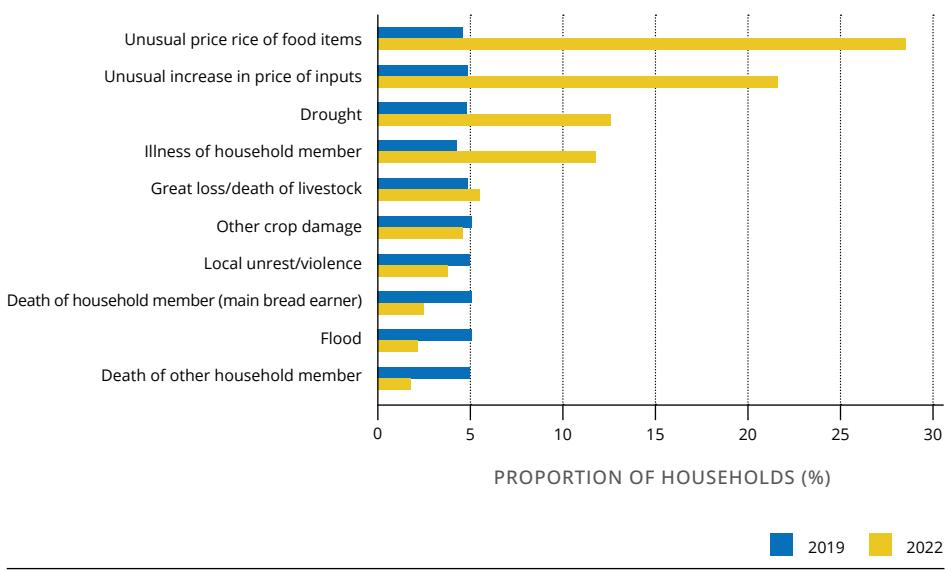
7.3 SHOCKS AND COPING MECHANISMS

7.3.1 Shocks

Table 7.5 summarizes the negative shocks households faced in 2022. The list includes both natural disasters and man-made incidents. The top ten are presented in Figure 7.6. An important observation is that more households reported experiencing selected shocks in the 2021/22 survey than in the 2019 survey (Figure 7.6).

In fact, over 5% of households in the 2019 survey reported that they didn't experience any shocks, but this was not the case in the 2021/22 survey. In the latter survey, the unusual rise of food prices was reported by 28.5% of households and 21.6% of households reported a rise in the costs of agricultural inputs.

FIGURE 7.6
Top 10 shocks, over time



Source: ESPS 5.

Other shocks that were reported by more households in 2022 compared to the 2019 survey include draught (12.6% of households) and illness of the household member (11.8%). However, the most reported shocks in terms of severity were drought, the death of a family member or child, and displacement due to development programs (Table 7.5).

7.3.2 Coping Mechanisms

Households cope with shocks in different ways (Table 7.6). The results show that a substantial share of households have mechanisms for coping with a shock. The most common coping mechanisms used to address the top three shocks households faced were, in order of importance: drawing on savings, selling livestock, changing eating patterns, and obtaining credit from friends and relatives. Among households that drew on savings, 35% reported doing so when faced with the unusual rise in the price of food items, 41.8% did when faced with an unusual rise of the price of inputs and 30.2% did when dealing with drought. Selling livestock was the second most important coping mechanism employed by 14 to 19% of households, and 4 to 5% received support from relatives and friends.

However, not all households had a coping mechanism. For example, 15.7% of those who reported a shock from the unusual rise in the price of food items, 13.7% of those who reported the unusual rise in the price of inputs, and 25% of those who faced drought had no coping mechanisms in place.

LIST OF TABLES FOR CHAPTER VII

TABLE 7.1

**Total Annual Household Spending (in Birr), by Region and Place of Residence,
2019 and 2022**

	2019	2022
Amhara	41,041	44,976
SNNP	50,161	52,588
Oromia	55,744	54,529
Benishangul Gumuz	51,708	56,992
Dire Dawa	69,164	61,363
Afar	50,976	65,567
Gambella	58,569	73,649
Somali	89,084	75,435
Addis Ababa	63,446	73,696
Harari	75,708	90,849
Rural	47,025	48,506
Urban	64,996	70,223
National	52,830	54,142

Note: Total spending includes both food and non-food consumption expenditure items.

Source: ESPS 5.

TABLE 7.2

Households Reporting any Spending on Food Items (%) and the Share of the Item as a % of the Total Food Consumption Budget, by Place of Residence, 2022

Food items	National		Rural		Urban	
	HH %	Share	HH %	Share	HH %	Share
Salt	95.0	1.0	95.6	1.1	93.5	0.7
Onion	87.4	3.3	84.7	2.9	95.1	4.3
Edible oil	80.3	6.3	78.6	5.8	85.2	7.9
Coffee	79.0	6.5	78.6	6.7	80.1	5.9
Red pepper (Processed pepper Berberie)	78.4	4.6	74.5	4.2	89.6	6.0
Wheat	62.7	7.8	57.6	8.2	77.0	6.6
Maize	60.7	8.6	66.6	10.2	43.8	4.1
Teff	57.6	9.6	47.6	8.0	86.1	14.0
Sugar	57.4	1.8	49.4	1.7	80.3	2.2
Green chili pepper (kariya)	55.8	0.7	51.5	0.7	68.1	0.8
Potato	52.2	1.9	46.2	1.9	69.2	1.9
Garlic	49.4	0.8	44.8	0.7	62.5	0.9
Tomato	47.6	1.4	40.6	1.3	67.8	1.7
kale, cabbage, Pumpkin Leaf, Lettu	44.7	1.7	41.2	1.9	54.6	1.2
Processed pulses (Shiro)	40.4	2.2	38.5	2.2	46.0	2.2
Horsebeans	36.0	1.8	34.3	1.9	40.9	1.6
Milk	31.4	2.5	33.3	2.8	26.0	1.6
Tea	29.5	0.3	18.8	0.2	60.2	0.4
Rice	28.5	2.3	23.2	2.4	43.7	2.0
Banana	28.0	0.8	22.1	0.6	44.8	1.4
Sorghum	25.6	3.7	29.7	4.4	13.8	1.4
Lentils	25.0	1.2	17.3	0.8	47.0	2.2
Chick Pea	23.0	0.9	17.3	0.8	39.1	1.4
Butter/ghee	21.6	1.6	21.5	1.6	22.0	1.6
Barley (Incl)	21.1	2.0	22.2	2.2	18.0	1.3
Eggs	19.6	0.8	15.1	0.6	32.4	1.3
Khat	18.5	3.8	21.8	4.7	9.1	1.3
Kocho	17.6	2.9	20.7	3.6	8.8	0.8
Haricot Beans	16.3	0.9	18.9	1.1	8.7	0.3

Source: ESPS 5.

TABLE 7.3

Households Reporting any Spending on Selected Nonfood Items (%) and the Average Spending (Birr), in the Past Month, by Place of Residence, 2022

Items	National		Rural		Urban	
	HHs (%)	Mean Expenditure (Birr)	HHs (%)	Mean Expenditure (Birr)	HHs (%)	Mean Expenditure (Birr)
Laundry soap	89.6	139	87.9	107	91.0	166
Matches	79.5	15	79.7	15	79.4	16
Hand/body soap	65.8	51	47.8	25	81.2	73
Transport	53.8	241	44.1	124	62.1	340
Charcoal	45.2	150	12.9	32	72.6	250
Batteries	39.0	26	55.7	39	24.8	16
Candles	38.4	19	19.4	10	54.6	26
Other personal care goods	35.5	65	22.5	19	46.6	103
Firewood	24.3	82	11.2	33	35.5	124
Kerosene	12.9	20	13.8	7	12.1	30
Rent	11.8	887	2.6	398	38.1	984
Cigarettes	5.5	14	8.5	21	3.0	8
Salary for servants, guards, baby-sitters	4.8	69	0.9	9	8.1	120

Source: ESPS 5.

TABLE 7.4

Spending on Nonfood Items and Services (%) and Average Expenditure (Birr) in the Previous Year by Place of Residence, 2022

Items	Ethiopia		Rural		Urban	
	HHs (%)	Mean Expenditure (Birr)	HHs (%)	Mean Expenditure (Birr)	HHs (%)	Mean Expenditure (Birr)
Clothing						
Clothes, shoes, fabric for men	66.3	1423	66.8	1170	65.0	2143
Clothes, shoes, fabric for women	69.4	1097	71.0	918	64.8	1607
Clothes, shoes, fabric for boys	53.4	721	57.4	638	42.2	957
Clothes, shoes, fabric for girls	52.5	655	55.9	601	42.7	811
Linens (sheets, towels, blankets)	25.8	196	26.8	162	23.0	291
Equipment and furniture						
Kitchen equipment (cooking pots, etc.)	34.8	335	36.4	305	30.1	421
Furniture	7.6	331	5.7	117	12.9	942
Lamp, torch, solar power	27.5	111	31.4	118	16.5	93
Donations and contributions						
Ceremonial expenses	69.1	2758	69.0	2235	69.5	4249
To informal social security institutions (iddir, mahiber, etc.)	54.3	365	54.7	269	53.2	638
To churches, mosques, and other religious institutions	50.8	335	52.6	220	45.5	662
To community development activities (road, school, health, water)	32.4	151	33.8	106	28.5	278
To social and political activities (Red Cross, sport, political parties, etc.)	31.2	175	33.5	117	24.6	339

Source: ESPS 5.

TABLE 7.5
Shocks Experienced by Households in the Previous 12 Months, Ranking, 2022, Percent

	Households Experiencing Shock	Households Experiencing as Most Severe	Households' Reporting It as: ^a		
			Most Severe	2 nd Most Severe	3 rd Most Severe
Unusual Price Rise of Food Items	28.5	29.7	52.6	31.8	15.6
Unusual Increase in Price of Inputs	21.6	16.5	38.7	41.6	19.8
Drought	12.6	18.2	72.9	19.1	8
Illness of Household Member	11.8	14	60.1	24.4	15.5
Great Loss/Death of Livestock	5.5	1.9	17.5	60.8	21.7
Other Crop Damage	4.6	3.4	37.8	44.3	17.8
Local Unrest/Violence	3.8	3.2	42.4	42.9	14.7
Death of Household Member (Main Bread Earner)	2.5	4.7	96	1.4	2.6
Flood	2.2	1.8	41.1	34.5	24.4
Death of Other Household Member	1.8	2.3	62.4	14.3	23.3
Unusual Price Fall of Food Items	1.2	0.6	25.2	19.3	55.5
Theft/Robbery and Other Violence	1.2	1	44.3	22.6	33.1
Heavy Rains Preventing Work	0.9	0.6	32.3	33.9	33.8
Loss of Non-Farm Jobs of HH Member	0.7	0.6	42.6	38.4	19
Death of a Child Under 5 Including	0.5	0.8	86.8	10.2	3
Landslides/ Avalanches	0.3	0.3	43.1	41.6	15.3
Fire	0.3	0.4	58.9	40.7	0.4
Displacement (Due to Dev. Programs)	0.1	0.1	81.6	10	8.4
Other	0.2	0.1	24.7	40.7	34.6

^a Among those who reported shocks

Source: ESPS 5.

TABLE 7.6

**Coping Mechanisms for Shocks Experienced by Households, last 12 Months,
Ranking, 2022, Percent**

	Mechanisms for Coping with Shock		
	Unusual increase in price of inputs	Unusual Rise in Prices of Food Items	Great loss/death of livestock
Relied on Own-Savings	35.2	41.8	30.2
Sold Livestock	19.4	13.8	16.7
Changed Eating Patterns	6.2	8.6	3.7
Obtained Credit	4.2	2.5	3.0
Help from Relatives and friends	3.9	4.9	3.8
Help from Government	3.8	4.6	14.5
Sold Durable Assets	3.2	1.3	1.5
Sold Crop Stock	2.8	0.8	0.6
Engaged In Spiritual Efforts	1.6	1.0	2.0
Took On More Employment	1.2	0.6	1.0
Household Members Migrated	1.2	1.5	1.2
Received Unconditional Help from NGO	1.1	3.2	6.8
Adult Member Previously Not Working	0.2	0.3	1.1
Intensify Fishing	0.0	0.2	0.0
Sold Agricultural Assets	0.0	0.3	0.1
Reduced Expenditures on Health / Edu	0.0	0.4	0.0
Sold Land / Buildings	0.0	0.2	0.0
Sent Children to Live Elsewhere	0.0	0.0	0.0
Other	0.3	0.2	0.0
Did Not Do Anything	15.7	13.7	13.9

Source: ESPS 5.

TABLE 7.7

Household Food Insecurity Experience by Region, Place of Residence and Wealth, 2022, Percent

	Moderate or Severe		Severe	
	Rate	MOE	Rate	MOE
National	41.5	3.9	9.2	2.1
Rural	43.7	4.9	10.0	2.7
Urban	35.2	5.2	7.0	2.5
Oromia	50.3	7.8	14.3	4.7
SNNPR	49.3	7.0	9.1	3.3
Somali	46.9	11.7	11.8	7.0
Dire Dawa	30.7	9.9	5.4	4.4
Amhara	27.5	5.9	3.3	2.1
Benishangul Gumuz	26.9	11.5	1.2	2.5
Gambella	24.7	8.6	1.6	1.7
Addis Ababa	24.1	6.2	3.2	2.3
Afar	20.4	12.4	3.7	5.8
Harari	18.9	8.4	3.6	3.2
Q1	52.4	8.9	13.3	5.3
Q2	50.0	9.3	11.8	5.6
Q3	42.1	8.3	8.2	4.4
Q4	35.7	8.2	6.9	4.1
Q5	27.3	7.3	5.8	3.2

Note: MOE refers margin of error.

Source: ESPS 5.



Chapter VIII

Agriculture

Highlights

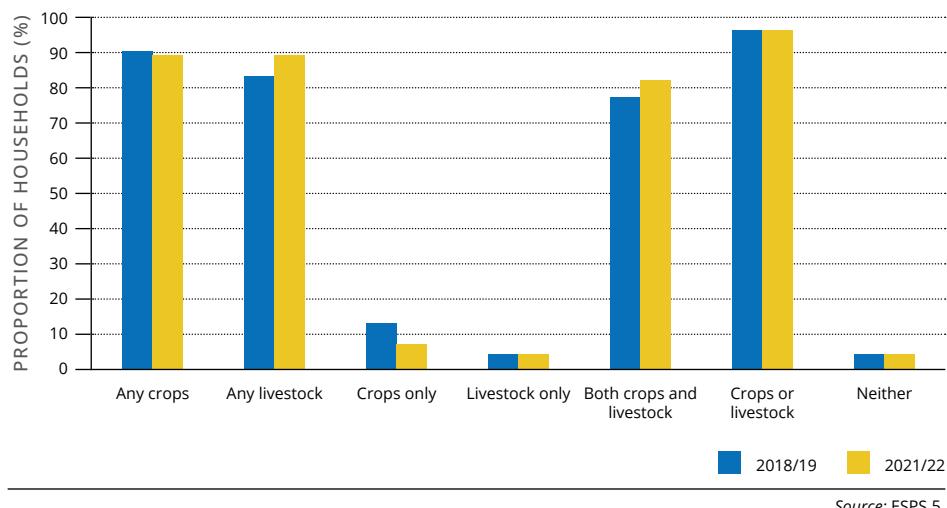
- Agriculture (farming or livestock) is practiced by 97% of rural households.
- Rural households primarily cultivate their own land; on average, they own 1.1 hectares of land.
- Except for maize and wheat, improved seed usage is very low.
- Inorganic fertilizers are applied in at least two-thirds of maize, wheat, barley, and teff fields.
- Most of the major cereals (55%–80%) are for own consumption, with sales accounting for 15% or less. Farm households tend to sell teff and other high-value crops and consume low-value cereals like sorghum.
- Cattle are the most common livestock type owned, followed by poultry, donkeys, and small ruminants.
- Ownership of exotic or hybrid cattle, small ruminants, and poultry increased over time.
- About half of livestock-owning households reported using immunization services.
- The primary purpose of owning small ruminants and poultry is for sale.

8.1 AGRICULTURE HOUSEHOLDS³⁵

Nationally in 2021/22, 89% of households cultivated crops, 89% kept livestock, and 82% engaged in both, with 96% practicing at least one of the two activities (Figure 8.1). Only 4% were engaged in non-agricultural activities. While there was no change in the proportion of households participating in crop production between 2018/19 and 2021/22, participation in livestock activities and mixed agriculture increased by six and five percentage points, respectively, over the three years. Notably, the practice of only crop farming declined from 13% in 2018/19 to 7% in 2021/22.³⁶

There are regional differences when participation in agricultural activities is considered (Table 8.1). For example, the participation rate in either crop or livestock activities ranges between 84% in Dire Dawa to 99% in SNNP.

FIGURE 8.1
Households participating in agricultural activities, over time



Source: ESPS 5.

³⁵ The ESPS 2021/22 sections on agriculture cover rural and urban areas. The reduced urban agriculture module, administered together with the household questionnaire, also covered rural households not visited during the post-planting visit due to security or other reasons. Like the CSA's AgSS, the ESPS rural household agriculture data provide information at the holder level. A holder in CSA surveys is a person who exercises management control over the operations of the agricultural holdings and makes the major decisions regarding the utilization of the available resources. Because households may have more than one holder, the agriculture modules were administered to each holder in the household. However, for the urban agriculture section, data were collected at the household level.

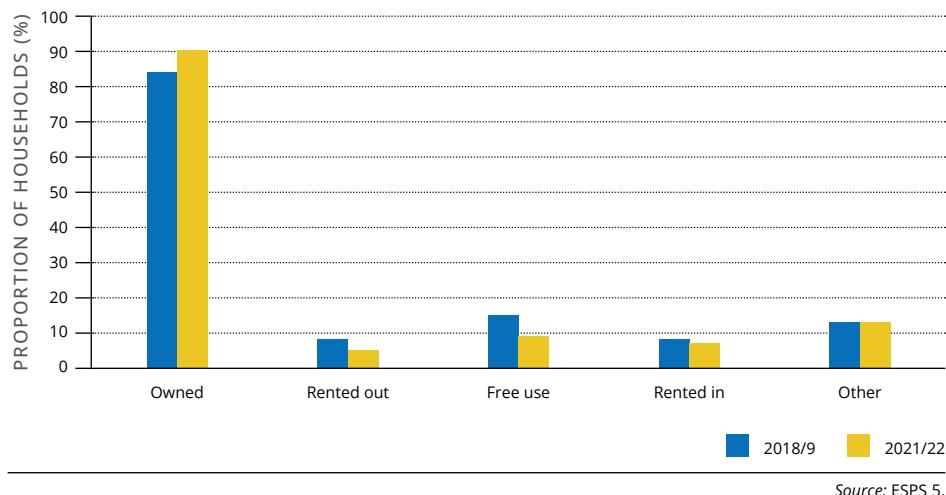
³⁶ See Table 8.7 for all 2018/19 and 2021/22 comparisons reported in this chapter.

8.2 CROP FARMING

8.2.1 Land Tenure

In 2021/22, ninety percent of farm households owned at least some of the land they cultivate (Figure 8.2). While 5% of them reported renting out some of their land and 7% rented in land, about 1 in 10 households reported using someone else's land at no cost. Renting out declined between 2018/19 and 2021/22.

FIGURE 8.2
Land tenure of farm households, over time



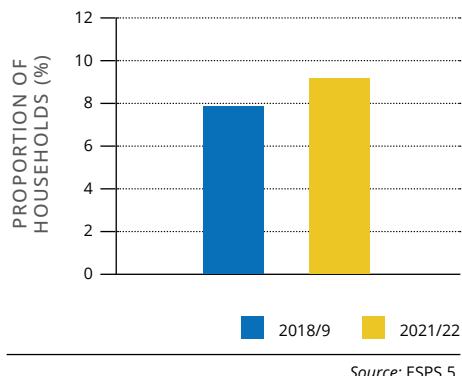
Source: ESPS 5.

8.2.2 Fields and Field Size

Rural households cultivated an average of nine fields during the 2021/22 planting season (Figure 8.3a). The average total land holding size was 1.1 ha (Figure 8.3b). About 0.8 ha of this land was cultivated (Table 8.3). Nationally, the size of land holdings increased by 0.3 ha between 2018/19 and 2021/22.

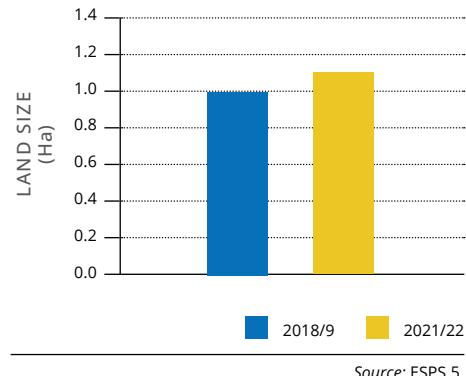
Land fragmentation is high in SNNP and lower in predominantly pastoralist regions (Afar, Somali, and Dire Dawa) (Table 8.3). The average land holding size is higher in Amhara and Oromia compared to the other regions. Land fragmentation has increased in Oromia, SNNP, and Benishangul Gumuz.

FIGURE 8.3A

Average number of field holdings, over time

Source: ESPS 5.

FIGURE 8.3B

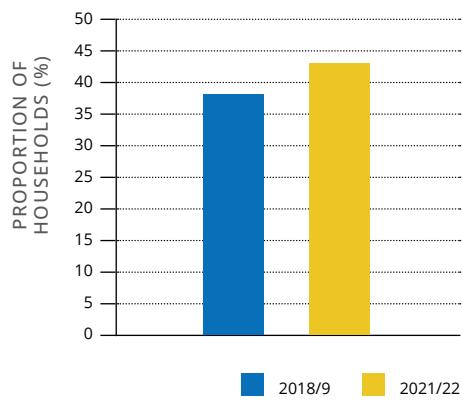
Average size of land holding, over time

Source: ESPS 5.

8.2.3 Use of Inputs**A. Use of improved seeds**

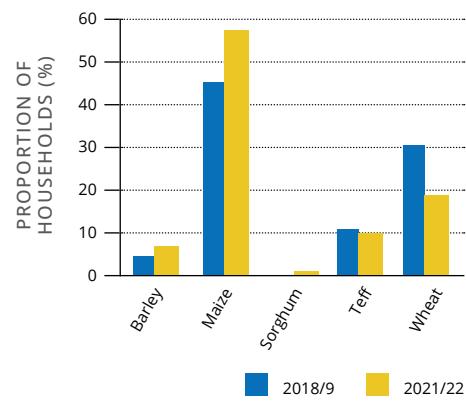
About 43% of households used improved seed for at least one of the crops they planted during the 2021/22 planting season (Figure 8.4a). Fifty-nine percent of households that grew maize used improved seeds on at least one of their maize fields during the 2021/22 planting season, an increase of 14 percentage points from the 2018/19 season (Figure 8.4b). Improved seed was used by 19% of wheat-, 10% of teff- and 7% of barley-growing households. Almost all households growing sorghum, barley and teff used traditional seeds.

FIGURE 8.4A

Households that used improved seed for at least one crop, over time

Source: ESPS 5.

FIGURE 8.4B

Households that used improved seeds on at least one plot, by crop type, over time

Source: ESPS 5.

B. Use of fertilizers

During the 2021/22 planting season, about 68% of households reported using inorganic fertilizers on at least one crop field cultivated (Figure 8.5a). The utilization of organic fertilizer is more common for households, as three-quarters use organic fertilizers. The rate of fertilizer use increased between the 2018/19 and 2021/22 planting seasons. Mainly such increase is on the use of organic fertilizers, its adoption increased during the 2021/22 planting season by 24 percentage points from 2018/19.

Inorganic fertilizers were used by 89%, 82%, 70%, 62%, and 12% of wheat-, teff-, barley-, maize, and sorghum-growing households, respectively, on at least one of their crop fields during the 2021/22 season (Figure 8.5b). In contrast, the major crops grown with organic fertilizers were maize (61%), sorghum (34%) and barley (27%). Organic fertilizer application increased for maize by eight percentage points from 2018/19.

FIGURE 8.5A
Households that applied fertilizer on at least one crop field, over time

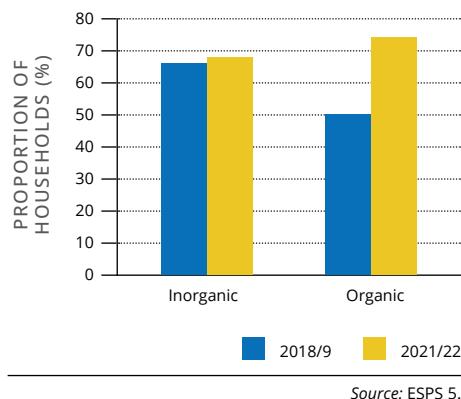
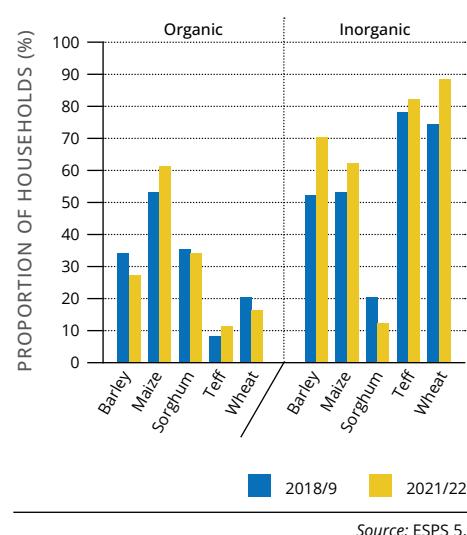


FIGURE 8.5B
Households that applied fertilizer, by crop type and fertilizer type, over time



C. Use of chemicals (herbicides, pesticides, fungicides)

Pesticides, herbicides, or fungicides to control crop diseases or damages were used by 40% of households for at least one of the crops cultivated during 2021/22 (Figure 8.6a). Disaggregated by type of crops, the use of modern chemicals was significantly higher for high-value crops, such as, wheat and teff. Of households that cultivated wheat during the 2021/22 planting season, 56% used chemicals on at least one wheat field (Figure 8.6b). Modern chemicals were also used by 53% of teff-growing households.

FIGURE 8.6A
Households that applied chemicals in at least one crop field, over time

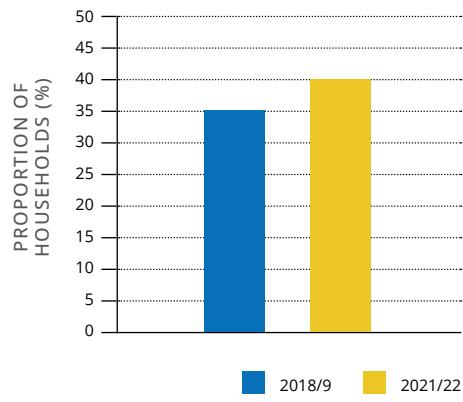
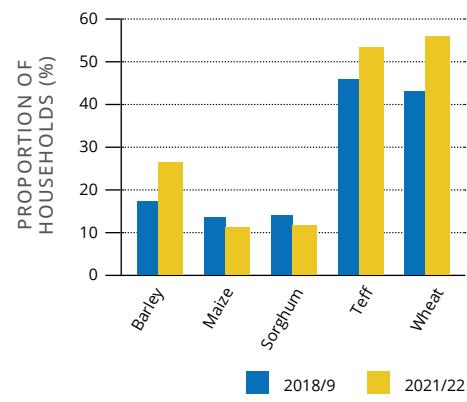


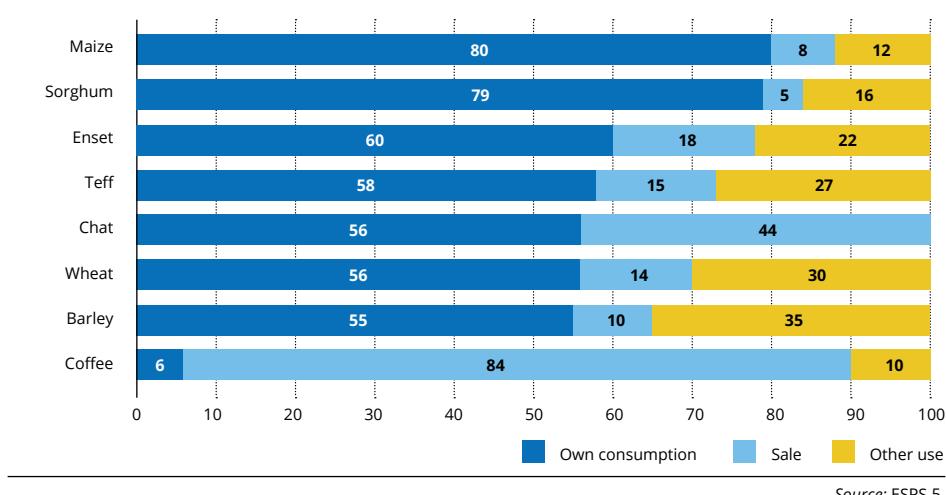
FIGURE 8.6B
Households that applied chemicals in at least one crop field, by crop type, over time



8.2.5 Crop Disposition

Most of harvested grain crops were used or intended for home consumption—ranging between 80% of maize and 55% of barley harvested (Figure 8.7). Farmers were more likely to sell high-value food grains like teff (15%) and wheat (14%). In contrast, low-value crops such as maize (8%) and sorghum (5%) are consumed or stored for consumption purposes. Among the permanent crops (Coffee, Chat, and Enset), coffee was mainly used or stored to be used for sale (84%), followed by Chat (44%), and Enset (18%). Enset is mainly used for consumption which accounts for 60 percent of the total harvest.

FIGURE 8.7
Utilization of harvest, by major crops, 2021/22



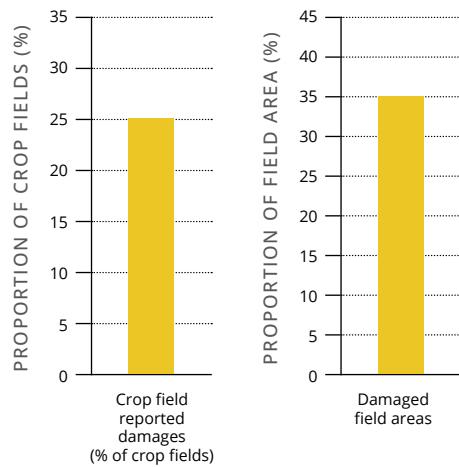
8.3 CROP DAMAGE AND PREVENTION PRACTICES

8.3.1 Preharvest Crop Damages

Twenty-five percent of crop fields cultivated during 2021/22 experienced damage or loss before the harvest (Figure 8.8a). Among the plots that experienced damages, up to 35% of the total area covered by the crop was damaged. Insects/birds/locusts (30%) and too much rain (24%) were reported as the main reasons for preharvest crop damage for all the crop plots cultivated (Figure 8.8b).

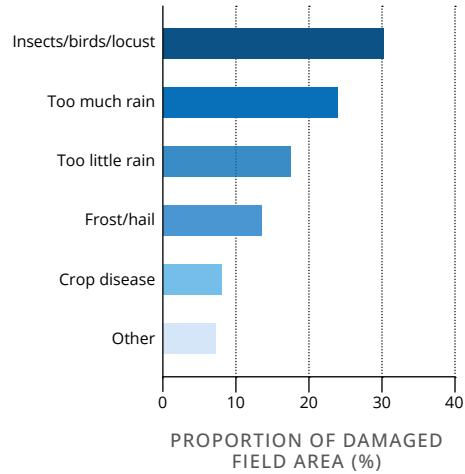
The prevalence of preharvest crop loss and damage varied for the top 16 crops cultivated. Among the permanent crops, high percentages of crop loss were reported on khat (44%) and coffee (38%) crop fields (Table 8.4). Among temporary crops, high preharvest losses were reported on horsebean (44%), wheat (35%), maize (35%), and sorghum (35%). Perishable permanent crops like mango (47%) and avocado (40%) reported higher proportions of crop damages from the total area covered by these crops.

FIGURE 8.8A
Prevalence of preharvest crop damage,
2021/22



Source: ESPS 5.

FIGURE 8.8B
Reasons for crop damage,
2021/22



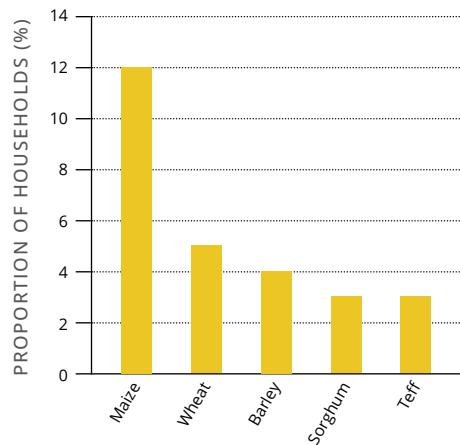
Source: ESPS 5.

8.3.2 Postharvest Crop Loss and Reasons

There was a significant amount of postharvest loss on maize as 12% of households experienced some amount of postharvest loss, resulting in a 9% loss of the total quantity harvested (Figure 8.9a & b). The second highest postharvest loss was on wheat, with five percent of households reporting and four percent of the total harvest lost. Although the proportion of households experiencing post-harvest losses for teff and sorghum was low, the total quantity lost for these crops was higher compared to other crops, where 13% and 12% of total harvests were lost.

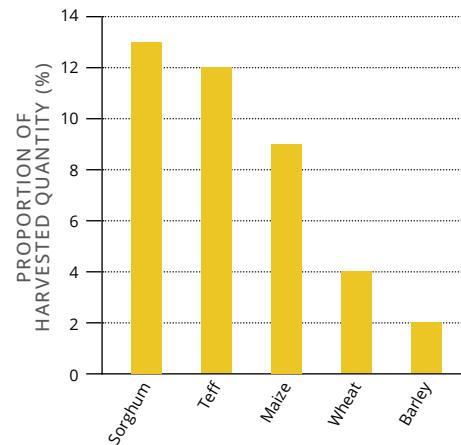
Rodents or other pests were the major cause for postharvest loss of the five major crops during the 2021/22 harvest season, with larger effects on wheat and teff (Table 8.5). Rotting was another significant factor contributing to postharvest loss for the five major crops. Notably, teff appeared to be particularly vulnerable to crop loss due to theft, as 15% of households reported.

FIGURE 8.9A
Occurrence of postharvest crop loss,
2021/22



Source: ESPS 5.

FIGURE 8.9B
Share of postharvest loss from total
harvest, 2021/22



Source: ESPS 5.

8.4 LIVESTOCK

8.4.1 Livestock Types Owned

The most popular type of livestock were cattle, owned by 83% of households (Figure 8.10). Poultry was the second most-owned type, followed by donkeys and small ruminants. Between 2018/19 and 2021/22, while the proportion of households owning poultry decreased by six percentage points, ownership of camels increased by three percentage points.

Although most livestock were of local or indigenous breeds, 32% of poultry and 9% of cattle were exotic or hybrid in 2021/22 (Figure 8.11).

FIGURE 8.10
Livestock-owning households by type, over time

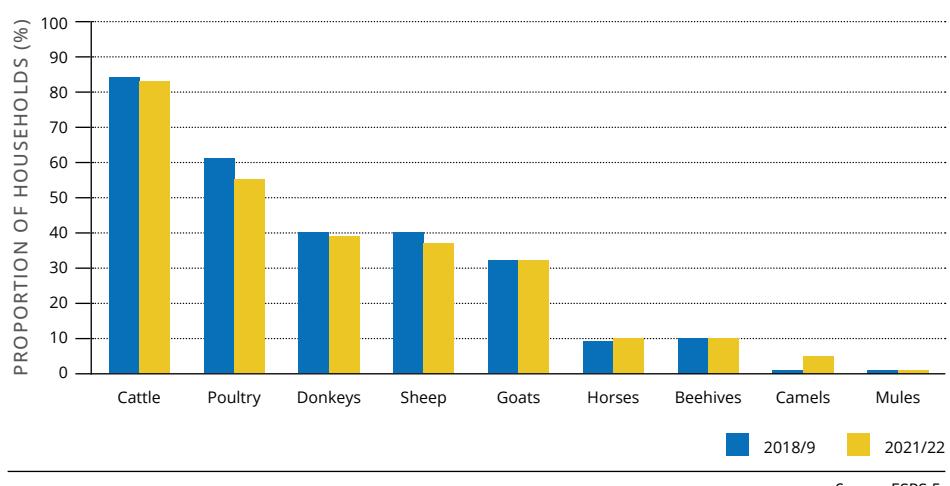
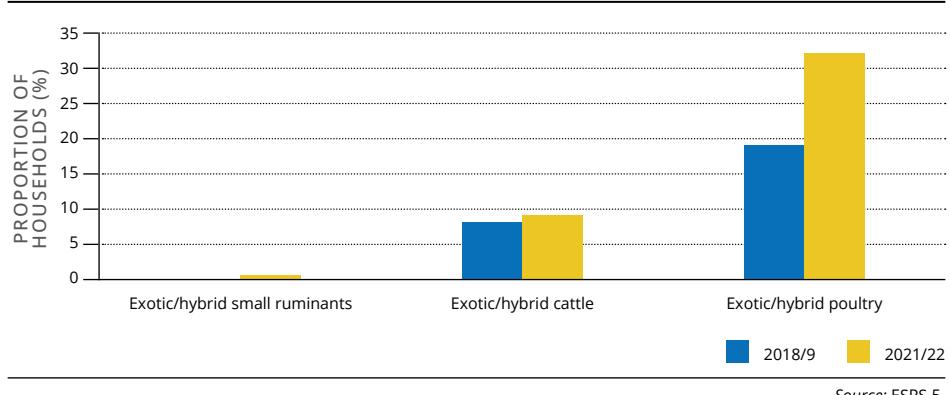


FIGURE 8.11
Livestock breed (exotic hybrid), over time



Owning exotic or crossbred small ruminants was almost nonexistent. There was an increase in the percentage of households owning exotic or crossbred poultry between 2018/19 and 2021/22.

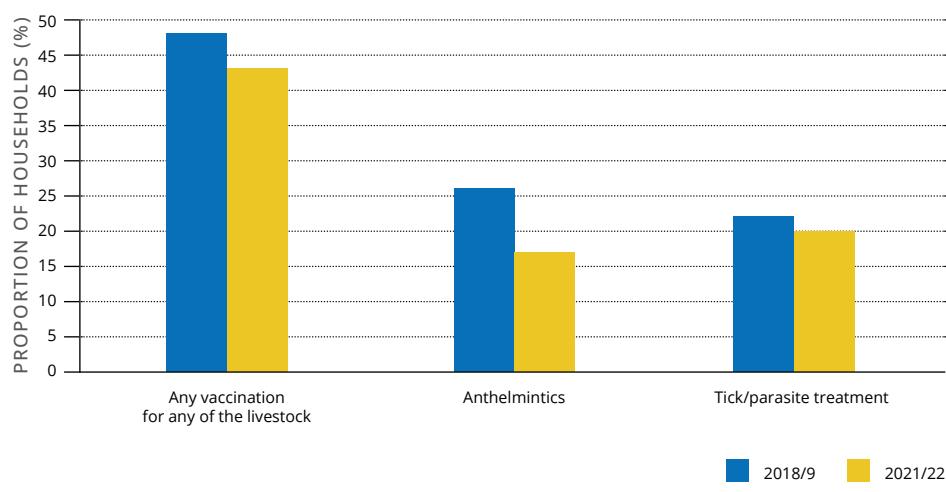
8.4.2 Livestock Disposition

Disposition of cattle, sheep, goats, and horses is primarily done through sale by rural households (Table 8.6). For example, four out of 10 households sold cattle, sheep, and goats during 2021/22. Interestingly, more than half of rural households (55%) lost poultry in 2021/22. Disposing livestock through slaughtering is rare in rural areas; only three out of 10 households slaughter goat and poultry, and about 20% slaughter sheep.

8.4.3 Livestock Vaccination Coverage

About 43% of livestock-owning households reported their livestock had been vaccinated against at least one disease in the 12 months preceding the survey (Figure 8.12). However, such comparisons may be misleading because disease risk profiles differ over time. Treatments and vaccination coverages may also depend on demand for the services as influenced by the prevalence of animal diseases, pandemics, and other factors.

FIGURE 8.12
Livestock vaccinations and other preventive care, over time



Source: ESPS 5.

LIST OF TABLES FOR CHAPTER VIII

TABLE 8.1

Participation of Households in Crop and Livestock Activities, by Place of Residence , Percent

	Any crops	Any livestock	Both	Crops only	Livestock only	Crops or livestock	Neither
Afar	25.4	78.6	18.5	6.8	60.0	85.4	14.6
Amhara	91.9	88.1	85.4	6.6	2.7	94.6	5.4
Oromia	93.8	91.6	88.3	5.5	3.3	97.1	2.9
Somali	17.0	85.6	15.8	1.3	69.8	86.8	13.2
Benishangul Gumuz	94.8	76.7	76.0	18.8	0.7	95.5	4.5
SNNP	97.7	90.0	88.4	9.3	1.6	99.2	0.8
Gambella	81.5	68.1	61.5	20.0	6.7	88.2	11.8
Harari	84.5	69.3	69.2	15.4	0.1	84.7	15.3
Dire Dawa	67.0	71.6	54.7	12.3	16.9	83.9	16.1
Rural Ethiopia	88.7	89.4	82.0	6.7	7.4	96.0	4.0

Source: ESPS 5.

TABLE 8.2
Land Tenure, by Region and Place of Residence , 2021/22

	Owned		Rented out		Free use		Rented in		Other	
	% HH	Size (ha)	% HH	Size (ha)	% HH	Size (ha)	% HH	Size (ha)	% HH	Size (ha)
Afar	58.3	0.02	10.7	0.00	42.9	0.004	6.0	0.000	2.4	0.004
Amhara	91.5	0.08	11.3	0.00	5.9	0.004	15.1	0.018	36.2	0.017
Oromia	94.9	0.10	4.8	0.00	7.1	0.001	8.8	0.007	13.9	0.011
Somali	79.6	0.05	0.4	0.00	10.6	0.002	0.0	0.000	0.4	0.000
Benishangul Gumuz	94.3	0.07	17.9	0.00	13.2	0.017	9.4	0.006	9.4	0.006
SNNP	97.0	0.05	1.2	0.00	2.6	0.001	5.3	0.001	9.3	0.006
Gambella	73.6	0.03	5.6	0.00	23.0	0.011	7.9	0.002	11.2	0.001
Harari	96.2	0.04	0.0	0.00	1.1	0.000	1.1	0.000	1.6	0.000
Dire Dawa	92.3	0.04	0.0	0.00	7.7	0.001	1.4	0.000	2.8	0.000
Rural Ethiopia	89.7	0.06	4.9	0.00	8.9	0.003	6.9	0.005	12.7	0.007

Source: ESPS 5.

TABLE 8.3
Average Number of Field Holdings and Field Size, by Place of Residence , 2021/22

	Measured Fields	Average fields per household	Average field size (ha)	Average HH land holding (ha)	Average cultivated land holding (ha)
Afar	120	1.4	0.2	0.4	0.3
Amhara	3,124	8.6	0.2	1.3	1.0
Oromia	3,436	9.1	0.1	1.3	0.9
Somali	313	1.3	0.8	1.1	0.1
Benishangul Gumuz	1,206	11.0	0.1	0.9	0.8
SNNP	4,824	11.6	0.1	0.7	0.5
Gambella	871	4.9	0.2	0.8	0.6
Harari	1,230	6.3	0.1	0.4	0.3
Dire Dawa	404	2.6	0.2	0.4	0.3
Rural Ethiopia	15,528	9.1	0.1	1.1	0.8

Source: ESPS 5.

TABLE 8.4

Prevalence and Reasons for Preharvest Crop Damage, by Crop Type, 2021/22, Percent

	Crop field reported damages (% of crop fields)	Damage % share	Reasons for crop damage					
			Too much rain	Too little rain	Insects /birds/ locust	Crop disease	Frost/hail	Other
Barley	27.2	29.7	24	0.7	24.2	23.3	18.4	9.3
Maize	34.8	36.4	32.5	24.3	11.6	2.8	21.7	7.2
Sorghum	34.7	36.3	57.1	14.2	6.2	1.5	15.7	5.2
Teff	25.7	33.4	25.6	35.8	2.5	10.8	17.5	7.8
Wheat	34.9	29.4	27.3	3.2	39.3	4.7	12	13.6
Horse bean	43.5	40.3	5.4	25.4	35.1	16.7	5	12.4
Red kidney bean	21.5	27.8	50.1	1.2	17.2	0	15.1	16.4
Banana	8.7	27.2	3.4	0	78.8	2.4	15.4	0
Mango	27.4	46.9	10.5	36	34.9	1.8	15	1.8
Kale	9.4	38.1	13.7	20	5	39.9	15.3	6.1
Godere	12.1	36.6	75.5	0	6.9	0	10.3	7.3
Khat	43.5	35.1	18.4	34	31.2	9.7	4.6	2.2
Coffee	38	37.5	3.2	6.8	75.9	1.7	4.5	7.8
Enset	12.8	20.8	0	11.9	63.4	10.4	14.3	0
Avocado	10.4	39.9	0	0	46.5	37.1	12.1	4.3
All crop fields	25.4	35.1	23.8	17.4	30.1	8	13.5	7.2

Source: ESPS 5.

TABLE 8.5
Reasons for Postharvest Crop Loss for the Major Five Crops, 2021/22, Percent

	Rotting	Insects	Rodents/Pests	Theft	Others
Barley	46.8	0.0	55.5	0.0	0.0
Maize	62.8	9.5	74.5	2.1	4.4
Sorghum	0.7	71.0	30.0	0.0	0.0
Teff	36.7	16.6	74.1	14.7	10.5
Wheat	42.2	21.2	78.8	0.0	0.0
Rural Ethiopia	54.5	13.6	72.1	2.9	4.1

*Note: Multiple responses were allowed. More than one reason was reported for a single crop damage/loss.

Source: ESPS 5.

TABLE 8.6
Livestock Acquisition and Disposition, by Livestock Type, 2021/22, Percent of Livestock Owning Households

	Having any born	Buying any	Receiving any as gift	Giving away any	Losing any	Selling any alive	Slaughtering any
Cattle	81.7	21.5	6.8	6.2	25.6	42.9	1.9
Sheep	65.0	22.4	3.3	2.9	23.6	44.0	22.5
Goat	72.0	15.5	4.5	3.4	30.7	46.2	28.8
Camel	56.3	13.2	5.3	3.3	12.4	11.9	3.9
Poultry	48.2	45.0	3.9	3.2	55.2	36.3	29.1
Horse	5.6	15.9	0.1	0.0	5.8	13.3	NA
Donkey	19.1	8.5	1.2	0.4	10.3	8.8	NA
Mule	13.0	0.0	0.0	0.0	1.1	0.7	NA
Bee	33.2	2.5	3.7	0.0	10.2	0.0	NA

Source: ESPS 5.

TABLE 8.7

The Dynamics of Selected Indicators in Agriculture between 2018/19 and 2021/22

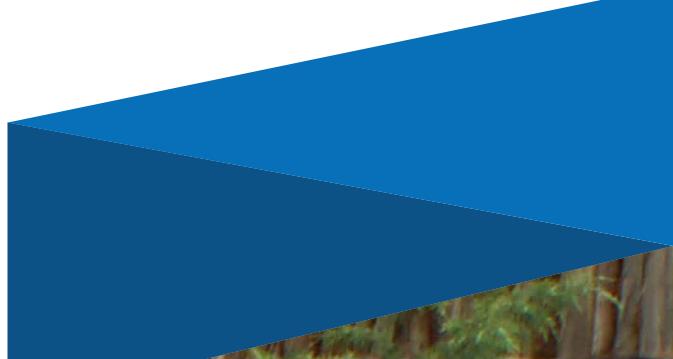
Indicator	Category, if applicable	Difference
Participation in agricultural activities	Any crop	
	Any livestock	6.1**
	Crops only	-6.2**
	Livestock only	
	Both crops and livestock	4.7*
	Either crops or livestock	
	Neither	
Land tenure arrangements	Owned	
	Rented out	-7.4**
	Free use	
	Rented in	
	Other	
Average fields per household (number)		1.3*
Average household land holding (ha)		0.3*
Use of improved seeds	Any crop	
	Barley	
	Maize	14.2**
	Sorghum	
	Teff	
	Wheat	
Use of organic fertilizers	Any crop	23.8**
	Barley	
	Maize	8.1*
	Sorghum	
	Teff	
	Wheat	
Use of inorganic fertilizers	Any crop	
	Barley	
	Maize	
	Sorghum	
	Teff	
	Wheat	

>>

Indicator	Category, if applicable	Difference
Use of chemicals	Any crop	
	Barley	
	Maize	
	Sorghum	
	Teff	
	Wheat	
Proportion of livestock-owning households	Poultry	-6.0*
	Camel	2.9**
Exotic/hybrid livestock	Small ruminants	
	Cattle	
	Poultry	12.4**

Note: Unless stated in parentheses for each indicator, the numbers refer to differences in percentage points. * and ** denote statistically significant for mean separation test at 0.05 and 0.01 levels respectively. Shaded areas show the tests are not significant.

Source: ESPS 5 and ESPS 4.



Chapter IX

Agriculture by Urban Households

Highlights

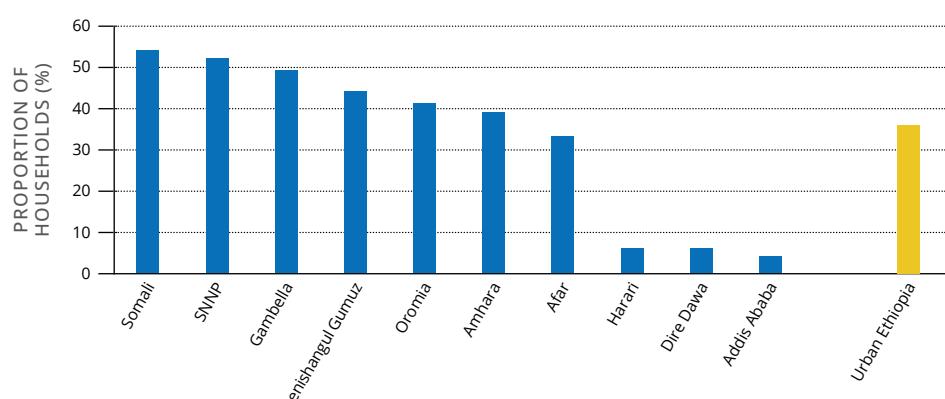
- More than a third of urban households engaged in agricultural activities (crop, livestock or both) in 2021/22, with notable regional variations.
- One in five urban households engaged in crop production during the 2021/22 season.
- Teff, wheat, maize, sorghum, and coffee are the five major crops planted by urban households.
- One in three urban households kept livestock in 2021/22, with cattle and poultry being the major types.
- A large proportion of urban households raised exotic or hybrid livestock, and this proportion is also higher compared to rural households.

Agriculture by urban households is gaining significant attention from policymakers and international development organizations in many developing countries due to rapid urbanization which leads to increased urban poverty and food insecurity. To respond to the data demand by these development stakeholders, the ESPS-5 incorporated an agriculture module that covers crop agriculture and livestock-rearing activities. The agriculture module of urban households is a condensed version of rural agriculture modules with the goal of collecting a few indicators of agricultural activities among urban households and comparing with rural households. Urban households were asked if they engaged in crop or livestock farming regardless of the farm location or activities. The crop agriculture section includes indicators like, the type of crop cultivated, land tenure and size, use of modern inputs, and production. The livestock section includes the type of livestock owned, the purpose of holding livestock, and income from livestock. Data collection was conducted during the post-harvest visits. Therefore, this chapter of the report attempts to give an overview of agricultural activities by urban households in the country.

9.1 URBAN HOUSEHOLDS IN AGRICULTURAL ACTIVITIES

Overall, 36% of urban households in Ethiopia engaged in agriculture (crop production, livestock production, or both) during the 2021/22 farming season (Figure 9.1). Regional differences exist in the participation rate. Households from major urban areas, such as Addis Ababa, Dire Dawa, and Harari reported lower participation in agricultural activities. In contrast, about half of urban households from less urbanized regions such as Somali, SNNP, and Gambella were engaged in agriculture activities.

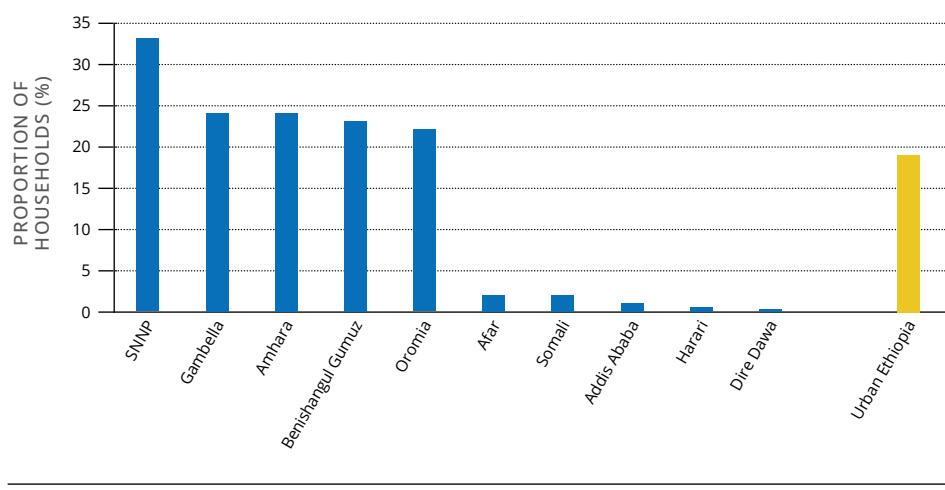
FIGURE 9.1
Urban households participating in any farming activity, 2021/22



Source: ESPS 5.

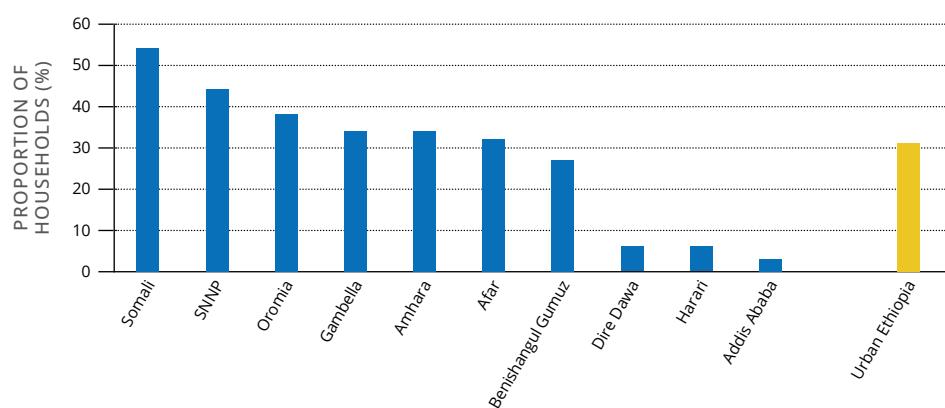
At the national level, 19% of urban households participated in crop farming (Figure 9.2a) and 31% engaged in livestock farming (Figure 9.2b). Notable differences were observed in the type of farming activities among the different regions in the country. Urban households from pastoralist regions, like Somali and Afar, mainly engaged in livestock farming. Whereas urban households from major crop-producing or mixed agriculture regions, such as SNNP, Gambella, Amhara, Oromia, and Benishangul Gumuz, engaged in crop farming.

FIGURE 9.2A
Urban households participating in crop farming, 2021/22



Source: ESPS 5.

FIGURE 9.2B
Urban households participating in livestock farming, 2021/22



Source: ESPS 5.

9.2 CROP FARMING

9.2.1 Land Tenure and Crop Fields

About 85% of households that engaged in crop farming own at least some of the land they cultivate (Figure 9.3a). About five percent of households reported borrowing land from others at no cost, six percent rented land, while twelve percent used other arrangements. No difference was reported in land tenure arrangements for crop fields cultivated during the 2021/22 growing season between urban and rural households. Urban households cultivated an average of two crop fields versus nine crop fields for rural households (Figure 9.3b).

FIGURE 9.3A
Land tenure type, by place, 2021/22

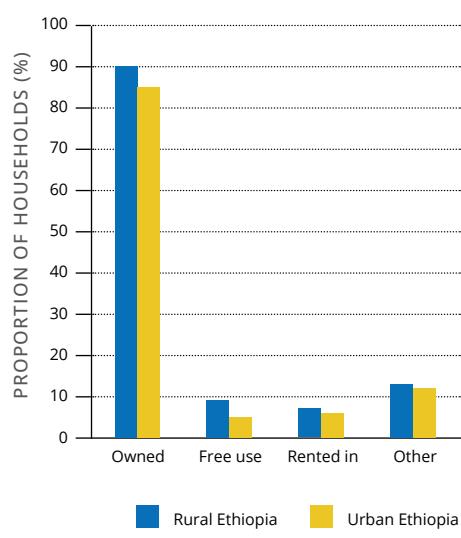
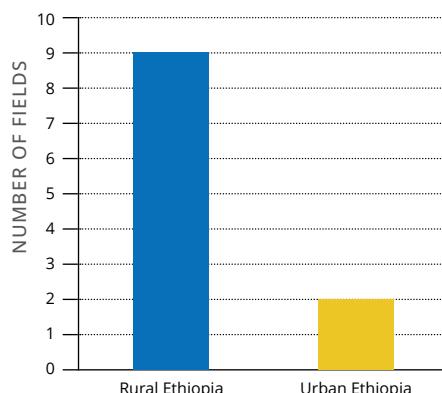


FIGURE 9.3B
Average number of fields per household, by place, 2021/22*



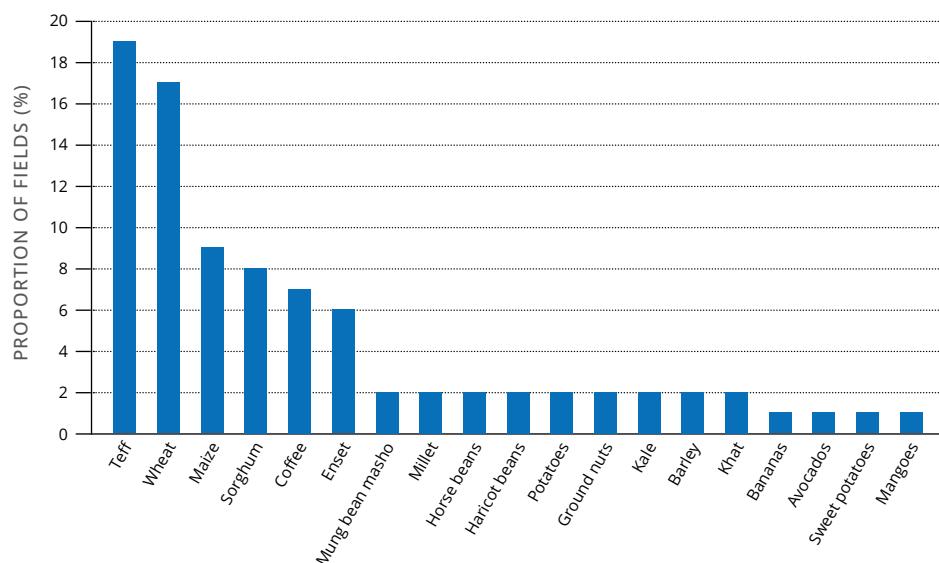
* The total number of fields for rural household is 15,528 crop fields and the total number of fields for urban households is 476 crop fields.

9.2.2 Crop Planting Practices

Most of the crop fields cultivated by urban households were covered by teff (19%), wheat (17%), maize (9%), and sorghum (8%) (Figure 9.4). The most common permanent crops covered by urban agriculture were coffee (7%), *enset* (6%) and *khat* (1%). Though the top ten crops planted for urban and rural households were similar, the rank order of these crops differed.

FIGURE 9.4

Planting practices: share of plots covered by crops, 2021/22



Source: to be provided.

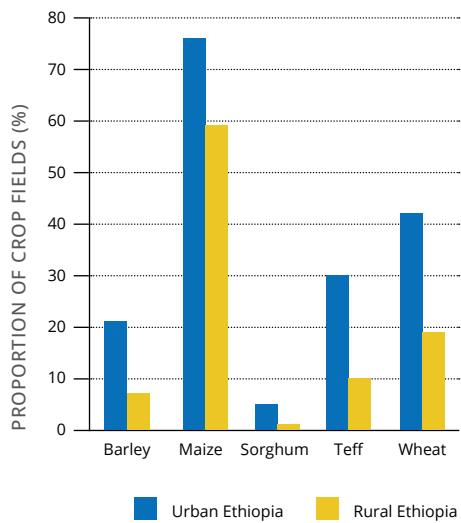
9.2.3 Input Use

Use of improved seeds in all major grains was significantly higher among farming households in urban areas compared to rural farming households (Figure 9.5a).³⁷ Over three-quarters of maize fields of urban households were sowed with improved seeds. This proportion was also higher for wheat (41%), teff (30%), and barley (21%). The use of fertilizer for teff and maize fields was higher among urban households compared to rural farming households, while the use of fertilizer for wheat, barley and sorghum fields was significantly higher among rural farming households (Figure 9.5b).

³⁷ Information on inputs is collected at the field level, therefore, the figures refer to fields in which at least one of the major five grains is grown.

FIGURE 9.5A

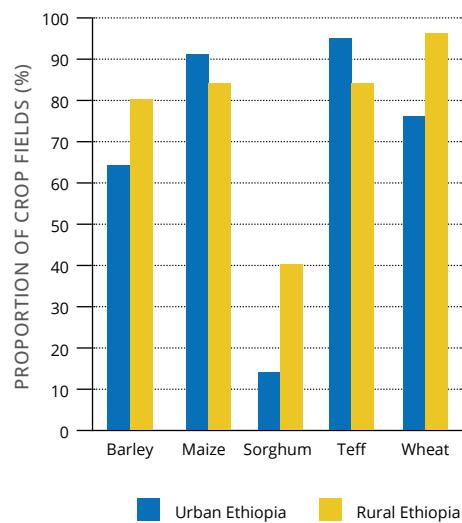
Crop fields that applied improved seeds, by place of residence and crop type, 2021/22



Source: ESPS 5.

FIGURE 9.5B

Crop fields that applied fertilizers, by place of residence and crop type, 2021/22



Source: ESPS 5.

9.3 LIVESTOCK FARMING

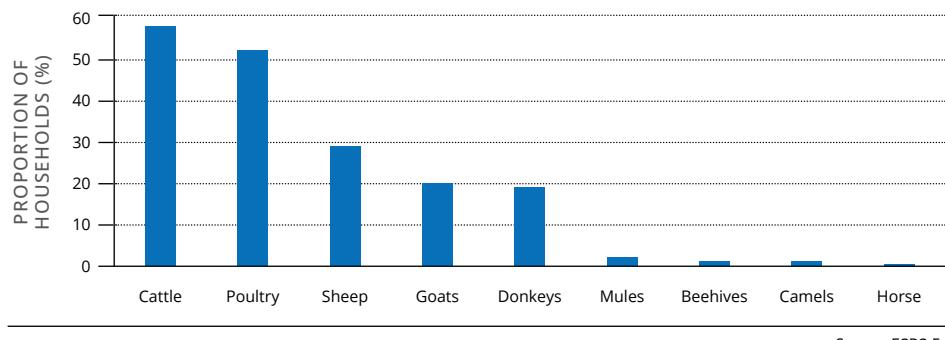
The two popular livestock types owned by households were cattle, reported by 57% of urban households that own any livestock, and poultry (52%) (Figure 9.6).³⁸

Two-thirds of urban households reported raising at least one improved or hybrid poultry, while only about one-third of rural households reported the same (Figure 9.7). Similarly, the majority of cattle owned by urban households are indigenous breeds. A higher proportion (24%) of cattle-owning urban households own at least one exotic or hybrid cattle, compared to 9% for cattle-owning rural households.

Small ruminants and poultry were the most common livestock among households keeping livestock for sale (Figure 9.8). Donkeys are kept mainly for transportation purposes, while poultry is used for own consumption. Small ruminants (sheep and goat) are raised by urban households mainly for sale or mixed purposes (sale and consumption). The main purpose of cattle rearing by urban households is reported to be for own consumption or mixed use.

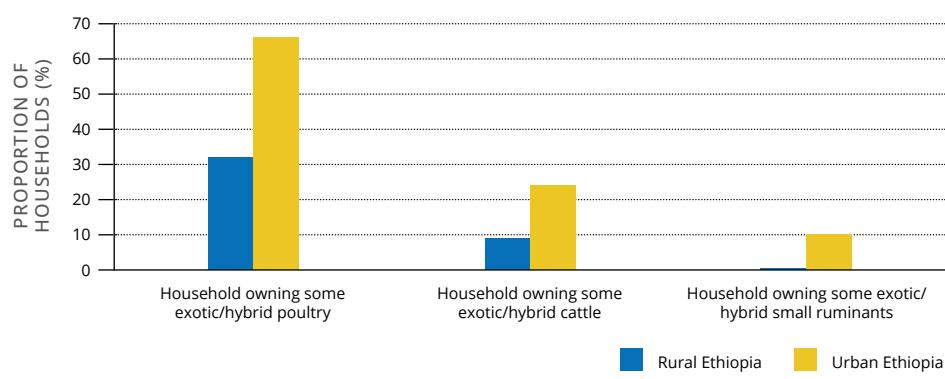
³⁸ The percentages are based on reported ownership of one or more livestock.

FIGURE 9.6
Types of livestock holdings of urban households, 2021/22



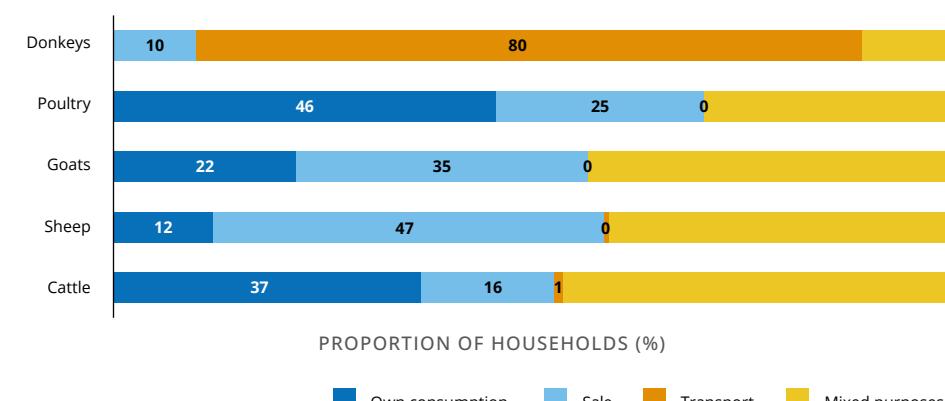
Source: ESPS 5.

FIGURE 9.7
Livestock breed (exotic hybrid), 2021/22



Source: ESPS 5.

FIGURE 9.8
Purpose of livestock farming, by livestock type, 2021/22



Source: ESPS 5.

LIST OF TABLES FOR CHAPTER IX

TABLE 9.1

Urban Households Participating in Crop and Livestock Activities, 2021/22, Percent

	Any crop	Any livestock	Both	Crop only	Livestock only	Crop or livestock	Neither
Afar	2	32	1	1	31	33	67
Amhara	24	34	19	5	15	39	61
Oromia	22	38	19	3	19	41	59
Somali	2	54	2	0	53	54	46
Benishangul Gumuz	23	27	6	17	21	44	56
SNNP	33	44	25	8	19	52	48
Gambella	24	34	9	15	25	49	51
Harari	1	6	0	0	6	6	94
Addis Ababa	1	3	0	1	3	4	96
Dire Dawa	0	6	0	0	6	6	94
Urban Ethiopia	19	31	15	4	17	36	64

Source: ESPS 5.

Ethiopia Socioeconomic Panel Survey **2021/22**

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