Working together for greater sustainability

What is soy, and what is it mainly used for?
Soy is the world’s most significant oil and protein plant. Soy acreage, located mainly in the USA, Brazil and Argentina, has far more than doubled between 1990 and 2018 and is currently equivalent to almost four times the size of Germany. Only a small proportion of the soy beans harvested around the world are processed for direct human consumption in the form of tofu, soy drinks or soy sauce. The vast majority of soy beans are pressed into soy meal or soybean oil. Around 75 percent of soy is made into soy meal, which is used to feed meat poultry and laying hens, pigs and dairy cows, as well as in aquaculture. The highest amount of soy relative to end product weight is used in poultry farming, as chickens require a lot of protein. Soybean oil on the other hand is used in the food industry, the chemical industry and as biofuel (see fig. 1). The EU is the second-largest importer of soy after China.

Deforestation due to soy farming...
Between 1990 and 2008, 13 million hectares of land were cleared directly for soy farming, making soy farming the second-largest driver of worldwide deforestation – only cattle farming has caused more forest to be destroyed. Soy-related deforestation is especially prevalent in Brazil, Argentina, Paraguay and Bolivia, where the soy sector is dominated by large agricultural and trading corporations whose farms are generally vast and highly mechanised, offering few employment opportunities. The use of sometimes extremely hazardous pesticides, which are sprayed by aircraft, poses a health risk to people in the surrounding areas.

Fig. 1: The soy supply chain (source: GIZ)
Increased soy farming is moreover frequently associated with displacement of smallholders and indigenous populations from their traditionally used lands.

... and the efforts to stop it

As supporters of the Amazon Soy Moratorium, in 2006 all major actors in the supply chain undertook to stop purchasing soy beans grown in Brazilian rainforest areas cleared after 2008. While this has curbed the advancing deforestation related to soy farming in the Amazon, soy production has instead expanded into the dry forests and savannahs of northern and north-eastern Brazil (Cerrado) and the Gran Chaco in Argentina and Paraguay – areas that are also rich in species diversity and crucial to climate protection. Since 2013, deforestation in the Amazon has been on the rise again.

How can soy production become more sustainable?

To increase the availability of protein plants such as soy, peas, fava beans and lupins in Germany and reduce soy imports, the German government has since 2012 been subsidising the farming of leguminous crops. As a result, soy farming acreage has expanded from 1,000 hectares in 2008 to 33,000 hectares in 2020. But soy imports remain a necessity: the EU is currently only able to meet 8 percent of its demand for soy through domestic farming.

That makes it all the more important to ensure that any imported soy is produced sustainably. To date, only 2.6 percent of soy farmed around the world is certified as “deforestation-free” in accordance with recognised sustainability standards such as RTRS, ProTerra, ISCC Plus or Donau Soja; additional quantities are certified through less prevalent sustainability systems or proprietary corporate standards. In 2019, 25 percent of soy consumed in Germany was certified in accordance with the above standards. Alongside certification, a further important requirement is to establish greater transparency along the supply chain.

What GIZ and BMZ are doing

The German Federal Ministry for Economic Cooperation and Development (BMZ) and the German Federal Ministry of Food and Agriculture (BMEL) are signatories to the Amsterdam Declarations. Through the Amsterdam Declarations Partnership (ADP), Germany and other European countries undertake to improve the market uptake of sustainably produced soy, palm oil and cocoa and support private business in eliminating deforestation along agricultural supply chains.

With funding from BMZ, GIZ is supporting the WWF-managed working group on “deforestation-free soy supply chains” under the umbrella of the Dialogforum Nachhaltigere Eiweißfüttermittel (FONEI), a consortium of various actors from the food industry, the animal feed trade and academia as well as representatives of associations, environmental organisations and federal authorities. FONEI members are committed to the goals of using only soy certified as sustainable in their animal feed and preserving forests through responsible supply chain management.
Through a global programme, GIZ is also working on behalf of BMZ to establish greater sustainability in soy supply chains and integrating topics such as the fight against deforestation or sustainable and low-carbon production methods. In addition, GIZ is supporting the establishment of local, sustainable value chains relating to increased productivity, market connections and onward processing in various African countries.

**Soy fact sheet**

In 2018, soy destined for the EU was grown on around 10.5 million hectares of land worldwide, 6.8 million hectares of which were in Latin America. That’s an area approximately the size of Bavaria.

Brazili: 4.1 m ha
USA: 2.5 m ha
Argentina: 2.2 m ha
Paraguay: 0.5 m ha
Canada: 0.4 m ha
Ukraine: 0.3 m ha
Rest of the world: 0.6 m ha

Fig. 2: The graphic illustrates the immense amount of land used in Latin America to produce soy imported by the EU.

Source: own calculations based on FAO-STAT and USDA

**Legal notice**

Published by the:
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Registered offices
Bonn and Eschborn
Friedrich-Ebert-Allee 32 + 36
53170 Bonn
T +49 228 44 60-0
F +49 228 44 60-17 66
E info@giz.de
I www.giz.de

Responsible for this content:
Programme Sustainability and Standards in Global Agriculture Value Chains (NAS)

Design/Layout:
Umbruch Werbeagentur GmbH, Darmstadt

Photo credits/sources:
Front: freepik; page 2: freepik

Bonn, 2022