



The hidden costs of soy

How EU soy consumption threatens South American biodiversity



Key messages

- Most of the soy that we consume is hidden in animal products such as meat, milk, and eggs.
- The European Union (EU) imports an average of 17 million tonnes of soy each year from the Global South, primarily from Brazil and Argentina, which requires 4.8 million hectares of land in these countries.
- Soy production results in significant land conversion in ecologically sensitive and biodiverse regions. In 2022 alone, about 125,000 hectares of natural ecosystems in Brazil were lost due to EU soy imports, mainly in the Cerrado and the Pampas.
- The Cerrado—a biodiversity hotspot and crucial water reservoir—is now Brazil's most threatened biome, with only 37% of its original area remaining.
- Soy is typically grown in vast monocultures with heavy use of agricultural chemicals (e.g., glyphosate), which threatens biodiversity. Over 90% of soy imported to the EU is genetically modified.

Soy: Hidden in animal products

When people think of soy, they often picture tofu or soy milk. However, 94% of the soy grown worldwide is not eaten directly but used as animal feed. This means that large quantities of soy end up on our plates, hidden in products such as meat, milk, and eggs.

Where does the soy come from?

The EU's top soy suppliers from the Global South are Brazil (67% of imports in 2022) and Argentina (28%). Soy production in these countries has significant environmental impacts, including deforestation and ecosystem degradation.

In 2022 alone, EU soy demand caused the conversion of about 125,000 hectares of land in Brazil, almost half the size of Luxembourg.

Soy: EU consumption at a glance

Imports: 17 million tonnes per year from the Global South (mainly Brazil and Argentina) plus nearly 6 million tonnes from the US

Use: Soybean meal accounts for 29% of protein sources used for livestock feed

Trends: EU meat consumption has increased by 64% (from 50 kg per capita in 1961 to 78 kg in 2022)

Land footprint: 4.8 million hectares for soy imports from the Global South (similar to the size of Slovakia)

Biodiversity in the Cerrado and the Pampas



The Cerrado

- South America's second-largest ecosystem, covering 2 million km².
- The most biodiverse savannah in the world, home to 4,200 endemic species.
- Crucial for Brazil's water supply, feeding eight of the country's twelve largest rivers.
- Two-thirds of its area has already been converted to farmland, pasture, and plantations.



The Pampas

- A biodiversity hotspot that spans much of Argentina and parts of Brazil and Uruguay, covering 1 million km².
- In Brazil, it covers only 2% of the territory but harbours 9% of the country's biodiversity, with more than 12,500 known animal species.
- Land conversion for EU soy consumption mainly occurs in the Brazilian part.
 About 30% of the original area has been converted for agriculture, especially soy cultivation.

Cerrado and the Pampas: Hidden victims

While most people associate deforestation with the Amazon rainforest, deforestation there has declined since 2015, largely due to zero deforestation commitments such as the (currently contested) Amazon Soy Moratorium in Brazil. Soy expansion has shifted to threaten unique savannah ecosystems such as the Cerrado and the Pampas.

Soy monocultures threaten biodiversity

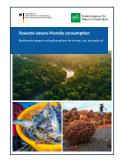
- Soy is grown on vast fields as a monoculture that provides little to no habitat for other plants, animals, or insects.
- Most soy in Brazil, Argentina, and Paraguay is genetically modified to resist herbicides like glyphosate which is highly harmful to nature.

Land conversion fuels climate change

- Destroying natural vegetation for new soy fields also releases large amounts of carbon previously stored in plants and soil.
- In 2022 alone, land conversion in Brazil for soy exports to the EU caused about 19 million tonnes of CO₂ emissions.

Further reading

In the <u>main report</u>, you will find further details and sources on the impacts of EU soy consumption on biodiversity – as well as political solution approaches.



Imprint

Published by: Federal Agency for Nature Conservation (Bundesamt für Naturschutz, BfN) Konstantinstr. 110, 53179 Bonn, Germany

Authors: Susanne Köppen, Frieda Giest

ifeu - Institut für Energie- und Umweltforschung Heidelberg gGmbH, susanne.koeppen@ifeu.de

Photo credits: page 1: nnattalli/Shutterstock.com, page 2, from top to bottom: Istockphoto/JudsonCastro, Carlos Souto, CC BY-SA 4.0, via Wikimedia Commons

This publication was developed in coordination with the 'Biodiversity & Consumption' working group of the Consumer Information Programme of the One Planet network.

The publication was commissioned by the Federal Agency for Nature Conservation as part of the 'Shaping Nature-Friendly Consumption' project (FKZ: 3523840500) with funds from the German Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN).

Bonn, 2025