

2 October 2025

The major trends in the production and consumption of animal products

In recent times, livestock farming has been criticised for its harmful effects on the climate and the environment, and its products are frequently blamed for causing diseases.

Before dealing with these important issues, it seemed necessary for us to revisit the remarkable growth that livestock farming has experienced over the past decades.

First, it should be remembered that livestock currently represent approximately 0.2% of the planet's biomass, which is roughly double the weight of humanity (110 million tonnes of carbon compared to around 60 million tonnes for humanity), and much less than bacteria and viruses whose biomass is several hundred times greater [read].

This article will address three main points: the **demographic dynamics** of livestock, the evolution of livestock **production** for food, and the **consumption** of animal products by humans.



The growth of livestock numbers

Over the last six decades, the population of livestock has **increased significantly** and fairly steadily (see **figure 1**).

The most spectacular increase has been that of the **poultry** population. Their number has practically multiplied by 7, going from just over 4 billion to more than 29 billion individuals between 1961 and 2023.

In the same period, the **pig** population has more than doubled to reach nearly one billion individuals.

As for the cattle, their number has grown from 940 million to almost 1.6 billion, and buffaloes more than doubled.

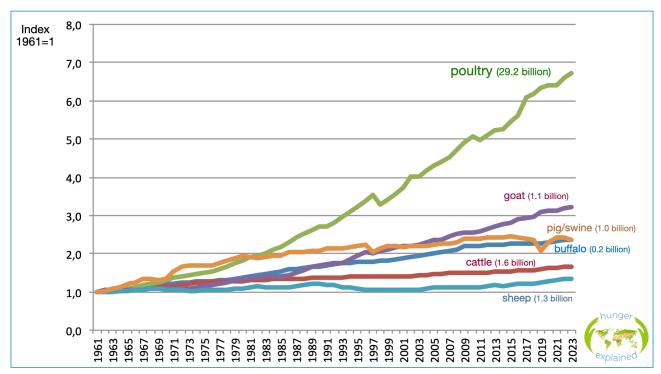


Figure 1 - Evolution of the livestock population (1961-2023)

Source: FAOSTAT data

The production boom

This population growth has led to an even more pronounced surge in production (see **figure 2**).

In this case, too, **poultry** are the champions, their meat production being multiplied by 16 to reach 144 million tonnes in 2023, while egg production more than sextupled to reach 97 million tonnes.

They are followed by **pigs**, whose production has more than quadrupled to exceed 120 million tonnes (**on figure 2**, pork is included in 'other meats').

Beef and buffalo meat, sheep and goat meat, as well as milk, have approximately tripled over the period considered.

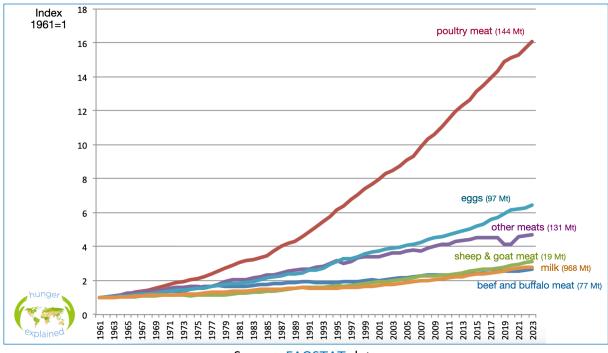


Figure 2 - Evolution of livestock production (1961-2023)

Source: FAOSTAT data

These spectacular increases in animal production have also been achieved through a remarkable growth in average productivity:

- an increase in the carcass weight of cattle by 42%,
- a growth in the carcass weight of chickens by 38%,
- a jump in egg production per bird by 45%.

However, these achievements have been variable depending on **countries** and the **technologies** employed. In some production centres, for instance, the chicken carcass weight has been multiplied by 5 while the growth period of birds was considerably shortened.

These productivity gains have resulted from considerable technological changes that have implied a deep transformation in the way livestock are being fed. Today, feed is largely made of **grain** (**cereals and oilseeds**) **produced by agriculture** and production involves an increasing use of **veterinary products**.

Traditional livestock production, found in small family farms, has gradually given way to a specialised and highly technological activity carried out in increasingly large production units that can house hundreds of thousands of animals of the same species, requiring enormous investments in buildings and various equipment [read].

Lastly, new technologies have recently started to consider animal product production through fermentation, using bacteria or fungi instead of 'traditional' animals [read here and here].

A strong growth in the demand for animal food products

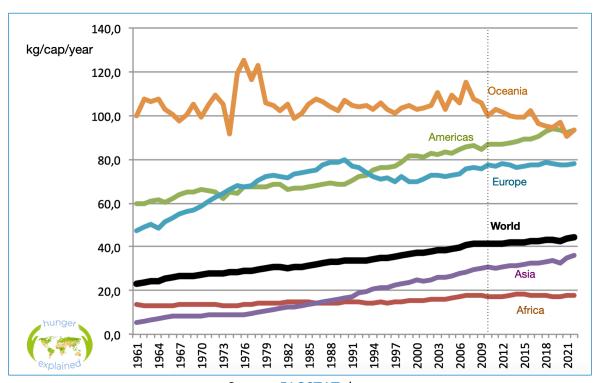
The increase in production described above is, of course, directly linked to the growth in global food demand. This demand is primarily determined by **demographic dynamics** – the world population has grown from 3 billion people in 1961 to 8 billion people in 2023¹ – and by **changes in the average standard of living** worldwide – the average global GDP per capita has risen from 3,753 dollars/person/year in 1961 to 11,656 dollars/person/year in 2023.² Other factors such as change of lifestyle and diet also have an important role.

Figures 3, 4, and 5 show the evolution of meat, eggs, and milk (excluding butter) consumption across different regions of the world.

Meat

Figure 3 shows that, at the global level, the average meat consumption per person per year has steadily increased to double over the period considered.

Figure 3 - Evolution of average meat consumption per person and year (1961-2023)



Source: FAOSTAT data

(the vertical dotted line indicates the date of change in the estimation method)

¹ according to the <u>United Nations Population Division</u>.

² In constant US dollars of 2015 (World Bank).

The increase was particularly strong in Asia (more than 600%) where consumption had been the lowest in the world at the beginning of the period.

In America and in Europe, it increased by around 50 to 60%, while decreasing in Oceania where it was already quite high in the 1960s.

In Africa, where it is now the lowest in the world (less than 20 kg per year), its progression has been slow (+30%).

<u>Eggs</u>

Figure 4 shows a rather hectic evolution in egg consumption.

For the world as a whole, the average consumption per person per year more than doubled between 1961 and 2023 (+130%). Similar to meat, the strongest growth occurred in Asia (+520%), followed by Africa (+87%) and Europe (+53%).

In Europe, after experiencing a significant increase between 1965 and 1985, consumption sharply declined until the late 1990s - perhaps because of concerns regarding the quality of eggs following contamination crises involving salmonella and dioxin [read] -, before resuming a positive trend, probably due in part to the segmentation of production (the emergence of mass free-range and organic egg production) [read in French].

(1961-2023)16,0 America kg/cap/year 14,0 12,0 10,0 8,0 Oceania 6,0 4,0 Africa 2,0 0,0 1988 1991 1994 1997 2000

Figure 4 - Evolution of average egg consumption per person and per year

Source: FAOSTAT data (the vertical dotted line indicates the date of change in the estimation method) In **Oceania**, where the average egg consumption was the highest in the world, it plummeted by half during the 1980s and has not returned to its previous level since.

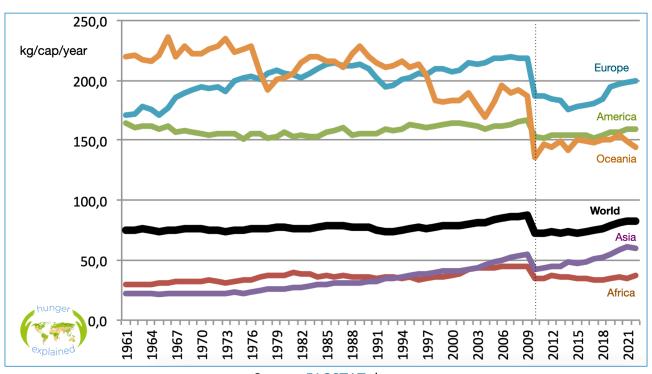
In Africa, it has increased by more than 80%, but still remains the lowest in the world.

Milk

Figure 5 shows that the consumption of milk has remained relatively stable worldwide over the period under consideration.³

At the regional level, the clearest trends have been the increase in consumption in Asia and its decrease in Oceania.

Figure 5 - Evolution of average egg consumption per person and per year (1961-2023)



Source: FAOSTAT data

(the vertical dotted line indicates the date of change in the estimation method)

Conclusion

The conclusion of this short article is quite obvious: the development of livestock farming over the past six decades has been a great success,

³ The fall observed in 2010 on **figure 5** is the result of a change of method of computation, the method used between 1961 and 2010 being replace by a new one. This implied a readjustment of data that is particularly visible in the case of milk demand.

probably only outperformed in the area of food by the development of aquaculture [read].

It is characterised by a rapidly growing number of livestock, a dynamic production, an increasingly productive and input-intensive technology, and a rise in protein-rich food consumption in almost all regions of the world, although in Asia and Africa in particular, it is often hindered by economic (purchasing power) and sometimes cultural obstacles (a more or less strict vegetarianism/veganism).

However, these observations must be **tempered by environmental and health considerations**. They will be the subject of two upcoming articles.

To know more:

- Magdelaine, P., and A. Braine, <u>Panorama mondial et européen de la production et de la consommation d'œufs</u>, INRA Prod. Anim., 2010, 23 (2), 111-122, 2010 (in French).
- Knowles, T., Moody, R. and M. McEachern, <u>European food scares and their impact on EU food policy</u>, British Food Journal. 109, 2007.

Consulted website:

- FAOSTAT.

Selection of earlier articles published on <u>hungerexplained</u> related to this topic:

- Opinion: 'Natural meat' and futurist fantasies? by Maria Grazia Quieti, 2023.
- Synthetic biology: solution or dangerous delusion? 2022.
- Plants and bacteria largely dominate world biomass, 2022.
- Animal welfare: a cause that makes progress, 2018.
- Are industrial megafarms the solution for feeding the world? 2018.

as well as other articles under our thematic page on 'Livestock'