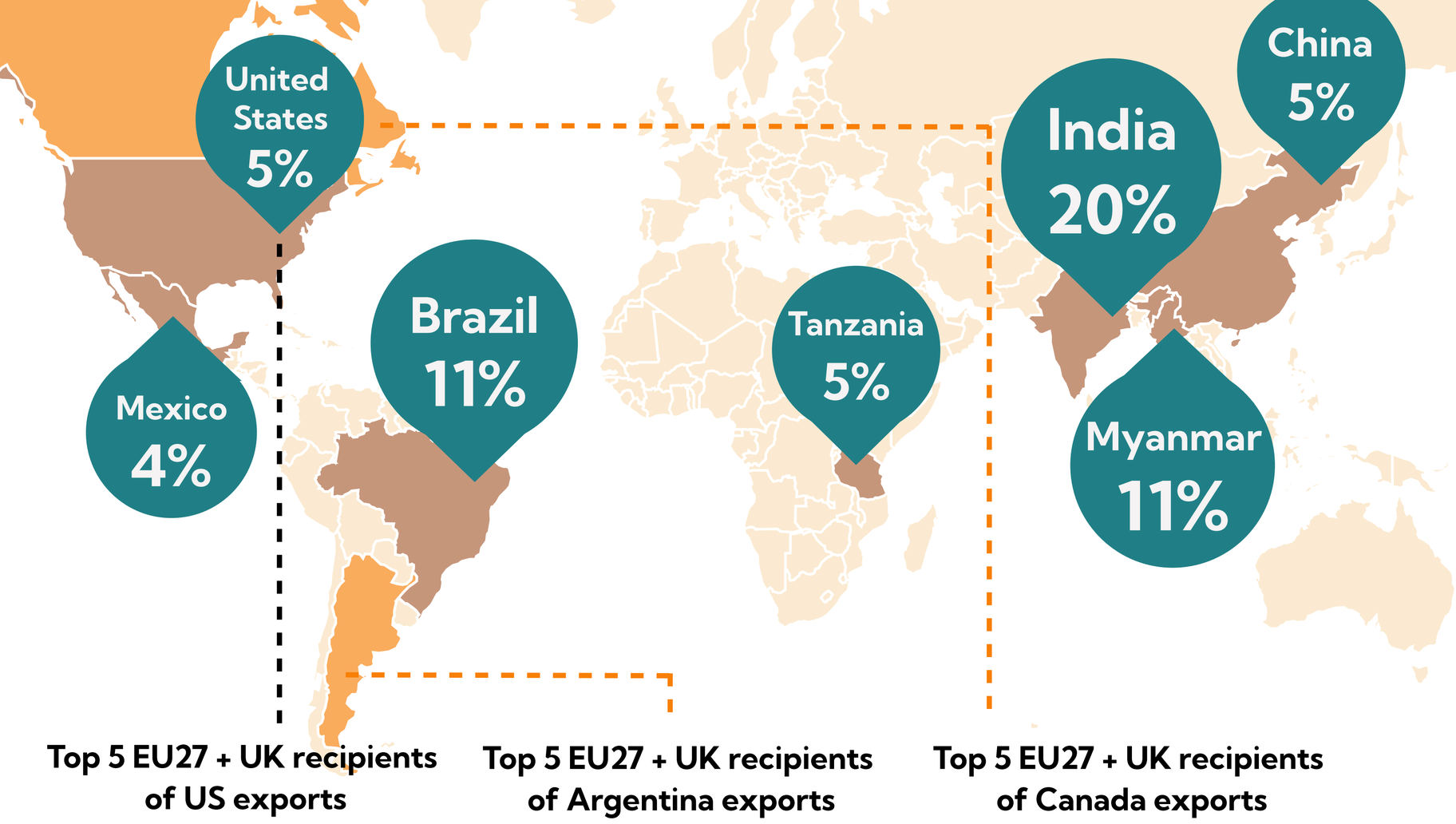
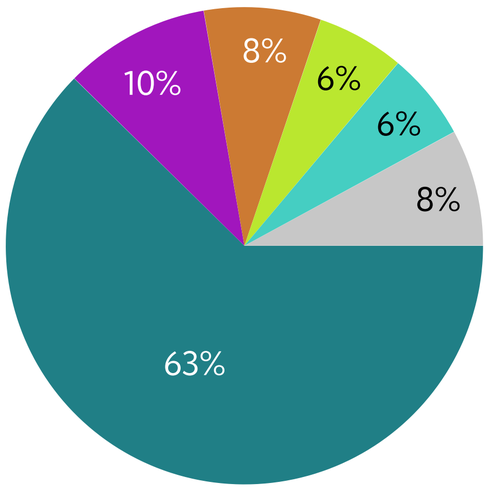
Dry beans
incl. Kidney beans, white beans

Production & Trade

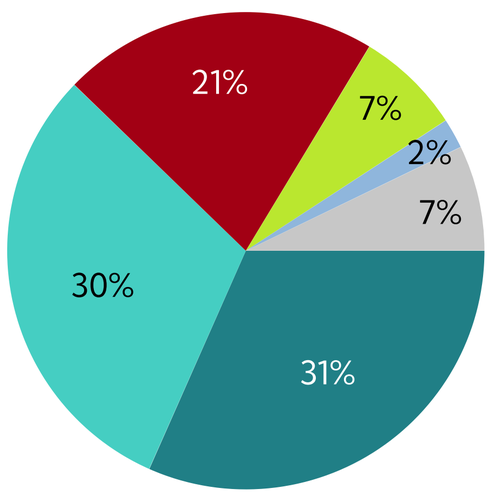
Global top-7 dry beans producers



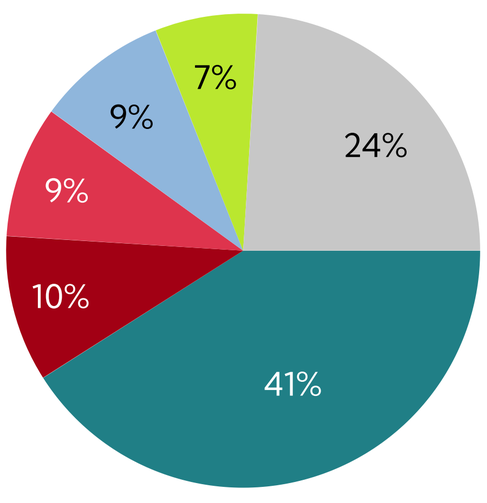
Top 5 EU27 + UK recipients of US exports



Top 5 EU27 + UK recipients of Argentina exports



Top 5 EU27 + UK recipients of Canada exports



Italy · France · Netherlands · Greece · Other EU27+UK countries
Portugal · Hungary · Spain · Belgium

Next to the top-3 suppliers Argentina, Canada, and the United States, **other non-EU suppliers of dry beans to the EU in 2021 include Egypt** (8%), **Ethiopia** (6%), and **China** (6%).

Volumes of dry beans from China to the EU have been on the decline, linked to growing domestic demand. China now represents the 6th largest supplier of dry beans to the EU.

France and Italy are the major recipients of dry beans from Argentina, Canada, and the USA, followed by Poland and Belgium. In 2020, the UK ranked fourth as a recipient of Canadian dry beans.

In **2020**, the top 7 producing countries **comprised 60 % of dry beans production worldwide**. Other countries with **more than 2% share** in global dry beans production are Kenya, Argentina, Uganda, Ethiopia, Canada, Burundi, Rwanda, and Cameroon. There are over 50 species of dry beans, of which kidney beans and dried peas are two most traded pulse varieties)

The EU does not produce dry beans and only imports from non-EU countries. **Argentina (33% of non-EU imports), Canada (25%), and the United States (13%)** are major suppliers of dry beans, including (white) kidney beans, to Europe. These countries are known for their good quality and reliability.

Dry beans

incl. kidney beans, white beans

Environmental Risks

241,159 ha

of deforestation risk was linked to dry beans production in Brazil in 2018

Dry beans production was associated with **high deforestation risk** in several producing countries in 2018, mainly in **Brazil, Myanmar, DR Congo, Mozambique, and India**, respectively 241,159 ha, 143,414 ha, 125,796 ha, 118,779 ha, and 93,116 ha. In Brazil, this number is even higher than the deforestation risk attributed to soy production (223,365 ha).

Land use and deforestation

However, the majority of EU dry beans imports in 2021 originated from other non-EU countries. Ranked the 10th supplier of the EU, Brazil provided less than 1% of the total EU imports of dry beans. **In Argentina, felling of trees started with kidney bean crops,** one of the traditional crops, which **occurred until the mid-1990s. This was followed by the soybean boom and soybean-linked deforestation.**

Data comparing water footprints of several plant-based crops estimates a water footprint of 5,053 cubic meters per ton of dry beans produced, which can be considered a **moderate water footprint.**

5,053 m3/ton

is the water footprint of dry beans production

Water Use

Canada

is the preferred supplier of dry beans to the EU

Organic buyers are moving away from Chinese dry bean production, as there is an increasing **concerns about compliance with organic standards**, e.g. linked to pesticide and fertiliser use. Canada is currently seen as the preferred supplier to the EU, e.g. of white pea bean (navy bean).

Contamination

Dry beans, as part of legumes, also have a positive environmental impact, as they are known to **fix nitrogen** in the soil. By fixing their own nitrogen, dry beans are able to increase biodiversity. Dry beans are therefore a suitable rotation crop.

Dry beans

fix nitrogen

Biodiversity Loss

IUCN National Committee of The Netherlands

IUCN NL (2022/2023). Sustainable plant-based worldwide.
Guide for value chain management in the protein transition.

aid environment

Dry beans
incl. kidney beans, white beans

Social Risks

Labour Conditions

With over 50 species of dry beans (Phaseolus Vulgaris), and a range of environment and cropping systems in many continents, there are little to no direct reports linked to social impacts of the production of the **overall class of 'dry beans'**.

For beans originating from China (mainly white pea bean, a smaller type of white bean), it is relevant that **labour rights** and conditions are often adverse. MVO risk checker identifies 14 labour right risks in China linked to leguminous vegetables (can include beans). They vary from low income, to long working hours, lack of childcare, to migrant issues and state-sponsored forced labour.

14 labour rights

risks are identified linked to leguminous vegetables production in China

Livelihood Issues

With over 50 species of dry beans (Phaseolus Vulgaris), and a range of environment and cropping systems in many continents, there are little to no direct reports on the existence of livelihood issues linked to the production of the **overall class of 'dry beans'**.

Health & Safety

not for producers. No pervasive health and safety issues were reported for dry beans. However, eating raw or undercooked kidney beans can lead to food poisoning, including symptoms such as nausea, vomiting and diarrhea. **Only a few beans are needed to cause poisoning**.

Food poisoning

Only eating a few raw kidney beans can lead to food poisoning