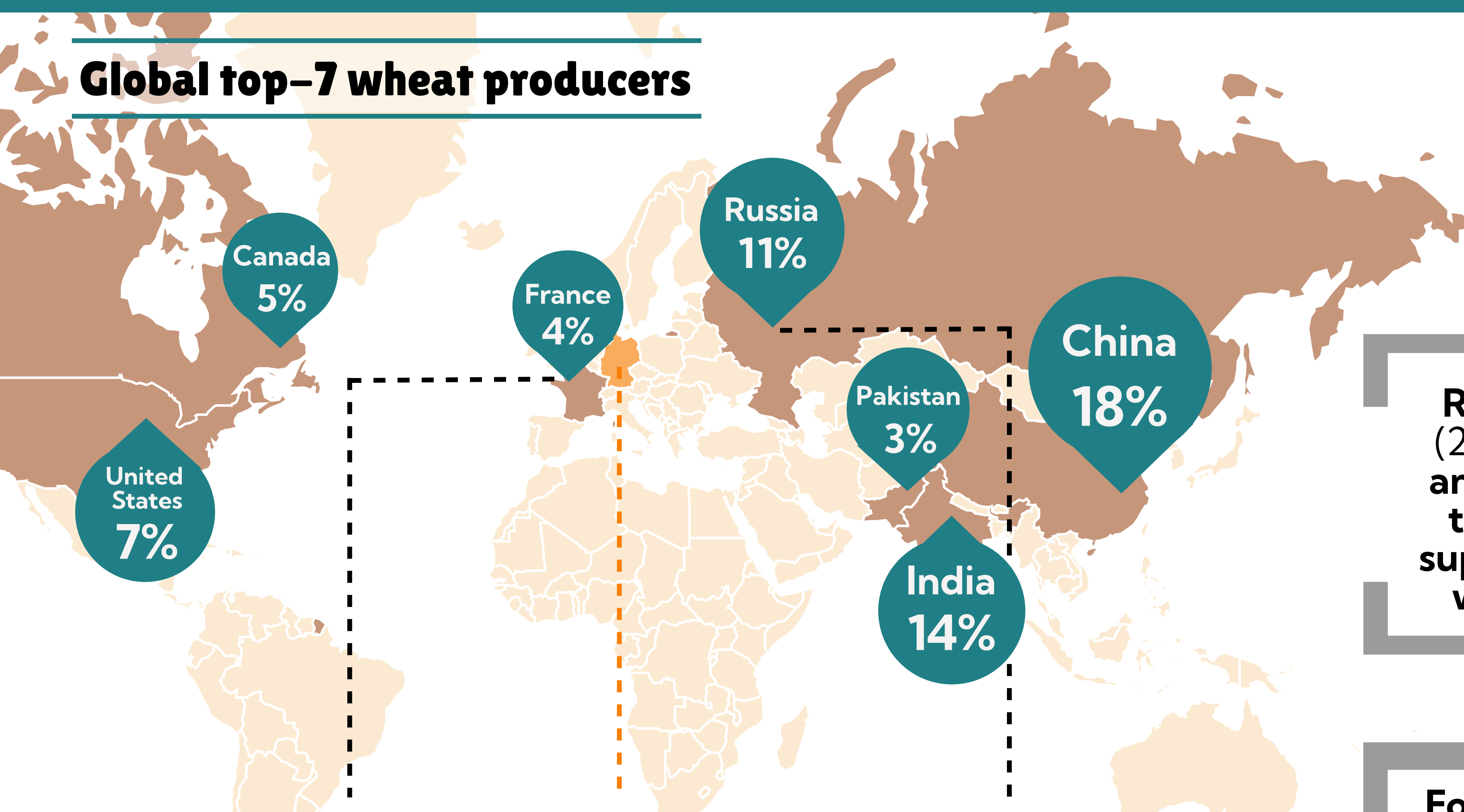


Wheat

Production & Trade

Global top-7 wheat producers

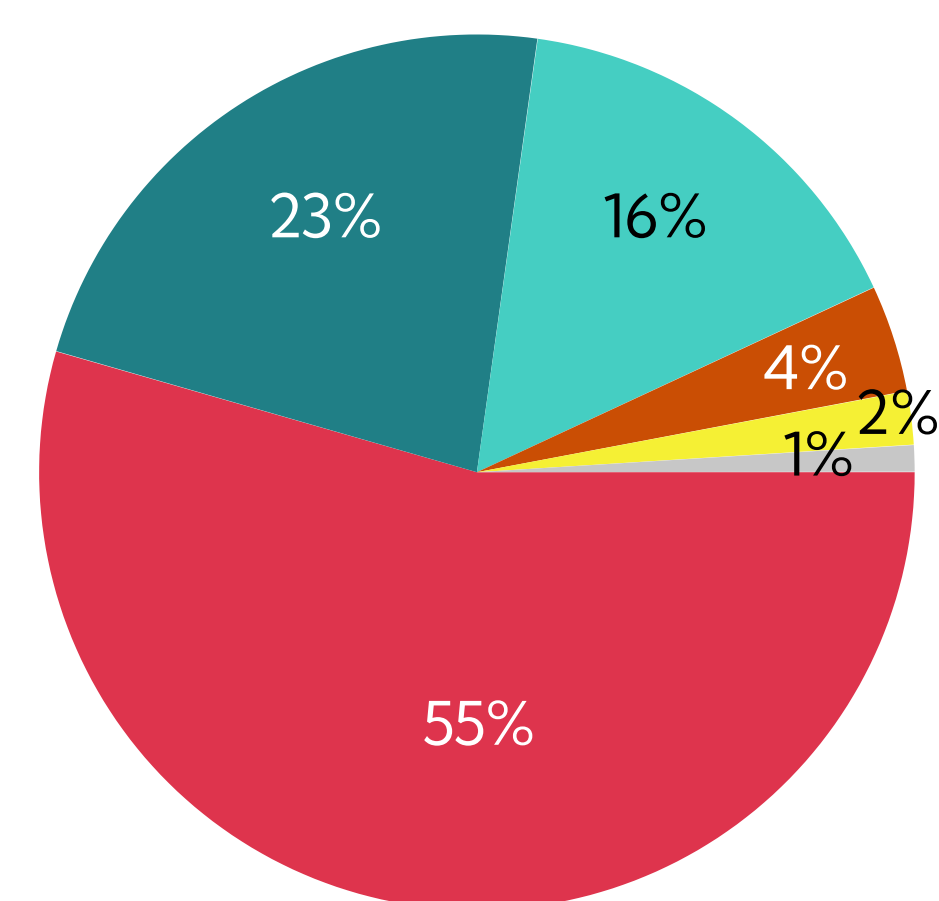
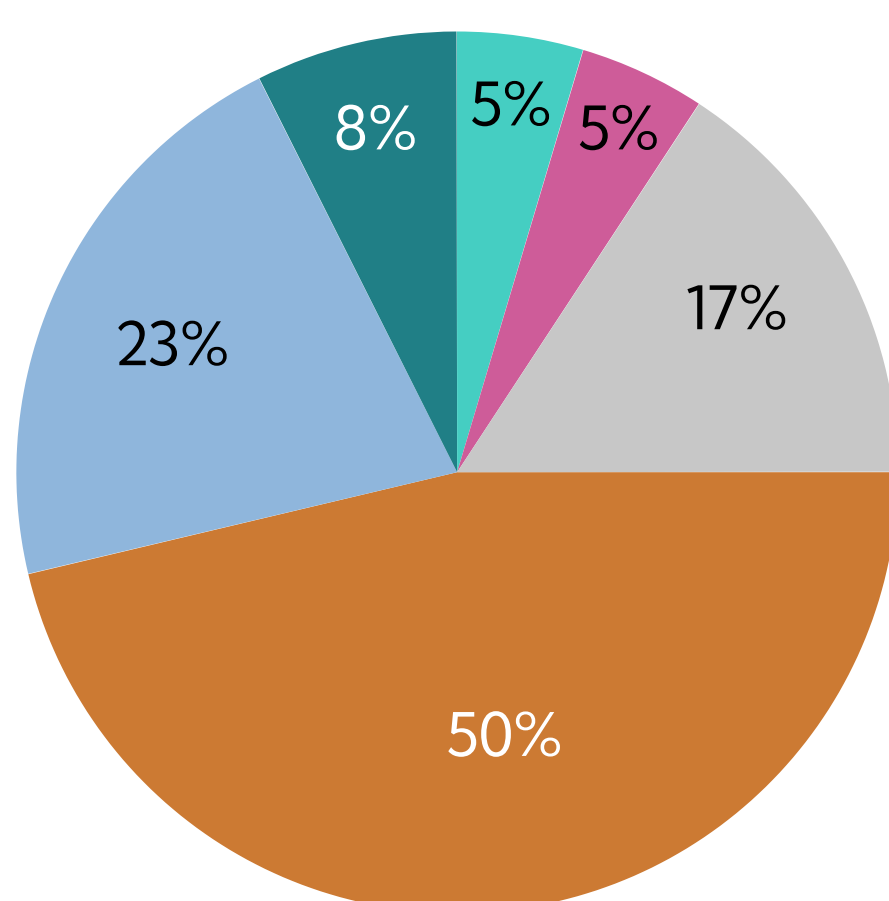
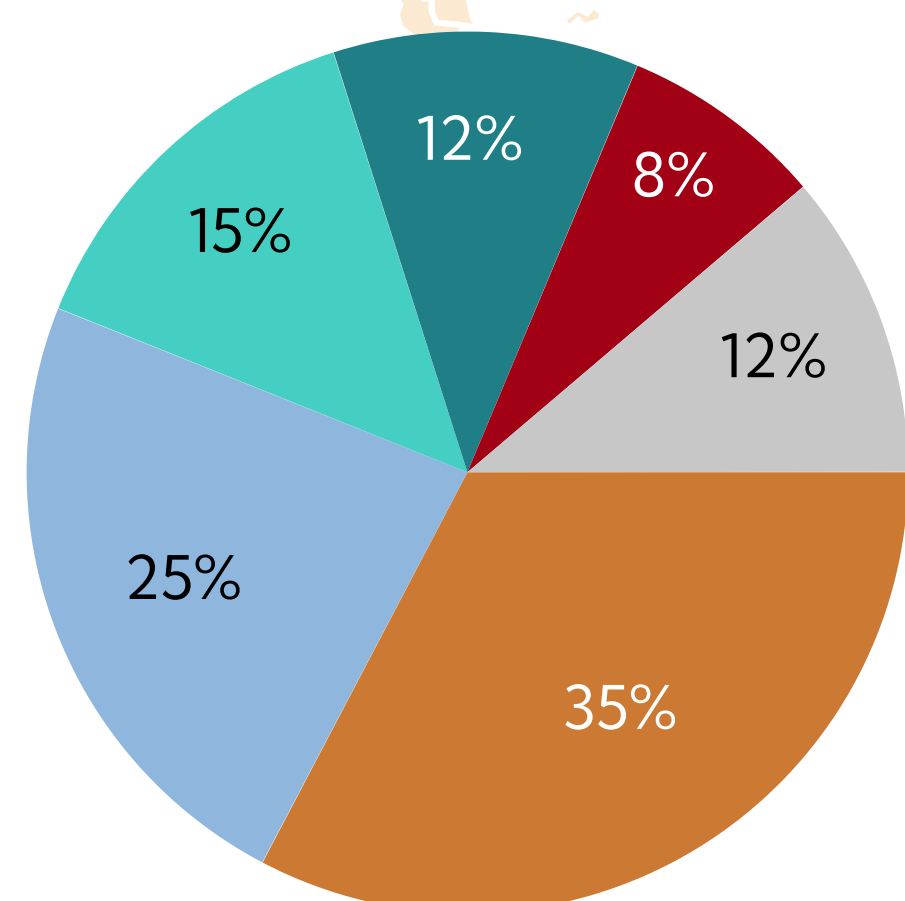


Russia (23%), Serbia (22%), Ukraine (16%), and Canada (13%) are the largest non-EU suppliers of (common) wheat to the EU28.

Top 5 EU27 + UK recipients of France exports

Top 5 EU27 + UK recipients of Germany exports

Top 5 EU27 + UK recipients of Russia exports



- | | | | |
|---------|---------|-------------------------|----------|
| Italy | Austria | Netherlands | Greece |
| Germany | Spain | Denmark | Portugal |
| Belgium | Cyprus | Other EU27+UK countries | |

For wheat starch, the largest non-EU suppliers to the EU28 are Serbia (90%), China (4%), and Turkey (3%). But in terms of volumes, the EU (mainly Austria) is the major supplier of starch to the EU28.

Italy and Spain are the largest recipient countries of wheat from France, Germany, and Russia. Greece is the largest recipient of Russian common wheat.

In **2020**, the top 7 producing countries **comprised 62% of wheat production worldwide**. Other countries with at least **3% share** in global wheat production are **Ukraine, Germany, Turkey and Argentina**.



Europe is also a major producer of wheat, with **France, Germany, and Czech Republic** being the top-3 European suppliers to the EU. Next to 'common wheat' (HS 101199), 'Wheat starch' (HS 110811) is a relevant product used in vega(n) products.



Wheat

Environmental Risks

Severe air pollution

has been linked to post-harvest burning of wheat residues in the North China plain.

Intensive wheat production has significant impacts on the levels of air, soil, and water pollution. Pesticides and fertilizers have been identified as the main sources of agricultural soil pollution.

In China, the excessive use of agrochemicals has largely lead to water contamination – more than 40% of China's rivers are highly polluted and about 80% of its lakes suffer from eutrophication. Agricultural production is the second largest source of ammonia nitrogen and the main responsible for water contamination in China. In fact, **nitrate leaching** (nitrate removal from the soil through drainage water) is prevalent in several cropping systems, among which wheat-maize rotations.

Contamination

Although the **water footprint of wheat is relatively low**, in many of the areas where it is cultivated, there is **substantial reliance on water supplied through irrigation**. A large part of wheat global production takes place in regions where there is high water stress, such as in China, India, and the U.S. The irrigation demands of wheat production in such water strained areas leads to **decreased river flows and groundwater depletion**, contributing not only to water scarcity, but also reduced harvests and loss of income for farmers.

**1.827
m3/ton**

is the water footprint of wheat

Water Use

From both the top-7 wheat producers and EU wheat suppliers, **only India's wheat production has been linked to deforestation risk – 1501,12 hectares in 2018** (17% of the total deforestation risk associated with global wheat production in the same year). **Soil exhaustion is also a side effect of intensive wheat production**, leading to lower yields. Phosphorus shortage, one of the main indicators of soil degradation and nutrient depletion, has been connected to the harvesting/cultivating of crops such as wheat.

Land Use & Deforestation

**0.67
kg CO2eq**

is the carbon footprint per kg of wheat

The **carbon footprint per kg of wheat is low**. However, a significant share of greenhouse gas (GHG) **emissions associated with wheat production**, especially in more intensified, high-yielding systems, **originates from the use of fuel, fertilizers and pesticides**. In China, agricultural activities account for 17% of the total GHG emissions, of which nitrogenous fertilizer overuse is one of its most important sources.

Emissions

Wheat

Social Risks

Labour conditions

Although wheat production has not been found a major driver of working condition concerns, **there are strong indications of forced labor in Pakistan's wheat production.**

In India, occurrences of precarious work conditions in the production of this crop have also been reported.

**50
days/year**

is the average amount of working time per year available for a seasonal worker in India.

The wheat-paddy crop cycle, which is labor-intensive, **has led to Punjab's dependence on cheap, migrant labour.** A large part of this workforce is made of casual, seasonal workers who only find work in agriculture up to 50 days/year and tend to **live below the social minimum.** In addition, in most cases, they receive poor wages and have long working hours while few social security measures apply to them.

Livelihood Issues

In many parts of the world, wheat is grown by smallholders whose productivity is typically less than that of larger plantations. In addition, **smallholders often face significant challenges accessing markets and may lack technical and financial support to improve their practices**, making them more sustainable, while also being **more vulnerable to climate change, adverse weather events, and market fluctuations**, all of which can endanger their economic stability and food security.

Gender Issues

Many immigrant women and girls work on crop producing farms in the USA where they reportedly face a high risk of sexual violence and harassment. Because most workers in the agricultural industry work in a shadow economy that is excluded from major labor law protections while also fearing deportation and reprisals from employers, these issues tend to be underreported.

Reputational Risks

Relevant is that common wheat supplied to the EU is largely produced in countries linked to the 2022 Russia-Ukraine crisis. **Sourcing from these countries may involve reputation risks for vega(n) producers.**