



## Ethiopia Socioeconomic Survey 2018–2019



### Highlights

- About 60 percent of households in Ethiopia are engaged in agricultural activities; in rural areas, this share is over 90 percent.
- Piped water access in the dwelling is low at the national level (less than 5 percent of households), and almost non-existent in rural areas (less than 1 percent).
- Ownership of the dwelling is significantly higher in rural areas than in urban areas, but the quality of housing is better in urban areas.
- The average household farm size in rural Ethiopia is 1.1 hectares, of which about 0.9 hectares is cultivated. On average, non-small scale food producers have about 1 hectare more land than small-scale food producers.
- The adoption of agricultural production technologies among agricultural households in rural Ethiopia is higher in non-small-scale food producers than small-scale food producers. While the uptake of inorganic fertilizers and chemicals is about 60 percent and 33 percent, respectively, the adoption rate of mechanical equipment is negligible.
- The average annual income of small-scale food producers from agriculture was nearly USD 629 (PPP, constant 2011 international USD), just around 40 percent that of non-small scale food producers.
- About 70 percent of the agricultural population have ownership or secure tenure rights over agricultural land, with a marginal difference between females and males.
- Half of the owners or rights-bearers of agricultural land are women.

## Country overview

Ethiopia is the second most populous country in Africa after Nigeria, with an estimated population of 114 million people in 2020 (United Nations Department of Economic and Social Affairs, 2019). The country is the fastest growing economy in Africa, and the share of the population living below the national poverty line was estimated at 24 percent in 2016. About 80 percent of the population live in rural, agriculture-dependent areas (World Bank 2020). Agriculture is the most important sector, as it accounts for around one-third of GDP (FAO, 2021a), two-thirds of employment (FAO, 2022a), and around half of the merchandise exports value (FAO, 2021b). The agriculture, fisheries and forestry value-added per worker was USD 804 (constant 2015 USD) in 2019 (World Bank, 2021).

## Results

The tables and figures summarize data on the population's demographic characteristics, living standards indicators, employment, engagement in agricultural production, agricultural income share in total income, landholding and tenure rights, adoption of agricultural production technologies, and livestock holding.<sup>1</sup> Differences in the means between the disaggregated groups in the tables (i.e. by sex, small-scale vs non-small scale, urban/rural areas), and the statistical significance, are also highlighted.<sup>2</sup>

### Demographics

Ethiopian households comprise 4.5 people on average at the national level and are larger in rural areas (4.9 people) than in urban areas (3.9 people)<sup>3</sup> (**Table 1**). The household head tends to be older and with fewer years of education in rural areas than in urban areas. About a quarter of households are headed by a female, and this proportion is higher in urban areas (34.6 percent) than in rural ones (22.3 percent). The majority of the households are constituted of both male and female members, and there are more female-only households compared to male-only households.

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<sup>1</sup> This country brief focuses only on a selected list of key statistics derived from the survey dataset. Further indicators, derived variables and processed datasets are disseminated and can be downloaded from the RuLIS website: <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/en/>

<sup>2</sup> The independent t-test is performed to compare means of the same variable between groups, and if the p-value is less than the pre-specified level (usually 0.1, 0.05 and 0.01), the mean difference is considered as statistically significantly greater than or less than zero.

<sup>3</sup> The findings are segregated by location – rural and urban, as defined in the survey.

**Table 1: Sample's demographic characteristics, by rural/urban classification**

Statistics	National	Rural	Urban	Difference
Sample size (households)	6 770	3 115	3 655	-
Number of households (weighted number)	20 067 412	13 552 817	6 514 596	-
Household size	4.5	4.9	3.6	1.3***
Head: Average age in years	42.9	44.9	38.7	6.2***
Head: Average years of education	7.7	5.6	10.0	-4.4***
Proportion of female-headed households	26.3	22.3	34.6	-12.3***
Households with male and female adults, share of total households (percent)	77.0	82.3	66.1	16.2***
Households with only female adults, share of total households (percent)	16.9	14.3	22.3	-8.0***
Households with only male adults, share of total households (percent)	6.1	3.4	11.6	-8.2***

Source: FAO. 2022. RuLIS – Rural Livelihoods Information System. In: FAO. Rome. Cited March 2022. <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/data-application/data/by-indicator/en>

\*:  $p$ -value < 0.1    \*\*:  $p$ -value < 0.05    \*\*\*:  $p$ -value < 0.01

Nationwide, less than 3 percent of Ethiopian households have access to piped water in their dwelling, and the proportion is less than 1 percent for rural households (**Table 2**). In urban areas, the quality of housing appears to be better, as over half of urban households live in dwellings with a non-dirt floor and 95 percent live under a solid roof. Dwelling ownership is much higher in rural areas (95 percent of households) than in urban areas (about half of the households). Nationally, 55 percent of households have access to a mobile telephone but the access in urban areas (87 percent) is double that of rural areas (43 percent).

**Table 2: Living standards and access to amenities**

Statistics	National	Rural	Urban	Difference
Population with piped water access in the dwelling, share of total population (percent)	2.6	0.1	9.8	-9.7***
Population living in a dwelling with a non-dirt floor, share of total population (percent)	16.2	4.4	50.3	-45.9***
Population living in a dwelling with a solid roof, share of total population (percent)	65.7	55.6	94.7	-39.1***
Average number of persons per room (real number)	2.9	3.2	2.2	1.0***
Population living in owned dwelling, share of total population (percent)	83.9	95.4	50.7	44.7***
Population with access to mobile telephone, share of total population (percent)	55.0	43.7	87.7	-44.0***

Source: FAO. 2022. RuLIS – Rural Livelihoods Information System. In: FAO. Rome. Cited March 2022. <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/data-application/data/by-indicator/en>

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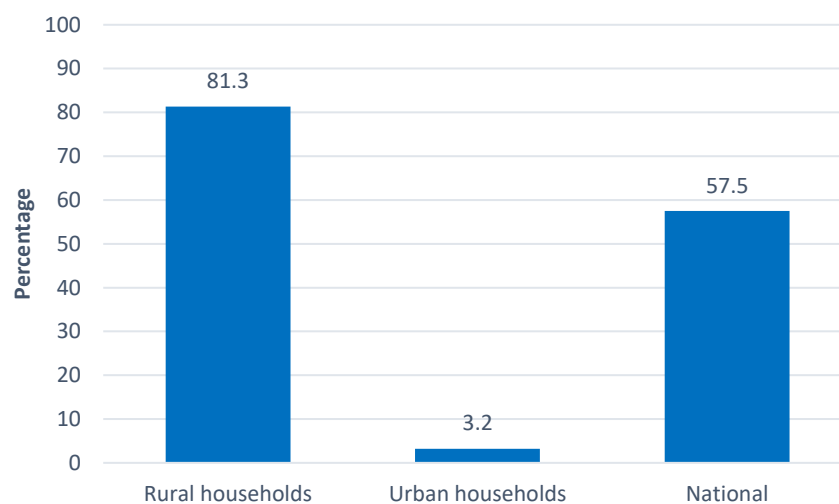
## Employment

Depending on data availability, the RuLIS database is used to compute some key employment indicators. The analysis of the employment status among individuals of working age shows that the employment-to-population ratio (defined as the proportion of the country's population aged 15 years and above that is employed) is highest in rural areas, where 71.4 percent of the persons aged 15 years and above are employed, compared to only 46.6 percent in urban areas. The difference between rural and urban is statistically significant (p-value <0.01).

## Agricultural production and income

The contribution of agriculture accounts for 58 percent of the total income of Ethiopian households, but this share is largely different between rural and urban areas: over 80 percent of the total income of rural households comes from agriculture, but only 3 percent (from agricultural wage labour) for urban households (**Figure 1**).

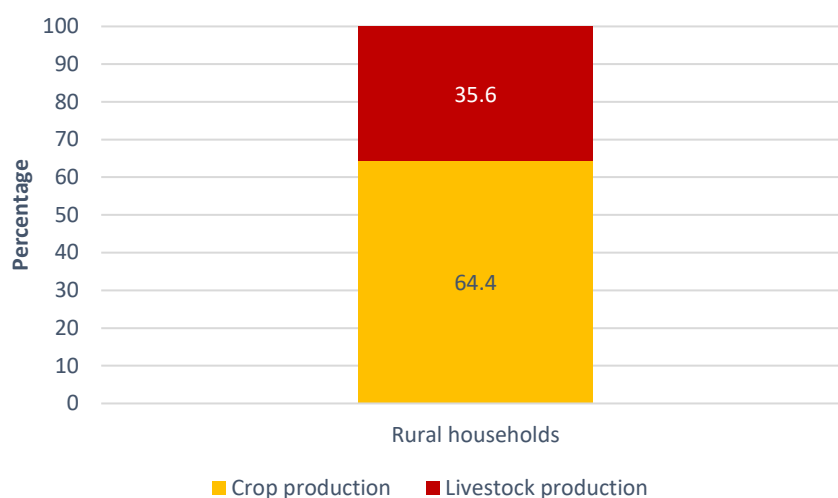
**Figure 1: Agricultural income share in total annual income**



Source: FAO. 2022. RuLIS – Rural Livelihoods Information System. In: FAO. Rome. Cited March 2022. <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/data-application/data/by-indicator/en>

The income derived from crop production has the largest share in the aggregated on-farm income compared to livestock production in rural Ethiopia (**Figure 2**).

**Figure 2: On-farm income by component**



Source: FAO. 2022. RuLIS – Rural Livelihoods Information System. In: FAO. Rome. Cited March 2022. <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/data-application/data/by-indicator/en>

Overall, at least 60 percent of Ethiopian households are engaged in on-farm agricultural production (that is, crop and livestock production activities) and within rural areas, at least 90 percent of households are agricultural households (Table 3).<sup>4</sup> In rural areas, over 80 percent of households derive more than 30 percent of their total income from agriculture (which includes on-farm production and agricultural wage labour), while nearly all urban households (97 percent) have no income from agriculture. Just above half of agricultural households are small-scale food producers.

**Table 3: Engagement in agricultural production, by rural and urban classification (percent)**

Statistics	National	Rural	Urban	Difference
Agricultural households, share of total households	61.4	91.0	NA	NA
Engagement in agriculture, share of total households				
More than 30 percent of income from agriculture	57.1	82.9	3.3	79.6***
Less than 30 percent of income from agriculture	5.6	8.2	0.2	8.0***
No income from agriculture	37.3	8.9	96.5	-87.6***
Households engaged in crop production, share of total households	57.8	85.5	NA	NA
Households engaged in livestock production, share of total households	54.0	80.0	NA	NA
Small-scale food producers, share of total agricultural households	51.9	51.9	NA	NA

Source: FAO. 2022. RuLIS – Rural Livelihoods Information System. In: FAO. Rome. Cited March 2022. <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/data-application/data/by-indicator/en>

\*:  $p$ -value < 0.1    \*\*:  $p$ -value < 0.05    \*\*\*:  $p$ -value < 0.01

<sup>4</sup> Sampling in the Ethiopia Socioeconomic Survey was two-stage, and in the second step, a systematic random sampling procedure was used to select ten agricultural households and two non-agricultural households in each enumeration area in rural areas. In urban areas however, 15 households were selected using a systematic random sampling procedure in each enumeration area regardless of the households' economic activity (see Central Statistics Agency of Ethiopia, 2019).

The average total landholding in rural Ethiopia is 1.1 hectares and an average of 0.9 hectares is cultivated with either annual or permanent crops (**Table 4**). In all the land categories analysed, non-small scale food producers hold around three times more land than small scale food producers, and the difference is around one hectare in each case.<sup>5</sup>

**Table 4: Landholding by scale of production (ha)**

Statistics	Rural	Small-scale food producers	Non-small scale food producers	Difference
Average cropland <sup>6</sup>	1.0	0.5	1.5	1.0***
Average arable land <sup>7</sup>	0.9	0.4	1.3	0.9***
Average size of household farm <sup>8</sup>	1.1	0.6	1.7	1.1***
Average cultivated land area <sup>9</sup>	0.9	0.5	1.4	0.9***

Source: FAO. 2022. RuLIS – Rural Livelihoods Information System. In: FAO. Rome. Cited March 2022. <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/data-application/data/by-indicator/en>

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The use of inorganic fertilizers is generally widespread in rural Ethiopia, with a 61 percent uptake rate on average (over 70 percent among non-small scale food producers) (**Table 5**). Similarly, about 60 percent of farm households accessed training and extension services, with no statistically significant difference between the categories of producers. Around a third of crop farming households use chemicals (such as herbicides and pesticides), and the proportion is significantly lower among small-scale food producers (19 percent) than among non-small scale food producers (48 percent). The adoption rate of mechanical equipment is negligible, and less than 10 percent of crop farming households have irrigation systems. About 10 percent of the crop land is irrigated.

<sup>5</sup> As per the internationally agreed methodology of SDG 2.3 indicators, the small-scale food producers are identified using a combination of two criteria, namely the physical size of the food producer, as expressed by the amount of operated land and the number of livestock heads in production, and the economic size of the food producer, as expressed by its revenues. The definition sets thresholds using a relative approach, in which producers that fall in the bottom 40 percent of the cumulative distribution are considered to be 'small-scale'.

<sup>6</sup> Area cropped with temporary crops, permanent crops or left fallow temporarily over the last complete cropping year.

<sup>7</sup> Area cropped with temporary crops or left fallow temporarily over the last complete cropping year.

<sup>8</sup> Total landholding.

<sup>9</sup> Area cropped with either temporary or permanent crops over the last complete cropping year.

**Table 5: Adoption of agricultural production technologies, by scale of production (percent)**

Statistics	Rural	Small-scale food producers	Non-small scale food producers	Difference
Households using chemicals, share of crop farm households	32.6	18.6	48.1	29.5***
Households using inorganic fertilizers, share of crop farm households	61.3	52.6	72.2	19.6***
Households using agricultural mechanical equipment (owned or rented), share of total farm households	1.3	0.4	2.2	1.8**
Households with access to agricultural production training or extension, share of total farm households	59.5	59.0	61.9	2.9
Crop farm households with irrigation systems, share of total crop farm households	8.3	6.6	10.3	3.7*
Irrigated crop land, share of total crop land	9.7	9.1	9.9	-

Source: FAO. 2022. RuLIS – Rural Livelihoods Information System. In: FAO. Rome. Cited March 2022. <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/data-application/data/by-indicator/en>

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On average, rural Ethiopian farm households own an equivalent of 2.7 Tropical Livestock Units (TLU), with non-small scale food producers having significantly more livestock (3.6 TLU) than small-scale food producers (1.6 TLU) (**Table 6**). Notably, about 90 percent of farm households, and almost all non-small scale food producers, keep livestock. Most livestock-keeping households have large ruminants (82 percent) followed by poultry (61 percent), small ruminants (59 percent) and equine (46 percent). At least half of the livestock-keeping households had an animal vaccinated. Landlessness is low (6 percent of livestock-keeping households on average), and is higher among small-scale food producers.

Table 6: Livestock holding by scale of production

Statistics	Rural	Small scale food producers	Non-small scale food producers	Difference
Average tropical livestock units owned by livestock farm households (TLU) <sup>10</sup>	2.7	1.6	3.6	2.0***
Livestock farm households, share of total farm households (percent)	87.9	81.2	97.8	16.6***
Share of livestock farm households owning large ruminants (percent)	82.0	69.9	92.8	22.9***
Share of livestock farm households owning equine (percent)	46.3	29.7	61.2	31.5***
Share of livestock farm households owning small ruminants (percent)	59.2	51.7	65.9	14.2***
Share of livestock farm households owning poultry (percent)	61.1	59.0	62.9	3.9
Share of livestock farm households with at least one animal vaccinated (percent)	52	46.1	57.0	10.9***
Landless livestock households, share of total livestock households (percent)	5.7	8.4	3.3	-5.1**

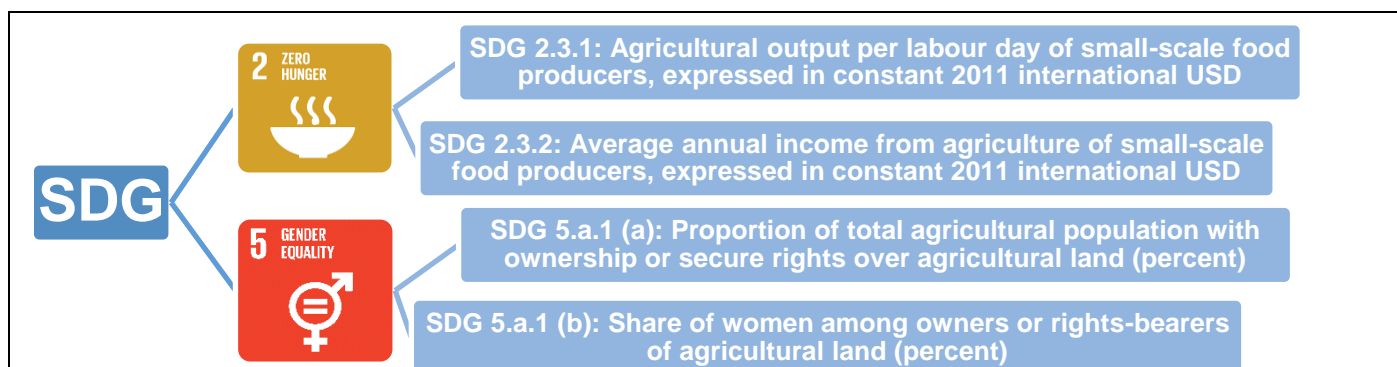
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<sup>10</sup> The TLU conversion factors used are as follows: Large ruminants = 0.5, small ruminants = 0.1, pigs = 0.2, poultry = 0.01 and equines = 0.45. See FAO. 2011. *Guidelines for the Preparation of Livestock Sector Reviews. 5. Animal Production and Health Guidelines*. <https://www.fao.org/docrep/014/i2294e/i2294e00.pdf>



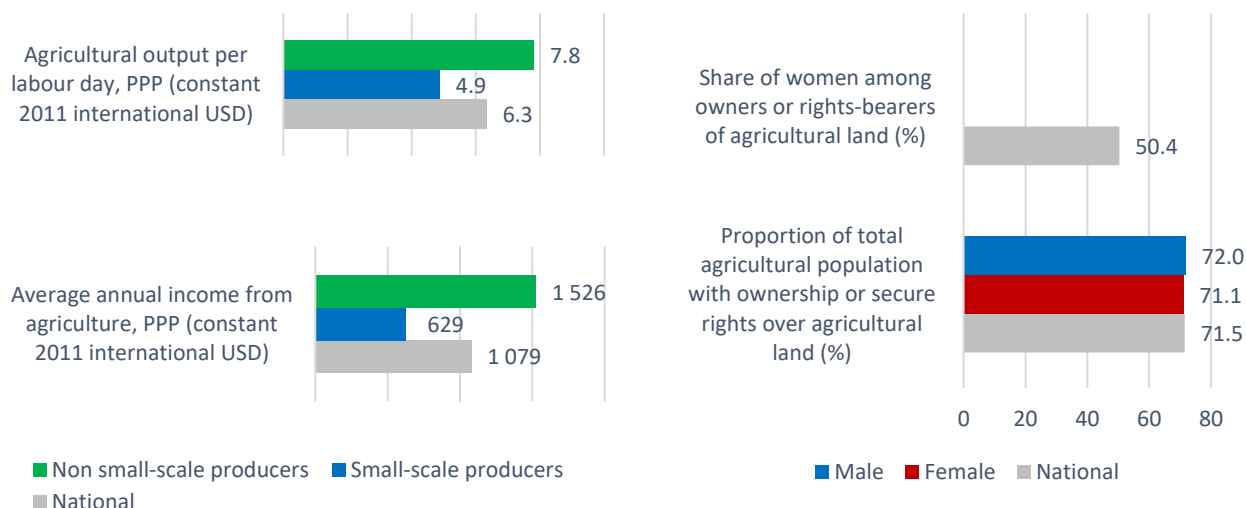
## Sustainable Development Goals indicators computed in RuLIS<sup>11</sup>



SDG 2.3.1 focuses on measuring the agricultural productivity of the small-scale food producers, which is computed as the ratio of the total agricultural output over the total number of labour days utilized. SDG 2.3.2 aims at measuring the average annual income that small-scale food producers derive from agriculture. SDG 5.a.1 (a) measures how prevalent ownership or secure rights over agricultural land are among the total agricultural population. SDG 5.a.1 (b) measures the share of women among owners or rights-bearers of agricultural land, and is used to monitor the under-representation of women among the owners or holders of agricultural land.

Figure 3 shows that, as may be expected, non-small scale food producers have a higher annual income from agriculture and daily output than small-scale food producers. The difference between the two groups is statistically significant ( $p < 0.01$  level of significance) for both indicators. For SDG indicator 5.a.1 (a), the proportion of persons with ownership and secure land rights over agricultural land is nearly equal between males and females. Among those with secure land rights, just above half are women.

**Figure 3: Sustainable Development Goals indicators**



Source: FAO. 2022. RuLIS – Rural Livelihoods Information System. In: FAO. Rome. Cited March 2022. <https://www.fao.org/in-action/rural-livelihoods-dataset-rulis/data-application/data/by-indicator/en>

<sup>11</sup> Please refer to <https://sdgs.un.org/goals> to learn in detail about the 17 SDGs.

## Explanatory Note

This brief uses data from the Food and Agriculture Organization of the United Nations (FAO)-hosted Rural Livelihoods Information System (RuLIS), which aggregates data from the Ethiopia Socioeconomic Survey 2018–2019 (Central Statistics Agency of Ethiopia, 2019) to highlight the results of some key indicators. Ethiopia Socio-economic Survey 2018 collects data from a sample of households in a population, and hence, the values of the indicators derived are not reflective of the non-household sector of the country. The findings are segregated by location – rural and urban, as defined in the survey. Often, the definition of rural and urban areas is country-specific, and is based on a variety of different criteria such as remoteness, population density or importance of the agricultural sector to employment, but mostly stems from traditional and administrative classifications. The analysis also identifies agricultural households as those engaging in on-farm production activities, either on own land and dwelling on it, or on land resource that is not owned – either rented-in or borrowed – and not necessarily living on it. In addition, the tables referring to the agriculture operations are disaggregated by small-scale food producers and non-small-scale food producers as per the small-scale producer definition for Sustainable Development Goal (SDG) indicators 2.3.1 and 2.3.2. While the survey was carried out in both rural and urban areas, the micro-level agricultural module was only carried out in rural areas. Therefore, national averages are shown only when data are available for both rural and urban areas.

The **Rural Livelihoods Information System (RuLIS)** is a set of harmonized household- and individual-level data and indicators on different aspects of livelihoods, including crops and livestock production, off-farm and non-farm income generating activities, households' composition and demographics, agricultural inputs, technology use, access to social protection, time use, shocks and migration. RuLIS currently includes information from 39 countries, with increasing data coverage in time and space as more micro-data becomes available. RuLIS aims to provide critical information for understanding medium- and long- term trends in the structural transformation of agriculture and rural economies; and for the design of policies that promote and accompany social and economic transformation and enhancement. RuLIS provides data on a wide set of indicators, cross-tabulated by rural vs urban areas, gender and other variables; and standardized variables at the household and individual level.

For further information on RuLIS, and for accessing the data and indicators on the platform, please refer to <http://www.fao.org/in-action/rural-livelihoods-dataset-rulis>.

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