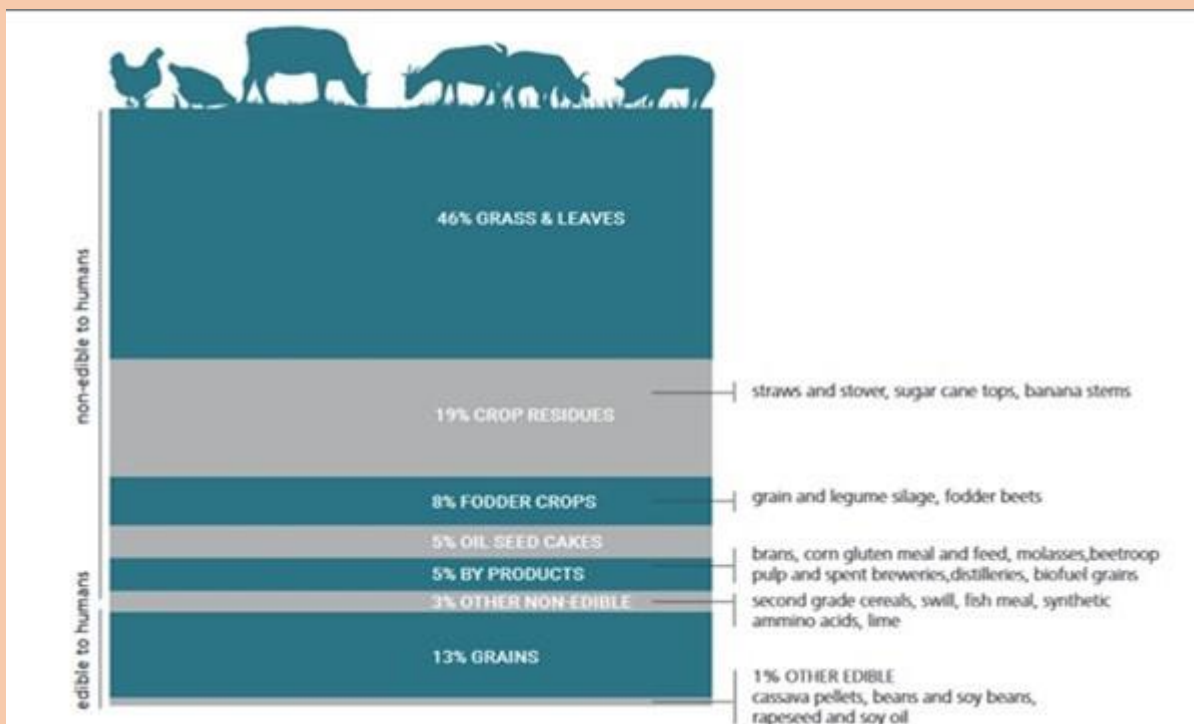


HOW MUCH CEREAL PRODUCTION GOES TO FEED LIVESTOCK?



Cereals play a significant role in **livestock feed**, but most **cereals used in animal feed are “feed-grade cereals”, i.e. not the same quality as cereals used in human food**. This includes cereals that were grown for human food purposes but, in the end, do not have the required food quality, for example, in terms of protein or gluten content for bread production.

If **food-grade cereals** are used in **animal feed**, they are typically a market surplus that is not absorbed by the food outlet purchased at a lower price. At a global level, **only 13% of the diet of food-producing animals is based on cereals**, most of which are fodder cereals. In the EU, **cereals represent 25% of what animals eat**. However, a large part of these cereals are **not edible**; what is edible is the **surplus not used by humans**. Considering animal feed in general, **only 86% of the feed intake comes from resources not edible by humans**, mainly composed of cellulose-rich plant materials.



Livestock consume a variety of other feed sources, including **grasses, forages, hays**, and **co-products** from food processing. **The three major feed materials are grass and leaves**, followed by **crop residues** such as straws, stover, leaves and stalks or sugar-cane tops. The total agricultural land currently used globally for livestock is **2.5 billion hectares**, corresponding to about **50% of the world's agricultural area** and about 20% of the land surface. The most considerable part of this land, **2 billion hectares**, is made up of **grasslands used by animals**.

Arable land for animal feed

The total arable land used for animal feed is approximately 0.55 billion hectares, **40% of global arable land**. Most of this land is used **to cultivate cereals**, and monogastrics, such as pigs and poultry, consume two-thirds. Livestock can also obtain feed from co-products deriving from the crushing of oilseeds (e.g. oilseed cakes) or **cereals (e.g. straw)**, harvesting approximately 0.13 billion hectares of land each. **Only 0.06 billion hectares of land** are destined for cereals silage, alfalfa and beet fodder production that **could effectively be used for human food**.

In short, **the competition for land use between animal feed and human food is limited** and can be **further reduced** by increasing the circularity of animal feeding systems by optimising the regional use of animal feed or co-products deriving from the processing of cereals and other agricultural biomass into food or bioenergy. Nevertheless, the EU does not produce enough proteins to meet animal needs. So today, this deficit is compensated via imports of soy and soy-derived products.

EU self-sufficiency for protein sources

The latest version of the [revised EU Feed Protein Balance Sheet](#) published by the European Commission in November 2022 shows that **EU self-sufficiency for all protein sources has been stable at around 77% for the last three years**. Yet the EU imports approximately 28 million tonnes of soybean meal annually. This figure has been fairly stable over the past 30 years, with a slight decrease in recent years due [to higher co-product usage](#). **Soybean products** have become the principally traded source of **protein-rich feed materials** worldwide, setting the benchmark for all other vegetable protein sources, mostly co-products from other **oilseeds** such as rapeseed and sunflower.

Soybean crops score uniquely high on the key nutritional characteristics that make a **high-quality protein source for feed manufacturing** for many farm animals: amino acid profile, protein concentration, nutrient density, digestibility and palatability. However, their affordability, consistency, and **all-around availability**, including the possibility of using price hedging tools, make it the first choice for **animal nutritionists** and feed buyers.

The **EU initiative to boost local plant protein production** aims to increase the self-sufficiency of the protein-rich feed materials the EU needs to import. This is also a welcome initiative from an **agronomic rotation** perspective. Nevertheless, the expectation is that Europe will remain reliant on **soy imports**, even in the long term. Hence, it is important to have sustainable sourcing initiatives for the private sector, such as the [FEFAC Soy Sourcing Guidelines](#).

