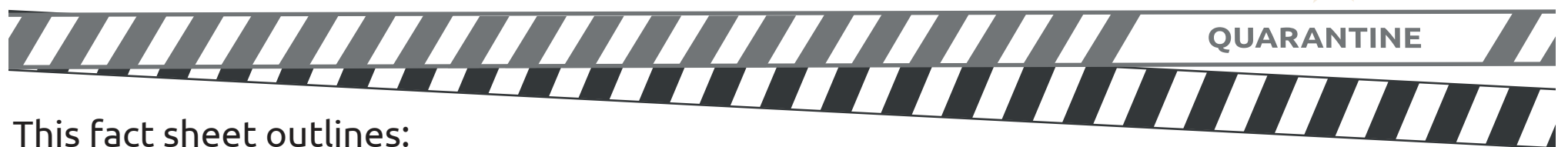


EU livestock is hungry for a resilient protein supply

The coronavirus crisis has shed a new light on food security and the weak spots of the EU food supply.

The EU is highly dependent on soya imports (see Box 1).

It is time to reconsider the risks associated with excessive reliance on imported soya.



This fact sheet outlines:

- the impact of the EU's soya import dependency on European food security,
- the vulnerability of the EU livestock sector in times of crisis and
- the contribution of a European protein strategy to sustainable, deforestation-free supply chains.

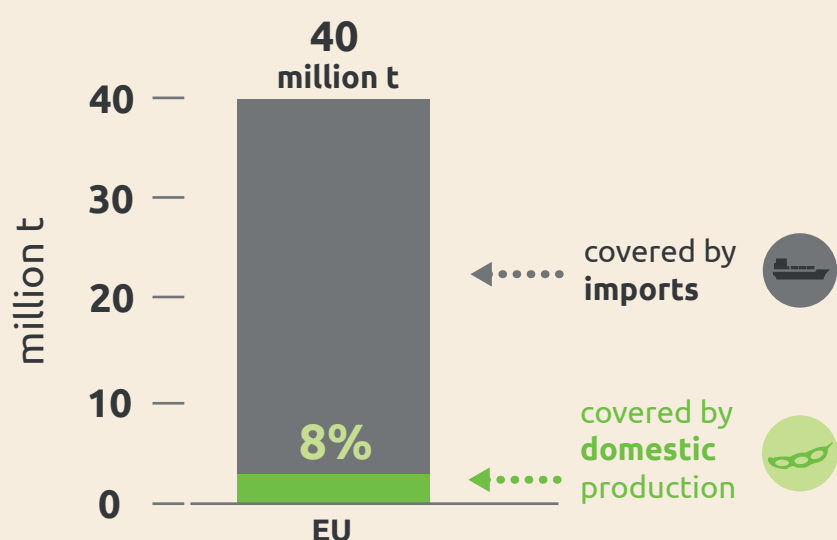
This fact sheet covers:

- 1 Recent crises and food security
- 2 The supply of basic foodstuffs
- 3 The food industry's weak spot
- 4 Tips to prepare for future crises

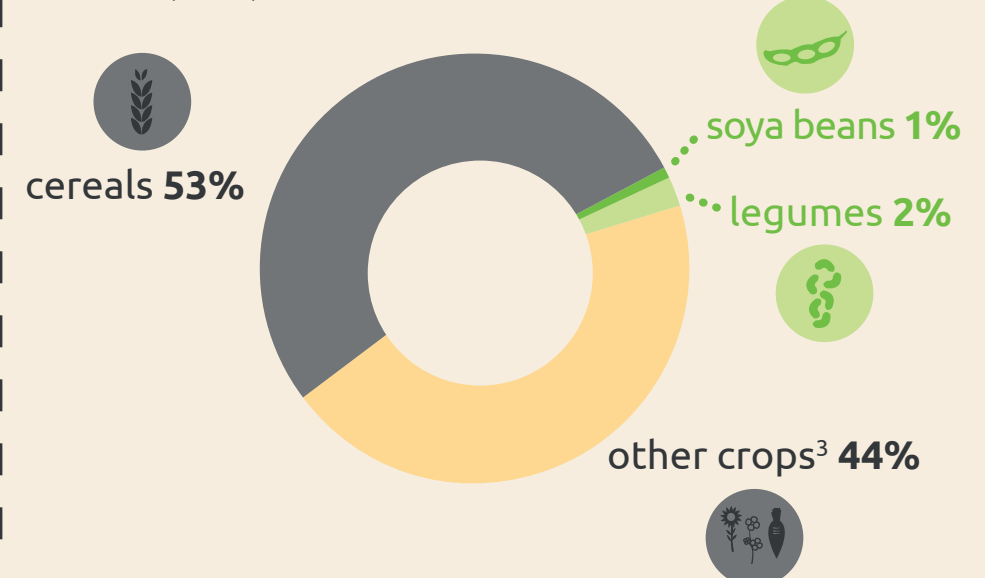
Box 1 – the EU fails to meet its own soya demand:

In the EU, the domestic demand for soya dramatically exceeds the domestic supply (see left figure below). This is the result of an unbalanced agriculture system: **Crop rotation is overwhelmingly dominated by cereals and lacks high-protein legumes such as soya beans** (see right figure below).

Soya bean meal consumption¹ and self-sufficiency ratio² in the EU (2019):



Proportion of soya beans/legumes grown on arable land in the EU (2018):



¹ Soya bean meal consumption is converted into "soya bean equivalents": 1 tonne of soya beans = 0.8 tonnes of soya bean meal.

² This ratio shows the extent to which the EU is able to satisfy its domestic demand for soya bean meal through domestic soya production.

³ including fallow land

Sources: Donau Soja + FAO

1. Food security in focus

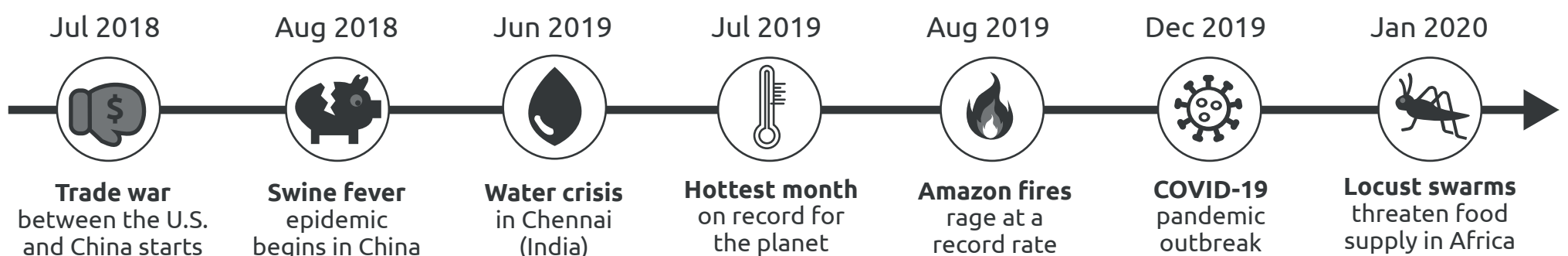
The coronavirus crisis, ongoing trade wars and climate change put the spotlight on food security in many countries around the world.

The economic and environmental crises occurring from 2018 onward – with several regions gaining first-hand experience with shortages of basic goods (such as food, water and medicine) – highlight the **importance of a resilient regional food supply.**



Food security spotlighted

Timeline of recent crises:



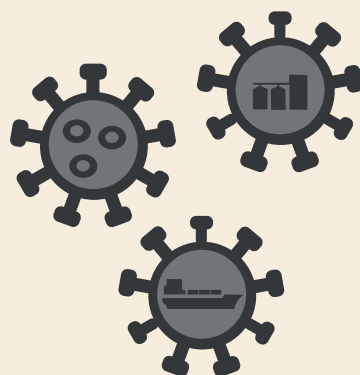
Box 2 – Crises with a strong relevance to the EU’s soya supply security:

Several major crises have shed light on the **risks associated with a high dependency on soya imports:**

Coronavirus outbreak

Factories and borders have been closed to prevent the spread of COVID -19.

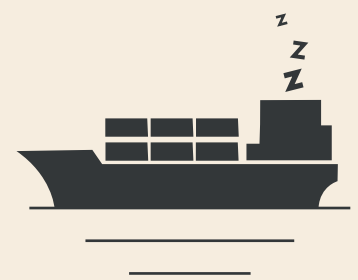
The potential shutdown of soya oil mills and transport routes in South America greatly jeopardises soya shipments to the EU.



Trade war

China faced an enormous challenge to feed its livestock after imposing punitive tariffs on soya imports from the U.S.

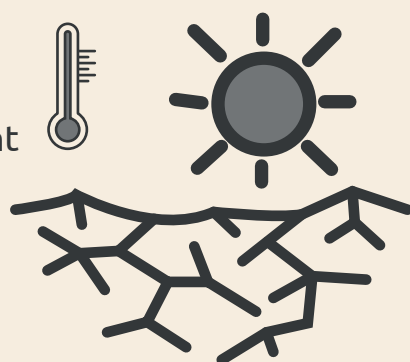
This illustrates the political vulnerability that results from heavy reliance on soya imports.



Climate change

2019 was the second hottest year on record. Due to global warming, extreme weather events became more frequent and severe.

As a result, the yields and supplies of crops, including soya beans, are becoming unpredictable across global markets.



Amazon fires

In 2019, Brazil’s Amazon rainforest burned at a record rate. The fires dramatically accelerated the pace of deforestation in the region.

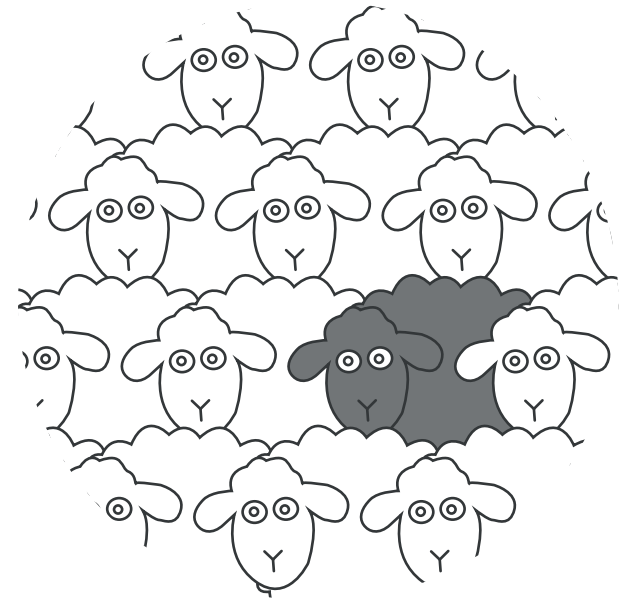
The EU is partially responsible for the destruction of the Amazon because some parts of the deforested land are used to produce soya beans for the EU livestock sector.



2. The black sheep in the EU food industry

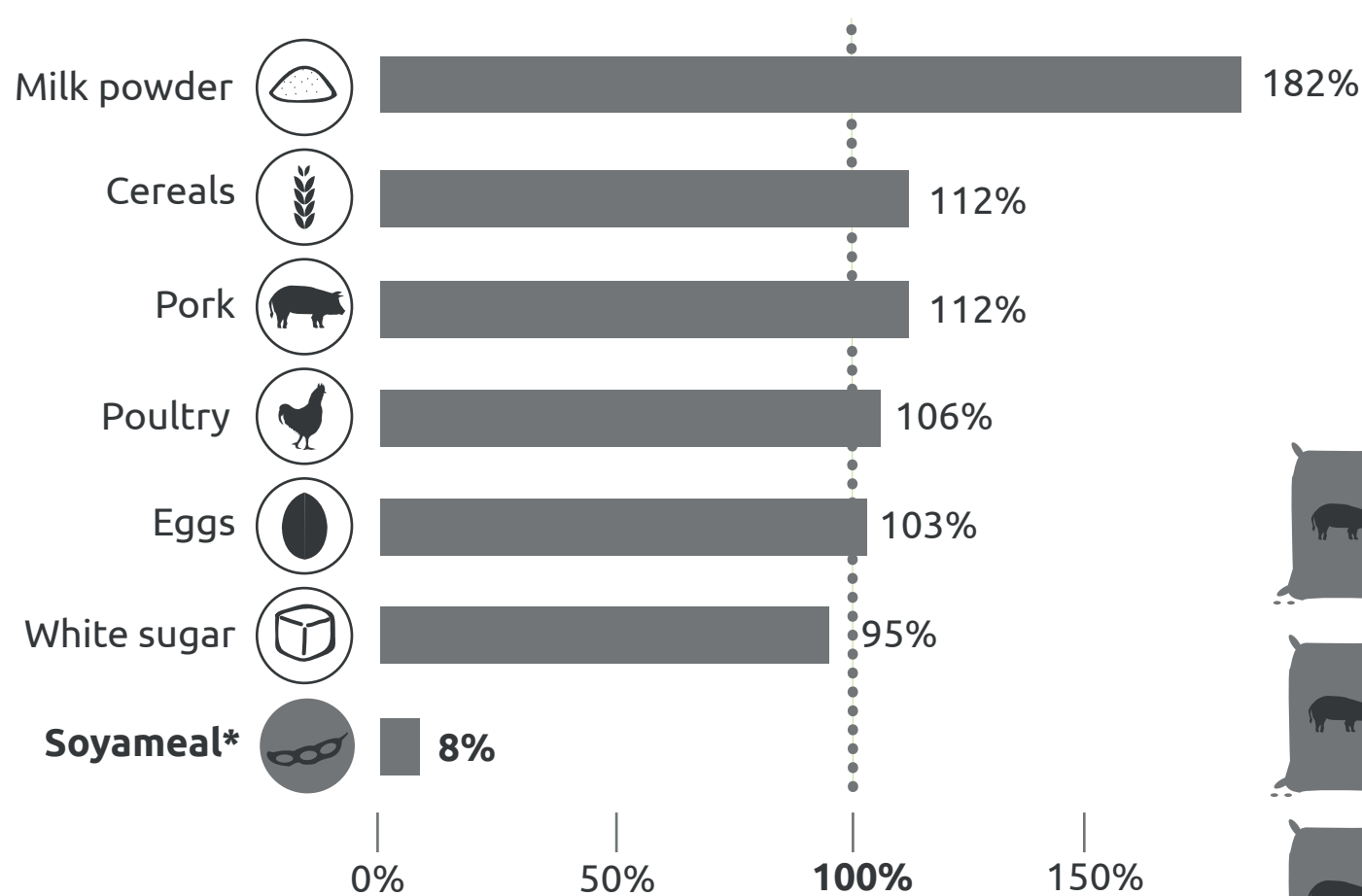
The EU is in a good position to secure the supply of staple foods in difficult times. Most of the European continent is self-sufficient in the production of primary agricultural products, such as cereals and milk, and is even running a trade surplus in many fields.

But there is one remarkable exception: the huge soya deficit within the EU. Only 8% of the soya beans required for animal feed are supplied by domestic production, the rest is import from overseas (see Box 3).

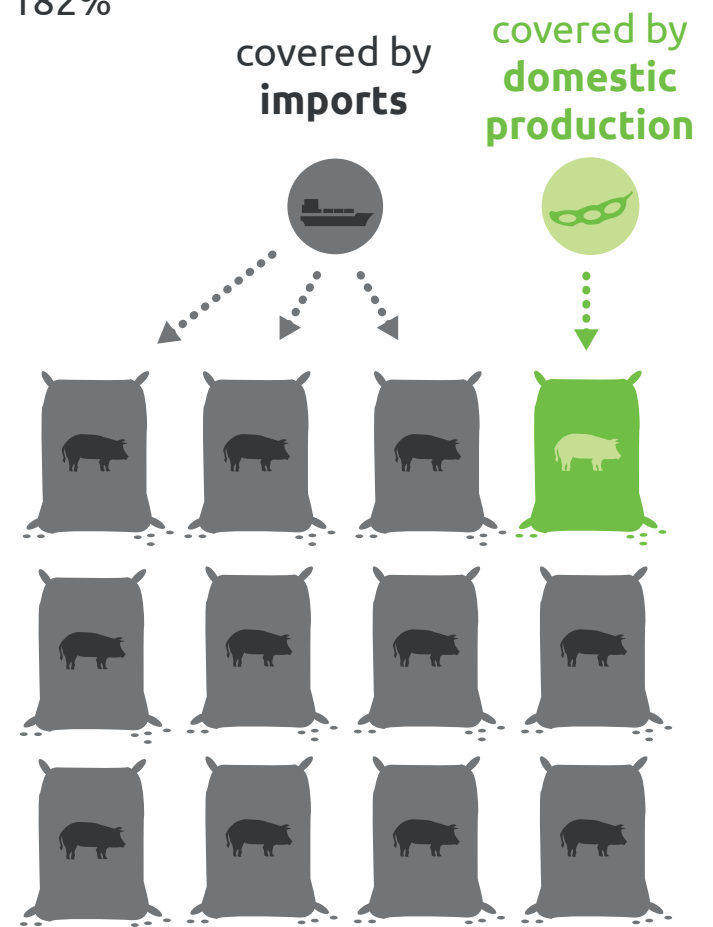


Only 8% of soya bean meal consumption is covered by **domestic production**

Self-sufficiency ratio* of important agricultural products in the EU (2018):



* this ratio shows the extent to which the EU is able to satisfy its domestic demand for soya bean meal through domestic soya production.
Sources: FEFAC + Donau Soja



Box 3 – the EU is among the top importers of soya

China and the EU are by far the largest importers of soya bean and soya bean meal in the global market (see figures below). The lion's share of the imports comes from the world's top soya-producing countries: Brazil, the U.S. and Argentina.

Leading importers of soya beans in the global market (2019):



Source: USDA

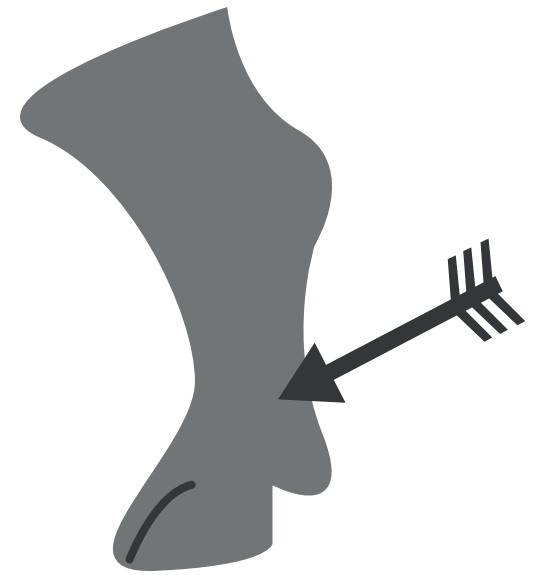
Leading importers of soya bean meal in the global market (2019):



Source: USDA

3. The Achilles' heel of the food industry

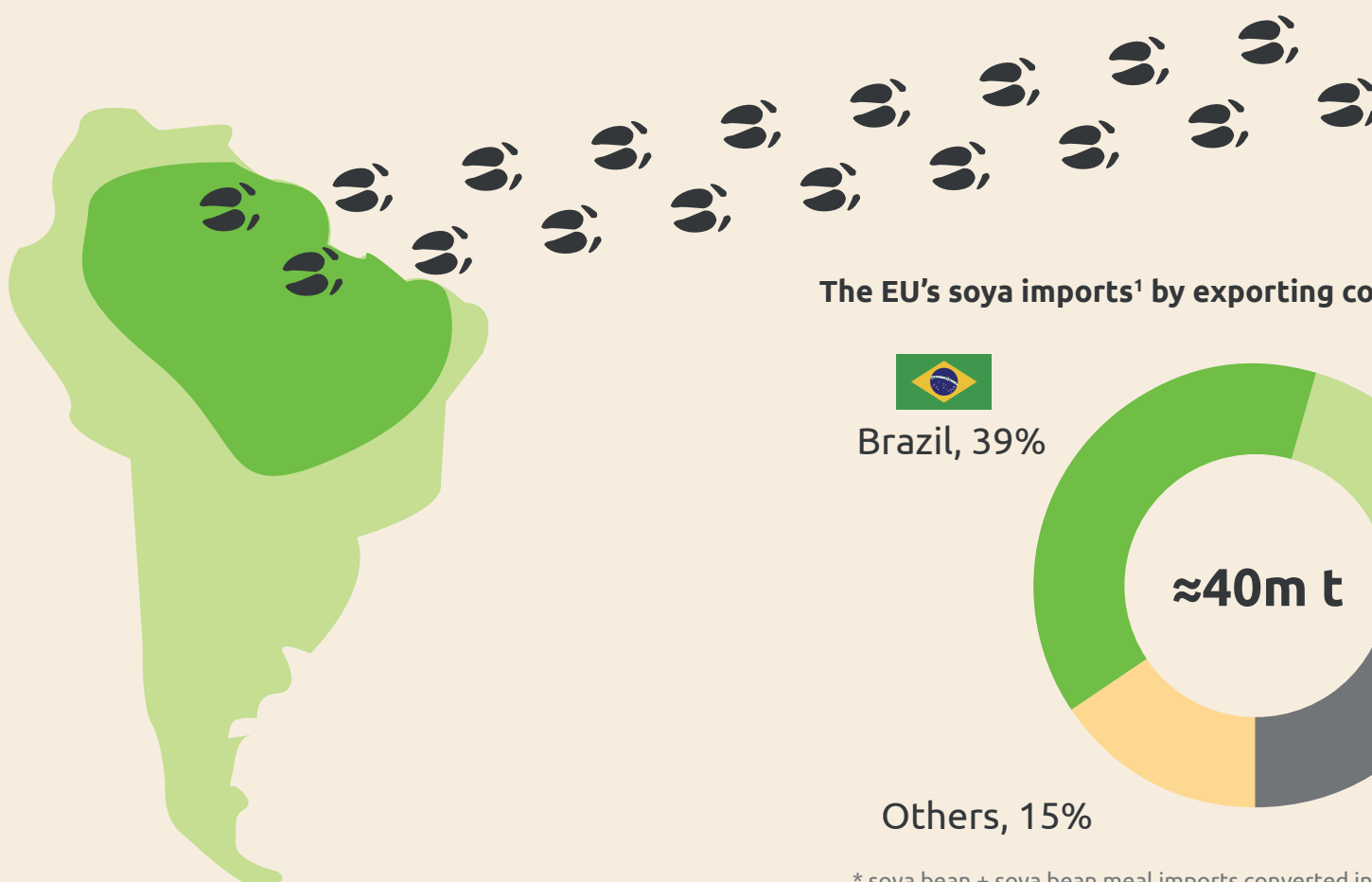
The EU's dependence on soya imports leaves it vulnerable to the whims of global markets, although overall its food industry is otherwise in good condition. **A lengthy shipment delay can cause major problems for the EU livestock production,** exposing the Achilles' heel of the European food industry. The risks of globalisation are particularly obvious in the livestock sector.



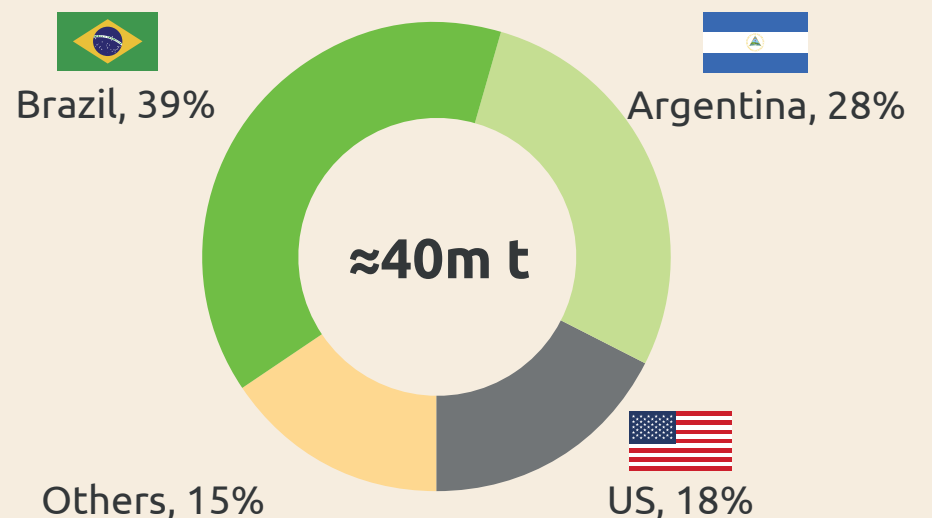
In light of this fact, easing the EU's reliance on the global soya market is essential to ensuring an adequate food supply within its borders. Scaling down soya shipments or phasing them out completely also has positive environmental and social effects outside the EU (see Box 4).

Box 4 – the EU's "ecological hoofprints" in the rainforest

A significant percentage of the EU's soya imports comes from South America (see pie chart below), where the expansion of arable land to produce soya beans for animal feed has led to an increase in the rates of deforestation. Thus, by importing soya for the European livestock sector, **the EU has become responsible for a part of this rapid deforestation;** at the same time, it has increased the carbon footprint of our food. Furthermore, this change in land use results in the displacement of small-scale farmers and indigenous people living in the region.



The EU's soya imports¹ by exporting country (avg 2015–2019):



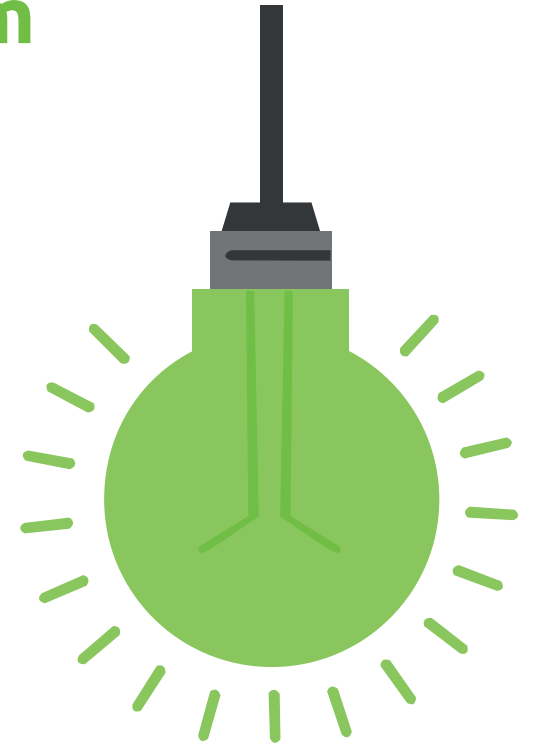
* soya bean + soya bean meal imports converted into "soya bean equivalents"
Source: Donau Soja calculation based on COMTRADE data

4. Towards a balanced agri-food system

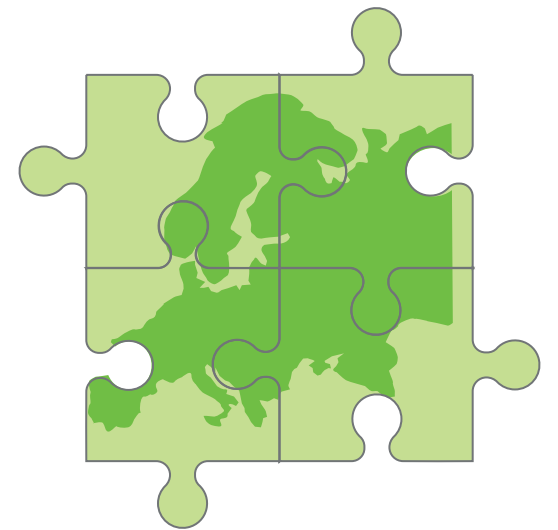
A comprehensive **protein strategy** is needed to address the EU's soya deficit and support a balanced and resilient agri-food system.

Policy makers should therefore take action to:

- **diversify the arable crop sector** by increasing the production of soya beans and other high-protein legumes;
- **moderate the excessive consumption of livestock products** by promoting sustainable and healthy diets (see Box 5);
- **change livestock feeding practices** in such a way as to improve protein utilisation efficiency and increase local protein sourcing.

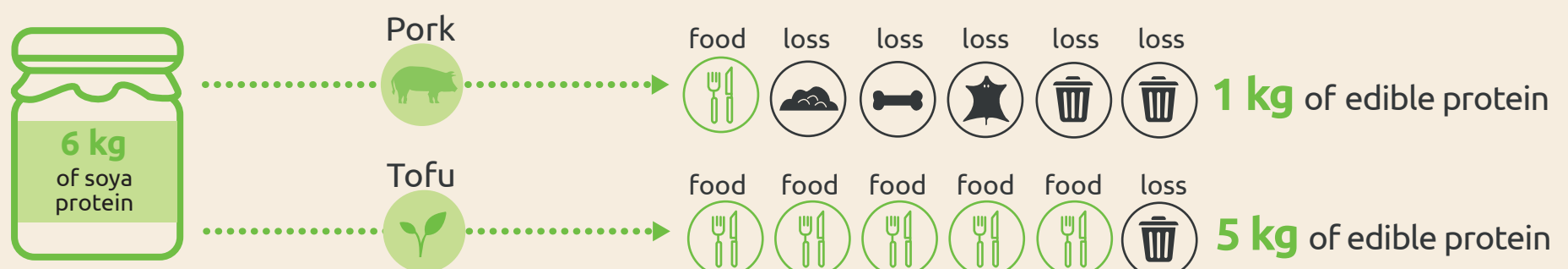


East-Central Europe can offer regional sources when it comes to diversifying the EU's soya supply. The protein strategy needs to embrace a **regional approach** to unlock the potential of major soya bean producers, such as Ukraine and Serbia. A greater level of East-West integration in Europe could contribute not only to easing the EU's heavy reliance on transatlantic imports but also to developing profitable and sustainable value chains in Eastern Europe.



Box 5 – Eating the plant or the plant eater?

Reducing the consumption of animal products such as meat and milk is an effective way to create a more sustainable food sector. The reason for this lies in the **inefficient protein utilisation of livestock supply chains**, where a high percentage of the protein (and calories) is converted to non-edible by-products, such as manure, bones and fur. The chart below illustrates the difference in protein utilisation efficiency between animal- and plant-based products: Whereas pork needs 6 kg of raw plant-protein to produce 1 kg of edible protein (17% conversion efficiency), tofu only requires 1.2 kg to achieve the same result (82% conversion efficiency).



5. Donau Soja as a facilitator

Donau Soja facilitates the protein transition process in Europe by promoting soya production and local supply chains in European countries (see Box 6).

Our activities make a valuable contribution to ensuring food security and developing sustainable supply chains throughout the continent.



Box 6 – Donau Soja in a nutshell

Organisation: International, non-profit and independent

Vision: A sustainable, safe & European protein supply




Members: **280+** members from **25+** countries

Goals: Support a **sustainable** soya production Establish **local & safe** supply chains

Activities:

- Farm days
- Field trials
- Training
- Research
- Best practice manuals
- **Certification**
- B2B meetings
- Policy formulation
- Market analyses
- **Protein Partnership**

Offices:

-  **Vienna** (Austria)
-  **Novi Sad** (Serbia)
-  **Chişinău** (Moldova)
-  **Kiev** (Ukraine)

Donau Soja & Europe Soya are the **leading standards** for European soya in terms of quality and quantity

 **675,000 t** of soya beans

 **8,500** farmers

 **9** oil mills

✓ Non-GM ✓ Sustainable
✓ Controlled European origin

Available volume within the **Protein Partnership** projects:

 **1,500,000 t** of soya beans

Published by:
Donau Soja Association
Wiesingerstrasse 6/14
1010 Vienna
Austria
+43 1 512 17 44 11
office@donausoja.org
www.donausoja.org

Author:
Bertalan Kruppa
marketinfo@donausoja.org