



# Ethiopia Food System Profile

Better understanding food  
systems at country level

The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) delivers research-based solutions that address the global crises of malnutrition, climate change, biodiversity loss, and environmental degradation.

The Alliance focuses on the nexus of agriculture, nutrition, and environment. We work with local, national, and multinational partners across Africa, Asia, and Latin America and the Caribbean, and with the public and private sectors and civil society. With novel partnerships, the Alliance generates evidence and mainstreams innovations to transform food systems and landscapes so that they sustain the planet, drive prosperity, and nourish people in a climate crisis.

The Alliance is part of CGIAR, a global research partnership for a food-secure future dedicated to transforming food, land, and water systems in a climate crisis.

[www.alliancebioversityciat.org](http://www.alliancebioversityciat.org)

[www.cgiar.org](http://www.cgiar.org)

**Citation:**

Chege, CGK; Béné, C; Lundy, M; Hernández, R; Wiegel, J; Achicanoy, H. Ethiopia Food System Profile. Better understanding food systems at country level. CIAT Publication No. 546. International Center for Tropical Agriculture (CIAT), Cali, Colombia. 35 p.

Cover photo: Lesly Derksen/Unsplash

© CIAT 2023. Some rights reserved.


This work is licensed under a Creative Commons Attribution 4.0 International License (CC-BY 4.0).

<https://creativecommons.org/licenses/by/4.0/deed.en>

June 2023

# Ethiopia Food System Profile

Better understanding food systems at country level

 Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,  
Education and Research EAER  
**Federal Office for Agriculture FOAG**



# Acknowledgements

This work is funded by the Swiss Federal Office for Agriculture.

The Alliance of Bioversity International and CIAT would like to thank the participants in multi-stakeholder dialogues in Ethiopia for their support in testing and improving this analytical framework.

# Contents

<b>What is a country food system profile?</b> .....	<a href="#"><u>6</u></a>
<b>Why food system country profiles are needed</b> .....	<a href="#"><u>7</u></a>
<b>Ethiopia Food System Profile</b> .....	<a href="#"><u>9</u></a>
<i>Drivers</i> .....	<a href="#"><u>10</u></a>
<i>Actors and activities</i> .....	<a href="#"><u>15</u></a>
<i>Food environment</i> .....	<a href="#"><u>20</u></a>
<i>Consumer behavior</i> .....	<a href="#"><u>25</u></a>
<i>Outcomes</i> .....	<a href="#"><u>30</u></a>
<b>Ethiopia Food System Profile: Possible areas of action</b> .....	<a href="#"><u>36</u></a>

# What is a country food system profile?

A Sustainable Food System Country Profile is a short document that synthesizes in a clear, concise, and graphic manner the critical information necessary for public and private decision-makers to obtain a holistic/systemic but synthetic overview of the components that are recognized to be critical for the sustainability of countries' food systems.

Country profiles are more than a simple compilation of national indicators. They are constructed and designed to identify hotspots of unsustainability in the food systems and prioritize interventions at multiple scales to address these through targeted actions and investments. An important feature of the country profiles is that they are co-produced with key public and private food system stakeholders engaged in both identifying the data and validating results and emerging key messages.

The use of a common framework also offers an opportunity for a global comparative analysis on food system transitions and transformations – not just at national but also international level – thus generating insights and lessons for decision-makers.

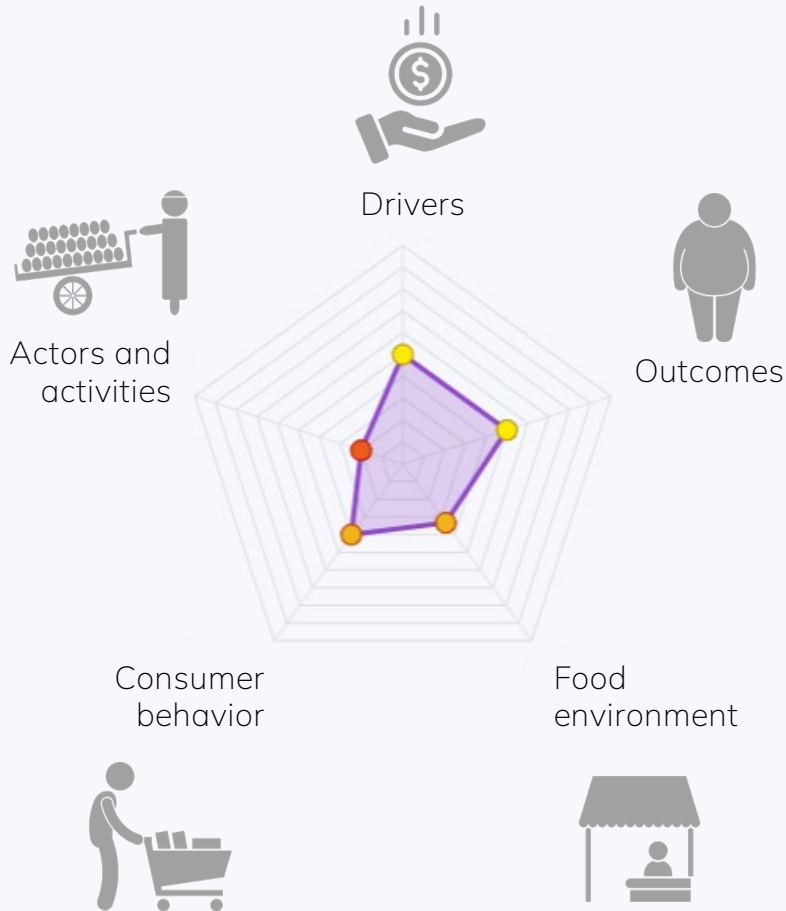


# Why food system country profiles are needed

Food systems are complex, multi-dimensional and multi-sectoral. Better understanding their dynamics and assessing their performances is critical if we want to strengthen their contribution to the Sustainable Development Goals.

A flurry of initiatives has emerged in the last few years, that propose multi-indicator “compendiums” intended to describe more holistically national food systems. Many of those compendiums, however, are made of 100 or more indicators. As such, they are often overwhelming the policy-makers who they were initially intended to guide, thus defeating their own purpose.

There is a need to find a “middle ground” whereby the complexity, dynamic, and multi-sectoral nature of those food systems is still captured, but boiled down to a more manageable combination of key indicators that help prioritizing entry points for interventions.



The process of identifying those key indicators also needs to follow a clear, transparent and reproducible protocol/methodology so that comparison between countries (and over time) remains possible, yet accounts for the specificity of each country's food systems and its large socio-cultural and political context.

Finally, the process needs to remain participative, involving the main stakeholders of the country's food system and not just experts.

The objective of the Food System Country Profile project is to demonstrate the feasibility of such an approach, initially by developing and field-testing a protocol in three pilot countries: Bangladesh in Asia, Ethiopia in Africa and Honduras in Latin America, with the ambition to expand the approach to other low and middle-income countries in the near future.

The final product, which is in the form of [Food System Country Profiles](#), offers a tool to facilitate more informed and evidence-supported decisions by key stakeholders around food systems.







Ethiopia



Geographic neighbors



Countries with similar GDP per capita



Global average

## Ethiopia Food System Profile

This Ethiopia food system profile is composed of **three main blocks of information**: (a) system drivers; (b) system components; and (c) system outcomes.

The **first main block** recognizes how environmental, demographic, technological, political, economic, social, and cultural drivers influence the food system—from production to consumption. The **second block** considers three components of the system: its actors and activities, the food environment, and consumer behavior. The **third block**, which is the last, corresponds to the system's outcomes in terms of the nutritional and health status of the population, food security, and the country's environmental and socioeconomic conditions.

This profile also presents a **comparison** of Ethiopia's data **against three groups**: the country's geographic neighbors (*Eritrea, Kenya, Sudan, Somalia, and South Sudan*), countries with similar GDP per capita (*Burkina Faso, Guinea-Bissau, Mali, Uganda, and Zambia*), and the world average.

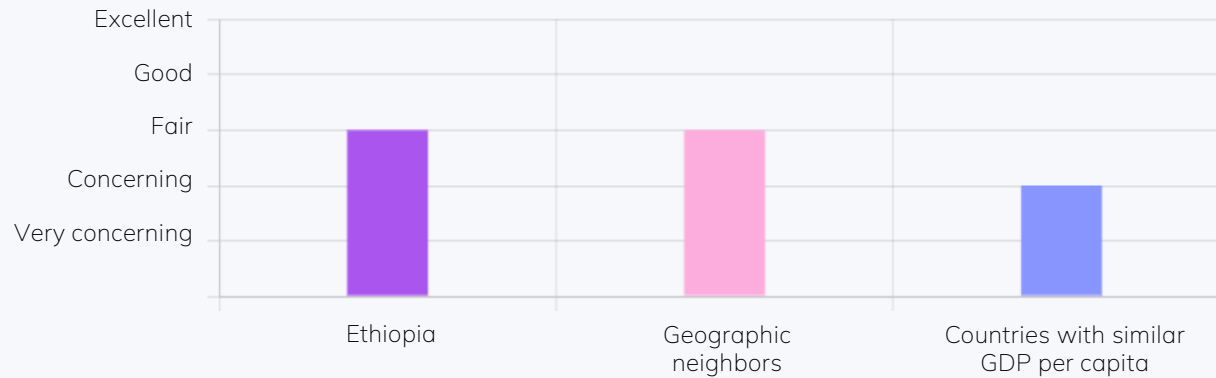
# DRIVERS

Fair



**Food system drivers** are the major factors known to directly influence the activities or the actors of the food systems. They include factors such as technological innovations, climate change, growing concerns about food safety, population growth or urbanization, and changes in lifestyle.

**Drivers** - aggregated value across the 6 individual indicators\*



- Eritrea, Kenya, Sudan, Somalia, and South Sudan
- Burkina Faso, Guinea-Bissau, Mali, Uganda, and Zambia

\* Temperature change; Nitrogen fertilizer used; Food exports; Foreign direct investment (FDI), net inflows; Urban population growth; Population growth.

## World average



**Improving**

65-84% of all indicators for world average have improved or remained unchanged over the time period considered

## DRIVERS

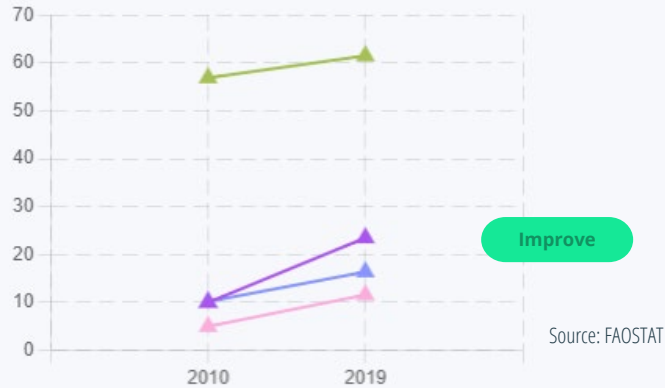
Fair



	<p><b>Nitrogen fertilizer used (2010-2019)</b> Kg/Ha <i>Proxy for change in technological innovations</i></p>	<p><b>10</b> 2010</p>	<p><b>23.5</b> 2019</p>	<p><b>13.5</b> difference</p>	<p><b>Improve</b> <i>But doing worse than the world average</i></p>
	<p><b>Temperature change (2011-2020)</b> C degrees <i>Proxy for changes in climate</i></p>	<p><b>1.1</b> 2011</p>	<p><b>1.4</b> 2020</p>	<p><b>0.3</b> difference</p>	<p><b>Deteriorate</b> <i>But doing better than the world average</i></p>
	<p><b>Food exports (2011-2020)</b> % of merchandise exports <i>Proxy for changes in trade policies</i></p>	<p><b>74.7</b> 2011</p>	<p><b>77.6</b> 2020</p>	<p><b>2.9</b> difference</p>	<p><b>Unchanged</b> <i>And doing better than the world average</i></p>
	<p><b>Foreign direct investment (FDI), net inflows (2011-2020)</b> % of GDP <i>Proxy for the contribution of the food system to national economy</i></p>	<p><b>2</b> 2011</p>	<p><b>2.2</b> 2020</p>	<p><b>0.2</b> difference</p>	<p><b>Improve</b> <i>And doing better than the world average</i></p>
	<p><b>Urban population growth (2002-2017)</b> Annual % growth <i>Proxy for changes in urbanization and consumer lifestyle</i></p>	<p><b>1.3</b> 2002</p>	<p><b>2.2</b> 2017</p>	<p><b>0.9</b> difference</p>	<p><b>Deteriorate</b> <i>And doing worse than the world average</i></p>
	<p><b>Population growth (2011-2020)</b> Annual % growth <i>Proxy for changes in population and consumption patterns</i></p>	<p><b>2.8</b> 2011</p>	<p><b>2.5</b> 2020</p>	<p><b>-0.3</b> difference</p>	<p><b>Improve</b> <i>But doing worse than the world average</i></p>

### Nitrogen fertilizer used (2010-2019)

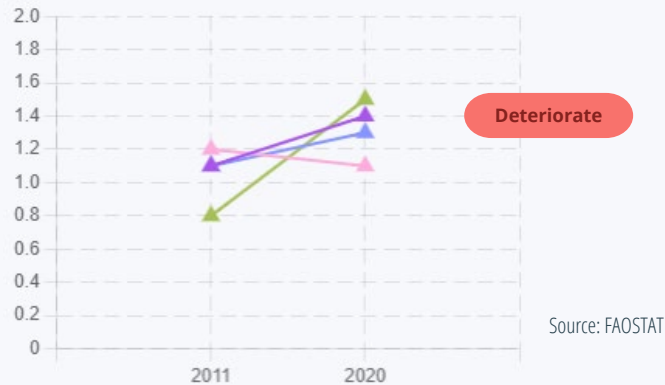
Kg/Ha



Source: FAOSTAT

### Temperature change (2011-2020)

C degrees



Source: FAOSTAT

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

## DRIVERS

Fair



The Ethiopian food system is currently driven by various factors from production, consumption, distribution and trade. Out of the six indicators used to measure drivers of the Ethiopian food system, three have improved over the past decade, two deteriorated and one remained unchanged, which shows a good trend for the country's food system drivers overall. The geographical neighboring countries have excellent performance with all six indicators showing improvements over the past decade.

In Ethiopia, improved technological innovations (measured by fertilizer use) stands out as one of the factors that has positively influenced the country's food system from the production/supply side through improvements in production and productivity. Ethiopia recorded the highest percentage increase in fertilizer use (135%) between 2010 and 2019 compared to her neighboring countries with similar GDP per capita (61%), geographic neighbors (132%) and the global average (8%).

Climate change is also an important factor driving the Ethiopia food system as depicted by the increasing temperatures over years. Increased temperatures could negatively affect the country's food system due to the weather effects on the food production and supply. Ethiopia has experienced a 27% increase in temperatures over the past

# DRIVERS

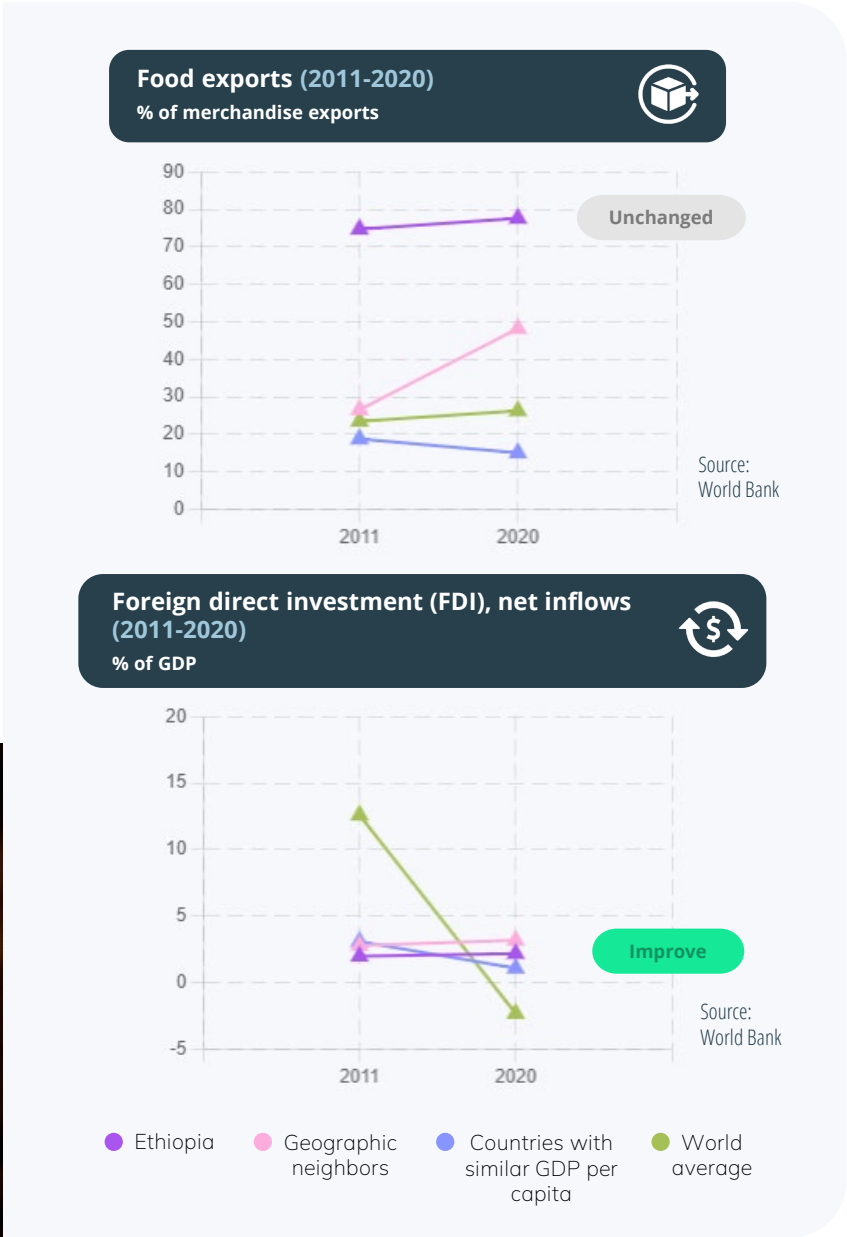


decade compared to her neighboring countries who experienced a smaller increase and even decrease in temperatures for some countries. However, the average global temperature change is double that of Ethiopia with a 88% increase in temperatures over the same period. Favorable trade policies in Ethiopia have contributed to an increase in the food export within the country over the decade.

Increased food export is beneficial in bringing in foreign exchange to the country but at the same time may put strain on the country's food basket when more of the local production is exported and insufficient amounts are left in the country for local consumption.



Photo: Samuel Belachew/Unsplash



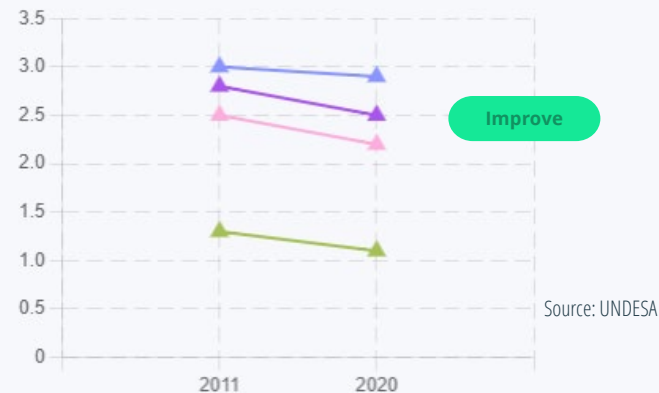
### Urban population growth (2002-2017)

Annual % growth



### Population growth (2011-2020)

Annual % growth



- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

## DRIVERS

Fair



In terms of food consumption/demand, Ethiopia has experienced tremendous urban population growth in the past decade. The Ethiopian urban population has been growing faster (at 2.2%) than neighboring countries with similar GDP per capita (decrease by 1.7%), the geographic neighbors (1.4%) and the global average (0.6%). Urbanization comes with new consumption behavior and negative lifestyle changes, and these affect consumer diets and nutritional status. Change in overall population growth is another factor driving Ethiopia's food system. Population growth means increased food demand, which may affect access, consumption and overall food security. Ethiopia experienced a 0.3% decrease in population growth between 2011 and 2020 a percentage similar to her geographical neighbors but lower than the neighbors with similar GDP per capita (0.1% decrease) and global average (0.2% decrease).

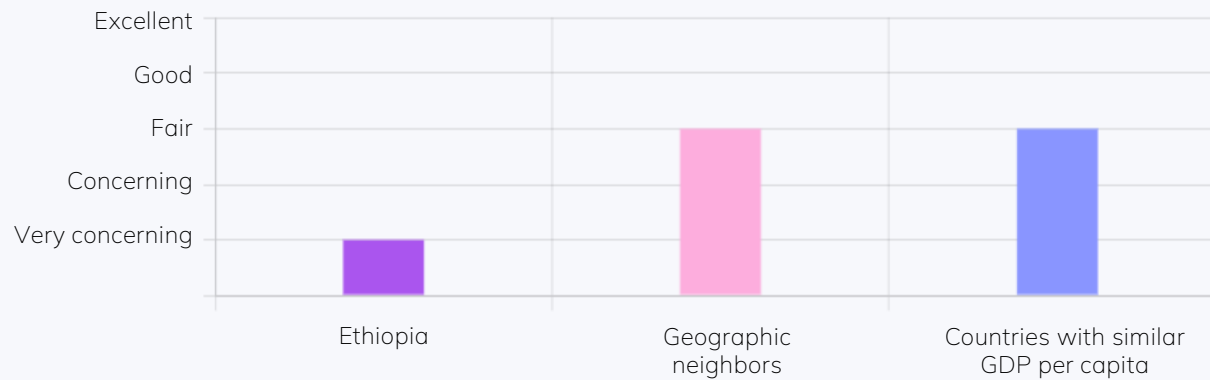


# ACTORS AND ACTIVITIES

Very concerning

Food system actors and activities include five major types of activities and their actors: food production, storage and distribution, food processing and packaging, and retail and marketing.

Actors and activities - aggregated value across the 5 individual indicators\*



- Eritrea, Kenya, Sudan, Somalia, and South Sudan
- Burkina Faso, Guinea-Bissau, Mali, Uganda, and Zambia

\* Food production index; Livestock production index; Access to electricity; Agriculture, forestry, and fishing, value added; Modern grocery retailers per 100,000 inhabitants.

## World average



Improving

65-84% of all indicators for world average have improved or remained unchanged over the time period considered

## ACTORS AND ACTIVITIES

Very concerning





### Food production index (2009-2018)

Units



Source: World Bank

### Livestock production index (2009-2018)

Units



Source: World Bank

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

## ACTORS AND ACTIVITIES

Very concerning

Three out of the five indicators in Ethiopia improved over the past decade while the food-processing indicator deteriorated, and the retail and market indicator remained unchanged. The overall performance of the Ethiopia indicators in this component were rated as very concerning, while neighboring countries with comparable GDP per capita and Ethiopia's geographical neighbors' performance was fair in this category.

The Ethiopian agricultural production system has been improving overtime. Likewise, the food and livestock production averages have increased in the past decade although still lies behind the global averages and averages of the geographical neighboring countries and her neighbors with similar GDP per capita.



## ACTORS AND ACTIVITIES

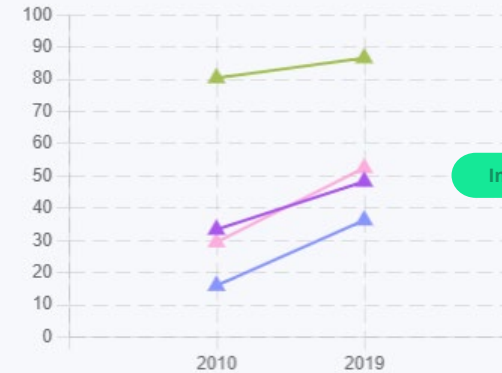
Very concerning

In terms of food storage and distribution (measured using access to electricity), Ethiopia is doing better than her neighboring countries with similar GDP per capita (48% vs. 36% of the population), but the global averages are almost double of Ethiopia's rates (86.6%). Food processing is still low in Ethiopia and has been decreasing over the years although overall Ethiopia is doing better than her neighboring countries and the global averages.



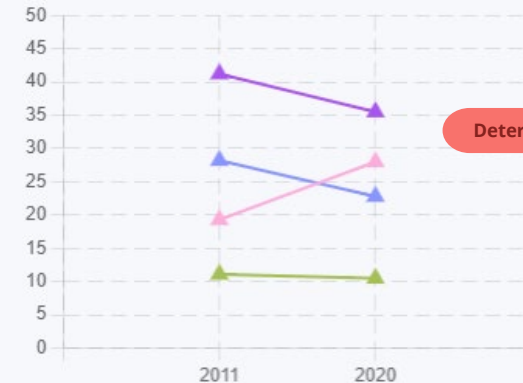
Photo: Taylor Flowe/Unsplash

### Access to electricity (2010-2019) % of population



Source:  
World Bank

### Agriculture, forestry, and fishing, value added (2011-2020) % of GDP

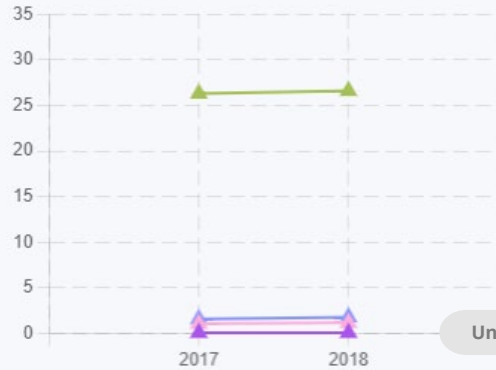


Source:  
World Bank

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

## Modern grocery retailers (2017-2018)

Number per 100,000 inhabitants



Source:  
Euromonitor  
International at  
the Food Systems  
Dashboard

Unchanged

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average



Photo: Aben Tefra/Unsplash

## ACTORS AND ACTIVITIES

Very concerning

Modernization of food retail is very low in Ethiopia compared to other comparison countries as well as the global averages. This shows overreliance of traditional food retail markets in the country and there may be need to diversify food environments to increase access and affordability.



Photo: Erik Hathaway/Unsplash

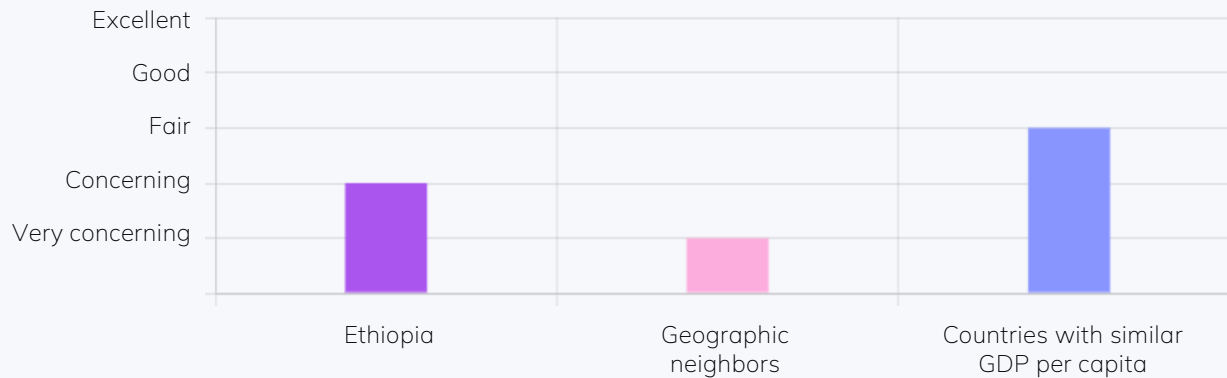
# FOOD ENVIRONMENT

Concerning



**Food Environment** refers to the different interacting processes that directly influence key characteristics of food, including their availability, quality, affordability or safety.

**Food environment** - aggregated value across the 6 individual indicators\*



- Eritrea, Kenya, Sudan, Somalia, and South Sudan
- Burkina Faso, Guinea-Bissau, Mali, Uganda, and Zambia

\* Average dietary energy supply adequacy; Consumer Prices, Food Indices (2015 = 100); Retail value of packaged food sales per capita; Diarrheal diseases-Prevalence-all ages-both sex; Government commitment to improved Nutritional Standards; Food loss (% of total waste/total domestic supply).

**World average**



**Deteriorating**

25-49% of all indicators for world average have improved or remained unchanged over the time period considered

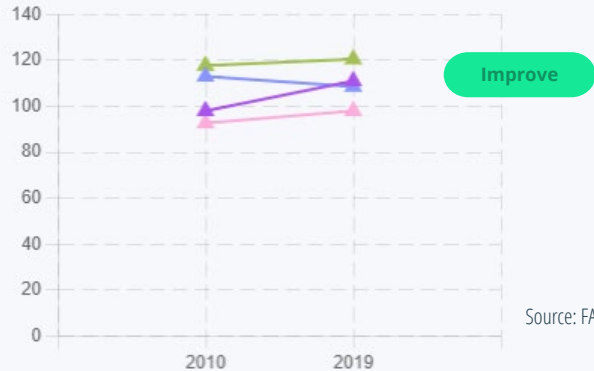
## FOOD ENVIRONMENT

Concerning



### Average dietary energy supply adequacy (2010-2019)

% (three-year average)



Source: FAOSTAT

### Consumer Prices, Food Indices (2015 = 100) (2012-2021)

Units



Source: FAOSTAT

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

## FOOD ENVIRONMENT

Concerning



The Ethiopia food environment is presented by food availability, affordability, convenience, quality and safety, promotion advertisement and information, and food loss and waste. The overall performance of the Ethiopia food environment is concerning with only two indicator having improved or remained unchanged in the past decade and four indicators deteriorated. The indicator for food quality and safety remained unchanged.

The food availability in Ethiopia (measured by Average dietary energy supply adequacy) has improved over the past decade and it is higher than the geographical and similar GDP per capita neighboring countries but lower than the global averages. However, food affordability remains a big challenge in Ethiopia. Between 2012 and 2021, food was more unaffordable in Ethiopia than the countries with comparable GDP per capita and global averages.

The Ethiopia consumer price food index (proxy for food affordability), increased by more than 200% compared to 82% increase for the global averages, during the past decade.

## FOOD ENVIRONMENT

Concerning

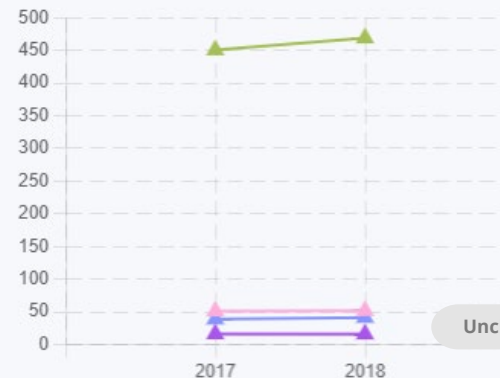
Ethiopia is performing poorly in terms of offering convenience foods compared to all other comparison groups. The convenience foods (measured by retail value of packaged food sales per capita (USD)) is only 3% of the global average and about a third of the neighboring countries' averages as of 2018.



Photo: Imani Manyara/Unsplash

### Retail value of packaged food sales per capita (2017-2018)

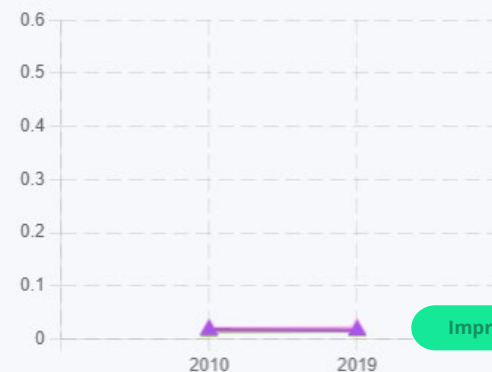
USD/person/year



Source: GAIN and Johns Hopkins University.

### Diarrheal diseases-Prevalence-all ages-both sex (2010-2019)

% of population

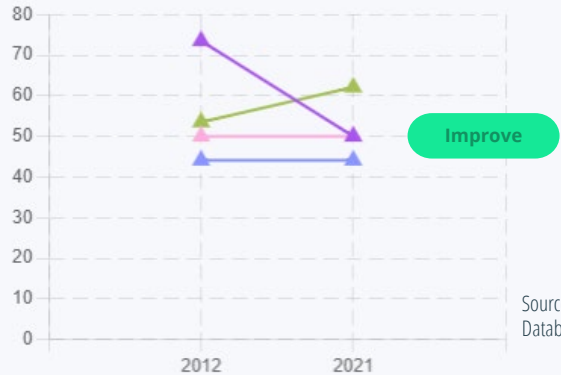


Source: Global Health Data

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

### Government commitment to improved Nutritional Standards (2012-2021)

Units (0-100 score)



Source: EIU GFSI Database (FAO)

### Food loss (% of total waste/total domestic supply) (2012-2021)

% of total domestic food supply



Source: FAOSTAT

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

## FOOD ENVIRONMENT

Concerning



The Ethiopian government show commitment to improve the nutritional standards in the country although the overall score decreased from 73.5 out of 100 in 2012 to 50 in 2021. The score is higher for the neighboring countries with similar GDP per capita (44) but much lower than the global averages (62) as of 2021. Ethiopia just published the food based dietary guidelines in 2022 to guide the population on consumption of healthy diets.

Food loss and waste remains very low in Ethiopia (5.4% in 2021), and in all the other three groups, but the loss and waste is increasing overtime in all the groups, an unfavorable performance for the food system.





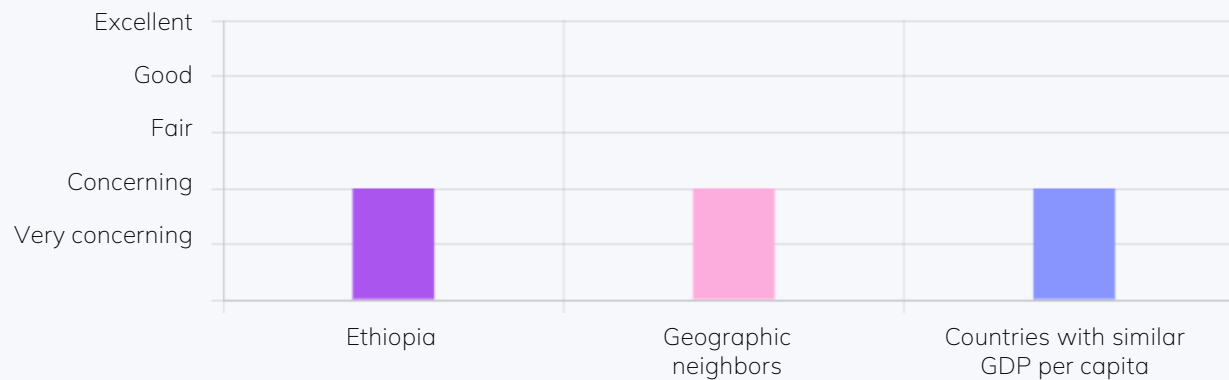
# CONSUMER BEHAVIOR

Concerning

**Consumer behavior** refers not only to what people choose to buy and to eat but also people's taste and preference, their socio-economic characteristics (for instance their income or education level) as well as their cultural identities ("who they are")

**Consumer behavior** - aggregated value across the 5 individual indicators\*

**World average**



**Improving rapidly**

85-100% of all indicators for world average have improved or remained unchanged over the time period considered.

- Eritrea, Kenya, Sudan, Somalia, and South Sudan
- Burkina Faso, Guinea-Bissau, Mali, Uganda, and Zambia

\* Population, male; Adult literacy rate, population 15+ years, both sexes; Poverty headcount ratio at \$1.90 a day (2011 PPP); Retail value of ultra-processed food sales per capita; Share of dietary energy supply derived from cereals, roots and tubers.

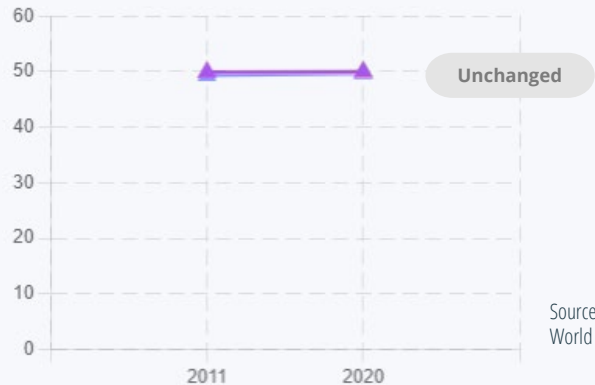
## CONSUMER BEHAVIOR

Concerning



	<p><b>Population, male (2011-2020)</b> % of total population <i>Gender structure of consumers</i></p>	<p><b>49.9</b> 2011</p>	<p><b>50</b> 2020</p>	<p><b>0.1</b> difference</p>	<p>Unchanged <i>And doing better than the world average</i></p>
	<p><b>Literacy rate, both sexes (2008-2017)</b> % of people &gt;=15 years old <i>Education structure of consumers</i></p>	<p><b>39</b> 2008</p>	<p><b>51.8</b> 2017</p>	<p><b>12.8</b> difference</p>	<p>Improve <i>But doing worse than the world average</i></p>
	<p><b>Poverty headcount ratio at \$1.90 a day (2011 PPP) (2006-2015)</b> % of population <i>Proxy for economic structure of consumers</i></p>	<p><b>38.5</b> 2006</p>	<p><b>30.8</b> 2015</p>	<p><b>-7.7</b> difference</p>	<p>Improve <i>But doing worse than the world average</i></p>
	<p><b>Retail value of ultra-processed food sales per capita (2017-2018)</b> USD/Person/Year <i>Proxy for consumption of processed foods</i></p>	<p><b>20.7</b> 2017</p>	<p><b>20.8</b> 2018</p>	<p><b>0.1</b> difference</p>	<p>Unchanged <i>And doing better than the world average</i></p>
	<p><b>Share of dietary energy supply derived from cereals, roots and tubers (2009-2018)</b> % (three-year average) <i>Proxy for consumption of healthy diets</i></p>	<p><b>76</b> 2009</p>	<p><b>75</b> 2018</p>	<p><b>-1</b> difference</p>	<p>Unchanged <i>But doing worse than the world average</i></p>

**Population, male (2011-2020)**  
% of total population



Source: World Bank

**Adult literacy rate, both sexes (2008-2017)**  
% of people >=15 years old



Source: UNESCO

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

CONSUMER BEHAVIOR

Concerning



Performance of the Ethiopian consumer behavior falls under concerning category, with two indicators recording improvements and three remained unchanged over the past decade. Ethiopian consumer choices are influenced by consumers' socio-economic status, their education and gender and the consumer preferences and tastes.

The gender structure of the Ethiopian consumer population is almost balanced, at 50% men but the percentage of male population is increasing. Ethiopia has the least educated consumer population with an adult literacy of 52% compared to 83% global average, 63% of the geographic neighbors and 60% for the neighbor countries with similar GDP per capita. Education level influences consumer behavior and dietary choices and eventually contributes to the nutrition status of the people.



Photo: Georgina Smith/CIAT

CONSUMER BEHAVIOR

Concerning



Ethiopia is doing better than her neighboring countries (both geographic and those with similar GDP) in terms of poverty levels (31% of the population compared to 48% and 49% respectively), an indication of improved consumer economic empowerment, but these averages are much higher than the global average (11%).

**Poverty headcount ratio at \$1.90 a day (2011 PPP) (2006-2015)**  
% of population



Source: World Bank

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average



### Retail value of ultra-processed food sales per capita (2017-2018)

USD/Person/Year

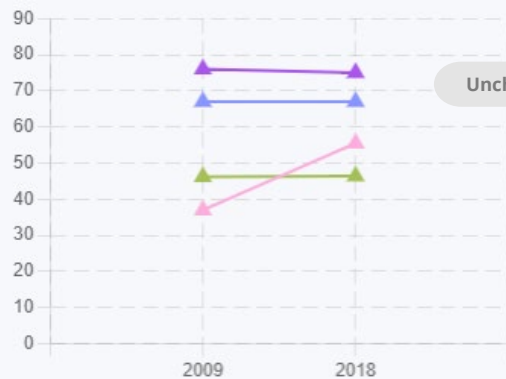


Source: Euromonitor International.

Unchanged

### Share of dietary energy supply derived from cereals, roots and tubers (2009-2018)

% (three-year average)



Source: FAOSTAT

Unchanged

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

## CONSUMER BEHAVIOR

Concerning

In terms of consumer preferences, there is an increase in sales of ultra-processed foods in Ethiopia as well as all other three comparable groups. The rate of increase is lower in Ethiopia compared to the other groups. Similarly the proportion of dietary energy supply derived from energy dense foods is highest in Ethiopia (75%) compared to all other groups, albeit recording a very small decrease in the past decade. This is an indication of **over-reliance in energy dense foods in the country**, which is not good for Ethiopia.



Photo: Zeynep Sümer/Unsplash

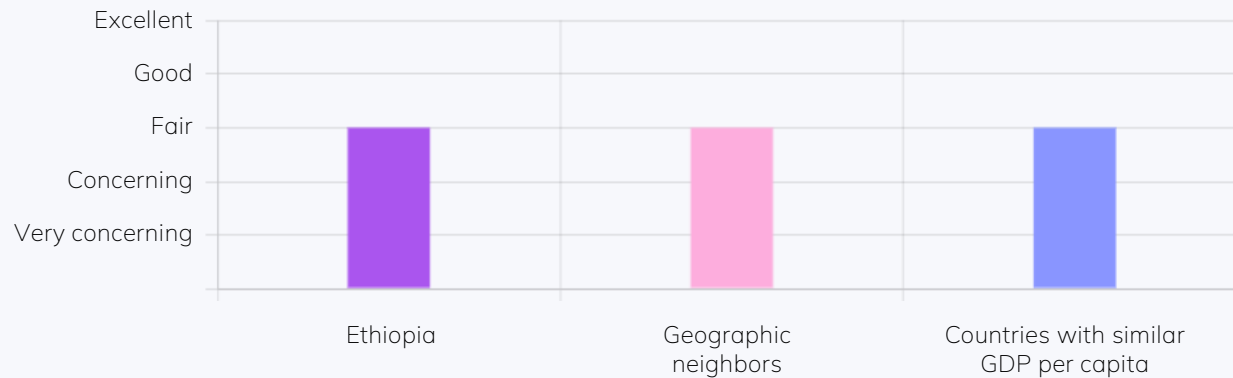
# OUTCOMES

Fair



**Food system outcomes** can be grouped into four major categories: the environmental, nutrition and health, economic and social impacts of food systems. Those different outcomes are generally characterized by trade-offs and many of the key decisions that are made by policy makers need to account for those trade-offs to avoid unintended consequences.

**Outcomes** - aggregated value across the 8 individual indicators\*



- Eritrea, Kenya, Sudan, Somalia, and South Sudan
- Burkina Faso, Guinea-Bissau, Mali, Uganda, and Zambia

\* Emissions (CO<sub>2</sub> equivalent), Agriculture total (gigagrams=1000 MT/Ha); Percent of national land area with tree cover; Food, beverages and tobacco; Agriculture, forestry, and fishing, value added per worker; Prevalence of undernourishment; Prevalence of obesity in the adult population (18 years and older); Employment in agriculture, female; Gini index.

## World average



**Uncertain**

50-64% of all indicators for world average have improved or remained unchanged over the time period considered.

# OUTCOMES

Fair



	<p><b>Emissions (CO<sub>2</sub> equivalent), Agriculture total (2009-2018)</b> Gigagrams/Ha <i>Proxy for contribution of the food system to climate change</i></p>	<p><b>2.4</b> 2009</p>	<p><b>2.7</b> 2018</p>	<p><b>0.3</b> difference</p>	<p><b>Deteriorate</b> <i>And doing worse than the world average</i></p>
	<p><b>Percent of national land area with tree cover (2011-2020)</b> % of national land area <i>Proxy for pressure of the food system on land</i></p>	<p><b>10.5</b> 2011</p>	<p><b>10.3</b> 2020</p>	<p><b>-0.2</b> difference</p>	<p><b>Unchanged</b> <i>But doing worse than the world average</i></p>
	<p><b>Food, beverages and tobacco (2006-2015)</b> % of value added in manufacturing <i>Proxy for the contribution of the food system to national economy</i></p>	<p><b>46.6</b> 2006</p>	<p><b>36.6</b> 2015</p>	<p><b>-10</b> difference</p>	<p><b>Deteriorate</b> <i>But doing better than the world average</i></p>
	<p><b>Agriculture, forestry, and fishing, value added per worker (2010-2019)</b> Constant 2015 USD/worker <i>Proxy for financial performance of the food system</i></p>	<p><b>597.9</b> 2010</p>	<p><b>804</b> 2019</p>	<p><b>206.1</b> difference</p>	<p><b>Improve</b> <i>But doing worse than the world average</i></p>
	<p><b>Employment in agriculture, female (2010-2019)</b> % of female employment <i>Proxy for the impacts of the food system on gender equality</i></p>	<p><b>68.2</b> 2010</p>	<p><b>58.7</b> 2019</p>	<p><b>-9.5</b> difference</p>	<p><b>Deteriorate</b> <i>But doing better than the world average</i></p>
	<p><b>Gini index (2006-2015)</b> Units (0-100 score) <i>Proxy for the contribution of the food system to economic inclusion</i></p>	<p><b>29.8</b> 2006</p>	<p><b>35</b> 2015</p>	<p><b>5.2</b> difference</p>	<p><b>Deteriorate</b> <i>But doing better than the world average</i></p>
	<p><b>Prevalence of undernourishment (2010-2019)</b> % of population <i>Contribution of the food system to food and nutrition security</i></p>	<p><b>27.6</b> 2010</p>	<p><b>16.2</b> 2019</p>	<p><b>-11.4</b> difference</p>	<p><b>Improve</b> <i>But doing worse than the world average</i></p>
	<p><b>Prevalence of obesity in the adult population (2012-2016)</b> % of people &gt;=18 years old <i>Impacts of the food system on consumer health</i></p>	<p><b>3.6</b> 2012</p>	<p><b>4.5</b> 2016</p>	<p><b>0.9</b> difference</p>	<p><b>Deteriorate</b> <i>But doing better than the world average</i></p>

Fair

OUTCOMES



Emissions (CO<sub>2</sub> equivalent), Agriculture total (2009-2018)

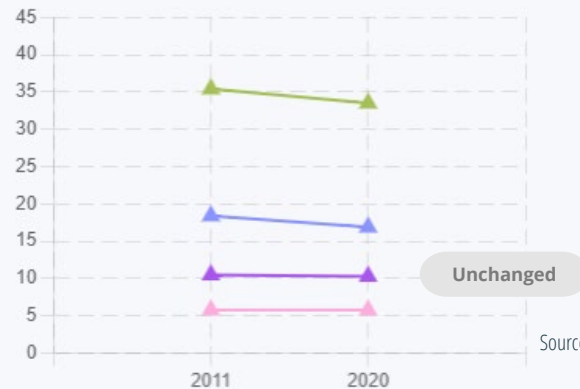
Gigagrams/Ha



Source: FAOSTAT

Percent of national land area with tree cover (2011-2020)

% of national land area



Source: FAOSTAT

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

The performance of the Ethiopian food system is measured against four development outcomes: environmental, social, economic and health. Overall, the performance of Ethiopia outcome indicators is fair, with only two indicators showing improvements, five deteriorating and one remaining unchanged over the past decade.

### Environment

From the environmental perspective, the Ethiopian food system is contributing negatively to the air quality as shown by a 12.5% increase in the emissions between 2009 and 2018. The data available shows that Ethiopian agriculture had almost double the amount of emissions compared to her neighboring countries with similar GDP per capita, and three times the emissions compared to the geographical neighbors. Ethiopia emissions were still higher than the global average as of 2018.

The percent of national land area with tree cover in Ethiopia has slightly decreased (by 1.9%) over the past decade and it is only a third of the global average (10.3% against 33.5%) but much higher than the geographical neighbors averages (5.8%).



## OUTCOMES

Fair



### Economic dimension

On the economic aspects, the contribution of the Ethiopian food system to the national economy has declined in the **past decade**, whereas the neighboring geographical countries and global averages have both recorded positive contribution to the national economy. Ethiopia has recorded an **improvement towards its food system contribution to the national financial performance**, although it still lags much behind the neighboring countries and the global average.

Photo: Georgina Smith/CIAT



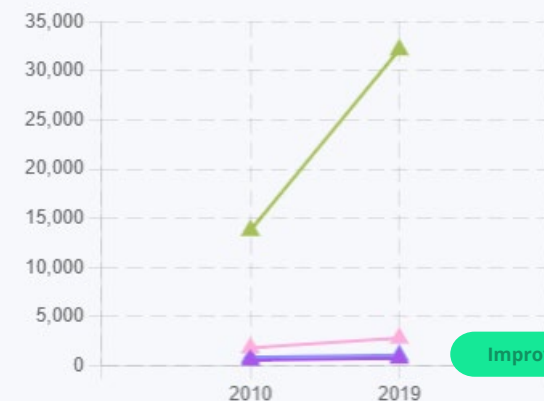
### Food, beverages and tobacco (2006-2015) % of value added in manufacturing



Deteriorate

Source:  
World Bank  
from UNIDO

### Agriculture, forestry, and fishing, value added per worker (2010-2019) constant 2015 USD/worker

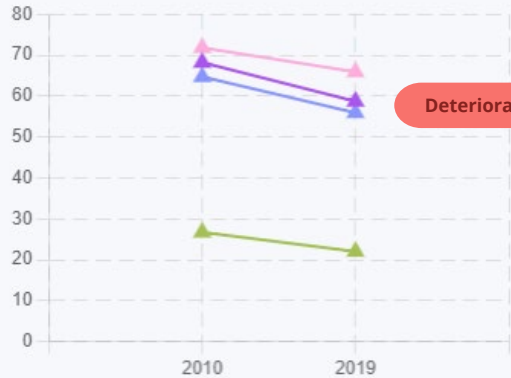


Source:  
World Bank

Improve

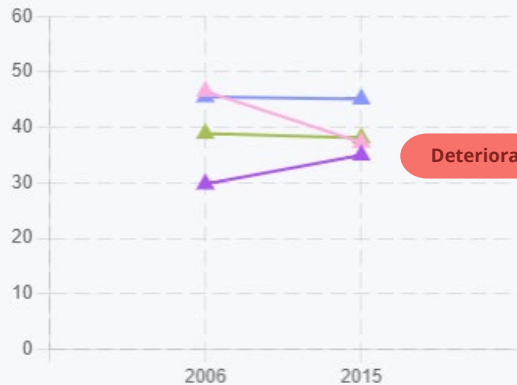
- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

### Employment in agriculture, female (2010-2019) % of female employment



Source:  
World Bank

### Gini index (2006-2015) Units (0-100 score)



Source:  
World Bank

- Ethiopia
- Geographic neighbors
- Countries with similar GDP per capita
- World average

## OUTCOMES

Fair



### Social dimension

On the social aspects, Ethiopia as well as all the three comparative groups recorded decreased impacts of their food systems on gender equity over the past decade, although Ethiopia is doing better than the neighboring geographic neighbor and the global average. **In terms of economic inclusion, Ethiopia is performing poorly compared to all the comparative groups, including the global average.** Between 2006 and 2015, all the comparable groups have improved their economic inclusion while that of Ethiopia is deteriorating.

Photo: Georgina Smith/CIAT



## OUTCOMES

Fair



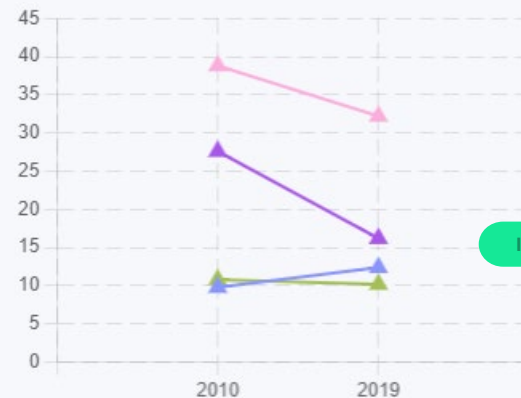
### Health

In terms of health outcomes, Ethiopia has been making impressive progress in improving its nutrition and health situation although the country is still below the global averages. The percentage of undernourished population is higher in Ethiopia (16.2%) than the global average (10.2%) and the neighboring countries with similar GDP per capita (12.4%). However, Ethiopia is doing better than her geographical neighboring countries who have an average of 32.2% of undernourishment. Compared to the three comparative groups, Ethiopia has made the largest improvements in terms of prevalence of undernourishment over the past decade (41% decrease).

On the other hand, prevalence of adult obesity in Ethiopia is low (4.5%) but it has been increasing in Ethiopia and the three comparative groups. However, the available data shows Ethiopia has recorded a 25% increase in the prevalence of adult obesity between 2012 and 2016, the highest increase across all the comparative groups. In addition, Ethiopia has the highest obesity rates compared to the other three groups.

#### Prevalence of undernourishment (2010-2019)

% of population

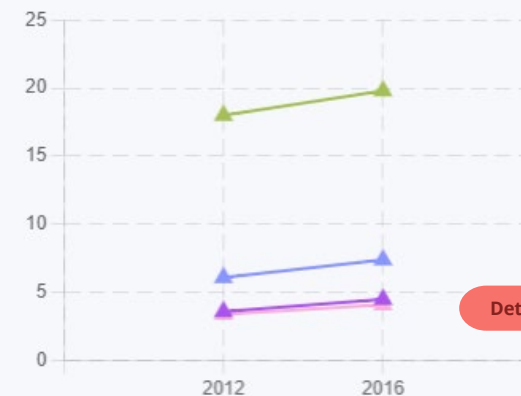


Improve

Source: World Bank

#### Prevalence of obesity in the adult population (2007-2016)

% of population >=18 years old



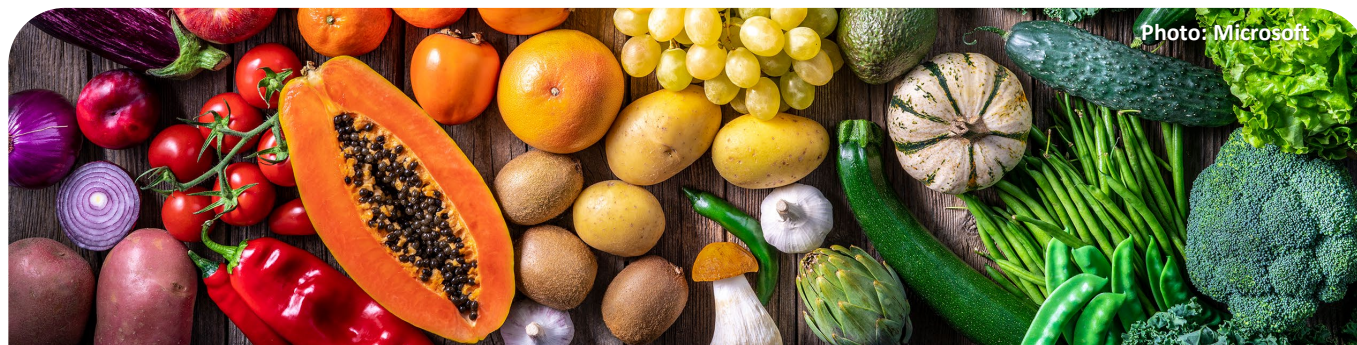
Source: FAO Ethiopia DHS

Deteriorate

● Ethiopia ● Geographic neighbors ● Countries with similar GDP per capita ● World average

# Ethiopia Food System Profile: POSSIBLE AREAS OF ACTION

## POSITIVE aspects in the food system that would be important to maintain:



- Ethiopia has good food production but there is need to increase capacity for increased production.
- Low consumption level of ultra-processed foods.
- Ethiopia is doing better than her neighbors in terms of food processing, but this is going down. Efforts are required to keep a positive trend on healthy processing of nutritious foods -without losing nutrients.
- Food storage and distribution is improving, and Ethiopia is doing better than the neighboring countries although still low. Could also think of ways of advancing food distribution –to be more inclusive and modernized.
- Promotion of healthy foods by government of Ethiopia.



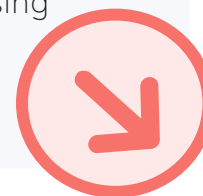
# Ethiopia Food System Profile: POSSIBLE AREAS OF ACTION

## Areas where Ethiopia NEEDS IMPROVEMENT

*(If we look at the peer countries, it seems that Ethiopia has the potential to perform better in these areas):*



- Technological innovations are quite low in Ethiopia compared to her neighbors
- Low dietary diversity. There is need for Ethiopia people to diversify their diets. Currently there is high consumption of cereals and energy dense foods.
- Sharp increase in urbanization. Need to design food system interventions considering the increasing urbanizations; introduce interventions that will reduce urbanization.
- Low modernization in food retail. Need to improve this given the increasing urbanization rates.
- Food unaffordability. High cost of food is a challenge in Ethiopia.
- Need for access to convenience healthy foods especially with the increasing urbanization.
- Need to attract more foreign investment for improved FDI in the country.



# Ethiopia Food System Profile: POSSIBLE AREAS OF ACTION

**Elements of  
the context  
to REFLECT  
ON their  
implications  
in the  
system:**



- Rapid Urbanization. This is tremendously increasing in Ethiopia. Need to deeply reflect on its effect on food systems and how this could be addressed to avoid negative effects.
- Need to reflect on how trade policies affects a country's food system. Increased food export is beneficial in bringing in foreign exchange to the country but at the same time may put strain to the country's food basket when more of the local production is exported instead of consumed locally.
- Improving the current food distribution channels from traditional to more modernized and inclusive offering opportunities throughout the system for micro, small, and medium-sized businesses- could attract youth?





Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,  
Education and Research EAER  
**Federal Office for Agriculture FOAG**



The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) is part of CGIAR, a global research partnership for a food-secure future.

Bioversity International is the operational name of the International Plant Genetic Resources Institute (IPGRI).

#### Headquarters

Via di San Domenico, 1  
00153 Rome  
Italy  
Tel. (+39) 06 61181

[www.alliancebioversityciat.org](http://www.alliancebioversityciat.org)  
[www.cgiar.org](http://www.cgiar.org)