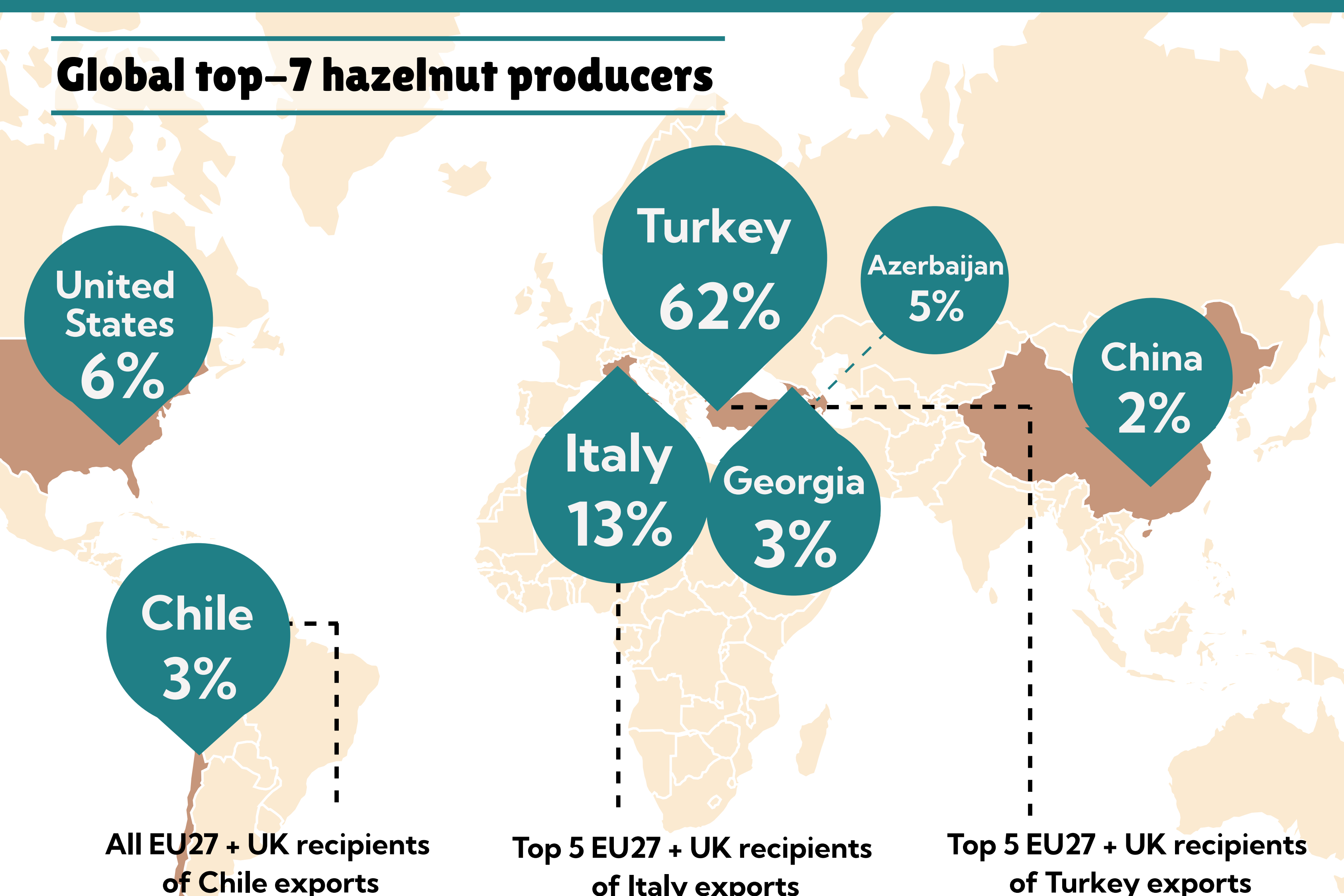


# Hazelnuts

## Production & Trade

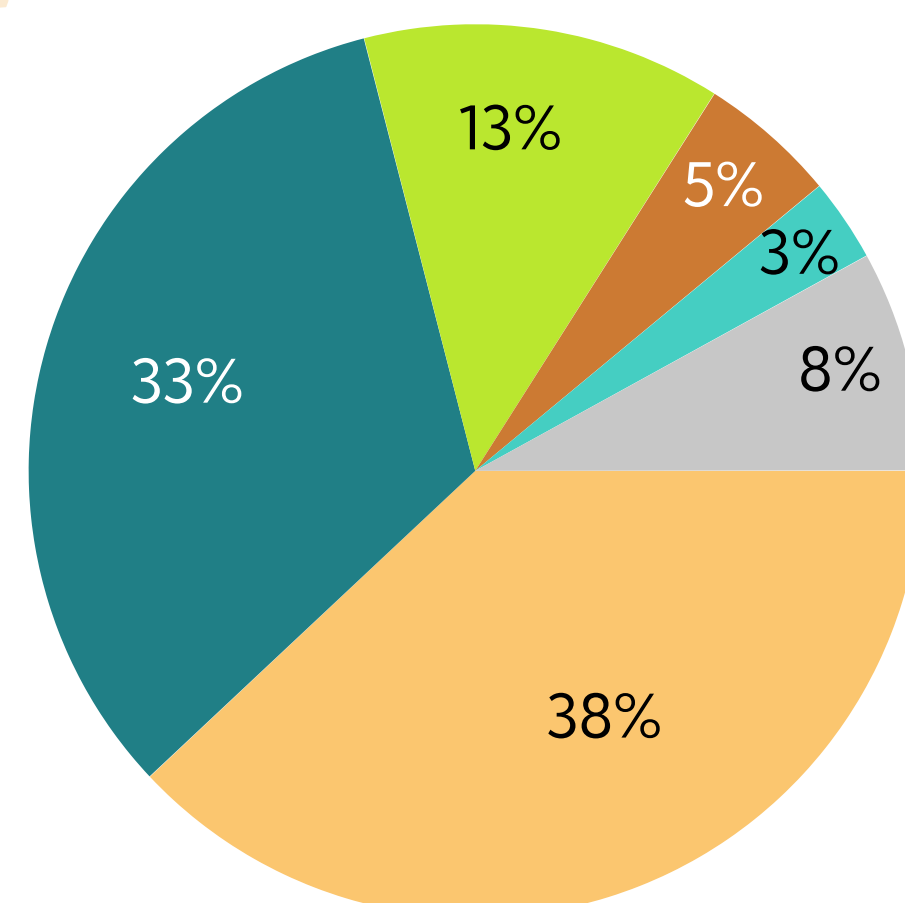
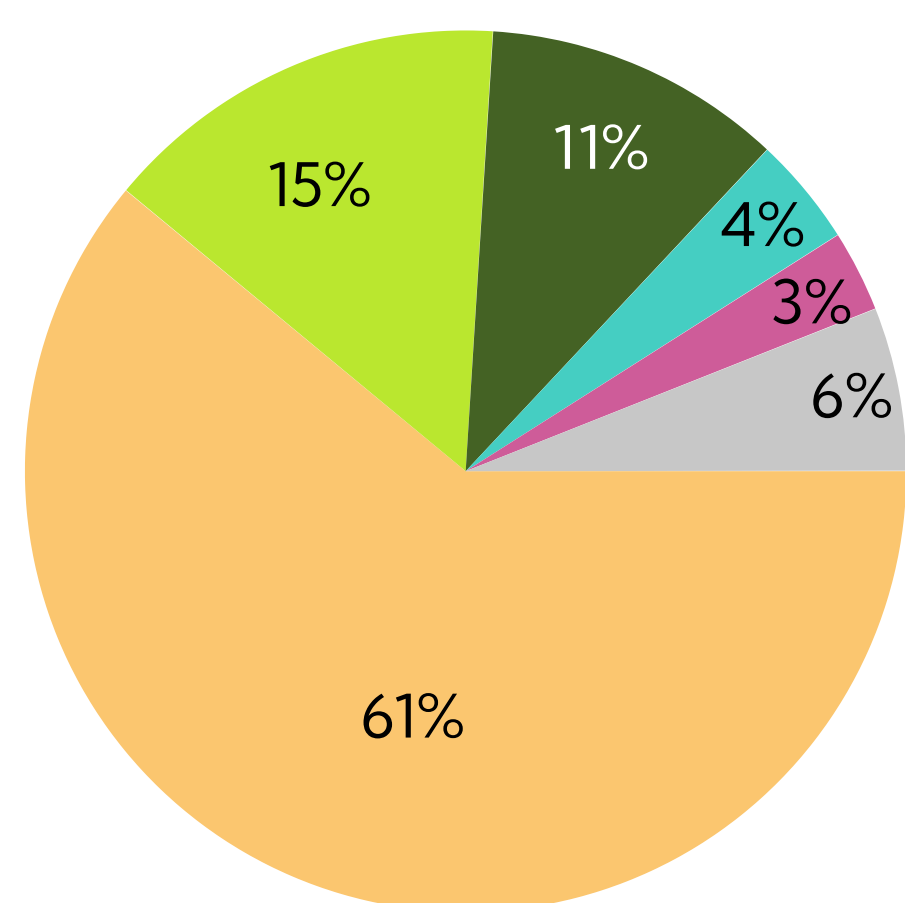
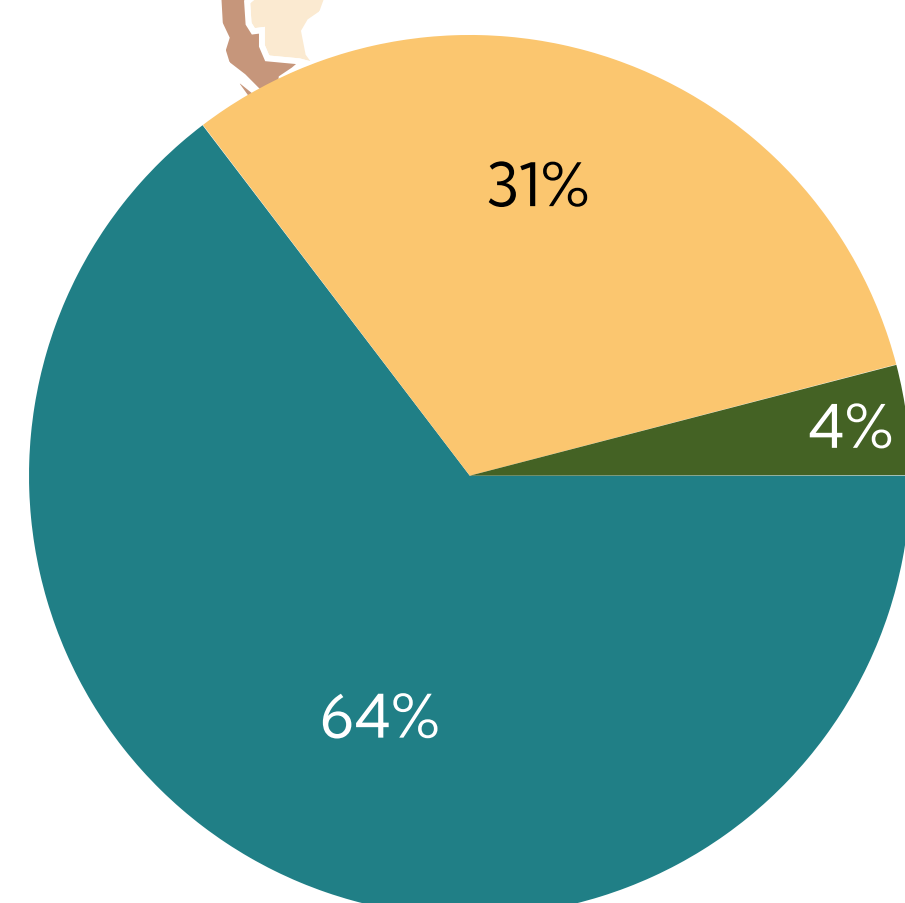
### Global top-7 hazelnut producers



In 2021, the EU imported the majority of hazelnuts from **Turkey (79%)** and **Chile (9%)**, that are respectively the first and fifth largest global producers of hazelnuts

Italy is the second largest global producer of hazelnuts (28,471 tonnes), but the country also imports from Turkey and Chile. **Within the EU, Italy is the largest supplier (57%) of hazelnuts to the EU.**

Apart from Turkey and Chile, **the EU also imports hazelnuts from Georgia (7%) and Azerbaijan (5%)** (and others such as the USA and Switzerland but volumes are close to 0%)



In **2020**, the top 7 producing countries **comprised 94% of hazelnuts production worldwide**. Iran is the only other country with a production share of slightly over 1%.

In the EU, also **France, Poland, Spain, Croatia, and Romania** produce hazelnuts, but volumes are negligible compared to the top-7 global producers, of which Italy is the second largest world producer.







# Hazelnuts

## Environmental Risks

Hazelnut production in Italy is currently characterized by **monocultures**. In the Viterbo region, **hazelnut trees dominate large parts of the farming area**. In Turkey, hazelnuts are largely produced in the Black Sea Region, where **monoculture of hazelnut trees prevail due to economic reasons**. The expanding area with hazelnut monocultures has affected biodiversity by limiting habitat provision while also causing problems with water, soil, and air. These monocultures have helped spread plant diseases and insects, resulting in the greater use of pesticides and herbicides.

### Biodiversity Loss



**10,515 m3/ton**

is the water footprint of hazelnuts production

The global average water footprint of hazelnuts production is **high**. This tree crop has been linked to groundwater depletion due to irrigation.

The exhaustion and pollution of several lakes in Italy have been connected to the extensive monoculture of hazelnuts. In Turkey, where hazelnut groves continue expanding, land conversion linked to this has severe effects on nearby water bodies.

### Water Use



The use of **chemical fertilizers and pesticides treatments** in hazelnut production in Italy is making the soil increasingly arid, which in turn has led to its erosion in some places. **Large quantities of fertilizers** have been used in the intensive hazelnut cultivation, and they have ended up in Lake Vico in Italy. This has caused the proliferation of so-called "red-algae," which produces carcinogenic chemicals that are harmful to environmental and human health.

**30%**

of all surface water monitoring sites in Italy detected one or more pesticides above the effect threshold

### Contamination



In Turkey, the **use of fertilizers, biocides, and lime in hazelnut orchard care** has been connected to chemical hazards for farm workers.

**1.07 kg CO2eq**

is the carbon footprint per kg of hazelnuts

The carbon footprint of hazelnuts is **low**.

### Emissions





# Hazelnuts



## Social Risks



**In general**, the working conditions of farmer workers producing and processing nuts are often bad. They work excessive overtime hours and often do not get enough to eat or drink. **Migrant labour issues are a major concern** in hazelnuts production, particularly in Turkey. Overall, seasonal agricultural workers in Turkey work under adverse conditions (12-hours working days, without formal contracts).

Reportedly, **Syrian refugees** work(ed) without permits on hazelnuts farms, without legal and social protection. There are strong indications that **discrimination of migrant workers** takes place in the production of hazelnuts in Turkey.



**Child labour** has been found in hazelnuts production in Turkey (the biggest world producer of hazelnuts and one of the main suppliers of the EU27 and the UK). Besides the heavy loads and exhausting working hours, children working in hazelnut production are also more vulnerable to the pesticides and toxic chemicals used.



Hazelnuts production can negatively affect the livelihoods of smallholder farmers. In Italy, the rush to invest in hazelnut plantations is **increasing land prices**, making it harder for small farmers to buy or rent land.

**Climate resilient production may be an issue.** The majority hazelnuts produced in Turkey are produced in the Black Sea region, where climate change has recently caused heat waves, shifting rain patterns, and severe storms, leading to declines in crop yields and affecting thousands of livelihoods.

