

# Using the Food Systems Dashboard to examine the food supply, nutrition, and health outcomes in Kenya & Tanzania **for policymakers**



## Purpose and Use

These briefs demonstrate how various stakeholders can use the Food Systems Dashboard to inform their work.

- The purpose of this brief is to show how policymakers can use the Food Systems Dashboard (FSD) to understand the status of a country's food system, how food supply influences outcomes, and how to make comparisons between countries.
- Stakeholders can learn about what actions are needed within food systems to promote positive outcomes and avoid negative consequences by using data, making comparisons across countries, and examining trends.



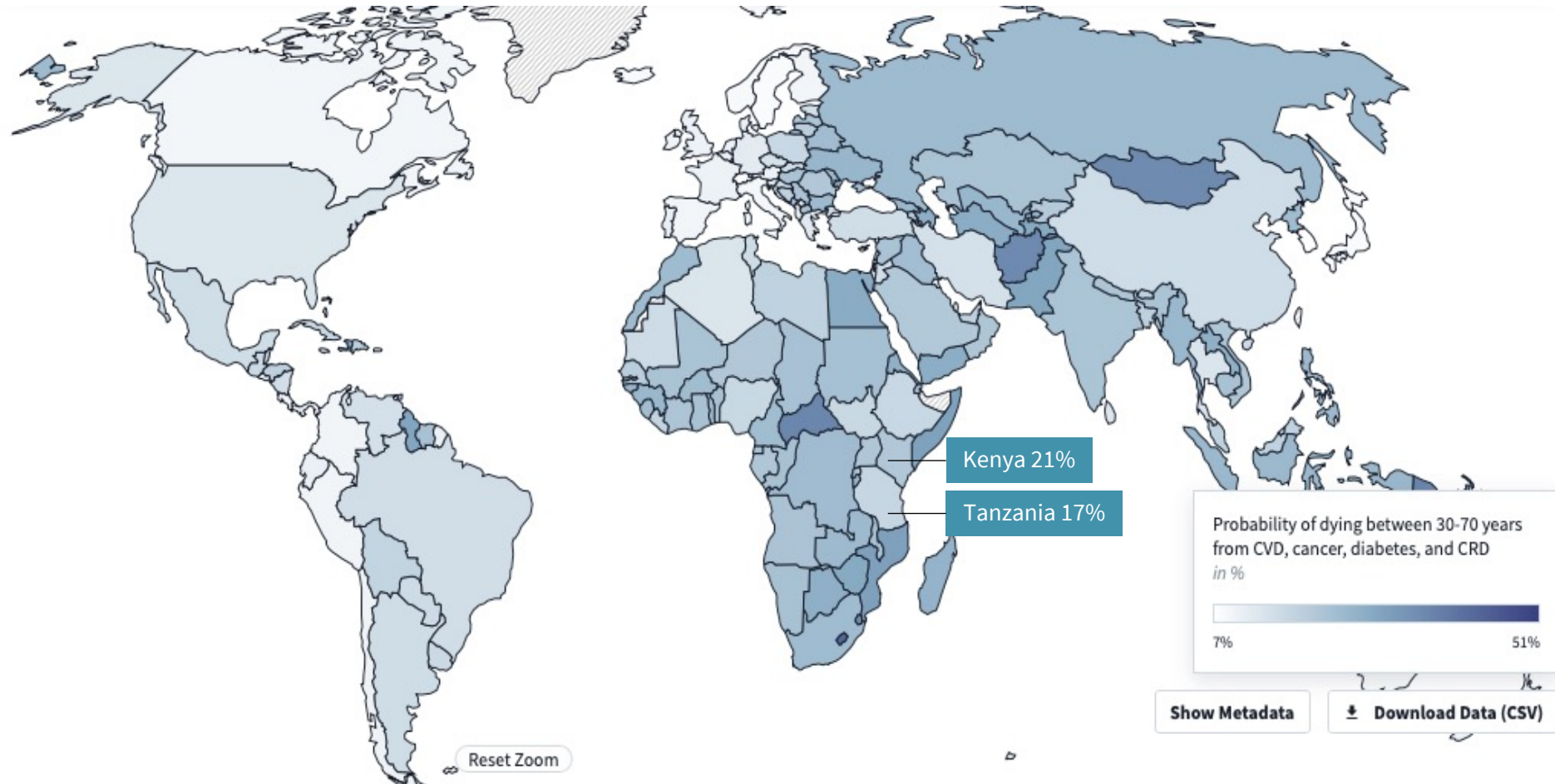
## Food supply shapes nutritional possibilities

- Recommended diets for human health promote consumption of fruits, vegetables, whole grains, and a variety of protein sources.
- Diets linked to poorer health outcomes tend to include high amounts of added sugar, salt, unhealthy fats, and highly-processed foods. These diets are a top risk factor for death and disability, as they increase prevalence and severity of noncommunicable diseases (NCDs), according to recent data from the Global Burden of Disease.
- NCDs are rising everywhere, particularly in East African emerging economies.

***Let's look at how the food supply in Kenya and Tanzania may be affecting health outcomes.***

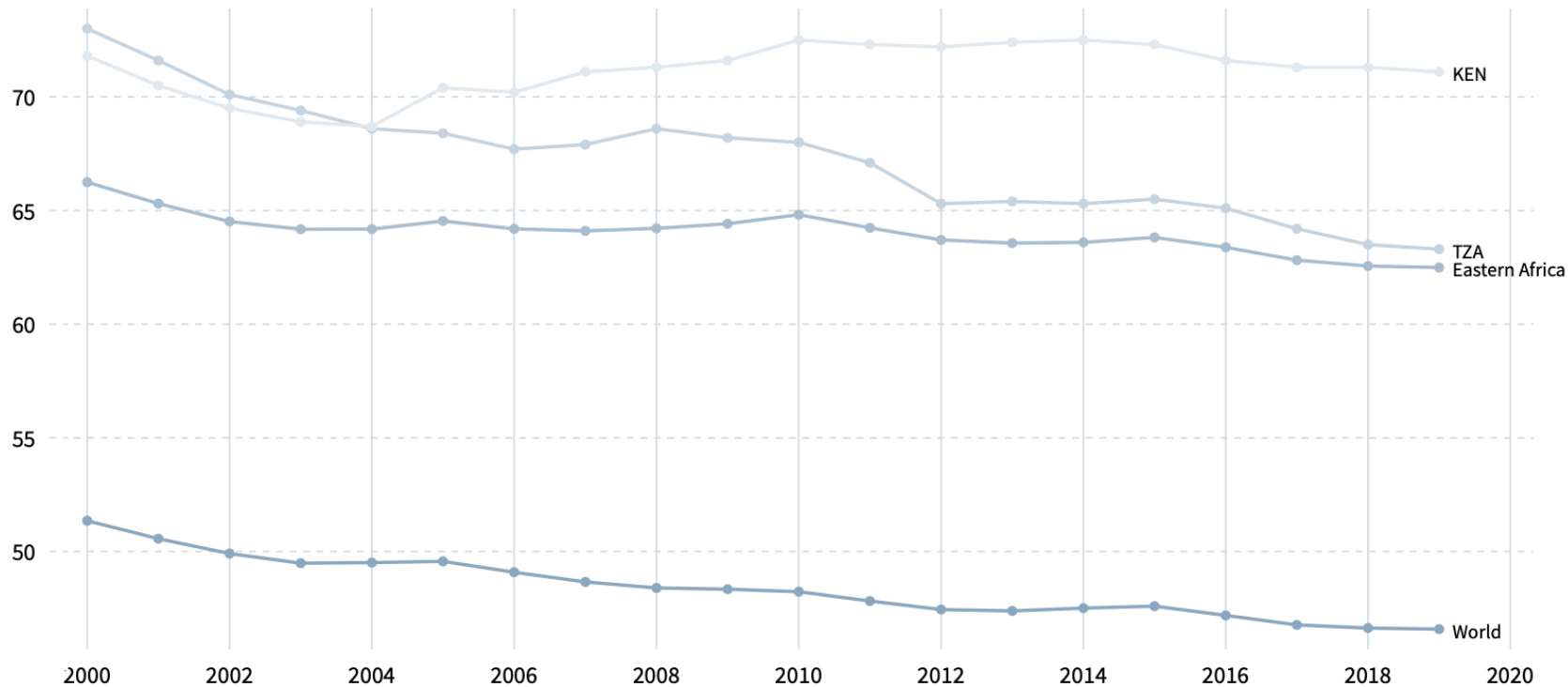


The probability of dying from cardiovascular disease (CVD), cancer, and diabetes between ages 30 to 70 is 21% in Kenya and 17% in Tanzania



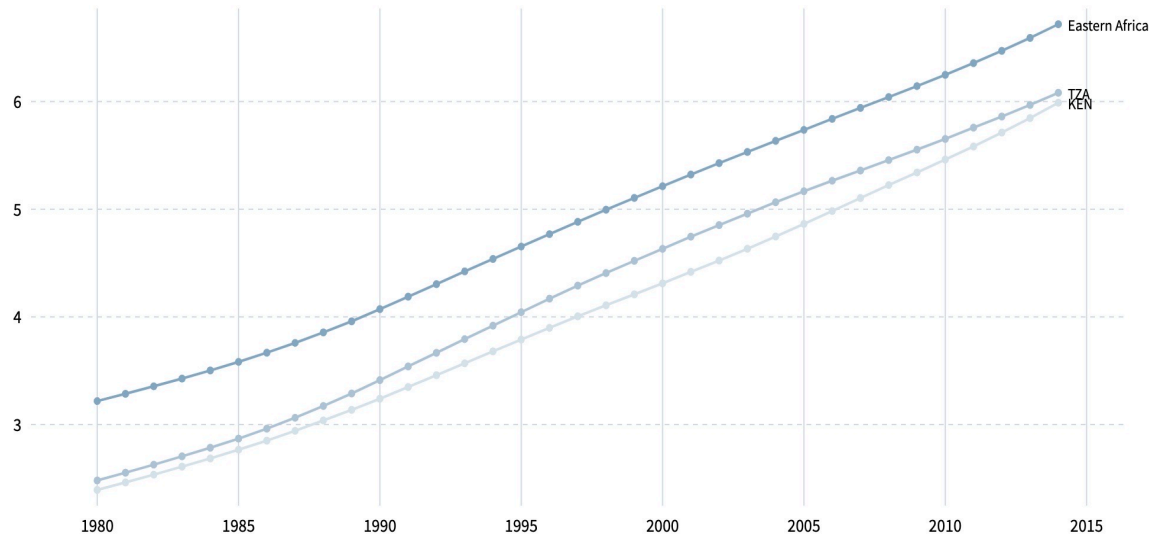
The percent of NCD deaths considered premature—that is, the share of deaths that occurs among people below age 70—is similar in Tanzania to the region but Kenya is higher and both countries are higher than the world.

**Percent of noncommunicable disease deaths that are premature (%)**

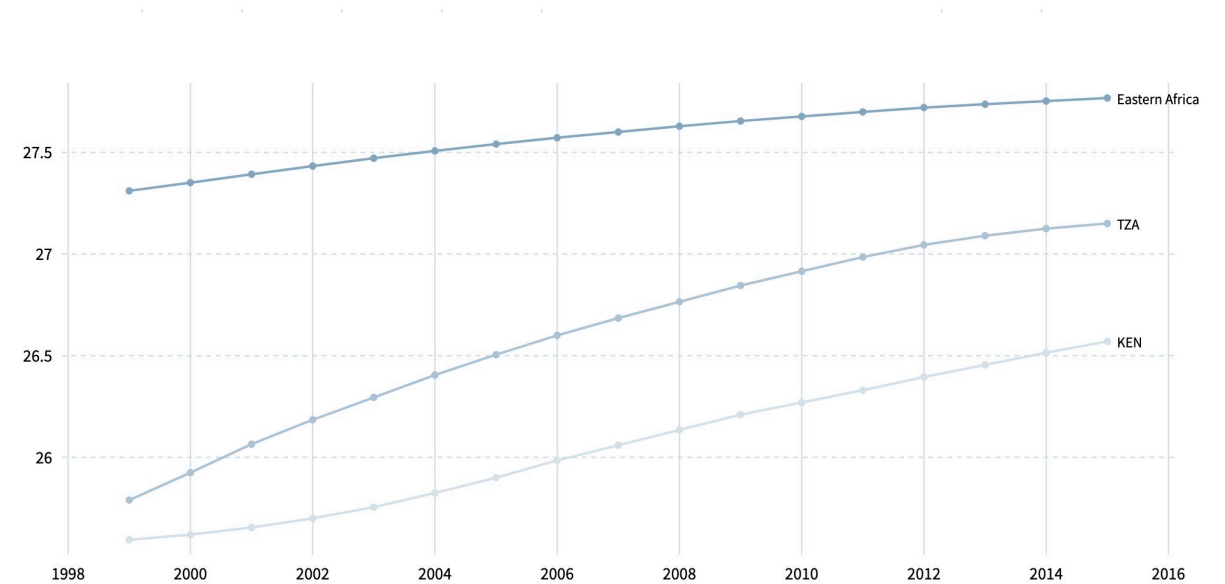


## Diabetes and high blood pressure prevalence is also increasing in both countries

**Adult diabetes prevalence (%)**



**Adult raised blood pressure (systolic and/or diastolic blood pressure  $\geq$  140/90 mmHg) (%)**



*High consumption of processed, sugary foods contributes to Type II diabetes.*

*High sodium intake via consumption of salt in processed food can contribute to high blood pressure, which increases the risk of CVD.*

One strategy to reduce the risk of diabetes, high blood pressure, and other NCDs is through increasing the consumption of fruits and vegetables. Is there an adequate supply of fruits and vegetables in Kenya and Tanzania to meet dietary recommendations?

Let's use the *Country Profiles* section of the Dashboard to find out

## Country Profiles

### Africa

#### CENTRAL OR MIDDLE AFRICA

 Angola

 Cameroon

 Central African Republic

 Chad

 Congo

 Democratic Republic of the Congo


 Equatorial Guinea

 Gabon

 Sao Tome and Principe

#### EASTERN AFRICA

 British Indian Ocean Territory

 Burundi

 Comoros

 Djibouti

 Eritrea

 Ethiopia

 French Southern Territories

 Kenya

 Madagascar

 Malawi

 Mauritius

 Mayotte


 Mozambique

 Réunion

 Rwanda

 Seychelles

 Somalia

 South Sudan

 Uganda

 United Republic of Tanzania

 Zambia

 Zimbabwe

Through the Country Profiles, FSD users can view an assessment of a country's food system, which identifies potential and likely challenge areas.

For Kenya, this indicates several potential challenge areas, shown in yellow:

- Fruit losses
- Vegetable losses
- Supply of fruit
- Supply of vegetables



#### Food Supply Chains

- Average crop species richness
- Cereal losses
- Fruit losses
- Pulse losses
- Vegetable losses



#### Food Environments

- Affordability of a healthy diet: Ratio of cost to food expenditures
- Cost of a healthy diet
- Cost of an energy sufficient diet
- Cost of legumes, nuts, and seeds relative to the starchy staples in a least-cost healthy diet
- Dietary energy in food supply
- Share of dietary energy from cereals, roots, and tubers
- Supply of fruit
- Supply of pulses
- Supply of vegetables
- Retail value of ultra-processed food sales per capita

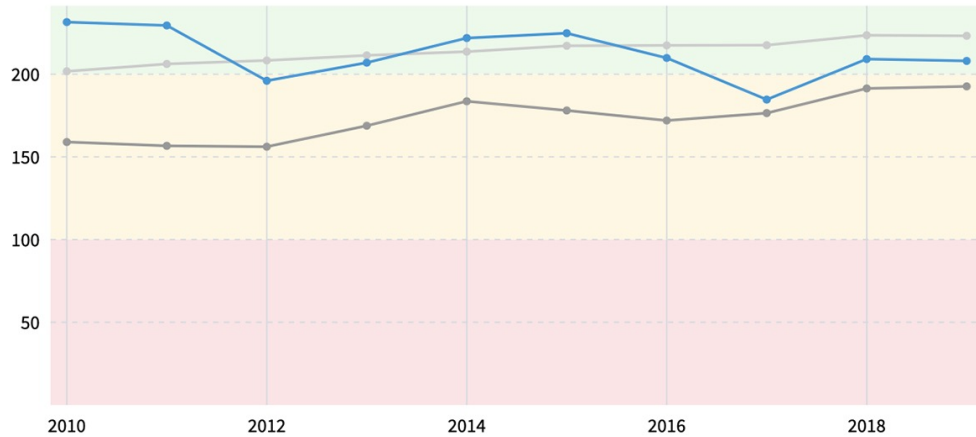
More information on the diagnostics can be found in Herforth, A. et al. "Diagnosing the performance of food systems to increase accountability toward healthy diets and environmental sustainability." PLoS One 17.7 (2022): e0270712.



## Tanzania's fruit supply is adequate and therefore an unlikely challenge area...

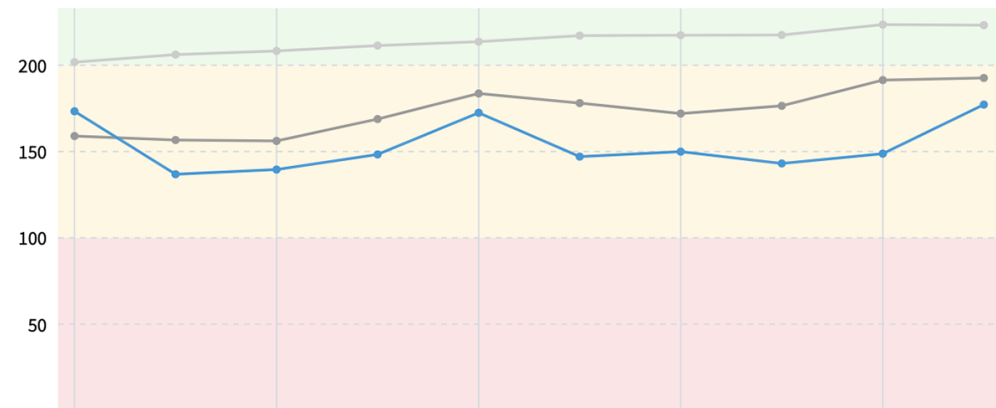
 **Supply of fruit (g/capita/day)**  
Food Environments > Food availability

● United Republic of Tanzania ● Eastern Africa ● World



 **Supply of fruit (g/capita/day)**  
Food Environments > Food availability

● Kenya ● Eastern Africa ● World



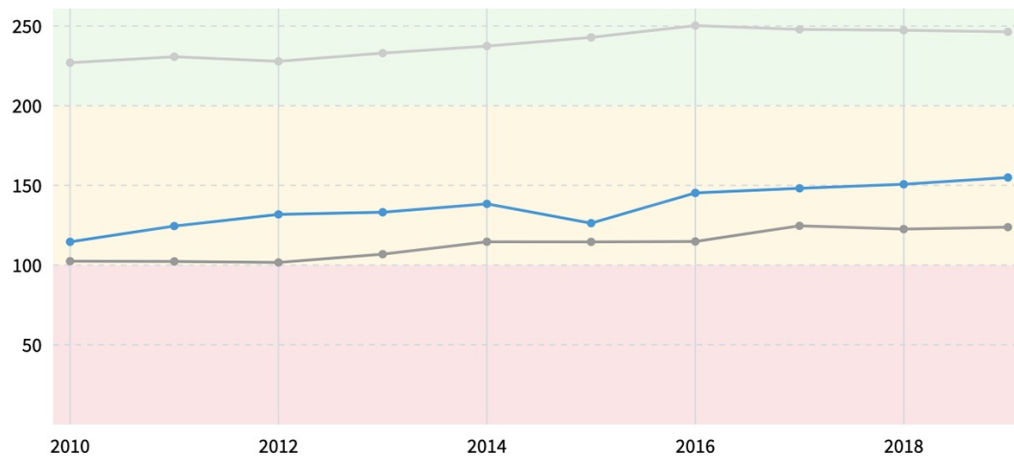
...while Kenya's is a potential challenge area.



# The supply of vegetables is a potential challenge area for both countries

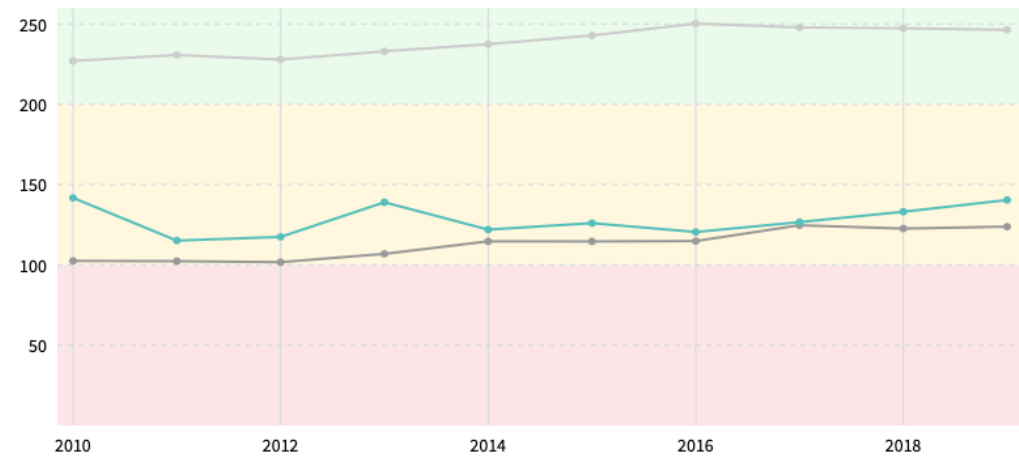
**Supply of vegetables (g/capita/day)**  
Food Environments > Food availability

● United Republic of Tanzania ● Eastern Africa ● World



**Supply of vegetables (g/capita/day)**  
Food Environments > Food availability

● Kenya ● Eastern Africa ● World



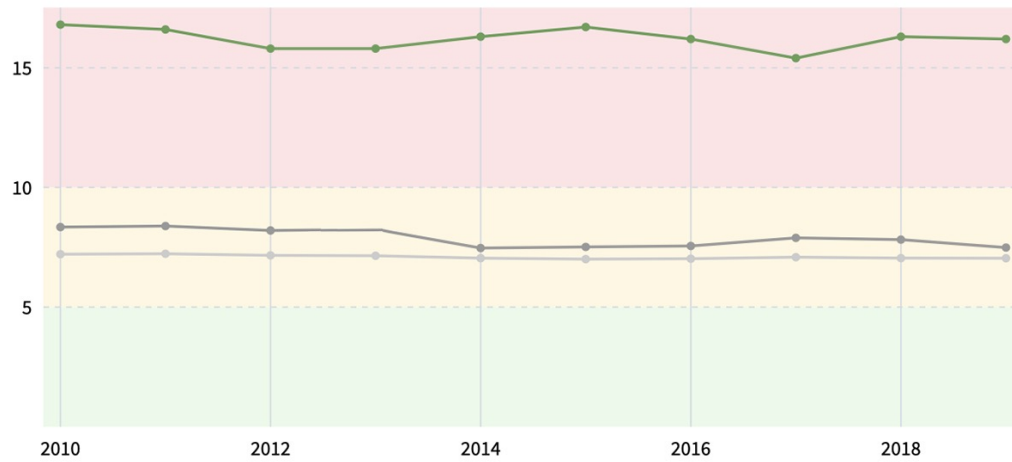


# Both countries face fruit losses along the supply chain that may affect the quantity of food available for consumption

## Fruit losses (%)

Food Supply Chains > Storage and distribution

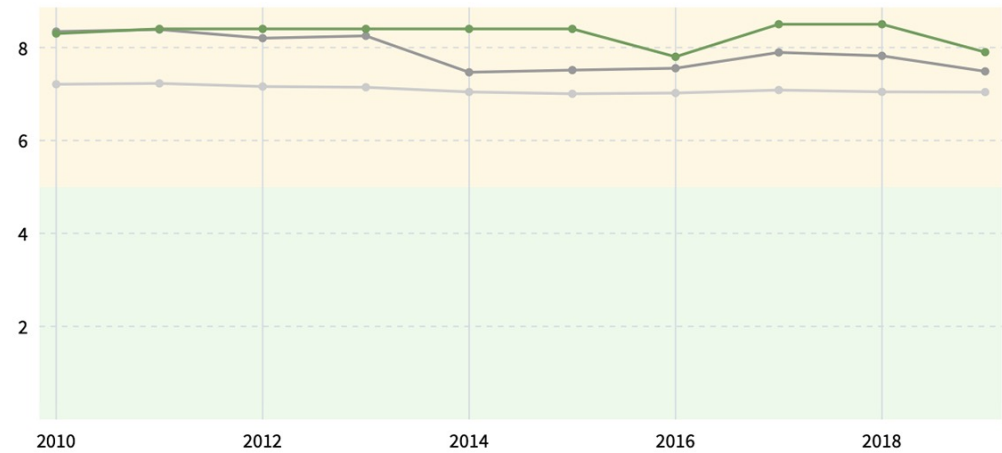
● United Republic of Tanzania ● Eastern Africa ● World



## Fruit losses (%)

Food Supply Chains > Storage and distribution

● Kenya ● Eastern Africa ● World

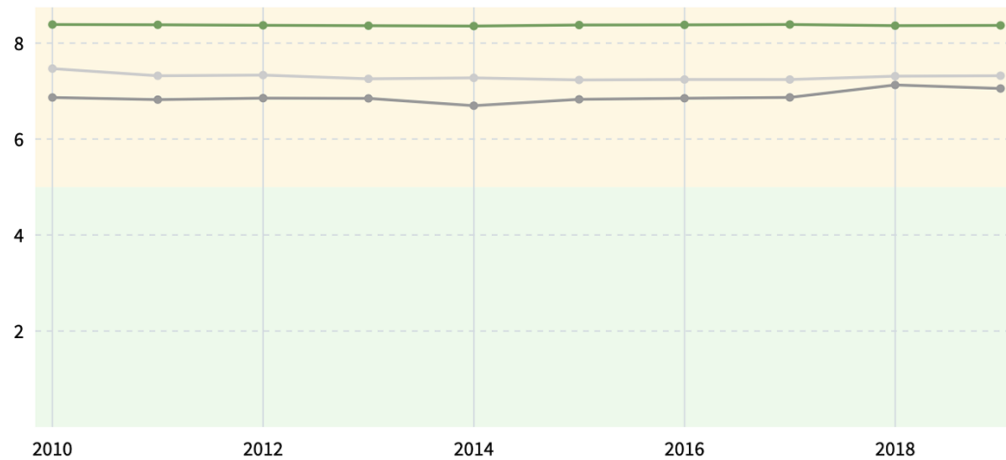




# They also face vegetable losses along the supply chain, a potential challenge area

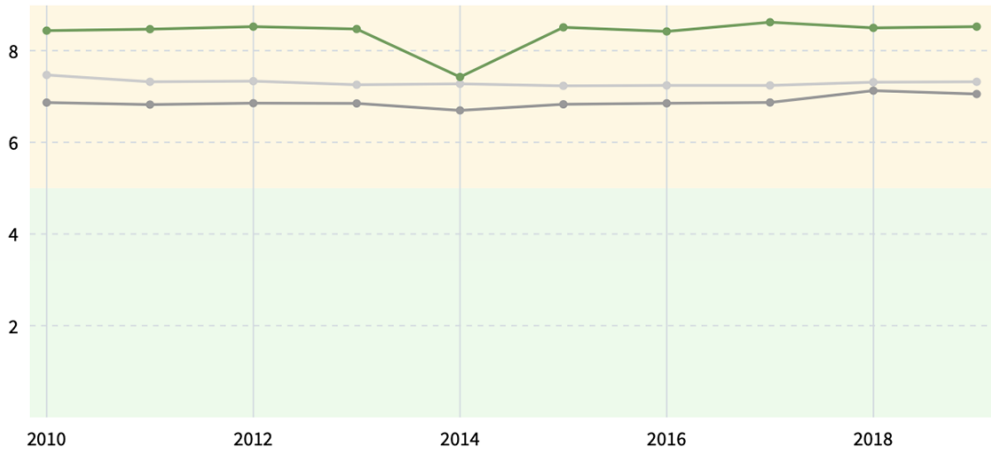
**Vegetable losses (%)**  
Food Supply Chains > Storage and distribution

● United Republic of Tanzania ● Eastern Africa ● World



**Vegetable losses (%)**  
Food Supply Chains > Storage and distribution

● Kenya ● Eastern Africa ● World



## Consumption of fruits and vegetables is low in both countries

**Adults (age ≥15 years): Consumption of at least one fruit (Percent)**



30% of adults in Kenya and 47% of adults in Tanzania did not eat any fruit the previous day.

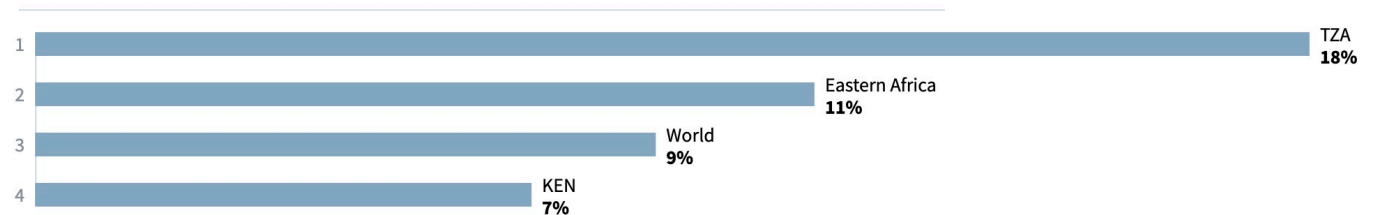
**Adults (age ≥15 years): Consumption of at least one vegetable (Percent)**



14% of adults in Kenya and 32% of adults in Tanzania did not eat any vegetables the previous day.

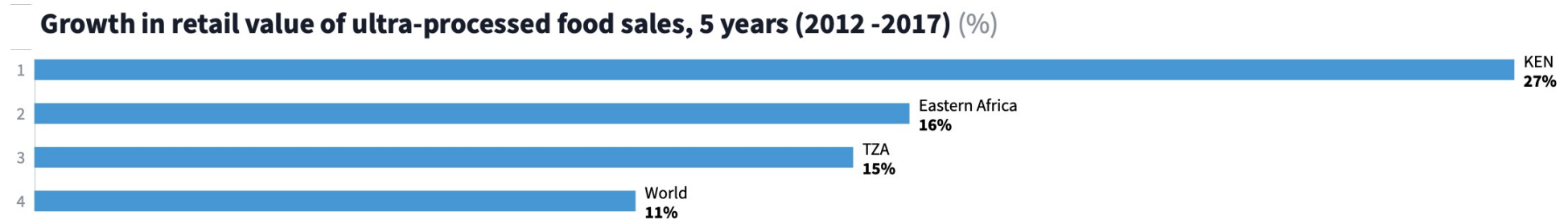
18% of adults in Tanzania did not eat any fruit or vegetables the previous day.

**Adults (age ≥15 years): Zero vegetable or fruit consumption (%)**





## The growth in retail value of ultra-processed food sales (2012-2017) has risen in both countries, most dramatically in Kenya



*Ultra-processed food is typically energy-dense, lacks adequate nutrients, and its consumption is linked to NCDs.*



## Key Messages and Recommendations

### Key Messages

- Premature mortality from NCDs, many of which are linked to diet, is relatively high in both Kenya and Tanzania.
- Consumption of fruits and vegetables has been associated with decreased risk of NCDs; however, most Kenyan and Tanzanian adults are not consuming enough fruits and vegetables daily.

#### **Both countries are facing:**

- Rising diabetes and high-blood pressure, though the prevalence of these is higher in Tanzania
- Challenges with the supply of vegetables
- Problems with fruit and vegetable losses along the supply chain
- Growth in the sales of ultra-processed foods, most stark in Kenya

### Recommendations

- Increase availability and affordability of fruits and vegetables by improving distribution, storage, and packaging.
- Promote the consumption of fruits, vegetables, and less processed foods through dietary guidelines.
- Incentivize the reformulation of ultra-processed foods to have less added sugar, saturated fat, and salt.