

Food around the world

Data Visualization
2022 - 2023

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Topic and dataset

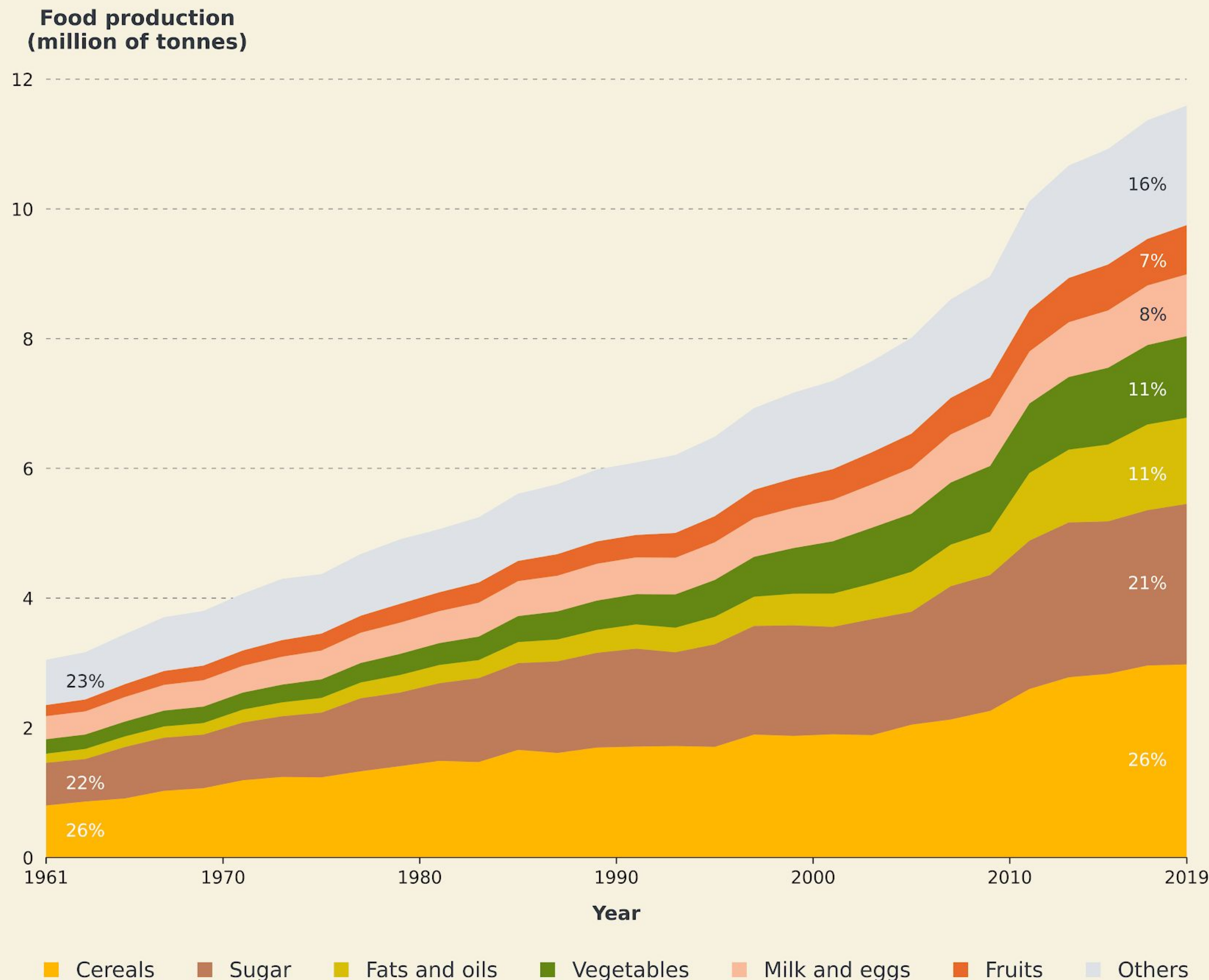
- **Topic:**
 - An analysis of global food production from 1961 to 2019
 - A comparison between food usage in year 1961 and year 2019
 - Top foods of the world
- **Dataset:** The dataset is part of the Food Agriculture Organization of the United Nations statistics to support the SDG - Sustainable Development Goals to hopefully reach ZERO HUNGER in the domains of Food Balance and Population. (<https://www.fao.org/faostat/en/#data>)
- **Github:** <https://github.com/carlodenardin/data-visualization-food>

Questions

1. How did the production of food change from 1961 to 2019? Has the production grown in proportion to the population?
2. What are the usage of the food produced in 1961 and 2019?
3. What did the world eat in 2019? What were the top foods consumed in our countries in that year?

Global food production from 1961 to 2019

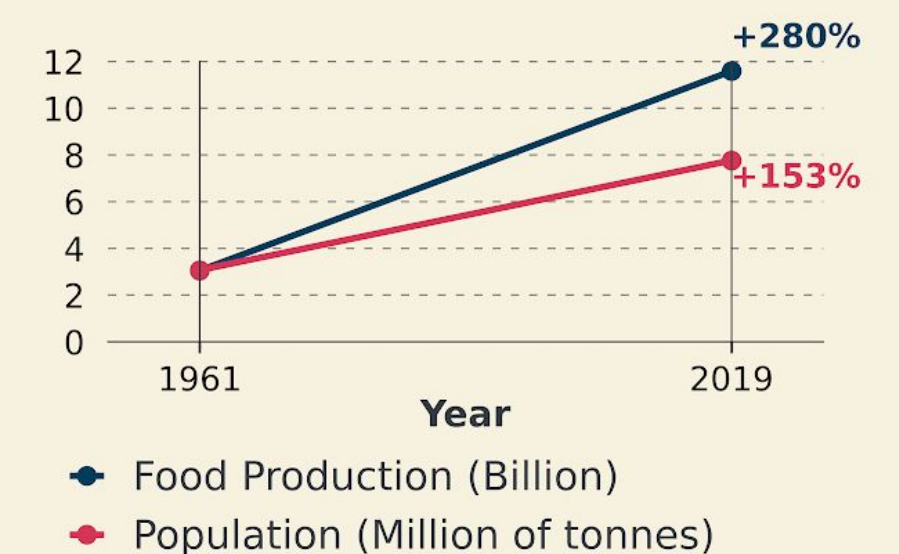
Global food production has almost quadrupled from 1961 to 2019



Sources: <https://www.fao.org/faostat/en/#data/FBSH>, <https://www.fao.org/faostat/en/#data/FBS>

Food production and population increase

Food production increase is almost double the population increase



Sources:

<https://www.fao.org/faostat/en/#data/FBSH>,
<https://www.fao.org/faostat/en/#data/FBS>,
<https://www.fao.org/faostat/en/#data/OA>

Note:

If all humans had access to the same amount of food produced, in 1961 we would have had **0.99** tons per capita annually and in 2019 we would have had **1.49** tons per capita annually.

Food production Data Attributes and Visual Channels

- Global food production from 1961 to 2019

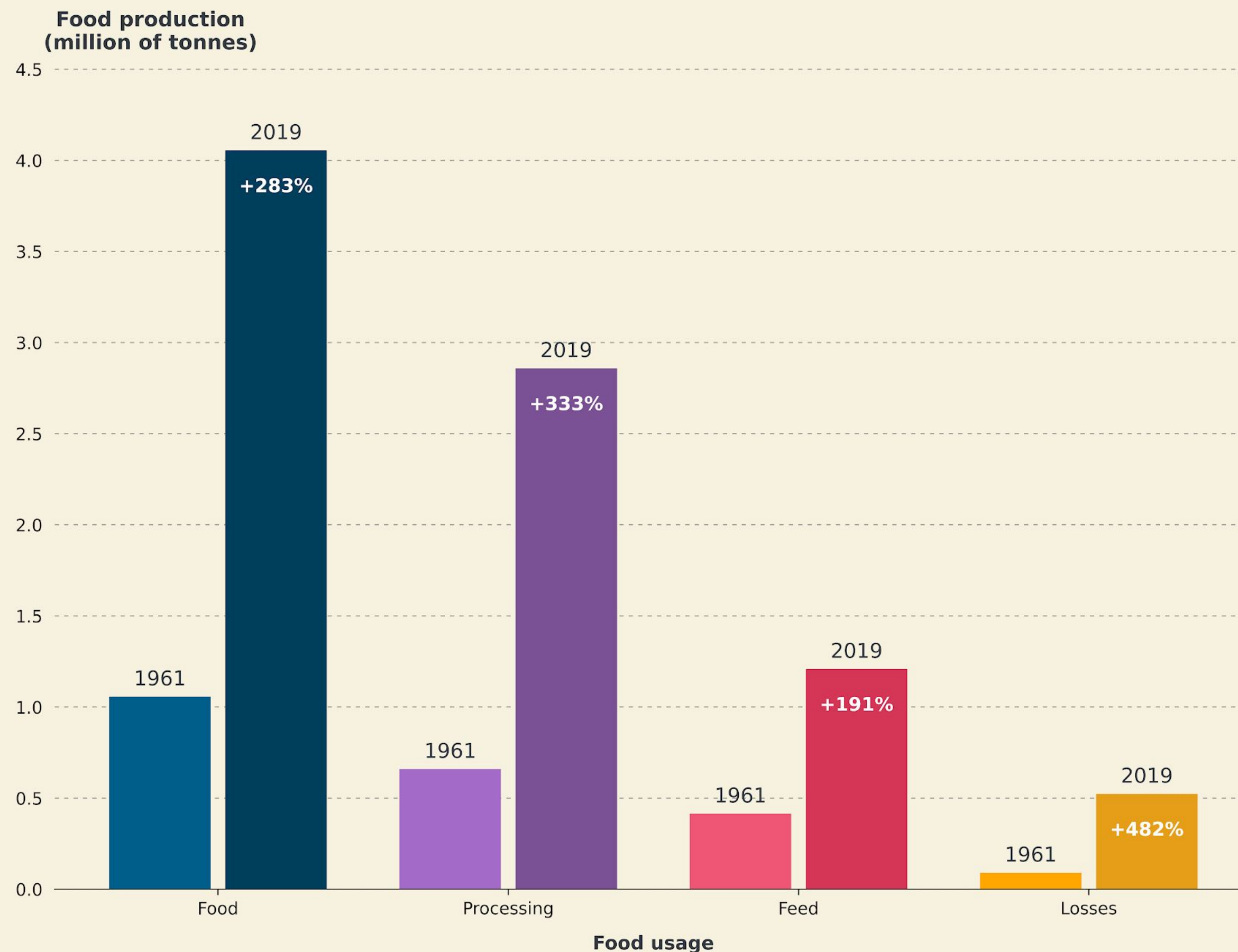
Data attributes	Visual channels
Food production	Position on the y-axis
Year	Position on the x-axis
Types of food	Color palette
Proportion of the types of food for the years 1961 and 2019	Percentage annotated in the plot

- Food production and population increase

Data attributes	Visual channels
Year	Position on the x-axis
Food production	Blue line
Population	Red line
Increase of the production and population between 1961 and 2019	Percentage annotated in the plot with the corresponding colors

Global food usage in 1961 and 2019

Management of food tripled in 2019 compared to 1961 with 482% increase in losses and 283% increase in human consumption.



Sources: <https://www.fao.org/faostat/en/#data/FBSH>, <https://www.fao.org/faostat/en/#data/FBS>

Terms:

Food = the amount of food we consume

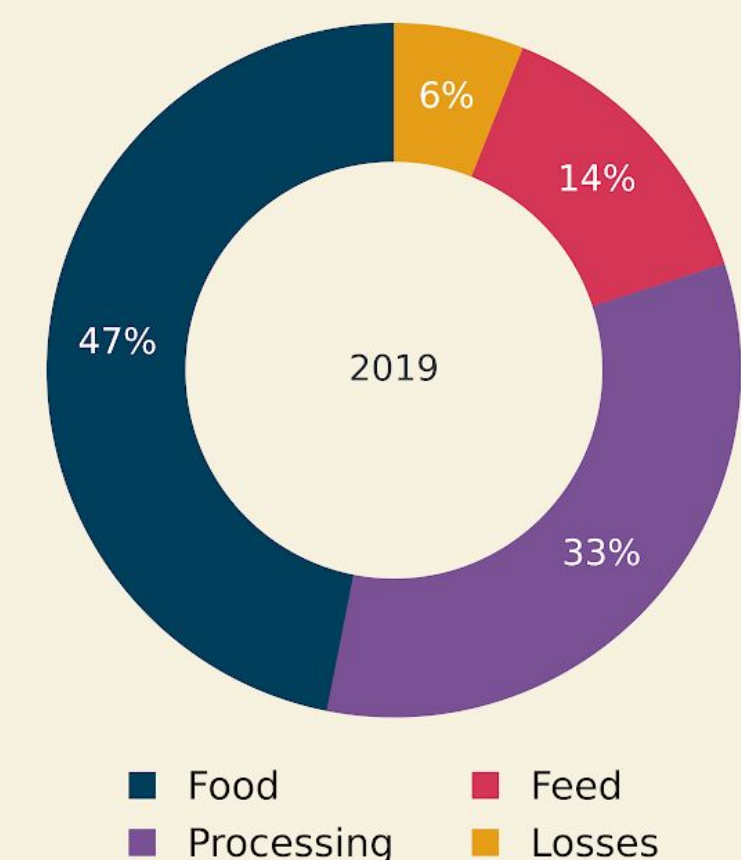
Feed = the amount of food we provide for the growth of animals

Processing = food items that are put to manufacture for food use and non-food use

Losses = the amount of food that we lose during transportation and storage

Global food usage distribution in 2019

The losses are only 6% of the production in 2019



Sources:

<https://www.fao.org/faostat/en/#data/FBSH>,
<https://www.fao.org/faostat/en/#data/FBS>

Food usage Data Attributes and Visual Channels

- Global food usage in 1961 and 2019

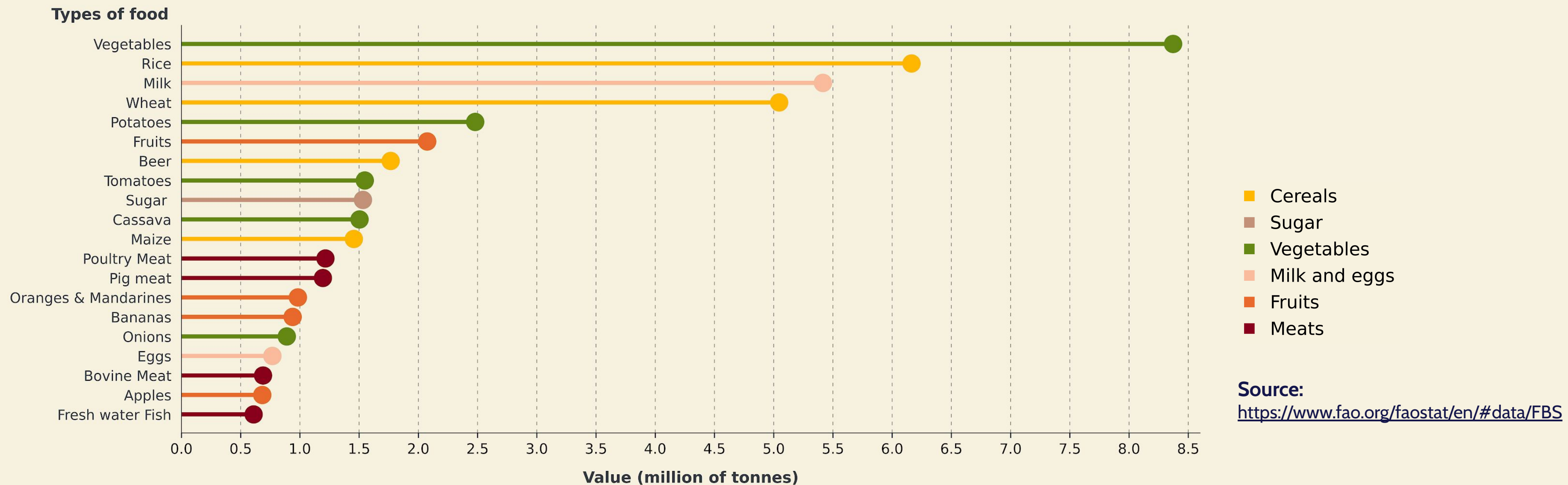
Data attributes	Visual channels
Years	Annotations over the bars
Amount of food produced	Position on y-axis
Different food usage	Position on x-axis
Increase percentage between 1961 and 2019	Percentages annotated in the bars
Different food usage	Color palette

- Global food usage in 2019

Data attributes	Visual channels
Percentage of food usage distribution	Size of the arcs - Area
Different food usage	Color hue

What's the world eating in 2019?

The top 5 food consumed are: vegetables, rice, milk, wheat, potatoes



Food of our countries

Egypt 🇪🇬



Italy 🇮🇹



Venezuela 🇻🇪



Source: <https://www.fao.org/faostat/en/#data/FBS>

World food rank Data Attributes and Visual Channels

- What's the world eating in 2019

Data attributes	Visual channels
Value	Length of the lollipop
Type of food	Ranked position on the y-axis
Food category	Color palette

- Food of our countries

Data attributes	Visual channels
Value	Size of the words - Area
Country (Area)	Color hue - Flags

Individual contributions

- **Dataset selection:** Bonaiuto Bolivar, De Nardin, Moustafa
- **Dataset parsing:** Bonaiuto Bolivar, De Nardin, Moustafa
- **Food production visualization:** De Nardin
- **Food usage visualization:** Bonaiuto Bolivar
- **World food rank visualization:** Moustafa
- **Aesthetic refinements:** De Nardin

Thank you!