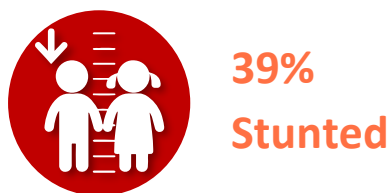




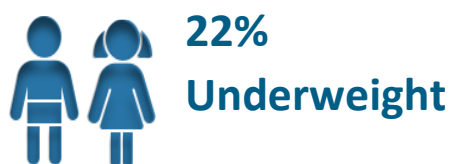
# 1. PREVALENCE OF MALNUTRITION IN CHILDREN UNDER FIVE YEARS OF AGE



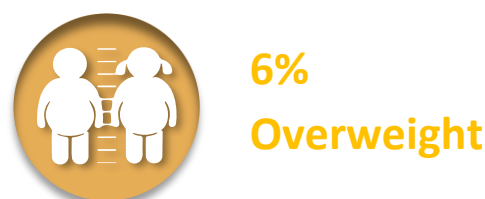
Stunting remains a major public health problem in Ethiopia. The current study shows that 39% (37-42: 95% confidence interval) of children under five years of age are stunted (height-for-age below -2SD).



The national prevalence of wasting (weight-for-height below -2 SD) is 11% (9-11: 95% confidence interval).



The national prevalence of underweight (weight-for-age below -2SD) in children under 5 years is 22%.



The national prevalence of overweight (body mass index-for-age above +1SD) among children under five years was 6%. The prevalence was highest in Sidama (14%) and lowest in the Afar region (2%).

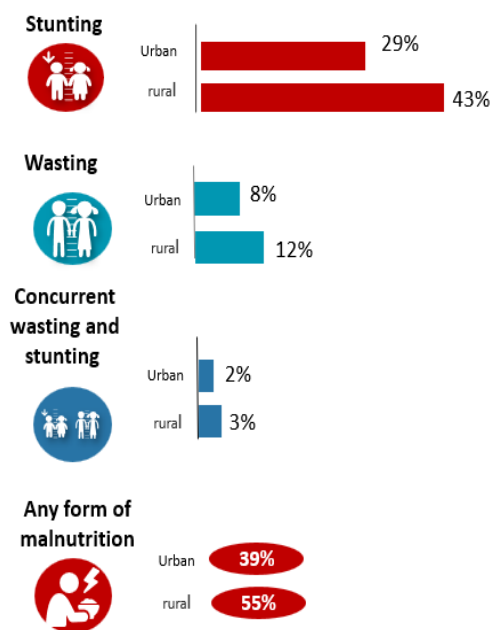
## 1.1 Urban-rural differences in the prevalence of child malnutrition

Despite some progress, the prevalence of under-nutrition in children under five is still high in Ethiopia. At the national level, more than half of children under five years were affected by any form of malnutrition. The proportion of stunted children is higher (43%) in rural areas compared to urban (29%) areas. The prevalence of wasting is also higher in the rural (12%) compared to the urban (8%) areas (Figure 1).

## 1.2 Regional differences in the prevalence of child malnutrition

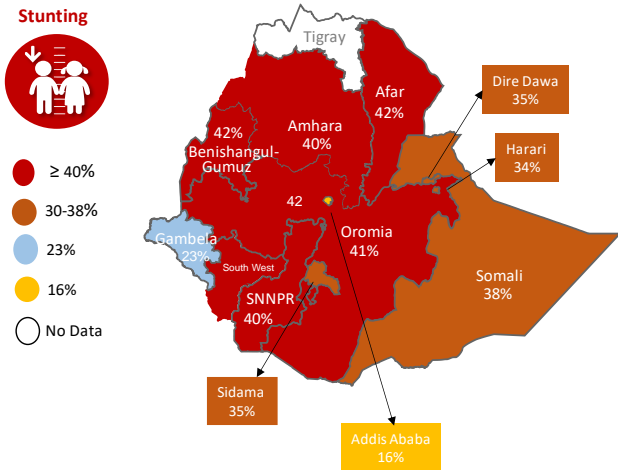
The prevalence of undernutrition differs across regions in Ethiopia. Stunting is highest in Afar (42%), Oromia (41%), Amhara (40%), and SNNP (40%) regions (Figure 2A). Oromia, and Amhara have the highest share in terms of absolute number of stunted children.

Figure 1: Prevalence of undernutrition by place of residence in Ethiopia, March 2023

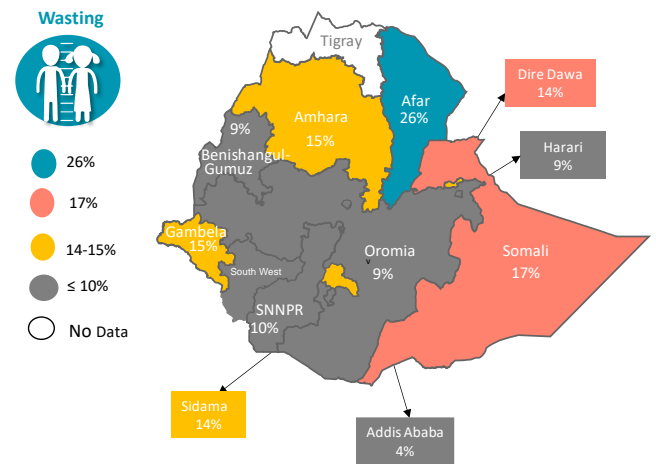


The prevalence of wasting among children under five years ranges from as low as 4% in Addis Ababa to as high as 26% in the Afar region (**Figure 2B**).

**Figure 2A:** Geographic distribution of stunting among children under five years in Ethiopia, March 2023



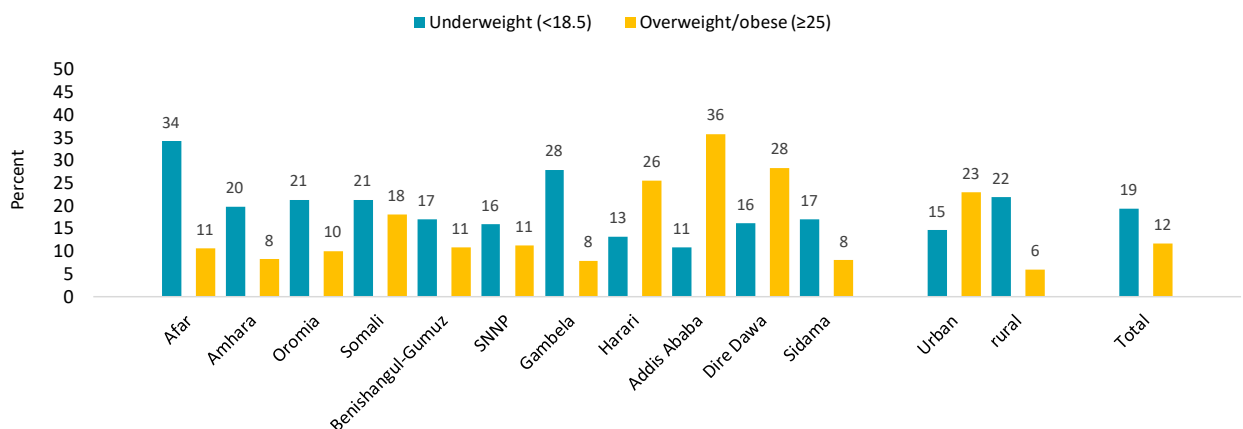
**Figure 2B:** Geographic distribution of wasting among children under five years in Ethiopia, March 2023



## 2. MALNUTRITION IN WOMEN

Overall, 19% of women of reproductive age were underweight (BMI < 18.5 kg/m<sup>2</sup>). About 22% of rural women were underweight as compared to urban women (15%). One in ten (12%) women were overweight/obese. The prevalence of overweight/obesity was four times higher in the urban settings (23%) as compared to the rural settings (6%). In the urban settings, the highest prevalence of overweight/obesity was recorded in Addis Ababa (36%) and Dire Dawa (28%) as shown in **Figure 3**.

**Figure 3:** Prevalence of malnutrition among women of reproductive age by region and place of residence in Ethiopia, March 2023



### 3. INFANT AND YOUNG CHILD FEEDING PRACTICES

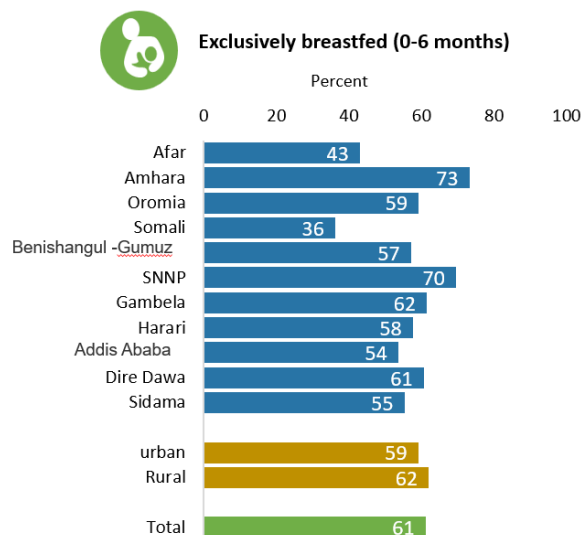
#### 3.1 Exclusive breastfeeding for six months

Overall, 61% of children aged 0–6 months were exclusively breastfed. As shown in Figure 4, there were slight differences in exclusive breastfeeding rates in the urban (59%) and rural settings (62%). Exclusive breastfeeding was highest in the Amhara region (73%), followed by the Southern Nations, Nationalities, and Peoples' Region (SNNPR) (70%), and the least was observed in the Somali region (36%) (Figure 4).

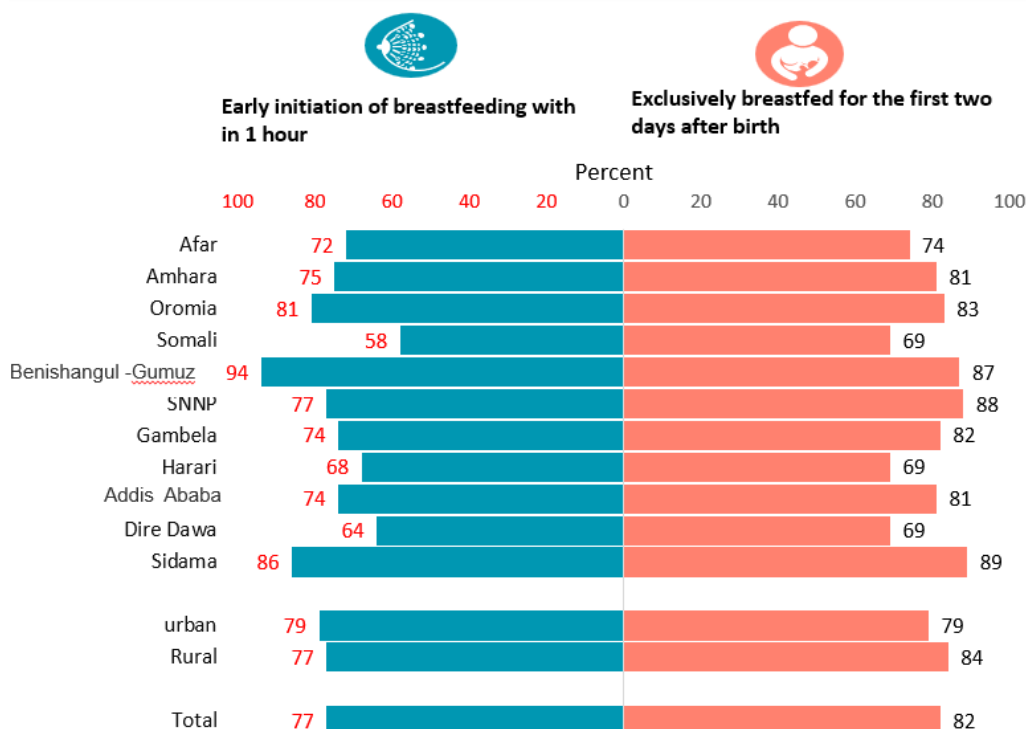
#### 3.2. Early initiation of breastfeeding

Overall, 77% of children were breastfed within an hour of birth, while 82% were exclusively breastfed for the first two days after birth. There were slight differences in the initiation of breastfeeding and exclusive breastfeeding for the first two days after birth between urban and rural settings (Figure 5).

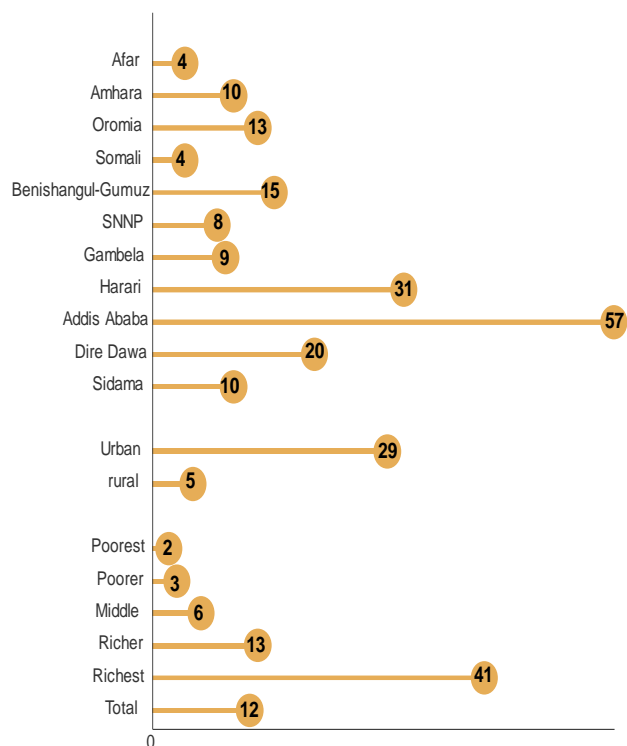
**Figure 4:** Exclusive breastfeeding rates among children aged 0-6 months by region and place of residence in Ethiopia, March 2023



**Figure 5:** Early initiation of breastfeeding by region and place of residence in Ethiopia, March 2023



**Figure 6:** Exposure to breast milk substitute promotion among children 0-23 months by region, place of residence and wealth quintiles in Ethiopia, March 2023



### 3.3 Exposure to breast milk substitutes

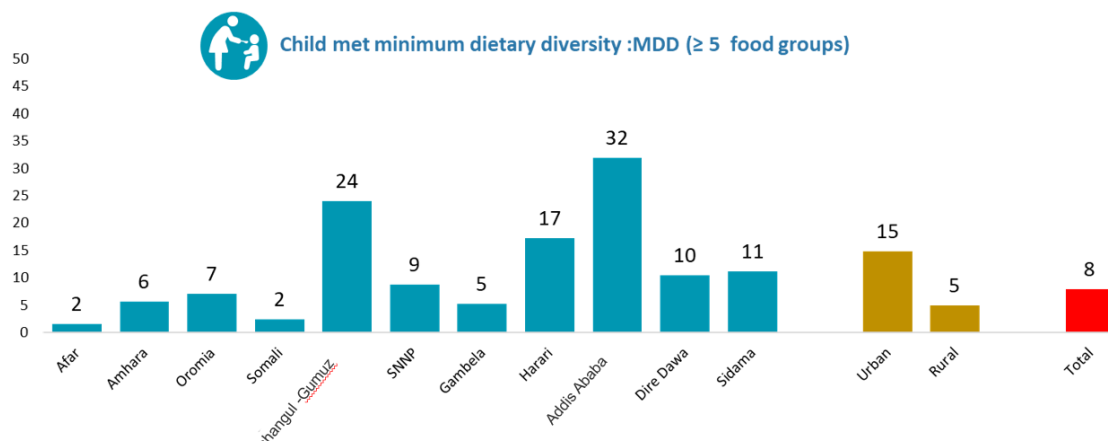
Overall, 12% of caregivers reported that they have heard or seen advertising for infant formula or other milk targeted to babies. Exposure to the promotion of breast milk substitutes (BMS) was highest in Addis Ababa (57%), Harari (31%), and Dire Dawa (20%). Exposure to BMS promotion was 6 times higher in the urban areas (29%) as compared to the rural areas (5%) (Figure 6). Exposure to BMS promotion was 20 times higher among caregivers in the richest households as compared to caregivers in the poorest households (Figure 6).

## 4. INFANT AND YOUNG CHILD FEEDING PRACTICES: COMPLEMENTARY FEEDING

### 4.1 Dietary diversity

Only 8% of children aged 6-23 months consumed the minimum recommended number of; 5 out of 8 food groups. Addis Ababa had the highest score (32%), while Afar and Somali recorded the lowest. Diet diversity was 3 times higher in the urban areas (15%) compared to the rural areas (5%) (Figure 7).

**Figure 7:** Diet diversity among children aged 6-23 months by region and place of residence in Ethiopia, March 2023



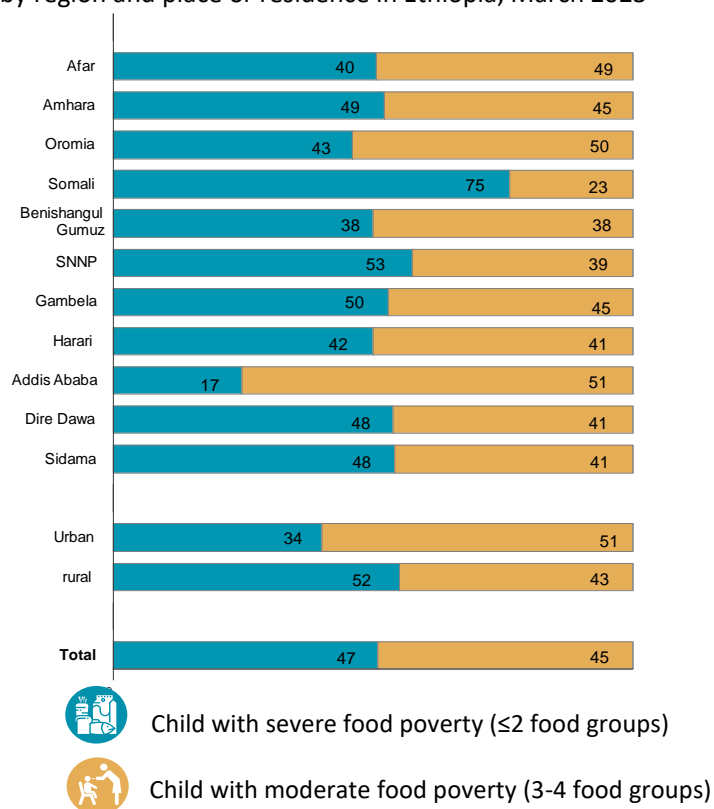


## 4.2. Child food poverty

Overall, 47% of children aged 6-23 months had severe food poverty (consumed  $\leq 2$  food groups a day). The highest proportion of children aged 6-23 months with severe food poverty was observed in Somali (75%), SNNPR (53%), and Gambella (50%). One in two children in the rural areas (52%) were more likely to consume, 2 or less food groups a day as compared to 1 in 3 children in the urban areas (34%).

Nearly half (45%) of the children aged 6-23 months had moderate food poverty (consumed 3-4 food groups a day). A similar level of moderate food poverty was observed in Addis Ababa (51%) and Oromia (50%). One in two children in the urban areas (51%) were more likely to consume 3-4 food groups a day as compared to 4 in 10 children in the rural areas (43%) (Figure 8).

**Figure 8:** Food poverty among children aged 6-23 months by region and place or residence in Ethiopia, March 2023



## 5. UNHEALTHY FEEDING

### 5.1 Unhealthy food consumption

Overall, 15% of children aged 6-23 months consumed unhealthy foods. Addis Ababa (35%) and Sidama (31%) recorded the highest intake of unhealthy foods, while three regions: Afar (2%), Dire Dawa (8%), and Somali (9%) had less than 10% unhealthy food consumption. The number of young children who consume unhealthy foods in urban areas (23%) is twice the number in the rural areas (12%) (Figure 9).

### 5.2 Sweet beverage consumption

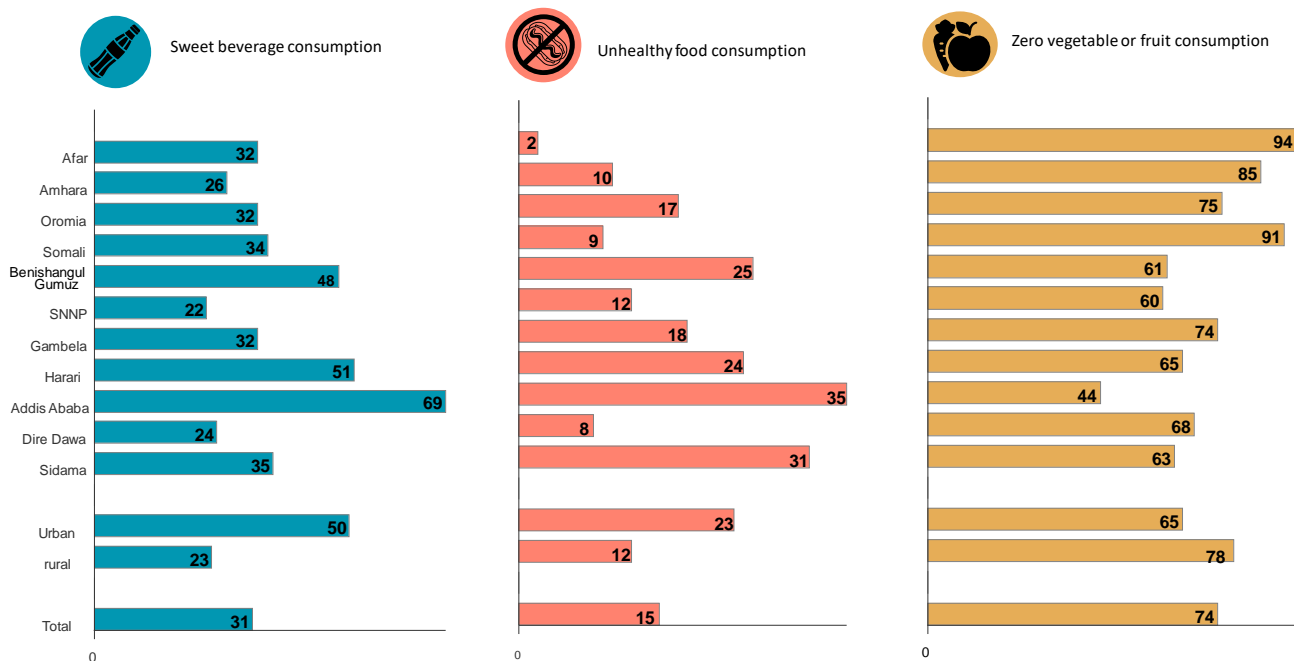
About 1 in 3 children aged 6-23 months consumed sweet beverage. The highest consumption of sweet beverages was recorded in Addis Ababa (69%), and the lowest was in SNNP (22%). One in two children in urban areas consume sweet beverages compared to 1 in 4 children in the rural areas (Figure 9). There

were differences in sweet beverage consumption by wealth; richest (54%) vs poorest (23%). However, there were no differences in sweet beverage consumption by child sex.

### 5.3 Zero fruit or vegetable consumption

Fruit/vegetable consumption was generally low. Three out of four children aged 6-23 months did not consume any fruit/vegetable per day. The proportion of children who did not eat any fruit/vegetable was highest in 3 regions: Afar (94%), Somali (91%), and Amhara (85%) and lowest in Addis Ababa (44%). There was a slight difference in zero fruit/vegetable consumption between the urban (65%) and rural (78%) areas (Figure 9).

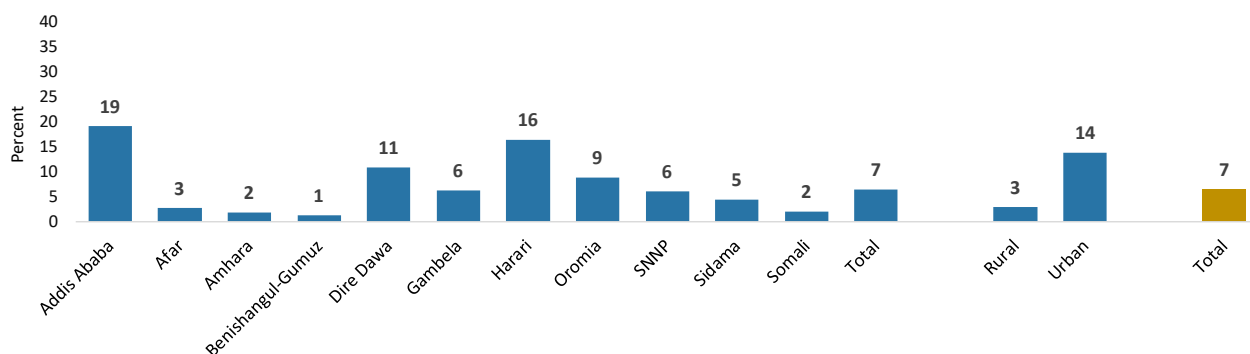
**Figure 9:** Sweet beverage, unhealthy food and zero fruit/vegetable consumption among children aged 6-23 months by region and place of residence in Ethiopia, March 2023



## 6. WOMEN DIETARY DIVERSITY

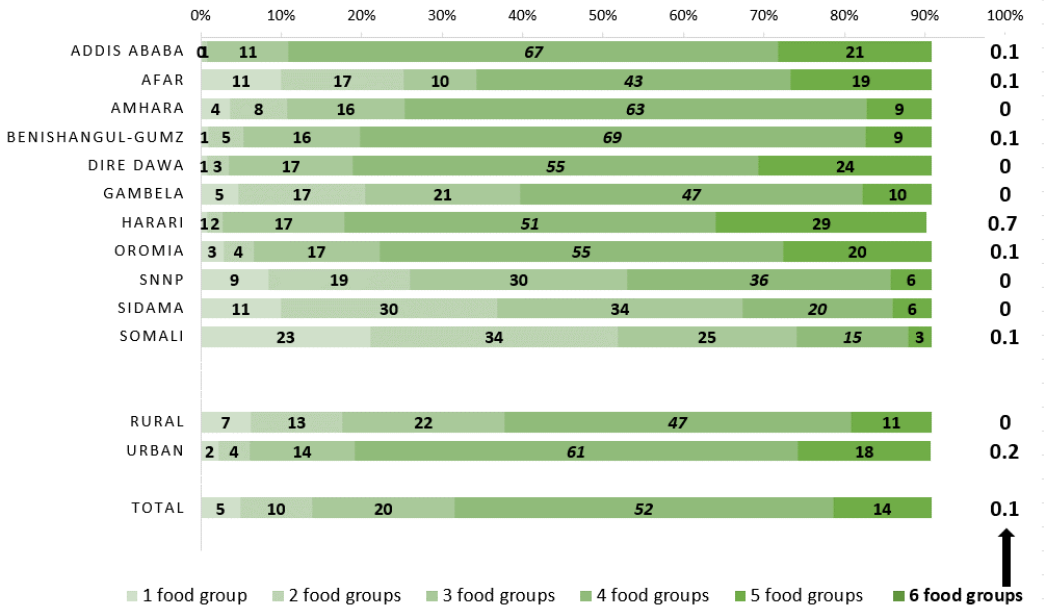
In total only 7% of women ate the minimum recommended number food groups. More women consumed five or more food groups in urban areas (14%) compared to rural areas (3%). A higher percentage of women consumed five or more food groups in Addis Ababa (19%), Harari (16%), and Dire Dawa (11%) compared to other regions (Figure 10).

**Figure 10:** Diet diversity among women aged 15-49 years by region and place of residence in Ethiopia, March 2023



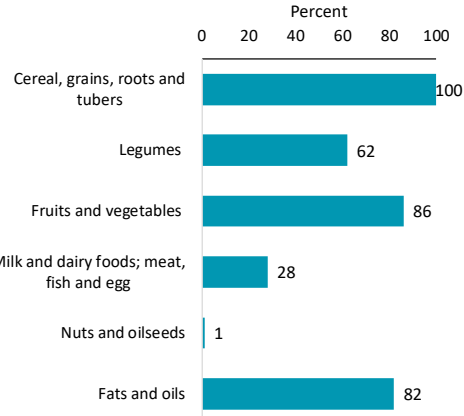
The Ethiopian Food Based Dietary Guidelines (FBDG) recommend that adults consume six food groups in a day. Overall very few (0.1%) women of reproductive age consumed the recommended six food groups in a day. However, 14% of women consumed five and 52% consumed three of the six food groups in a day (**Figure 11**).

**Figure 11:** Consumption of FBDG food groups by women aged 15-49 years by region and place of residence in Ethiopia, March 2023

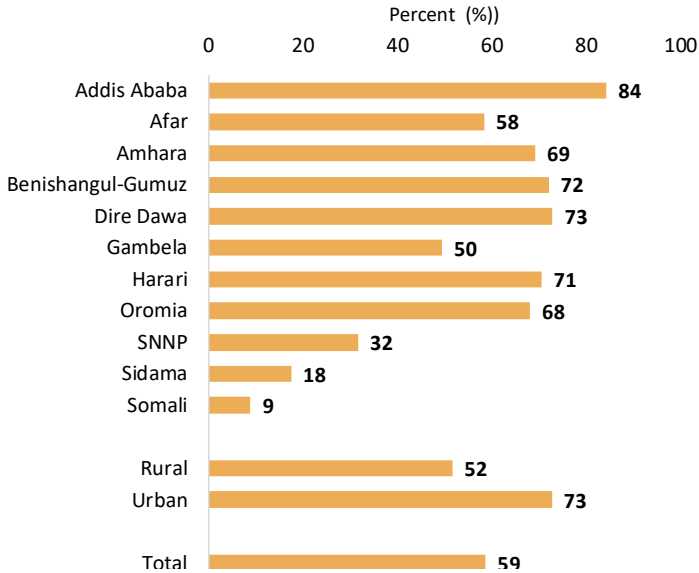


Nuts and seeds were the least consumed food group (1%) and cereal grains, roots and tubers were the most consumed food group (100%) (**Figure 12**). Overall, 59% of women consumed four food groups in at least one meal in a day. Consumption of 4 food groups in a meal was highest in Addis Ababa (84%) and lowest in Somali (9%) (**Figure 13**).

**Figure 12:** Percentage of women who consumed the FBDG food groups at least once in a day in Ethiopia, March 2023



**Figure 13:** Percentage of women who consumed 4 food groups in at least one meal in a day in Ethiopia, March 2023





## 7. MICRONUTRIENT DEFICIENCIES

### 7.1 Micronutrient status of women of reproductive age (WRA)

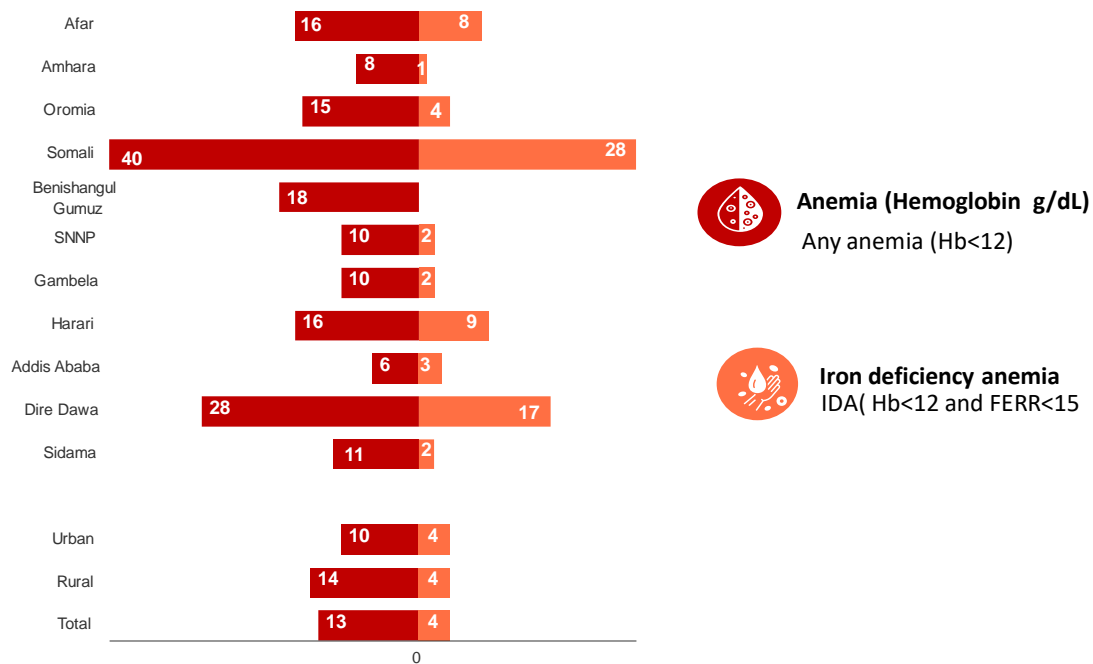
Two in three WRA were deficient in one or more micronutrients and the burden is highest in the urban (73%) as compared to the rural areas (62%). Folate deficiency was the most prevalent micronutrient deficiency in Ethiopia. One in two WRA are folate deficient and at risk of giving birth to children with neural tube defects. Prevalence of folate deficiency was more than 50% in most regions except Oromia (48%), SNNPR (39%), and Sidama (11%). The national prevalence of vitamin D deficiency is 34% and the lowest prevalence of 1% was recorded in the Somali region. However, in Addis Ababa alone, 2 in 3 WRA are vitamin D deficient (**Table 1**).

**Table 1:** Micronutrient deficiencies among women of reproductive age by region and place of residence in Ethiopia, March 2023

Region	Iron Deficiency/ low Serum ferritin	Folate Deficiency	Risk of NTDs or folate insufficiency	Vitamin B12 Deficiency	Vitamin D Deficiency	Any micronutrient deficiency
Afar	19	91	79	4	Progress	87
Amhara	3	56	46	8	47	73
Oromia	10	48	47	13	32	65
Somali	48	86	74	2	1	83
Benishangul- Gumuz					Progress	
SNNP	6	39	25	7	21	53
Gambela	7	73	73	3	11	73
Harari	18	80	61	11	34	84
Addis Ababa	8	70	43	8	61	84
Dire Dawa	25	85	84	19	11	88
Sidama	3	11	12	1	21	32
Urban	9	63	54	7	33	73
Rural	8	43	38	10	34	62
<b>Total</b>	<b>8</b>	<b>50</b>	<b>43</b>	<b>9</b>	<b>34</b>	<b>66</b>

The prevalence of anemia among WRA in Ethiopia is 13%. Anemia remains a severe public health problem in the Somali region where 4 in 10 women are anemic (**Figure 9**). Anemia is a moderate public health problem in Dire Dawa (28%) and a mild public health problem in all the other regions of Ethiopia (**Figure 14**).

**Figure 14:** Anemia and iron deficiency anemia among women of reproductive age by region and place of residence in Ethiopia, March 2023



## 7.2 Micronutrient status of preschool children/children under-five years of age

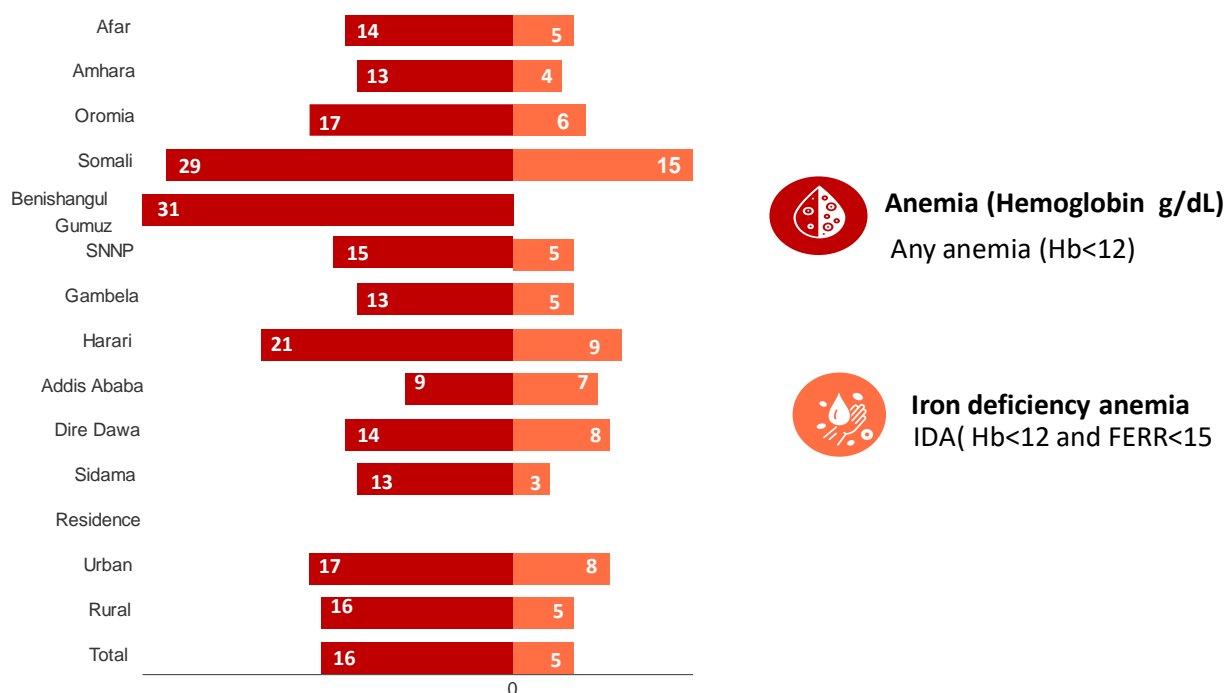
Three in ten children aged 6-59 months in Ethiopia are suffering from either iron or folate deficiency and the burden is highest in the urban (38%) as compared to the rural areas (24%) (Table 2). The national prevalence of iron and folate deficiency in Ethiopia is 13% and 19% respectively. Iron deficiency among children was highest in the Somali region (36%) and lowest in the Amhara region (7%). In all, 3 out of 4 children under-5 years living in Afar or Somali are likely to be iron or folate deficient.

The prevalence of anemia among children aged 6-59 months is 16% and there are no urban and rural differences. Anemia among children remains a public health problem in Benshangul Gumuz (31%), Somali (29%) and Harari (21%) regions. Overall, the prevalence of iron deficiency anemia (low serum ferritin and low hemoglobin) was low (5%). Iron deficiency anemia among children aged 6-59 months in the Somali region remained the highest of about 3 times the national prevalence of 5% (Figure 15).

**Table 2:** Iron and folate deficiencies among children aged 6-59 months by region and place of residence in Ethiopia, March 2023

Regions	Iron Deficiency/ low Serum ferritin (µg/L)	Folate Deficiency (ng/mL)	Any micronutrient deficiency
Afar	16	75	78
Amhara	7	25	31
Oromia	13	14	23
Somali	36	68	75
Benishangul-Gumuz			
SNNP	15	9	22
Gambela	15	54	60
Harari	24	40	50
Addis Ababa	16	17	30
Dire Dawa	18	59	64
Sidama	15	4	17
Urban	18	26	38
Rural	12	16	24
<b>Total</b>	<b>13</b>	<b>19</b>	<b>28</b>

**Figure 15:** Anemia and Iron deficiency anemia among children aged 6-59 months by region and place of residence in Ethiopia, March 2023



### 7.3 Micronutrient status of adolescent girls

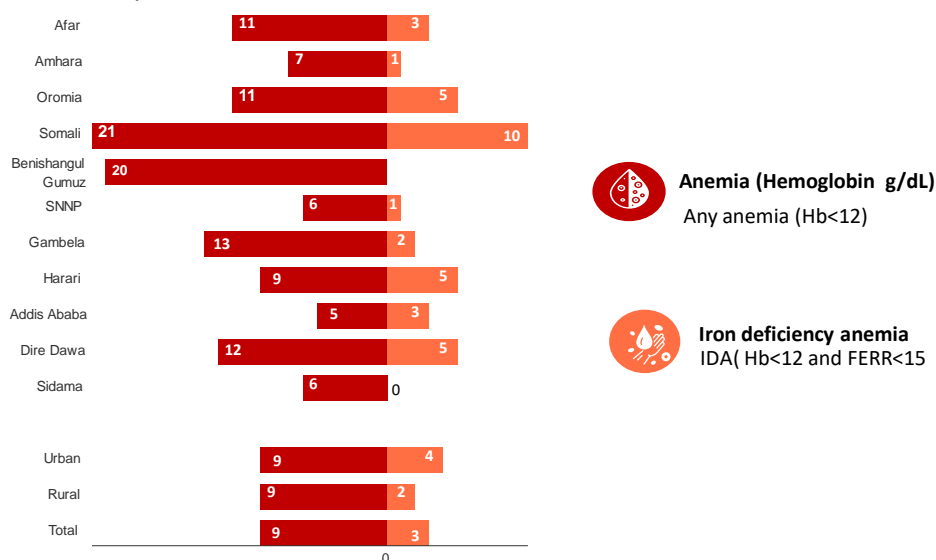
One in two adolescent girls is deficient in one or more micronutrients and the burden is highest in the urban (64%) as compared to the rural areas (45%). The highest micronutrient deficiency in Ethiopia among adolescent girls is folate deficiency. The prevalence of folate deficiency in the urban areas (52%) is about twice the number in the rural areas (29%). Generally, 1 in 3 adolescent girls are folate deficient and at risk of giving birth to children with neural tube defects. Prevalence of folate deficiency was more than 50% in 5 regions namely: Dire Dawa (88%), Afar (83%), Somali (75%), Harari (67%) and Addis Ababa (56%) (Table 3).

The prevalence of overall anemia among adolescent girls is 9%. Anemia remains public health problem in the Somali (21%) and Benishangul-Gumuz (20%) regions (Figure 16).

**Table 3:** Micronutrient deficiencies among adolescent girls by region and place of residence in Ethiopia, March 2023

Regions	Iron Deficiency/ low Serum ferritin	Folate Deficiency	Risk of NTDs or folate insufficiency	Vitamin B12 Deficiency	Vitamin D Deficiency	Any micronutrient deficiencies
Afar	13	83	62	1	Progress	80
Amhara	3	41	46	3	37	61
Oromia	11	35	44	11	25	51
Somali	24	75	71	1	1	70
Benishangul-Gumuz					Progress	
SNNP	6	23	19	7	Progress	30
Gambela	10	42	65	1	7	48
Harari	13	67	68	14	12	73
Addis Ababa	8	56	58	4	67	78
Dire Dawa	15	88	83	15	18	90
Sidama	2	7	5	1	13	19
Urban	11	52	58	5	38	64
Rural	6	29	33	8	25	45
<b>Total</b>	<b>8</b>	<b>35</b>	<b>39</b>	<b>7</b>	<b>28</b>	<b>50</b>

**Figure 16:** Anemia and Iron deficiency anemia among adolescent girls by region and place of residence in Ethiopia, March 2023

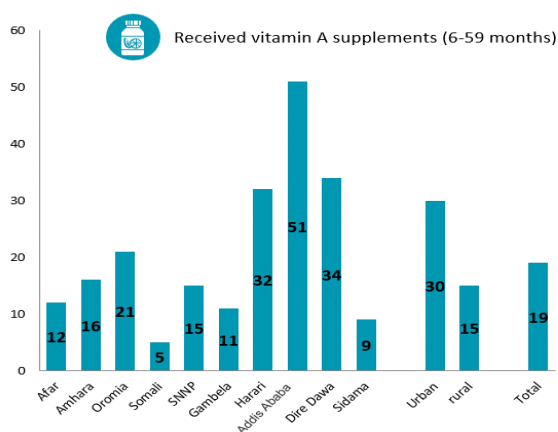


## 8. NUTRITION SERVICE COVERAGE: CHILDREN

### 8.1 Vitamin A supplementation coverage in the past six months among children

Vitamin A supplementation coverage among children aged 6-59 months in Ethiopia was 19%. The number of children who received vitamin A supplementation in the urban areas (30%) is twice the number in the rural areas (15%) (**Figure 17**). There were regional differences in the vitamin A supplementation coverage; the highest was in Addis Ababa (51%) and the lowest in the Somali region (5%).

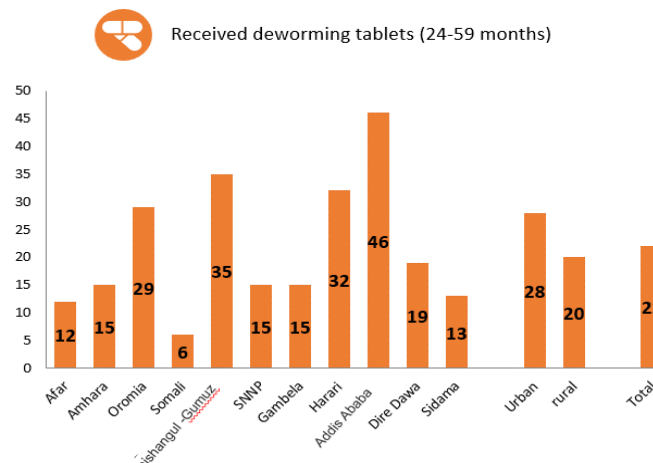
**Figure 17:** Vitamin A supplementation among children aged 6-59 months by region and place of residence in Ethiopia, March 2023



### 8.2 Children received deworming tablets in the past six months

Deworming coverage in Ethiopia in the past 6 months was 22%. About 28% of the children in the urban areas received a deworming tablet in the past 6 months as compared to 20% of children in the rural areas. There were also regional differences in deworming coverage; the highest was in Addis Ababa (46%) and the lowest in the Somali region (6%) (**Figure 18**).

**Figure 18:** Deworming coverage among children aged 6-59 months by region and place of residence in Ethiopia, March 2023



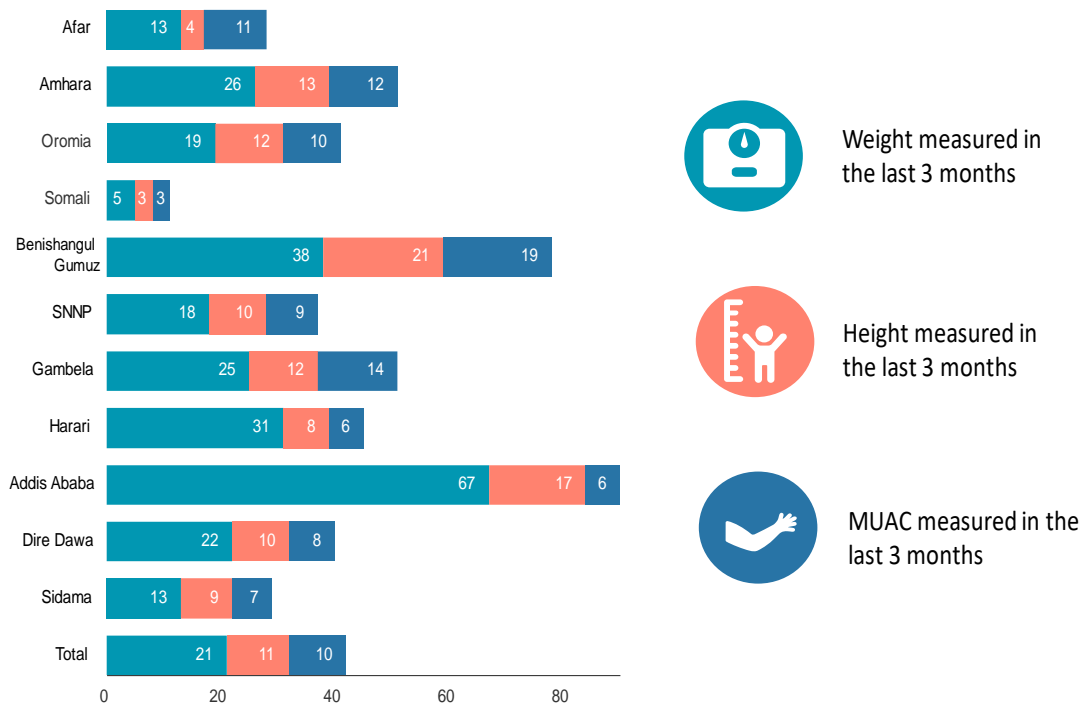
### 8.3. Coverage of growth monitoring service

The growth monitoring program currently provided in the health facilities is a vital activity to respond to all forms of malnutrition. The proportion of children who received weight, height, and MUAC measurements in the past three months prior to the survey were 21%, 11%, and 10%, respectively. The highest weight measurement services were reported from Addis Ababa (67%) and the lowest in the Somali region (5%) (**Figure 19**).

### 8.4 Infant and young child feeding (IYCF) counseling

Overall, age-appropriate and any IYCF counseling were very low at 26% and 27%, respectively (**Figure 20**).

**Figure 19 :** Coverage of growth monitoring service in the last three months by region in Ethiopia, March 2023



### 8.5. Children with reported weight at birth

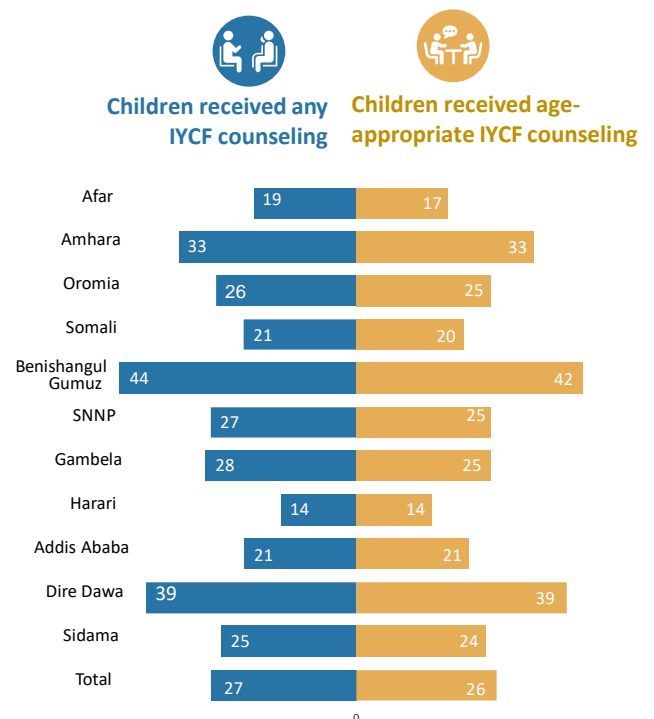
Overall, the proportion of children with reported weight at birth was 30%. The regional disparities were large as evidenced by 13% in the Afar and Somali regions and 86% in Addis Ababa. The urban-rural disparities were also very high as evidenced by 59% of the urban children with reported weight at birth as against 19% for children in the rural areas

## 9. NUTRITION SERVICE COVERAGE: WOMEN

### 9.1. Iron/folic acid (IFA) intake for 90+ days during pregnancy

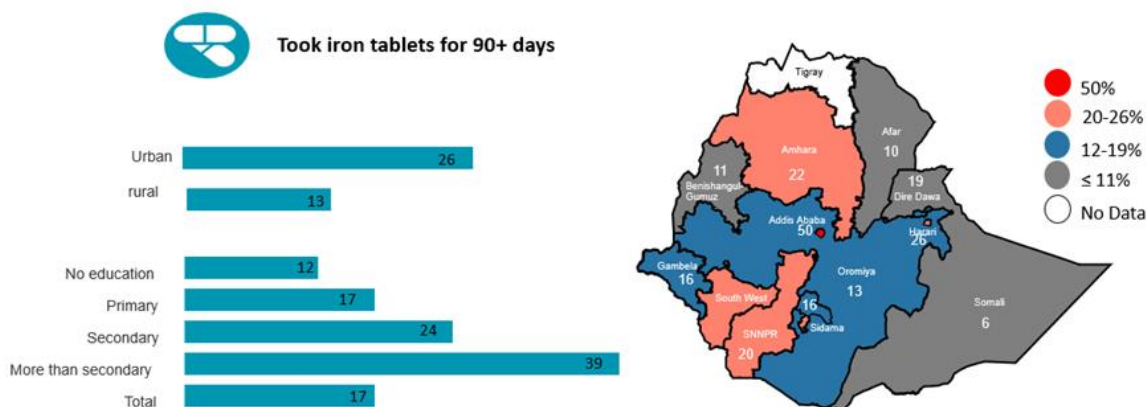
Overall, only 17% of pregnant women took iron/folic acid (IFA) tablets for 90+ days. IFA intake was highest among pregnant women who had tertiary education (39%) and were in the richest wealth quintile (31%). Women taking IFA tablets for 90+ days ranged from 6% in the Somali region to 50% in the Addis Ababa region (**Figure 21**).

**Figure 20:** Age-appropriate IYCF counseling by region in Ethiopia, March 2023





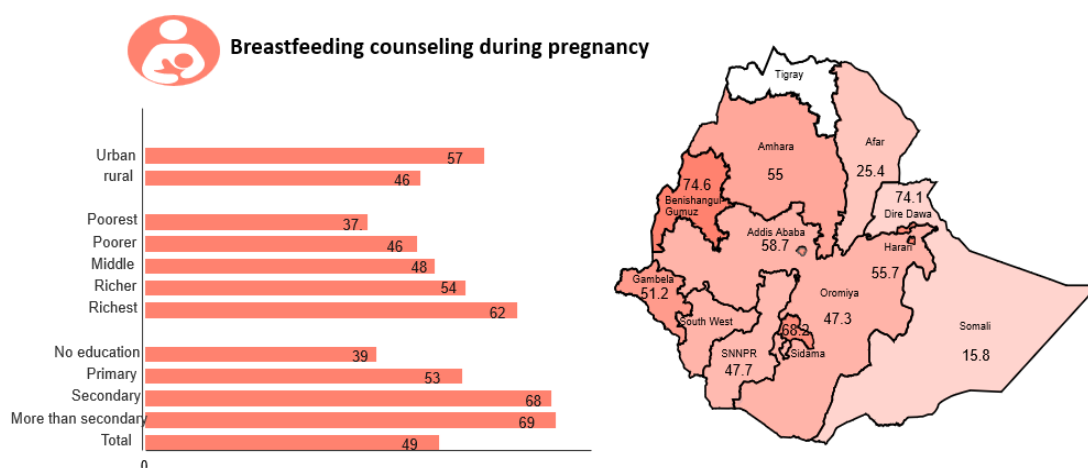
**Figure 21:** Iron/folic acid intake for 90+ days during pregnancy by residence, region and educational status in Ethiopia, March 2023



## 9.2. Breastfeeding Counseling during pregnancy

Overall, 49% of pregnant women received breastfeeding counseling. In the urban areas, 57% pregnant women received breastfeeding counselling compared to 46% in the rural areas. The highest proportion of breastfeeding counselling was reported in the Benishangu Gumz (75%) and Dire Dawa (74%) regions whilst the lowest proportions were reported in the Afar (25%) and Somali (16%) regions (**Figure 22**)

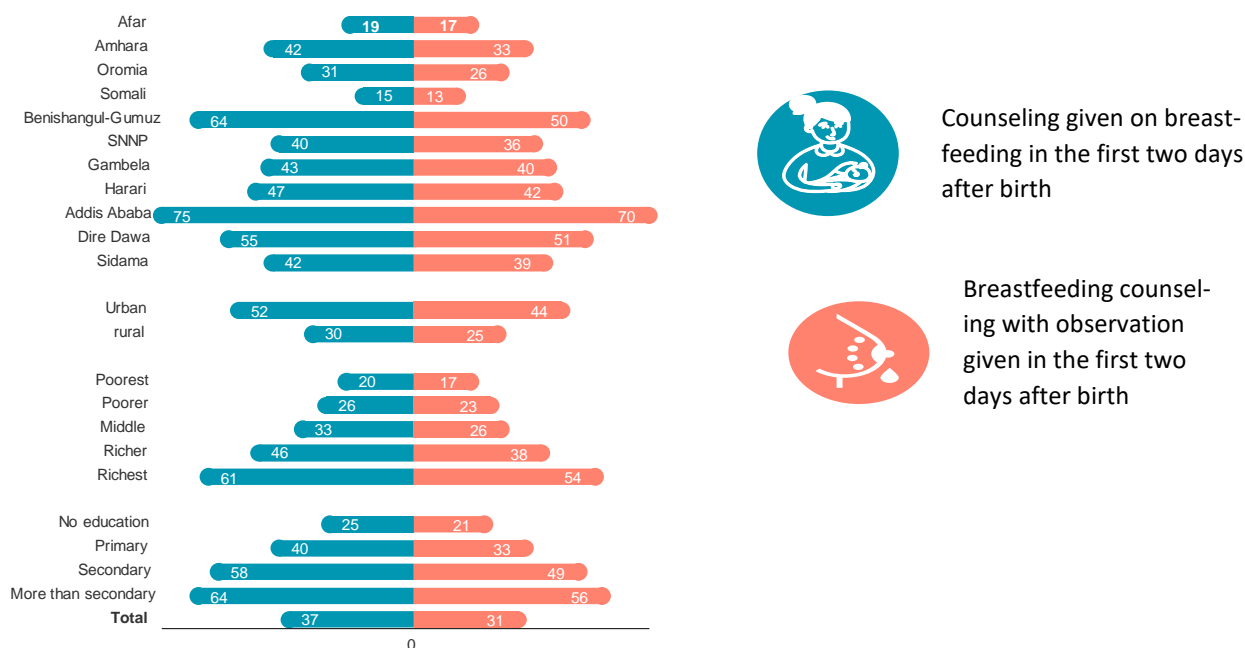
**Figure 22:** Coverage of breastfeeding counseling during pregnancy by region, place of residence and educational level in Ethiopia, March 2023



## 9.3 Breastfeeding counseling during postnatal care

Overall, about 37% of mothers received breastfeeding counseling in the first two days after birth, whilst 31% received breastfeeding counseling with observation in the first two days after birth. Breastfeeding counseling in the first two days after birth was highest in Addis Ababa (75%) and lowest in Somali (15%). This trend was similar for breastfeeding counselling with observation given in the first two days after birth (**Figure 23**).

**Figure 23:** Coverage of breastfeeding counseling during postnatal care by region, place of residence, wealth quintile and educational level in Ethiopia, March 2023

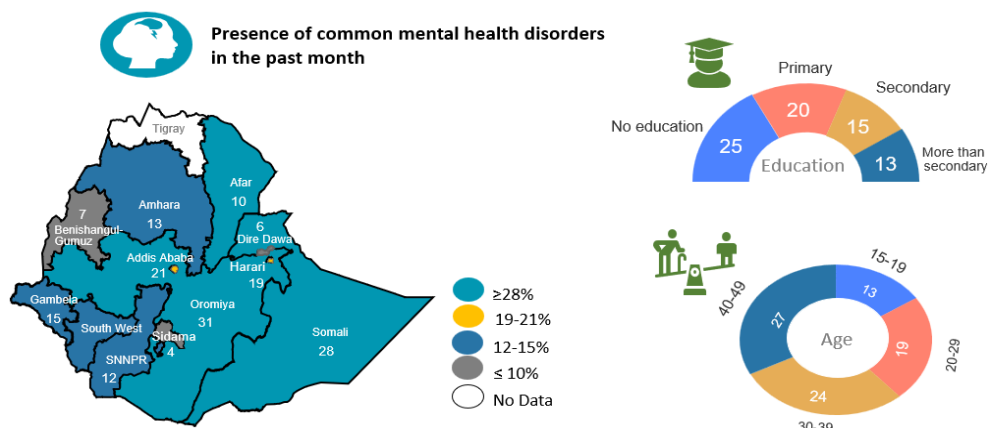


## 10. DETERMINANTS OF NUTRITIONAL OUTCOMES

### 10.1 Prevalence of common mental disorders among Women of Reproductive Age (WRA)

Two in ten WRA in Ethiopia experienced common mental health disorders. Geographically, the prevalence of common mental health disorders varied across regions, with the highest rates observed in Oromia (31%), followed by the Somali region (28%) and Addis Ababa (Figure 24). Moreover, the prevalence was greatest (25%) among WRA without formal education and among those in the poorest wealth quintile (23%). There was a gradual increase in mental health disorders with age as evident by a 13% and 27% prevalence among WRA aged 15-19 years and 40-49 years respectively (Figure 24).

**Figure 24:** Prevalence of common mental health disorders among women of reproductive age by region and educational level in Ethiopia, March 2023






## 10.2 Women empowerment

Social independence is the precondition that enables women to achieve high educational attainment, and access to information. About 1 in 4 WRA have high social independence; this is highest among women in the urban (48%) compared to those in the rural areas (14%). Addis Ababa (68%) had the highest proportion of WRA with a high social independence whereas the lowest high social independence was observed among WRA in Somali (13%) (Table 4).

Decision-making is the extent of the woman's participation in household decision-making. One in four WRA had high decision-making ability. WRA in urban areas (40%) were twice more likely to have high decision-

making ability as compared to those in the rural areas (20%). Addis Ababa (64%) had the highest proportion of WRA with high decision-making ability whereas the lowest high decision-making ability was observed among WRA in Dire Dawa (14%) (Table 4). Attitude to violence is a proxy for the woman's incorporation of gender norms related to the acceptability of intimate-partner violence. About 6 in 10 WRA have a high attitude to violence. Women from urban settings (76%) have a better attitude to violence than those in the rural settings (52%; Table 4). Majority of WRA in Addis Ababa (93%) have high attitude to violence whereas the lowest high attitude to violence is recorded among WRA in Afar (53%).

**Table 4:** Women empowerment by region in Ethiopia, March 2023

	 Social independence			 Decision-making			 Attitude to violence		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Afar	41	40	19	0	71	29	38	9	53
Amhara	41	34	25	0	77	23	24	10	66
Oromia	44	35	22	0	77	23	38	8	54
Somali	55	32	13	0	73	27	32	9	59
Benishangul-Gumuz	34	40	26	0	80	20	16	10	74
SNNP	33	44	23	0	69	30	31	11	57
Gambela	35	41	25	1	64	36	31	8	60
Harari	34	30	36	0	51	49	17	10	73
Addis Ababa	8	25	68	0	36	64	3	4	93
Dire Dawa	32	33	35	0	86	14	14	11	75
Sidama	38	42	20	0	82	18	33	10	57
Urban	22	30	48	0	60	40	16	8	76
rural	47	38	14	0	80	20	38	9	52
<b>Total</b>	<b>40</b>	<b>36</b>	<b>24</b>	<b>0</b>	<b>74</b>	<b>26</b>	<b>32</b>	<b>9</b>	<b>60</b>

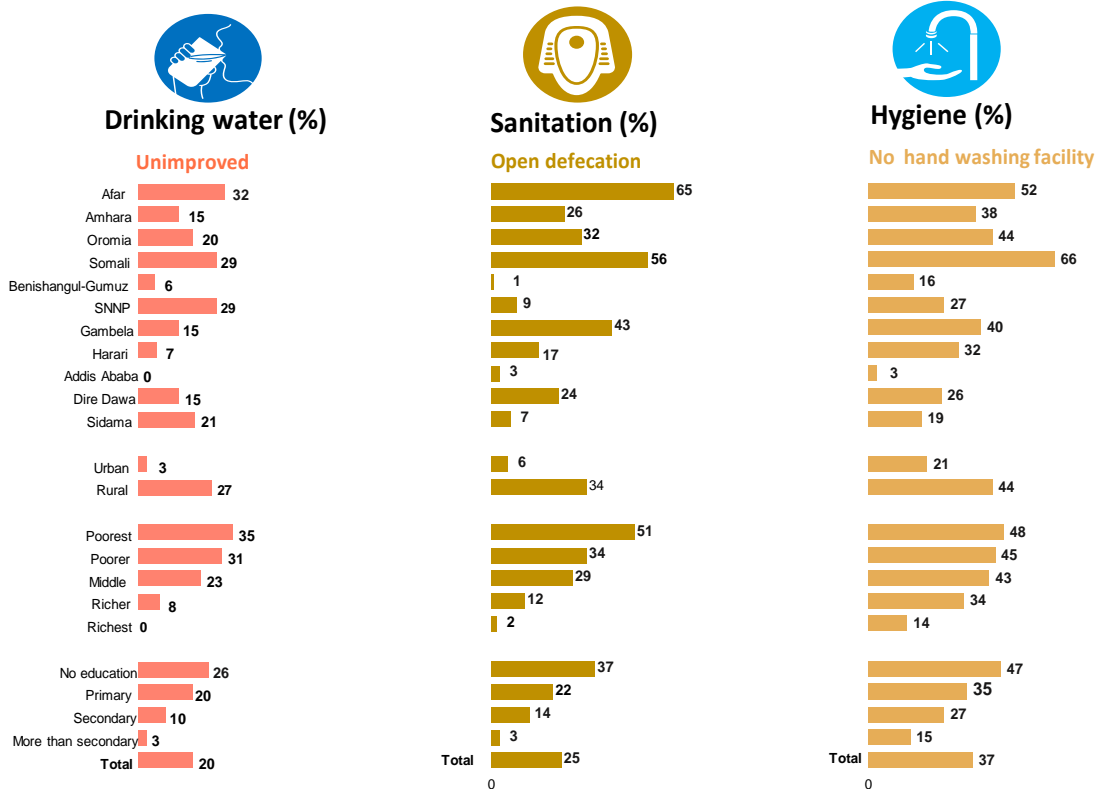
## 11. NUTRITION SERVICE COVERAGE: HOUSEHOLD

### 11.1 Households with improved water sources

Eight out of ten (80%) households have access to improved drinking water. About 97% of urban households have access to improved drinking water as compared to 73% of rural households. Addis Ababa has the highest improved drinking water access (100%) while the Afar region had the lowest (68.4%) (Figure 25).

## 11.3 Hygiene

**Figure 25:** Coverage of water, sanitation and hygiene services by region, place or residence, wealth and educational level in Ethiopia, March 2023



## 11.2 Open -defecation

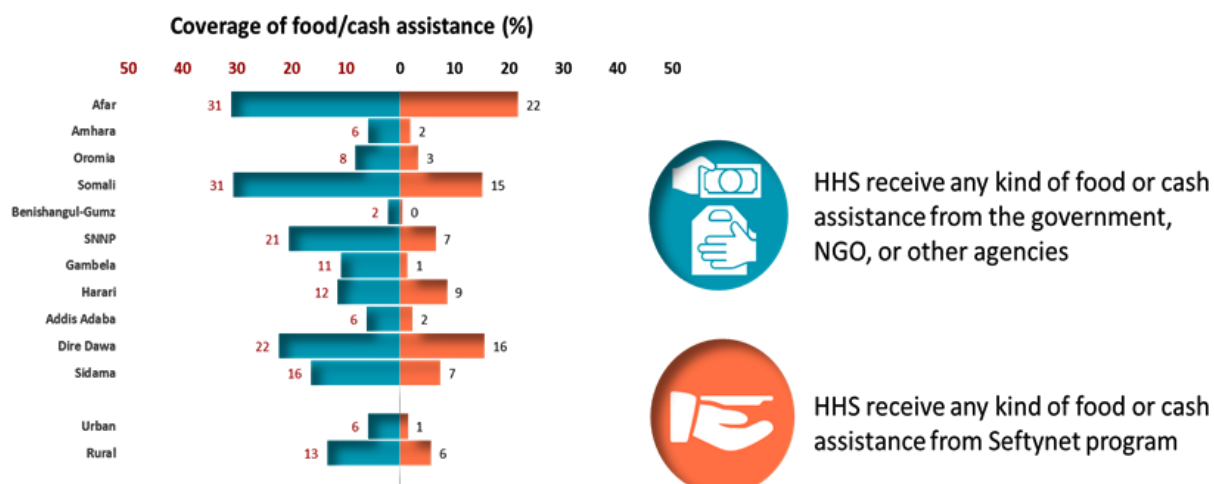
About 25% of households in Ethiopia practiced open defecation. Pastoral and agro-pastoral regions had the highest proportion of open defecation; Afar (65%), Somali (56%), and Gambela (43%) regions. Open defecation practice was high in rural (34%) and low in urban (6%) households (Fig. 26).

Overall, a hand washing facility was reported available in 63% of households. Nonetheless, there was a noticeable disparity in accessibility between urban and rural areas, with 79% of urban households having a hand washing facility compared to 56% of rural households. The regions with the highest availability of hand washing facilities were Addis Ababa (97%), Benishangul Gumuz (84%), and Sidama (81). On the other side, Somali (66%), Afar (52%), and Oromia (44%) were reported to have regions with limited availability of hand washing facilities (**Figure 25**)

## 11.4 Coverage of Productive Safety Net Program (PSNP) and other food/cash Assistance

The proportion of households who received cash/food assistance was low. Overall, only 11% of the household received the PSNP or cash/food assistance (**Figure 26**). The number of rural households that received PSNP or cash/food assistance was 6 times the number of urban households.

**Figure 26:** Coverage of PSNP and food/cash assistance by region, and place or residence in Ethiopia



## 11.5 Household coverage of iodized salt

Almost all households in Ethiopia have access to iodized salt. However, only 51% of households are consuming adequately iodized salt while the remaining are consuming inadequately iodized salt. There were no rural and urban differences in the consumption of adequately iodized salt. Somali had the highest percentage (86%) of households consuming inadequately iodized salt while Addis Ababa had the highest percentage (43%) of households consuming excessively iodized salt (**Table 5**).


**Table 5:** Coverage of iodized salt by region and place of residence in Ethiopia, March 2023

	Inadequate Iodized Salt (<15)	Adequately Iodized Salt (15-40)	Excessive Iodized Salt (>40)
Afar	29	47	25
Amhara	17	55	28
Oromia	23	53	24
Somali	86	12	2
Benishangul-Gumuz	11	69	20
SNNP	26	50	24
Gambela	25	55	21
Harari	21	55	25
Addis Ababa	7	50	43
Dire Dawa	15	71	14
Sidama	39	44	18
Urban	16	51	32
Rural	28	51	21
<b>Total</b>	<b>24</b>	<b>51</b>	<b>25</b>

## 11.6. Household consumption of fortifiable foods

Access to fortifiable edible oils, wheat flours, and salt were 90%, 30%, and 97% respectively. A higher percentage of households in urban areas (94%) consumed fortifiable edible oils as compared to rural households (88%). Access to fortifiable edible oils varies between 77% and 96% across regions. Overall access to fortifiable wheat flour was 30% and this was 2 times higher among urban households as compared to rural households. The consumption of fortifiable wheat flour was highest in Somali (68%) followed by the Harari region (64%), and lowest in the Amhara region (17%) (Table 6).

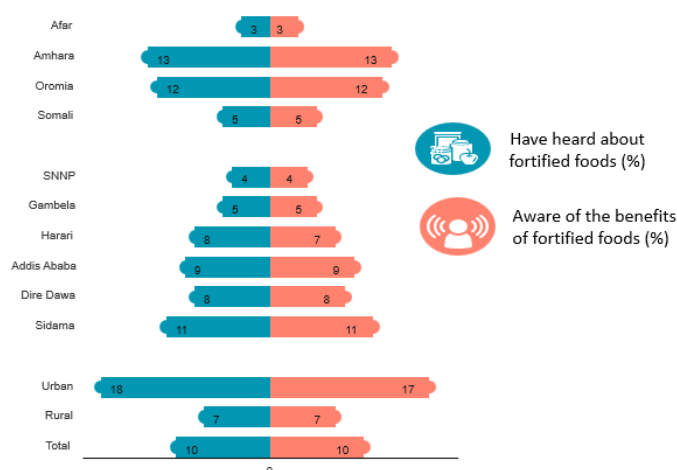
**Table 6:** Household access to fortifiable foods by region and place of residence in Ethiopia, March 2023

	Coverage of fortifiable edible oil (%)	Coverage of fortifiable wheat flour (%)	Coverage of fortifiable salt (%)	# individual reach by wheat flour fortification in million	# of individual reach by oil fortification in million
Afar	79	38	96	0.36	0.74
Amhara	88	17	97	3.88	20.08
Oromia	92	31	98	10.85	32.20
Somali	79	68	83	2.48	2.88
Benishangul-Gumuz	90	38	98	0.38	0.90
SNNP	88	29	96	3.90	11.84
Gambela	90	29	98	0.12	0.37
Harari	91	64	97	0.19	0.27
Addis Ababa	96	53	98	2.28	4.12
Dire Dawa	77	39	94	0.17	0.33
Sidama	92	33	97	1.30	3.62
Urban	94	45	98	12.14	25.35
Rural	88	23	96	13.63	52.13
<b>Total</b>	<b>90</b>	<b>30</b>	<b>97</b>	<b>25.89</b>	<b>77.59</b>

## 11.5. Knowledge on food fortification

Only 10% of households had heard about fortified foods. Additionally, only 10% could list at least one benefit of fortified foods. Urban areas had better knowledge about fortified foods as compared to rural households. The highest (20%) knowledge about fortified foods and the least (3%) knowledge about fortified foods was recorded in the Afar region (Figure 27).

**Figure 27:** Household awareness and knowledge about fortified foods by region and place of residence in Ethiopia, March 2023

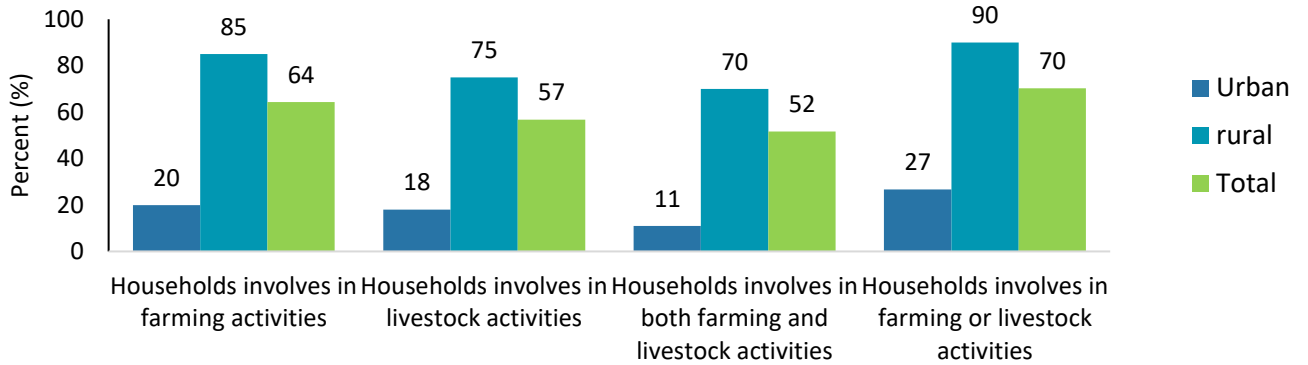




## 12. AGRICULTURAL PRODUCTION AND SAHRE OF CONSUMPTION

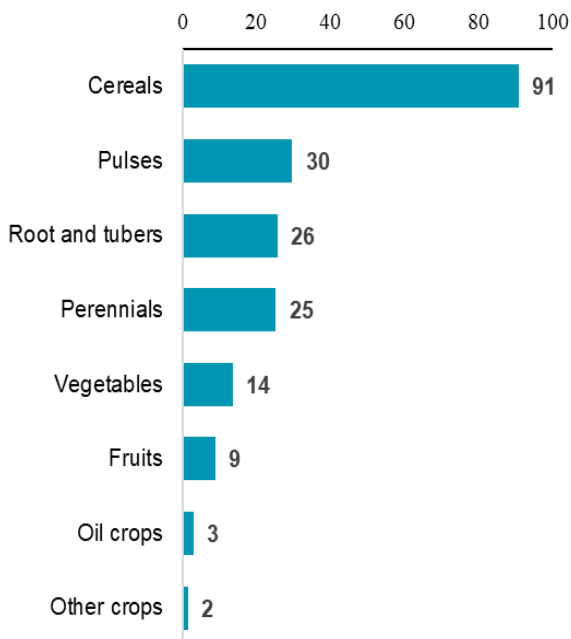
About 70% of households are involved in farming or livestock activities (**Figure 28**). Cereals are the predominantly produced crop (**Figure 29A**).

**Figure 28:** Agricultural crop production by place of residence in Ethiopia, March 2023

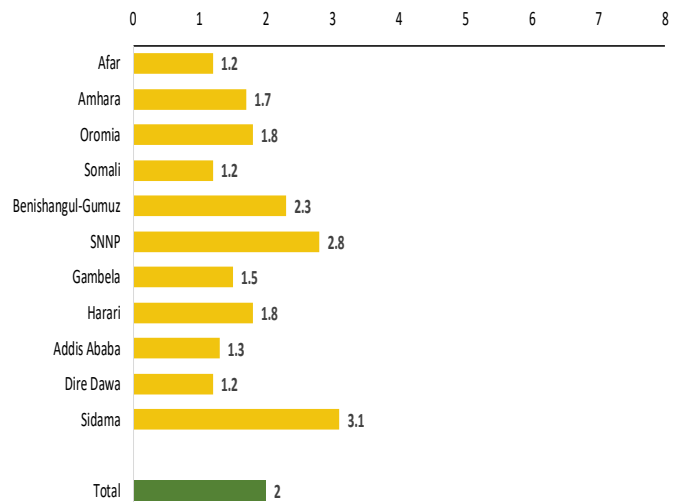


Production diversity was low in all regions. On average, SNNPR and Sidama regions had the highest production diversity (**Figure 29B**). As shown in **Figure 30**, maize, wheat and teff were the most produced crops while fruits and vegetables were the least produced crops. Fruit and oil crops were mostly sold crops, while most other crops were used for household consumption (Fig. 33).

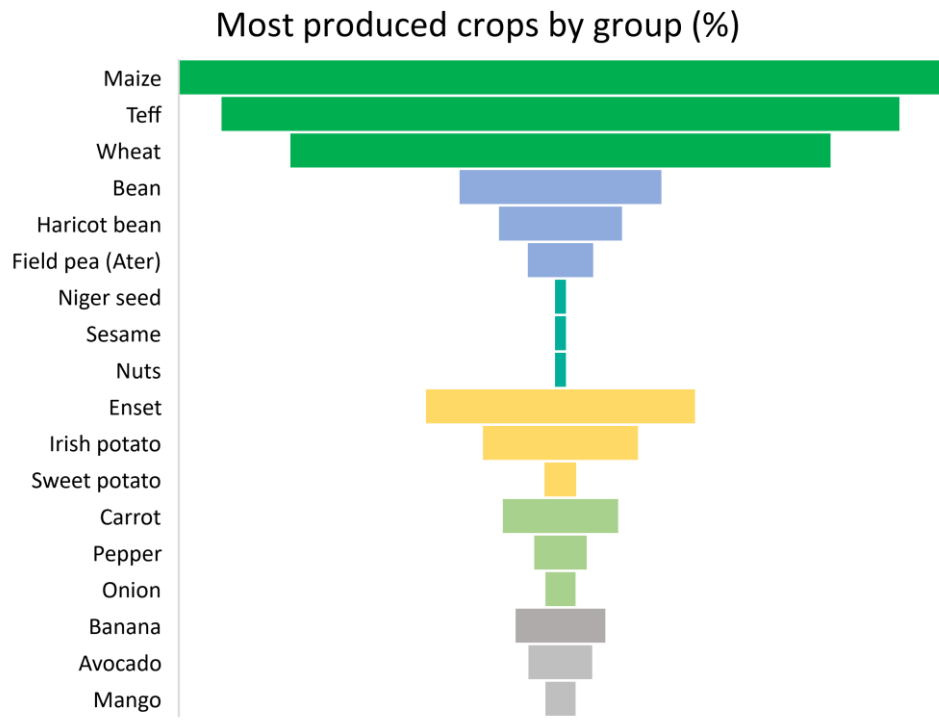
**Figure 29A:** Percentage of crop production among households who own agricultural land in Ethiopia, March 2023



**Figure 29B:** Average number of crops cultivated by region in Ethiopia, March 2023

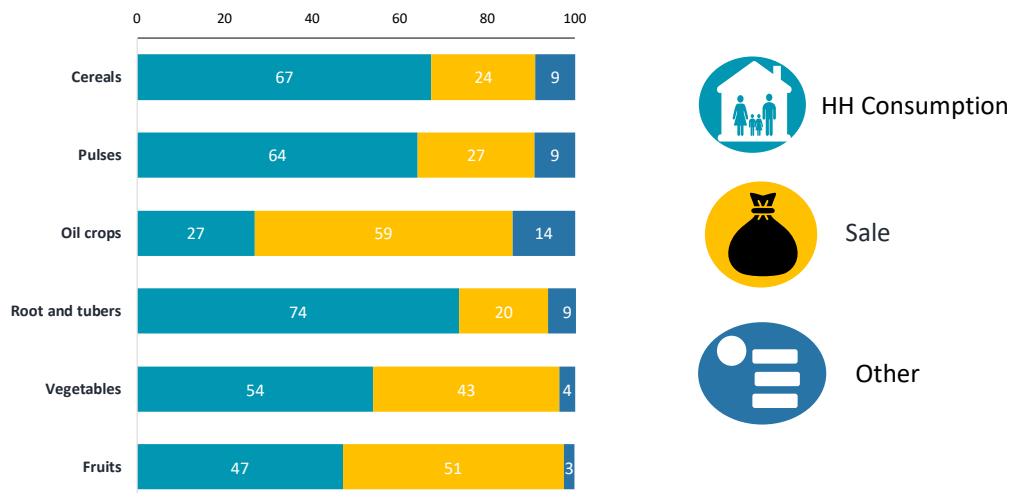


**Figure 30:** Crop production in Ethiopia, March 2023



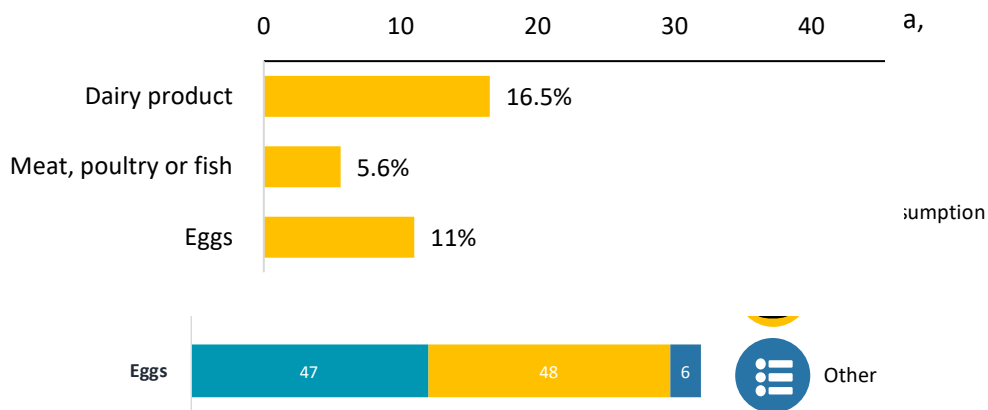
More than half (51%) of fruits produced in households and 43% of vegetables produced were sold. In contrast more than half cereals (67%), pulses (64%) and roots and tubers (74%) produced were utilized for own household consumption (**Figure 31**)

**Figure 31:** Consumption, sale, and other uses of food crops in Ethiopia, March 2023



Production of animal-based foods was low: dairy products (16.5%), meat, poultry, or fish (5.6%) and eggs (11%). Most of the animal-based foods produced were for own household consumption. Specifically, more than 50% of households consumed meat, poultry or fish and dairy products while 47% consume eggs (Figure 33).

Figure 32: Production of animal-based foods in Ethiopia, March 2023



### 13. AGRICULTURAL SOIL FERTILITY MANAGEMENT

Nearly 64% of households owned agricultural lands. Household land ownership was highest in Sidama (81%) and lowest in Addis Ababa (0.8%). Households in rural areas were 4 times likely to own an agricultural land as compared to those in the urban areas. The most used soil fertility management practice was fertilizer application (76%), followed by crop rotation (33%), tillage practices (20%) and intercropping (15%). Fertilizer application on agricultural lands was higher in rural areas. In general, 86% of households prefer to use chemical fertilizers while 14% prefer the use of organic fertilizers. The four regions with higher organic fertilizer utilization over chemical fertilizers are: Somali (70.2%), Dire Dawa (68.5%), Harari (54.3%) and Gambela (47.1%). Except for the Gambela region, which predominantly uses crop residues (34%), the commonly used organic fertilizer is livestock manure (63%) followed

by compost (13%) and the least used is green manure (3.6%) (Table 7).

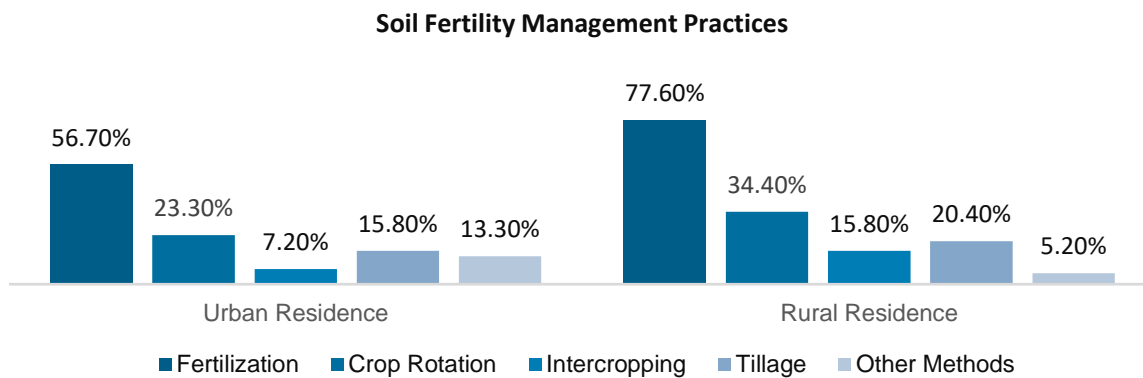
**Table 7:** Household agricultural land ownership and soil fertility management practices by region and place of residence in Ethiopia, March 2023

Region/ Place of residence	% of HH that owned agricultural land	% of HH soil fertility mechanism					% of frequently used fertilizers		% of organic fertilizers used				
		Fertilizer application	Crop rotation	Intercropping	Tillage	Others	Chemical fertilizers	Organic fertilizers	Livestock manure	Green manure	Crop residues	Compost	Others
<b>Region</b>													
<b>Afar</b>	25.4	24.8	6.8	2.2	11.7	56.1	92.4	7.6	25.7	1.8	20.7	18.7	33.1
<b>Amhara</b>	66.8	80.5	34.7	10.8	20.1	2.9	95	5	58	3	7.3	16.6	15.1
<b>Oromia</b>	72.6	76.4	36.6	12.3	12.8	5	81.7	18.3	58.4	4.2	11.6	13.1	12.7
<b>Somali</b>	31.9	24.5	18.2	14.4	13.1	42.4	29.8	70.2	80.2	0.6	4.8	2.5	12
<b>Benishan-gul-Gumuz</b>	56.9	74.8	35.3	17.5	17.2	0.9	80.9	19.1	58.4	6.8	10.8	13.7	10.3
<b>SNNP</b>	69	71.9	32.8	22.6	46.3	8.5	89.7	10.3	83.7	2.4	3.9	2.6	7.3
<b>Gambela</b>	50.7	17.5	19.5	14.5	12.8	39.1	52.9	47.1	24.3	2.3	34.3	4.2	35
<b>Harari</b>	32.9	84.5	13.2	26.2	21.4	5.2	45.7	54.3	81	1.4	1.4	9.8	6.4
<b>Addis Ababa</b>	0.8	88.8	10.6	0	24.5	11.2	87.1	12.9	34.9	0	0	0	65.1
<b>Dire Dawa</b>	28.6	62	10.5	2.4	6	15.3	31.5	68.5	69.2	4.1	16.6	10.1	0
<b>Sidama</b>	81	83.6	12.8	35.7	4.1	3	78.6	21.4	68.2	5.4	5.6	17.8	3
<b>Residence</b>													
<b>Urban</b>	19.7	56.7	23.3	7.2	15.8	13.3	92.1	7.9	49.2	4.3	8	6.8	31.6
<b>Rural</b>	84.8	77.6	34.4	15.8	20.4	5.2	85.9	14.1	63.9	3.5	8.8	13.3	10.5
<b>Total</b>	64.4	75.6	33.4	15	20	6	86.4	13.6	62.8	3.6	8.7	12.8	12.1

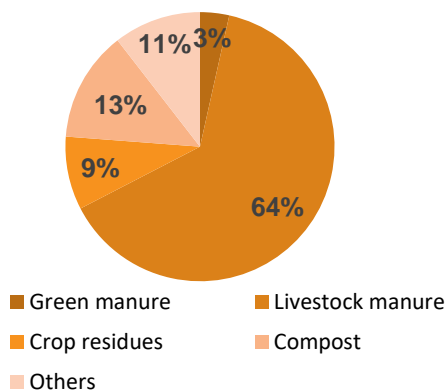
Regenerative agricultural practices such as crop rotation and intercropping are sustainable agricultural practices that could support soil health. Crop rotation was the commonly used regenerative agricultural practice and this was highly used in the rural

than urban areas (Figure 34). Livestock manure is the commonly used organic fertilizer among rural households while DAP is the commonly used chemical fertilizer among urban households who owned agricultural lands (Figure 35).

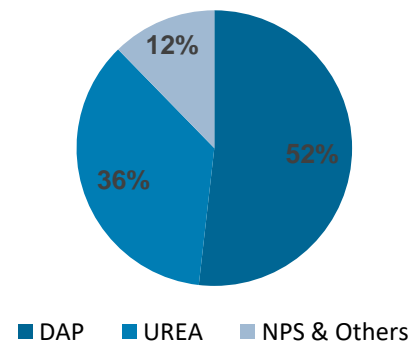
**Figure 34:** Soil fertility management practices by place of residence in Ethiopia, March 2023



**Figure 35A:** Organic fertilizer use among rural and urban residents in Ethiopia, March 20203



**Figure 35B:** Chemical fertilizer use among rural and urban residents in Ethiopia, March 20203



## 14.IMPLICATIONS OF FINDINGS

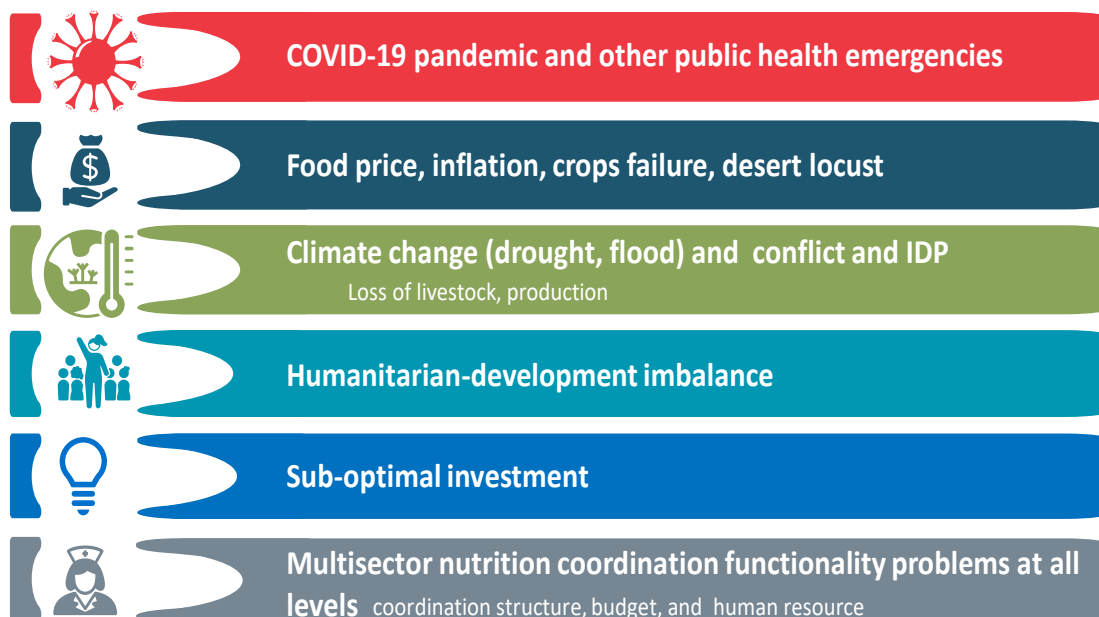
Limited progress was seen in the reduction of child and maternal malnutrition in Ethiopia . **Table 7** shows progress made against the World Health Assembly (WHA) targets.

**Table 7:** Progress towards the WHA targets

Target	FNS 2022	EDHS 2016
<b>Child stunting</b> : 40% reduction in number of stunted children	39 (37, 42)*	38 (36, 40)*
<b>Anemia in women</b> : 50% reduction	13	24
<b>Low birth weight</b> : 30% reduction	--	--
<b>Childhood overweight</b> : No increase	6	3
<b>Exclusive breastfeeding</b> : At least 50%	61	58
<b>Wasting</b> : Less than 5%	11(10, 12)*	10 (9,11)*

\*95% confidence interval

Some of the possible reasons for the limited progress seen are listed below.





## 15. A CALL FOR ACTION

The change needed is significant but not impossible.

- 01 Strengthen multisectoral coordination, ownership and accountability at all levels.
- 02 Mobilize additional financing from government, partners and private sector.
- 03 Establish structure and human resource for food and nutrition at sub-national level.
- 04 Establish a multisectoral food and nutrition information system.
- 05 Innovative and context-based intervention implementation.
- 06 Strengthen household food and nutrition service delivery.
- 07 Support the national initiative such as food system transformation, Yelemat Tirufat, green legacy (fruit tree).
- 08 Role out mandatory large scale food fortification and strengthen micronutrients supplementation.

## METHODS

The overall goal of this survey was to produce nationally and regionally representative estimates on anthropometric status, coverage of nutrition interventions, dietary intakes, and micronutrient status for Ethiopia. The target population of this study were i) women of reproductive age aged (15-49 years) ii) pre-school children aged 0-59 months iii) school aged children aged 6-12 years, and iv) adolescent girls aged 10-19 years, and v) households. A total of 14,673 households were included in the survey. The characteristics of the study participants are shown in the **Table 8**.

**Table 8** Characteristics of study participants, March 2023

Characteristics	Number		Total	Row percent	
	Unweighted	Weighted	Percent	Urban	Rural
<b>AGE</b>					
15-19	2,399	3,186,964	15.9	35.2	64.8
20-29	6,947	8,699,989	43.3	37.7	62.3
30-39	4,633	5,777,452	28.7	31	69
40-49	1,821	2,433,483	12.1	27.4	72.6
<b>EDUCATION</b>					
No education	6,115	7,977,615	39.7	15.6	84.4
Primary	4,985	6,932,173	34.5	33	67
Secondary	2,947	3,379,505	16.8	55.5	44.5
More than secondary	1,756	1,813,637	9	80.4	19.6
<b>RELIGION</b>					
Orthodox	5,365	8,973,565	44.6	38.1	61.9
Muslim	6,672	6,765,532	33.7	24.8	75.2
Protestant	3,574	4,105,158	20.4	41.1	58.9
Catholic/Other Christian	115	69,668	0.3	59.4	40.6
Traditional	58	154,806	0.8	21	79
Other	19	34,200	0.2	1.5	98.5
<b>Total</b>	<b>15,803</b>	<b>20,102,930</b>	<b>100</b>	<b>34</b>	<b>66</b>

## LIMITATIONS OF THE SURVEY



Some areas of the country not addressed due to ongoing conflict

- Tigray
- Wollega and north wollo: Replaced with neighboring enumeration areas
- Only Benishangul Zone covered

01



Tigray region not covered: will be surveyed in the future

02



South-west region not included: Survey started in July 16, 2021, before the establishment the region.

03



Despite this limitations the survey provides regionally representative data for competed regions.

04

## FURTHER INFORMATION:

For additional information about the survey contact us at the Food science and Nutrition Research Directorate at EPHI, [dr.masresha.tessema@gmail.com](mailto:dr.masresha.tessema@gmail.com).

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