

A. Nominal Consumption Aggregate

Food

Organization of food section of the questionnaire (number of items, specific sources asked about (purchases, gifts, own production, payment in kind etc), recall period(s), use of NSUs, record quantities and/or value estimates of non-market transactions, FAFH at hh or individual level)

Consumption vs. expenditure

- In the initial part of the food section, respondents were interviewed regarding their consumption of 26 distinct food items. The recall period utilized in this part of the questionnaire was seven days, and the consumption quantities were recorded in accordance with predefined units. For each unit, both the overall consumption and consumption obtained from various sources, such as purchases, self-production, and gifts, were recorded. However, it should be noted that total expenditure was only recorded for consumption obtained through purchases.

SECTION 5A: FOOD LAST 7 DAYS														
1.	2.		3.		4.	5.		6.		CODES FOR UNIT:				
Over the past one week (7 days), did you or others in your household consume any [ITEM]? INCLUDE FOOD BOTH EATEN COMMUNALLY IN THE HOUSEHOLD AND THAT EATEN SEPARATELY BY INDIVIDUAL HOUSEHOLD MEMBERS. YES...1 NO...2 ► NEXT ITEM	How much in total did your household consume in the past week?	QUANTITY	UNIT	How much came from purchases? IF NONE RECORD 0.	QUANTITY	UNIT	How much did you spend?	BIRR	How much came from own production? IF NONE RECORD 0.		QUANTITY	UNIT	How much came from gifts and other sources? IF NONE RECORD 0.	QUANTITY
CEREALS														
1	Teff													
2	Wheat													

Gram 1
Cubic Centimeter 3
Number 4
Pair 6

- During the fourth part of the food section, participants were interviewed regarding their consumption of FAFH (Food away from home). This segment included inquiries pertaining to eight different food categories, and the recall period employed was seven days. Households were asked to provide information on their total expenditure for each category, and were prompted to estimate the total cost when the consumption was not paid for.

		6.	7.
		In the past 7 days, did members of this household consume any of the following meals or drinks away from home? YES.....1 NO.....2 ► NEXT ITEM	How much did you or other household members pay, in total in the last 7 days for [MEAL/DRINK]? If free, please estimate what it would have cost if you had to pay.
MEAL			BIRR
A	Full meals (e.g. Enjera made of teff/millet/barley with any type of stew, kocho/kocho with meat, rice with sauce, etc.)	Breakfast	
B		Lunch	
C		Dinner	
D	Snacks such as Kolo, bread, biscuits, cakes, etc.		
E	Dairy based beverages such as milk, yoghurt etc.		
F	Vegetables and roasted or boiled items such as (carrot, potatoes, boiled/roasted corn, sugar cane etc)		
G	Non alcoholic drinks (coffee, tea, fruit juice, soda etc.)		
H	Alcoholic drinks (local beer,Beer,Areqe etc)		

Valuation of non-market transactions (or even market transactions), including aggregation of prices

- Unit prices were constructed by utilizing the total spending from purchases reported by households for each item on the list. Subsequently, the aggregated unit prices of each item were calculated for various levels of regional disaggregation. A price hierarchy was then employed to determine which price level (such as national, rural, or regional) would be assigned to each item. In the final step, the aggregated prices were utilized to estimate the consumption value of items obtained through self-production and as gifts.

General Non-Food Goods and Services

Organization of questionnaire (number of items, recall period)

Specific inclusions / exclusions

- Section 6 of the questionnaire allocated two parts for reporting households' nonfood expenditures. The first part comprised of filter questions for each item, with the total payment for a given item being recorded. Expenditure on 12 items was recorded during this part, with a recall period of one month.
- A similar questionnaire structure was employed in the second part of this section, albeit with a longer recall period of 12 months. In this part, expenditure on 12 different groups was recorded.

SECTION 6: NON-FOOD EXPENDITURE					
LAST ONE MONTH		LAST 12 MONTHS			
ITEM CODE	1. Over the past one month, did your household purchase or pay for any [ITEM]? YES...1 NO...2 ► NEXT ITEM	2. How much did your household pay in total? BIRR	ITEM CODE	3. Over the past 12 months, did your household purchase or pay for any [ITEM]? YES...1 NO...2 ► NEXT ITEM	4. How much did your household pay in total? BIRR
1	Matches		1	Clothes/shoes/fabric for MEN (18 years and older)	
2	Batteries		2	Clothes/shoes/fabric for WOMEN (18 years and older)	
3	Candles (tua'af), incense		3	Clothes/shoes/fabric for BOYS (less than 18 years)	

- When constructing total non-consumption aggregates, expenditures such as house rent, furniture expenses, ceremonial expenses, contributions to IDDIR, donations, taxes, and levies were excluded.
- In section 9 of the household questionnaire, information on average monthly expenditures for housing utilities (including spending on electricity, water, and telephone usage) was collected. These expenditures were also taken into account when constructing nonfood household consumption aggregates.

Health and Education Services

Specific components of education expenses, recall period

- During the survey, information on the value of scholarships and assistance (both in kind and/or cash) received by each individual who attended school and received support was gathered. The recall period for this segment was specified as the current academic year. Additionally, total

expenditures on school-related expenses, such as tuition fees and school equipment (including uniforms) were also collected for each individual who attended school, with the recall period being the preceding 12 months for this part of the survey.

Specific components of health care services, recall period. Inclusion/exclusion of any health care services, especially hospitalization.

- It should be noted that expenditures on health were not collected in the ESS survey.

Durable Goods

Number of durable goods, information collected on each (age, purchase price, current value etc.)

- In section 10 of the survey, households were interviewed about their owning status on 36 different items. While the number of items that households owned were recorded, information on the age of goods, purchase price, and current value were not collected. For this analysis, I utilized imputed data provided to us.
- When constructing the total use value of households, the following items were excluded.
 - ✓ Cart, sewing machine, weaving equipment, gold, silver, sickle, axe, pick axe, and plough.

Method/formula to construct use value

- Equation (1) was used to estimate the depreciation rate for each observation, and then the median depreciation rate of each item was calculated.

$$Depreciation = 1 - \left(\frac{Current\ value}{Purchase\ price} \right)^{\frac{1}{t}} \quad Eq.(1)$$

- Equation (2) was estimated to construct the use value of each observation. The real interest rate was defined as 11.68%. Following this step, the median use value by item and rural level was calculated in order to impute missing values.

$$Use\ value = Current\ value \times (real\ interest\ rate + median\ depreciation\ rate) \quad Eq.(2)$$

Housing Costs/Value

Actual rental cost used for renters?

- In section six of the household questionnaire, the survey participants were interviewed regarding their expenditure on house rental for the preceding month. Utilizing the available data, the actual rental costs were incorporated for those participants who were identified as renters.

Percent of renters by urban/rural (and if possible, capital city vs. other urban, by admin1)

- 1.8% of households in rural areas reside in rented dwellings, while the percentage increases to 9.6% for households in urban areas.

Model for imputed rent (log model? one model or multiple? independent variables?) or respondent estimated or other

- I chose not to employ a separate model to estimate the use values of dwellings in different regions (urban vs rural) due to the limited number of renters located in rural areas and an insufficient number of observations to develop an efficient model.
- The dependent variable in the model was defined as the logarithm of actual rents, while various characteristics of the dwelling, such as the number of rooms, the type of walls, roof, floor, kitchen, toilet, and main source of drinking water, were used as independent variables.
- Furthermore, actual rents were utilized to estimate the use values for privately owned or free-of-rent dwellings.

B. Adjustments to Consumption Aggregate

Adult Equivalency

Scale/formula for computing adult equivalency for national estimates

- The Pacific scale was chosen as the primary adult equivalency scale in the analysis. Nevertheless, the poverty estimates were recalculated using the DZ equivalency scale for the purpose of assessing sensitivity.

$$\text{Pacific AME} = \text{Total adult in hh} + 0.5 \text{ Total child in hh} \quad \text{Eq. (3)}$$

$$\text{DZ AME} = (\text{Total adult in hh} + 0.33 \text{ Total child in hh})^{0.9} \quad \text{Eq. (4)}$$

Price Level Adjustments

Type of adjustments (temporal, spatial, combined)

Spatial (if applicable): source of prices, geographic unit, type of index, base for index OR other method (implicit based on separate poverty lines)

- The Paasche price index was utilized to adjust for variations in prices across regions.

C. National Poverty Line and Rates

Poverty Line

Construction of food basket (number of items, % value of food consumption they represent, reference population) # of calories

- 25 food items as defined in Section 5A of the household questionnaire were included in the food basket, with the exception of "Kat" food item.
- When constructing the food basket, the individuals from the 10th to 70th percentiles of the distribution in terms of real, per adult equivalent food consumption were defined as the reference population.
- Additionally, a target calorie intake of 2300 kcal per adult equivalent per day was established when constructing the food basket.

Food item	Unit price	kcalper100g	Basket quantity	Basket cost per day
1. Teff	1.4	338	1.01	1.41
2. Wheat	0.9	351	0.72	0.65
3. Barley	0.8	338	0.48	0.36
4. Maize	0.6	358	1.41	0.85
5. Sorghum	0.7	348	1.02	0.68
6. Millet	0.7	313	0.24	0.16
7. Horsebeans	1.0	343	0.34	0.34
8. Chick Pea	1.2	368	0.08	0.10
9. Field Pea	1.2	347	0.12	0.15
10. Lentils	2.4	350	0.06	0.14
11. Haricot Beans	1.0	351	0.12	0.12
12. Niger Seed	1.0	834	0.01	0.01
13. Linseed	1.3	490	0.01	0.01
14. Onion	1.0	118	0.24	0.24
15. Banana	1.2	78	0.09	0.11
16. Potato	0.6	182	0.23	0.14
17. Kocho	0.5	200	0.76	0.38
18. Meat	10.0	99	0.04	0.38
19. Milk	1.2	76	0.33	0.39
20. Cheese	2.0	135	0.04	0.08
21. Eggs	1.5	153	0.02	0.02
22. Sugar	2.0	387	0.13	0.26
23. Salt	0.6	0	0.14	0.09
24. Coffee	6.4	96	0.14	0.88
26. Bula	1.7	170	0.03	0.05

Construction of nonfood components (methodology, i.e. Ravallion, WAEMU etc.)

- The Upper Ravallion method was employed to construct the nonfood component of the poverty line. The estimates included all nonfood consumption items such as housing and education etc. Additionally, a version of the poverty line that excluded housing was also constructed for sensitivity analysis.