



## SOMALI REGION

# Making agriculture nutrition-sensitive

Findings from a study of consumption, production, availability, and affordability of nutritious food

Poor dietary quality is one of the leading causes of premature death and diseases globally.<sup>1</sup> Typically proxied by the diversity of one's diet, dietary quality is a challenge in Ethiopia where household consumption tends to be monotonous. According to the Ethiopian Public Health Institute, adults and children throughout the country get between 60-80 percent of their energy from carbohydrates.<sup>2</sup> This is particularly worrying for Ethiopia given that a carbohydrate intake greater than 60 percent increases an individual's risk of cardiovascular disease—one of the country's most common causes of premature mortality.<sup>3</sup> Micronutrient deficiencies and stunting are another indication of limited dietary quality. Across Ethiopia, 60 percent of children are anemic, one-third are deficient in Vitamin A, and only 14 percent of children meet the World Health Organization's (WHO) standard for diet diversity.<sup>4,5</sup> In an effort to improve dietary quality, the Government of Ethiopia has set out ambitious plans through the National Nutrition Programme to increase the year-round availability, access, and consumption of nutritious foods.<sup>6</sup> At the core of these efforts is the urgent need to transform food systems to support healthier diets throughout Ethiopia.<sup>7</sup>

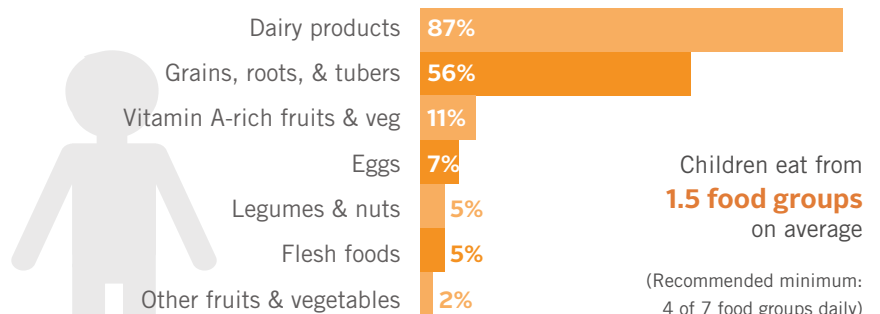
### ABOUT THE STUDY

This brief summarizing Hirvonen and Wolle's 2019 report, *Consumption, Production, Market Access and Affordability of Nutritious Foods in the Somali Region of Ethiopia*, offers insight into the gaps and opportunities where nutrition-sensitive agriculture policies and programs could have the greatest impact on diet diversity.<sup>8</sup>

## CONSUMPTION IN SOMALI

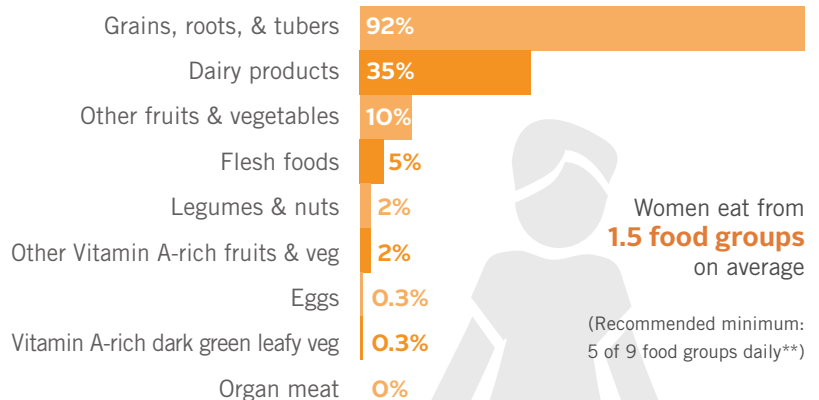
The study looks at consumption in two sample populations within Somali: children 6-23 months and women in USAID's Feed the Future (FTF) areas. Children in the region primarily consume dairy products, while women primarily consume grains, roots, and tubers. Both groups fall far below the recommendations for diet diversity, with only 4 percent of children meeting the WHO's minimum standard and less than 1 percent of women consuming from the recommended number of food groups. The graphs below show the percentage of children and households that consume the different food groups.

### CHILDREN 6-23 MONTHS (DEMOGRAPHIC & HEALTH SURVEY, 2016\*)



\* Sample limited to children who consumed complementary foods

### WOMEN (SURVEY OF FTF AREAS, FIRST PHASE, 2018)

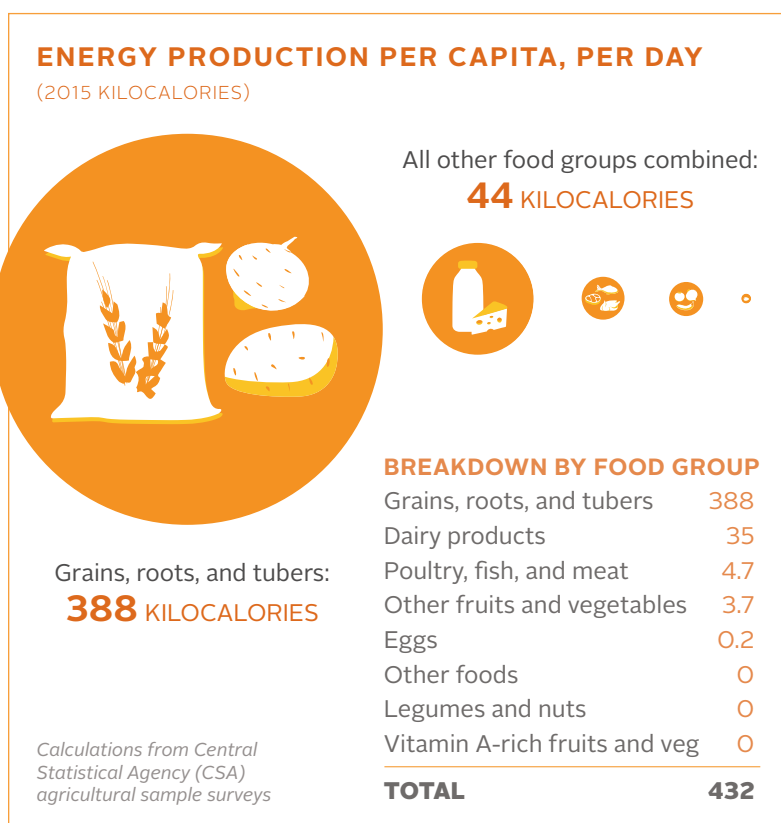


\*\* Based on the Women's Dietary Diversity Score (WDDS)

## PRODUCTION AND AVAILABILITY IN SOMALI

Total energy production in Somali increased by 61 percent between 2011 and 2015, largely driven by the production of grains, roots, and tubers. These staples accounted for 90 percent of all calories produced in 2015, followed by dairy products at 8 percent. The remaining six food groups made up only about 2 percent of the total calories produced in the region that year. The market availability of nutritious foods found in the Productive Safety Net Program (PSNP) areas is shown at right. A limited variety of different food items are available in Somali markets. Apart from starchy staples, the most common items observed in a June-July 2018 PSNP survey were:

- Fresh milk, goat, and eggs
- Onion, tomato, and green pepper



## AVAILABILITY OF NUTRITIOUS FOOD IN LOCAL MARKETS

FOOD GROUP AND ITEM		PSNP (%)
Beans and peas	Lentil	29
	Horse bean	21
	Chickpea	14
	Bean, brown	4
	Bean, white	0
	Cowpea	0
	Green bean	0
Nuts and seeds	Groundnut	36
	Fenugreek	14
	Vetch	4
	Sesame	4
	Groundnut flour	0
Dairy	Fresh milk	71
	Powdered milk	21
	Yoghurt	7
	Cheese	4
Flesh foods	Goat	68
	Beef	36
	Camel meat	14
	Mutton	4
	Chicken	4
	Dried fish	0
	Fresh fish	0
Eggs	Eggs	64
Vitamin A-rich dark green leafy vegetables	Ethiopian Kale	14
	Spinach	7
Other Vitamin A-rich fruits and vegetables	Mango	39
	Carrot	32
	Papaya	11
Other vegetables	Onion	93
	Tomato	93
	Green pepper	79
	Lettuce	14
	Cauliflower	0
	Mushroom	0
Other fruits	Banana	43
	Orange	0
	Cactus fruit	0

From 2018 survey of PSNP areas

## KEY TAKEAWAYS

- Overall, Somali does not produce enough food to feed its population, making the region a net food importer despite the increased production of staple crops in recent years.
- Markets have very limited availability of foods, providing a constraint to diverse food consumption.
- Food production needs to significantly improve in the region, and in addition to staple crops, emphasis should also be on diversification to include non-staples that support health and nutrition.

## AFFORDABILITY IN SOMALI

In this analysis, affordability is defined as the share of total income needed to consume the recommended daily amount of the food group. Since Ethiopia is still developing its own nutritional guidelines, the analysis below is based on the EAT-Lancet Commission on Food, Planet, and Health guidelines\* that recommend diets rich in plant-based foods based on the needs of a healthy individual.<sup>9</sup> The analysis below calculates the minimum cost to meet the dietary recommendation using the cheapest food item available for each food group to provide a sense of the price of foods relative to household incomes in the region. The seven food groups used in the child dietary diversity measure were used, with the omission of grains, roots, and tubers.

\*Children under 2 years and pregnant and lactating women have different dietary requirements

### PERCENT OF HOUSEHOLD INCOME NEEDED TO MEET THE RECOMMENDED INTAKE

(FOR HEALTHY INDIVIDUALS 2 YEARS OR OLDER)

FOOD GROUP	ANNUAL HOUSEHOLD INCOME			
	Average (Birr 9,946)	Poorest (Birr 3,992)	Median (Birr 8,986)	Richest (Birr 21,701)
Legumes and nuts	7%	17%	8%	3%
Dairy products	17%	42%	19%	8%
Poultry, fish, and meat	33%	82%	36%	15%
Eggs	5%	13%	6%	2%
Vitamin A-rich fruits & vegetables	6%	16%	7%	3%
Other fruits and vegetables	12%	29%	13%	5%
<b>TOTAL</b>	<b>80%</b>	<b>199%</b>	<b>89%</b>	<b>36%</b>

Income is proxied by consumption-expenditures from the 2015/16 Ethiopian Household Consumption-Expenditure (HCE) Survey from CSA

### KEY TAKEAWAYS

- The poorest households in Somali cannot afford the recommended intakes for the six food groups because it would require 199% of their household income, and this excludes income needed to purchase food in the grains, roots, and tubers food group. Even the richest would need to spend 36% of their income on the six food groups.
- Dairy consumption is relatively high, but affordability of dairy products, as well as of flesh foods, can be an issue for most consumers.
- Among the animal source foods, eggs are relatively affordable.
- One way to diversify diets is to promote the consumption of eggs, and fruits and vegetables, which are currently lacking in diets but are relatively affordable to most income groups.

## SUMMARY

### Consumption

The diets of mothers and children in Somali currently lack adequate diversity to meet nutritional needs.

### Production

Food production in the region does not meet caloric needs. It needs to include a variety of nutritious foods, in addition to staples, that would support a diverse diet.

### Availability

A limited number of nutritious foods are available in markets, suggesting an opportunity to diversify markets and boost production of the most acceptable and affordable items.

### Affordability

Plant-based foods and eggs are relatively affordable, while flesh foods are likely to be unaffordable for many households to consume regularly.

## CONCLUSION

The most readily available and affordable food groups in Somali that are lacking in diets are eggs and plant-based foods. Making these sub-sectors or value chains a priority—by increasing availability and improving affordability, price stability, and safety in all local food markets—offers promise for moving toward a more diverse diet, when combined with increasing demand for these foods.

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