



# Towards a sustainable transition in EU livestock farming

## State of play and current challenges

Introduction , DG AGRI E3

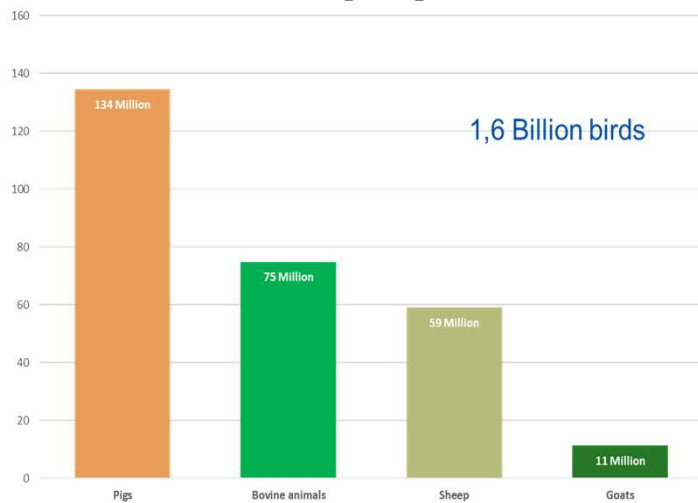
JOINT MEETING OF THE  
CIVIL DIALOGUE GROUP ON ENVIRONMENT AND CLIMATE CHANGE  
AND ON THE CAP STRATEGIC PLANS AND HORIZONTAL MATTERS, 14.03.2024

# Index



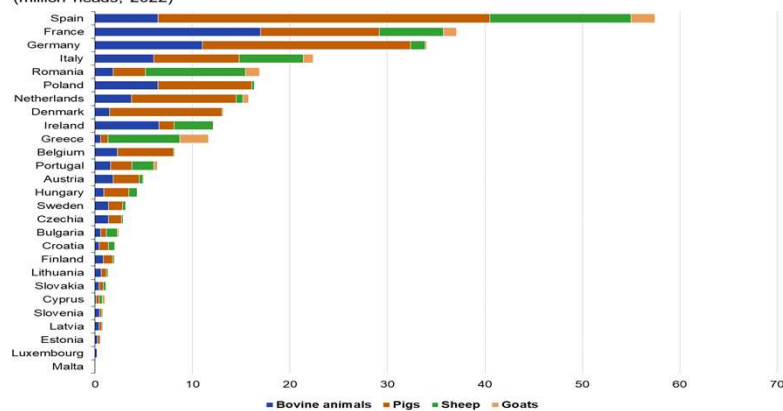
- Socio-economic aspects of livestock farming in the EU: positive and negatives
- Environmental aspects of livestock farming in the EU: positive and negative
- Overview of policy affecting livestock farming in the EU (environmental, livestock, I & R, diseases, CAP...)
- Examples of how policy can help livestock to move towards sustainable farming in future

# EU Livestock population



Source: Eurostat (online data codes: apro\_mt\_lscatl, apro\_mt\_lspig, apro\_mt\_lssheep, apro\_mt\_lsgoat)

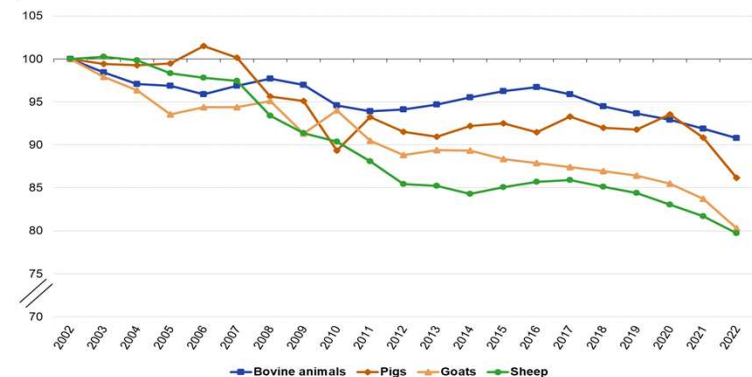
## Livestock populations (million heads, 2022)



Source: Eurostat (online data codes: apro\_mt\_lscatl, apro\_mt\_lspig, apro\_mt\_lssheep, apro\_mt\_lsgoat)

## Developments of livestock populations

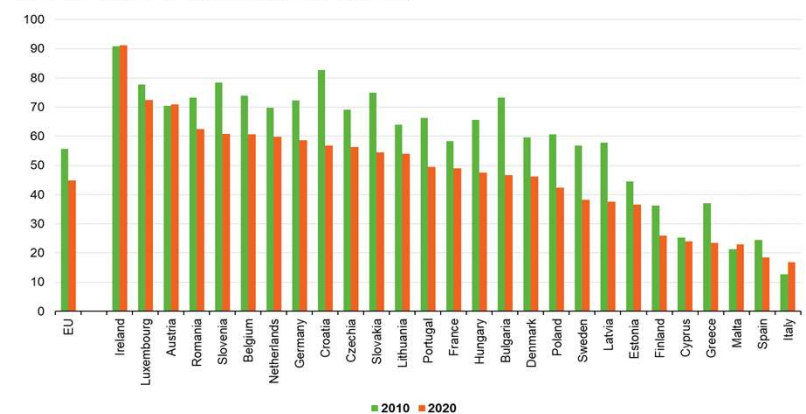
(index 2002=100 based on heads of animals, EU, 2002-2022)



Source: Eurostat (online data code: apro\_mt\_lscatl, apro\_mt\_lspig, apro\_mt\_lssheep and apro\_mt\_lsgoat)

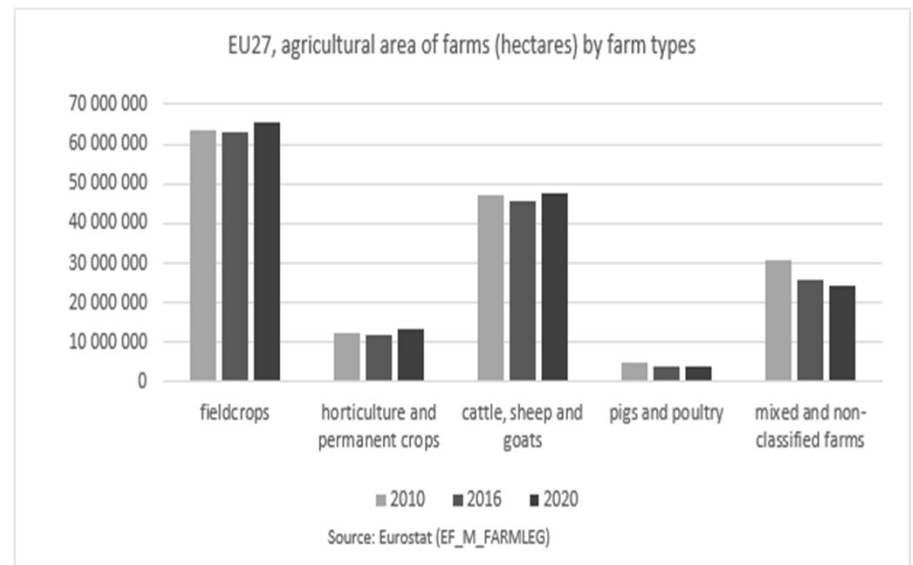
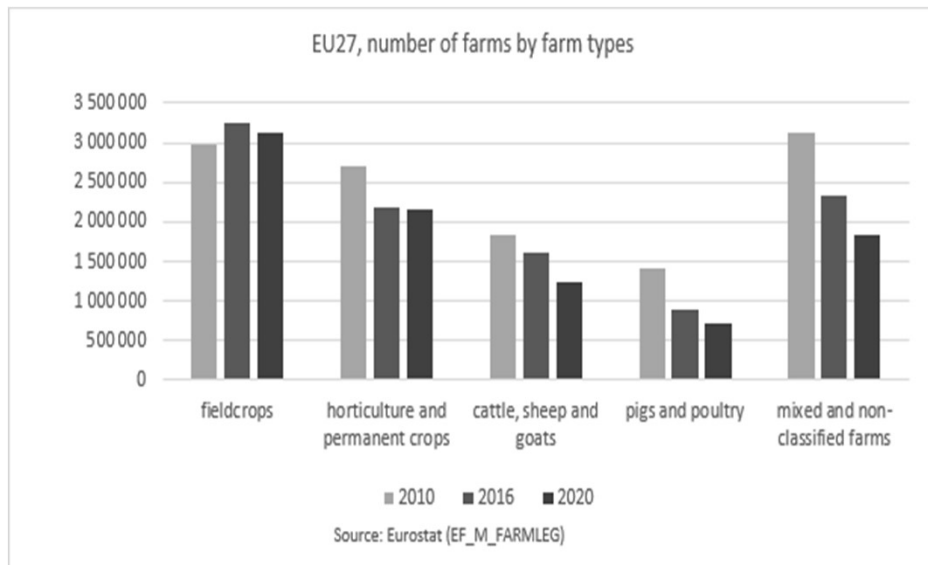
## Farm holdings with livestock

(% of total number of farm holdings, 2010 and 2020)

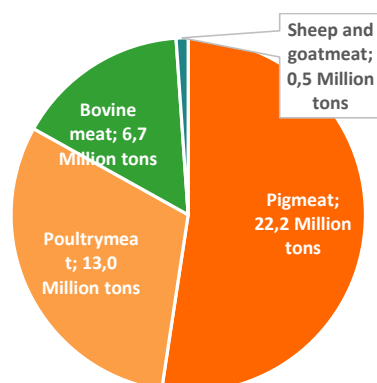


Source: Eurostat (online data code: ef\_lsk\_main)

# Livestock farms



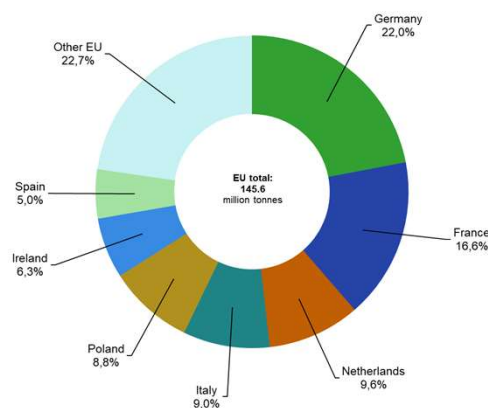
# EU animal production & balance (2022)



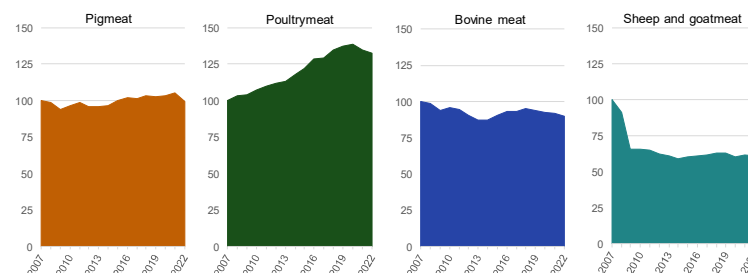
	2022
<b>Net Production</b>	<b>42,6 Million tons</b>
Imports (meat)	1,4 Million tons
Exports (meat)	6,5 Million tons
<b>Net trade (meat)</b>	<b>5,0 Million tons</b>
<b>Total EU Consumption</b>	<b>37,6 Million tons</b>
<b>per capita consumption (kg r.w.e.)*</b>	
of which Beef and Veal meat	10,3
of which Sheep and Goat meat	1,4
of which Pig meat	32,0
of which Poultry meat	23,3

Source: AGRI short-term outlook - Volumes expressed in carcass weight equivalent (cwe) except for per capita consumption, expressed in kg retail weight equivalent (rwe)

## Cow milk deliveries to dairies (2022)



## Developments of the quantity of meat production (2007 = 100 based on tonnes, EU, 2007-2022)



Source : Eurostat (online data codes: apro\_mt\_iscatl, apro\_mt\_ispig, apro\_mt\_issheep, apro\_mt\_lsgoat)

Source: Eurostat (online data code: apro\_mk\_pobta)

Annual  
production  
growth/decline  
until 2035

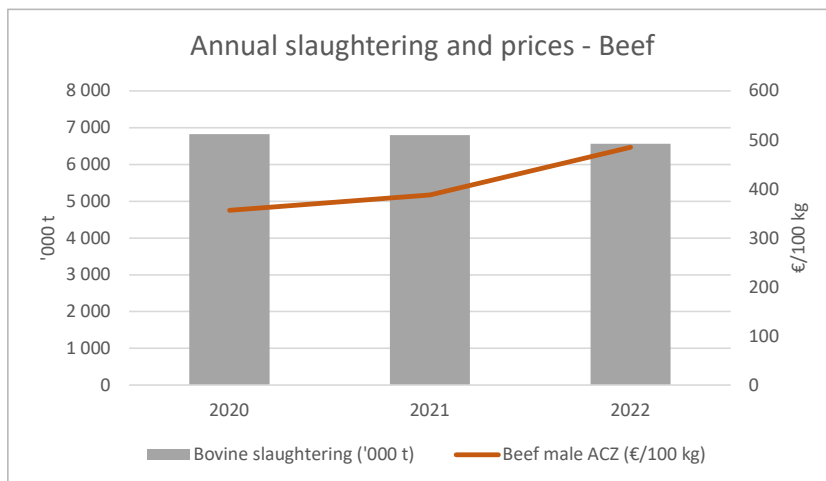
Gross Indigenous Production	2013 – 2023	2023 - 2035
Milk	1,1%	-0,2%
Beef	0%	-0,8%
Pigmeat	0,1%	-0,8%
Poultry	1,9%	0,4%
Sheep+goat	-0,1%	-0,3%

Source: Report on EU agricultural outlook 2023-35,  
European Commission

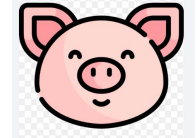
# EU Cattle



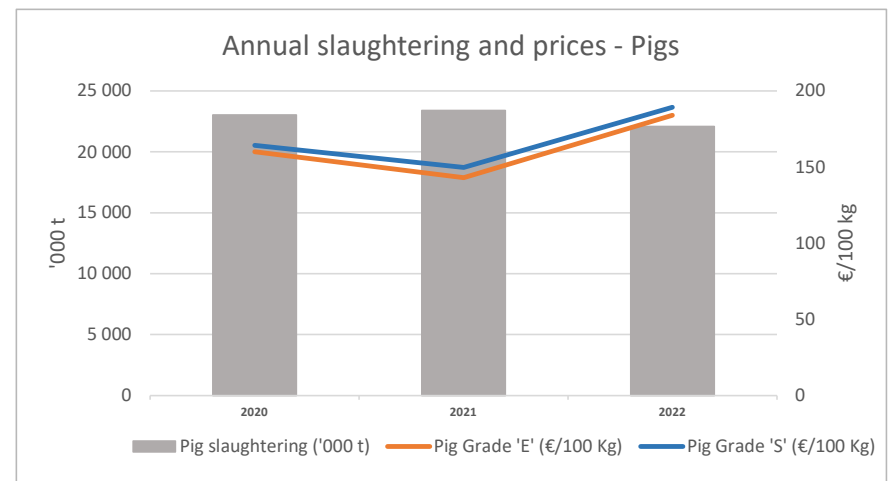
- **Declining cow population** (fewer calves)
  - Increasing milk yield in dairy herds
  - Low profits in suckler cow herds
- Beef “by-product” of dairy, declining supply



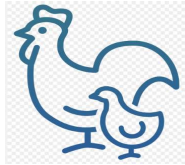
# EU Pigmeat



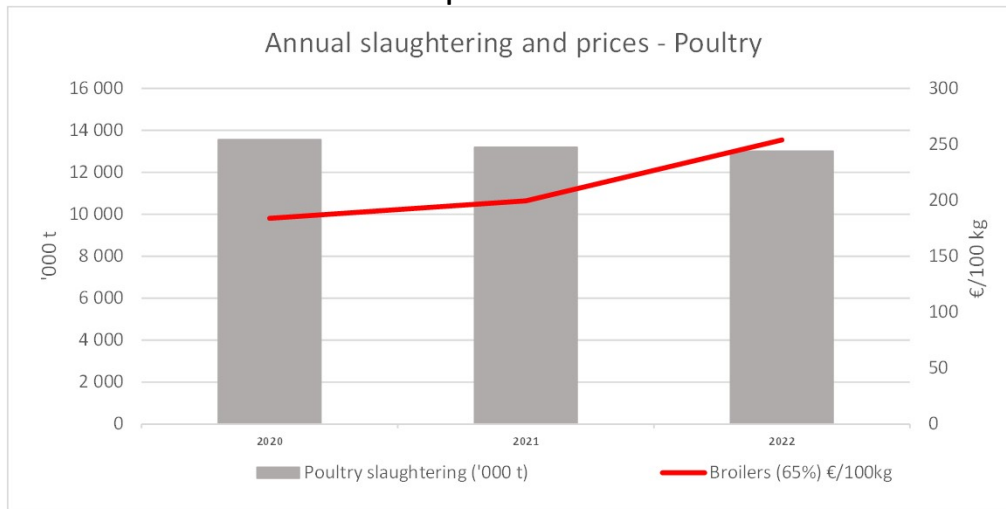
- **High costs** (feed, energy), **low margins**, **feed import dependency**
- Past price hikes driven by **exports**
- Investments difficult in **high density areas**
- **ASF** – permanent risk



# EU Poultry



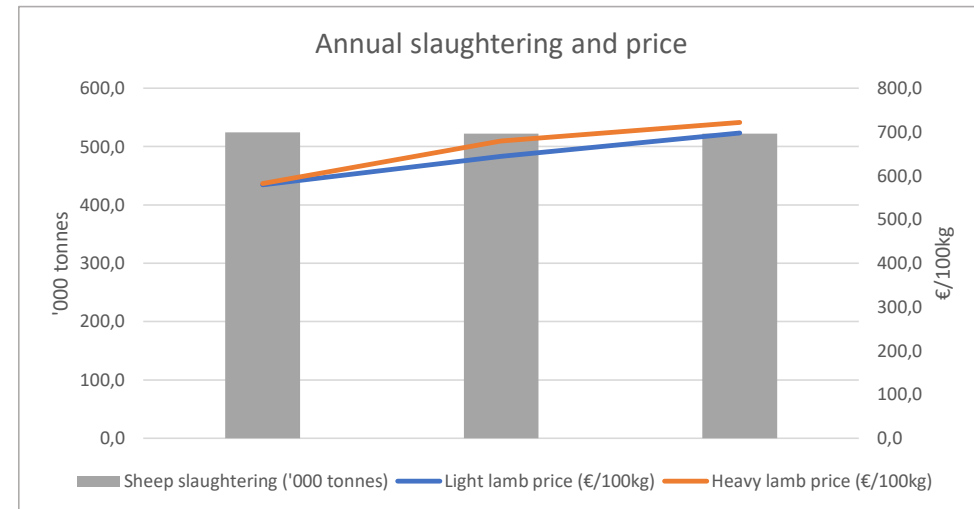
- **Price** competitive vis-à-vis other meats
- Only meat with **growing potential**
- **Feed import dependency**, Very competitive imports (UA, BR)
- **Avian Influenza** - permanent threat



# EU Sheep/Goats



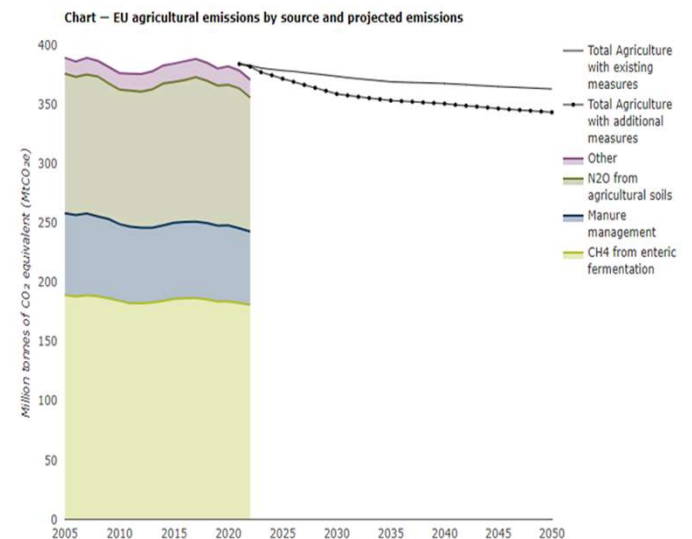
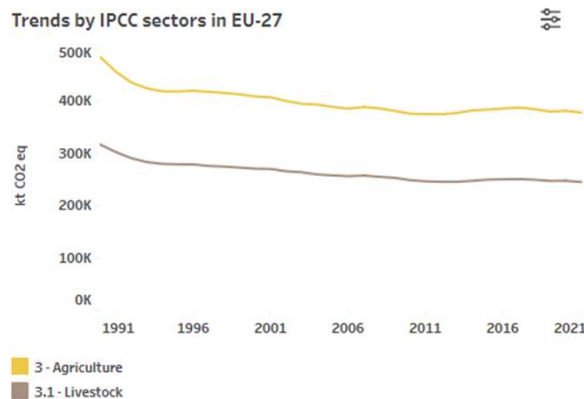
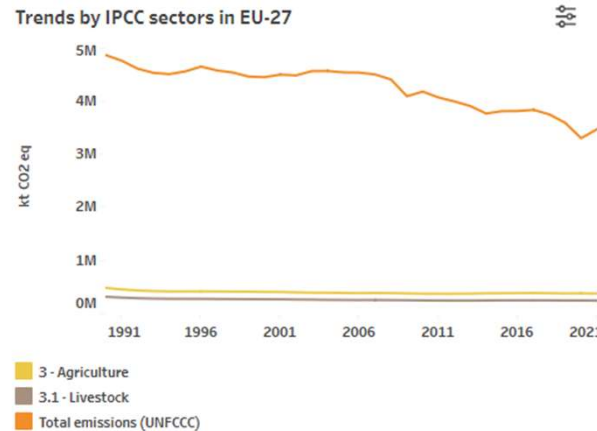
- **Seasonal** domestic supply (meat/milk)
- Niche market demand
- Competitive sheep meat imports (UK, NZ)
- Active **live sheep exports**





# Livestock impact on climate change: GHG emissions

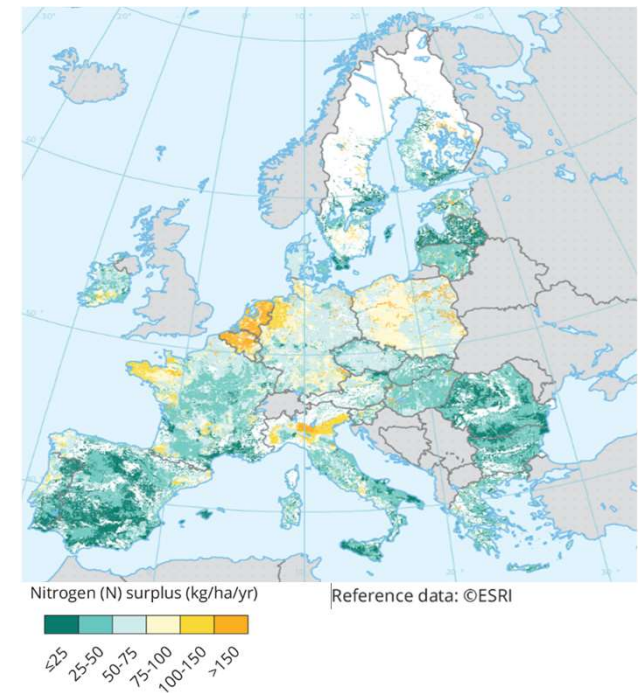
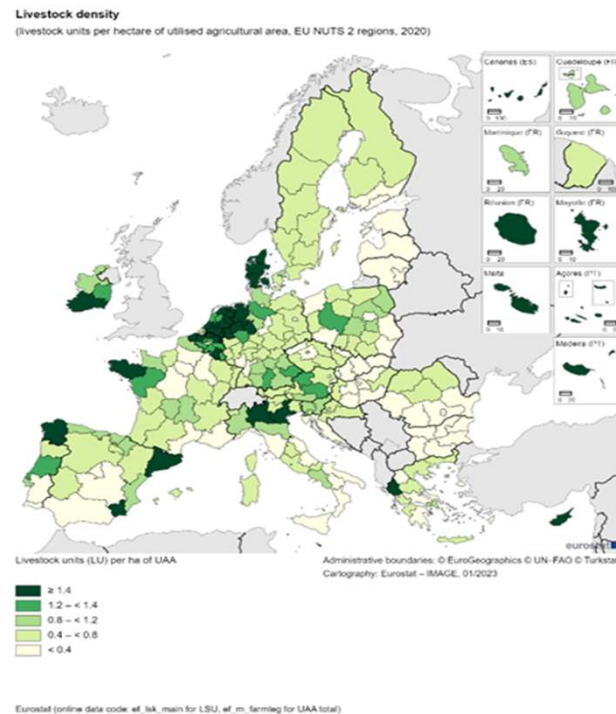
- EU agriculture is responsible for **11% of total EU GHG emissions**.
- **Livestock** represents the **main emission source (65%)** within agriculture.
- EU **livestock** GHG emissions **decreased by 23% from 1990 to 2021**.
- Based on **national projections**, an EU-level **decline of 4% is expected by 2030** compared with 2005 levels. If **currently planned additional measures** are implemented, an **8% reduction** is expected.



Source: European Environment Agency (EEA). National emissions reported to the UNFCCC and to the EU Greenhouse Gas Monitoring Mechanism

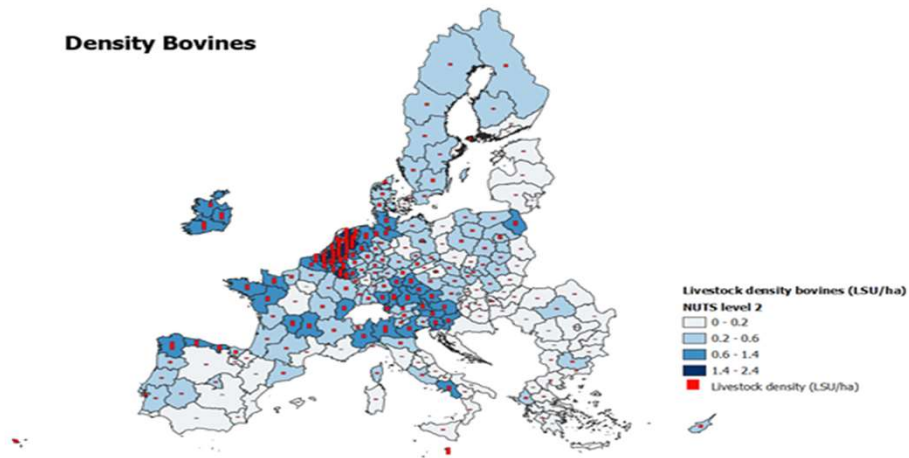
# Livestock impact on air, soil and water

- Environmental impacts mainly result from the **concentration of livestock in geographical areas**.
- In those areas with high livestock density, **nitrate leakage** is higher in **water**, as well as ammonia and nitrogen emissions.
- Livestock contributes to soil acidification and air and water pollution.

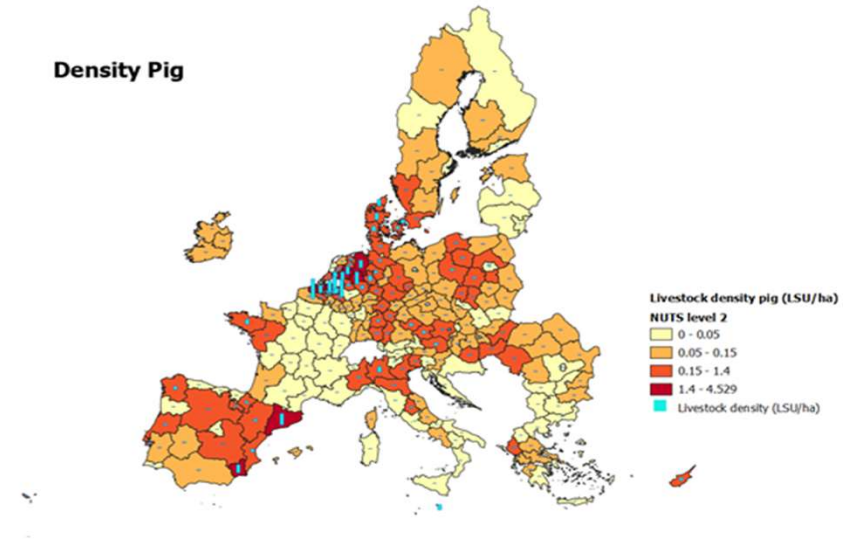


# Diversity

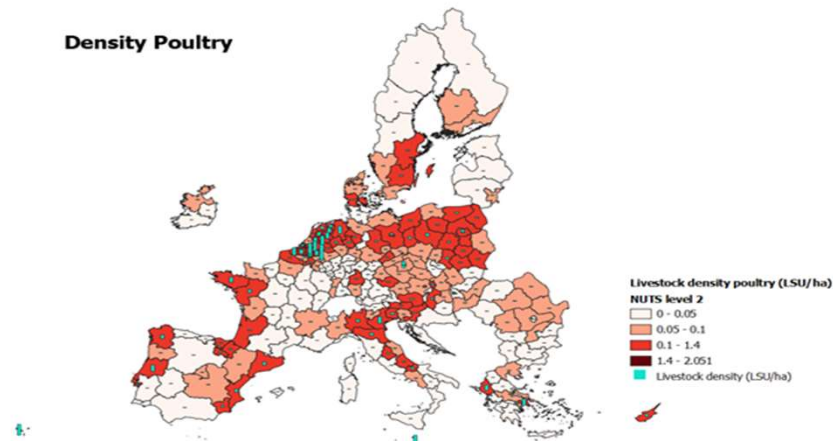
**Density Bovines**



**Density Pig**



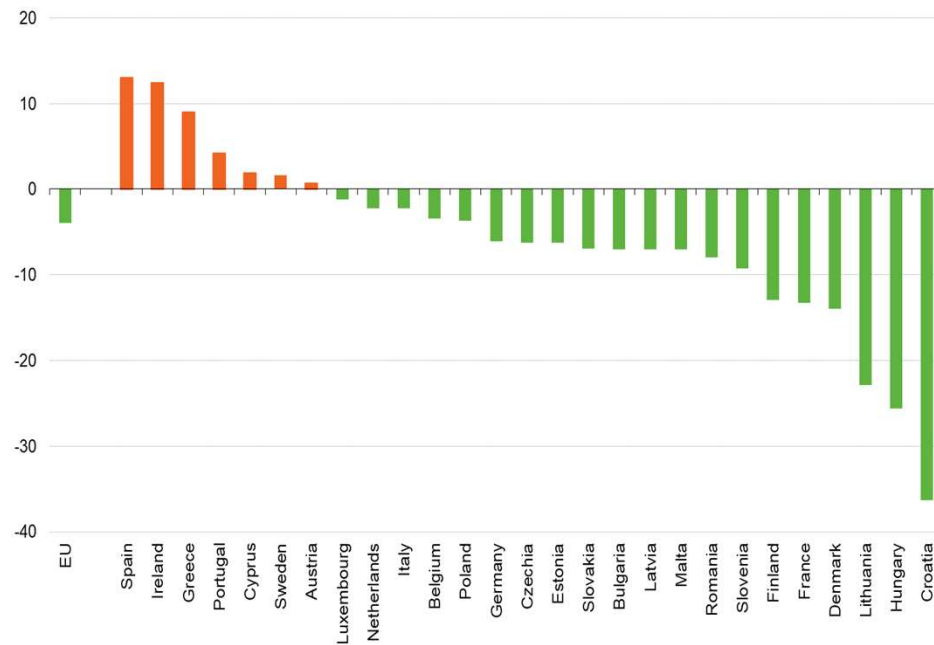
**Density Poultry**



Source: Eurostat (online data codes: ef\_lsk\_main, ef\_lus\_main)

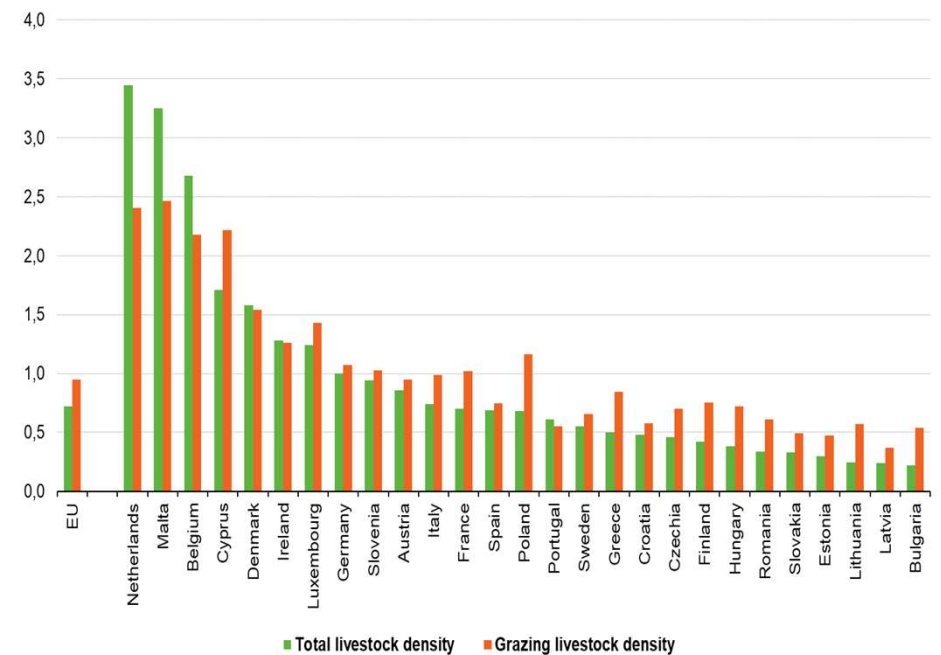
# Diversity

**Developments in livestock density**  
(% change, 2010-2020)



Source: Eurostat (online data codes: ef\_lsk\_main, ef\_lus\_main)

**Livestock density and grazing livestock density**  
(livestock units per hectare, 2020)

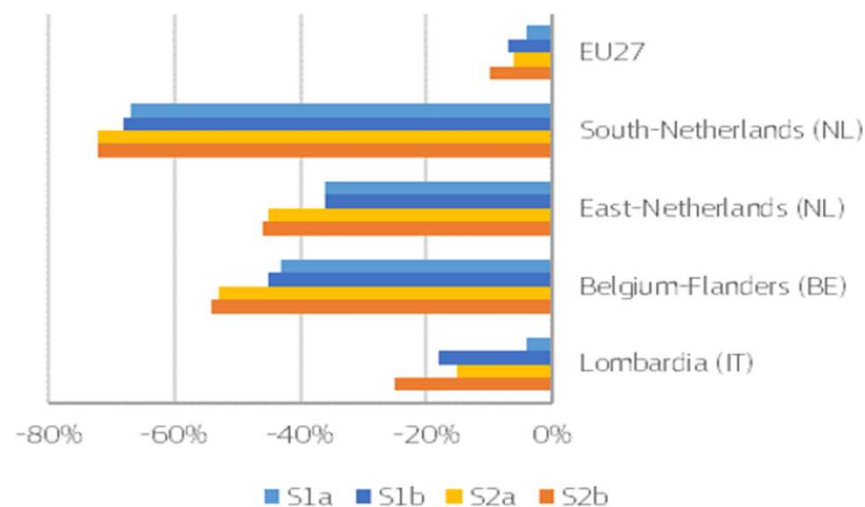


Source: Eurostat (online data codes: ef\_lsk\_main, ef\_lus\_main and Eurostat calculations)

# Environmental indicators in hotspots

- Environmental benefits associated with lower livestock density:
  - Lower ammonia emissions
  - Reduced nitrates leaching and runoff
  - Lower greenhouse gas emissions
- Advanced farming practices can further reduce agricultural emissions in hotspots (e.g. feed additives, anaerobic digestors, advanced manure management and manure application technologies)

Nitrates leaching and runoff reduction in EU27 and some hotspots

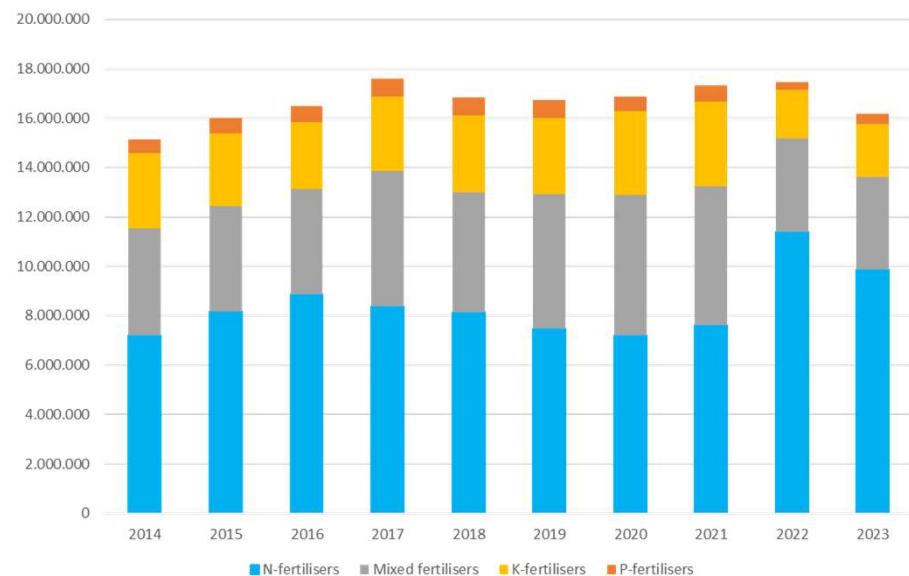


Source: EU agricultural Outlook 2022-2023  
(environmental scenario)

# EU fertilizer import dependency

- EU is largely dependent on mineral fertilizer and natural gas imports
- Geopolitical tensions may affect availability of imports and prices
- Fertilisation with organic matter (manure) linked to livestock herd

On average (2014-2023) Nitrogen fertilisers imports = 51% of total imported fertilisers



Source : [Agri-food data portal\\_Fertiliser trade](#)

# Livestock positive externalities

- Animals **convert nonedible biomass** into highly nutritious food for humans.
- In territories considered 'marginal' livestock farming produces food on **land that cannot be used for crops** (marginal land), while also contributing to maintaining local habitats
- In these settings **livestock is a main economic activity**, critical to ensure **vitality to the local rural society**
- Extensive pasture-based systems have a **proven significant potential in terms of carbon sequestration**.
- Livestock, especially grazing ruminants, **can have a positive impact on biodiversity**, by providing wildlife habitats for species of flora and fauna that are specific to grassland ecosystems
- Livestock is a potential **source of renewable energy and organic fertilisation**
- Grazing could be a strategy for controlling biomass and **prevent fire events**



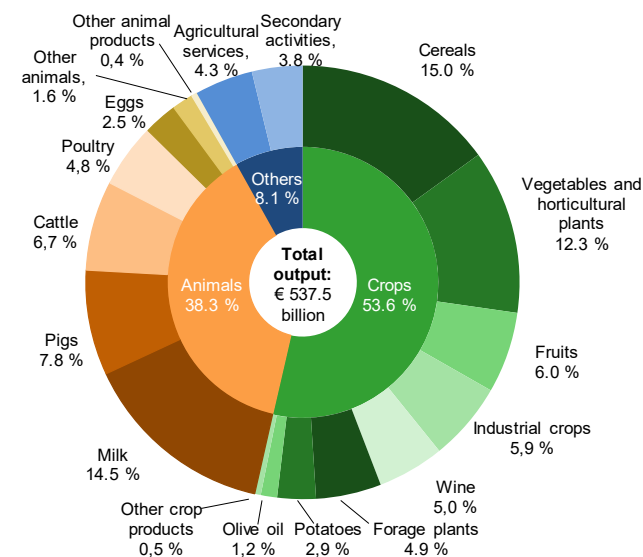




# Additional facts & figures about EU livestock

- From an economic point of view, livestock is crucial for EU agriculture:
  - They represent around **40% of the total agriculture value**
  - European industries linked to animal production (milk and meat processing, feed for livestock) have an annual turnover of approximately EUR **400 billion**
  - Livestock farms employ around **4 million people** in the EU
  - Livestock contributes to shape the EU farming system based on family farms: **58% of European farms hold animals**
  - The average livestock farm typically has 1 to 2 workers plus the family owner
  - Livestock sector is a most problematic in terms of ageing/generational renewal
  - Decrease in labour
  - Predominant farming system in predominantly rural regions

**Output of the agricultural industry**  
(% of total output, EU, 2022)



Source: Eurostat (online data code: aact\_eaa01)

# Current EU policies

CAP



# EU support for agriculture's sustainability

## Economic sustainability

- ✓ **Basic income support** (= payments decoupled from production)
- ✓ **Redistributive income support** (for farms < 50ha)
- ✓ **Coupled income support** (for competitiveness/sustainability/quality in sectors in difficulty)

## Environmental sustainability

- ✓ **Conditionality** (for all)
- ✓ **Eco-schemes** (for those going beyond conditionality in carbon sequestration, precision farming, permanent pasture, animal welfare, antimicrobial reduction)
- ✓ **Agro-environmental measures** (including support for organic farming, improve animal welfare and combat antimicrobial resistance, conserve and develop genetic resources)

## Social sustainability

- ✓ **Respect of EU labour standards** conditional for receiving payments + incentives to improve working conditions on farm
- ✓ **Complementary income support for young farmers**
- ✓ **Higher animal welfare standards**
- ✓ **Reduced use of antibiotics**

# Concrete examples – Eco-schemes/Investments for livestock sectors

## Production system

1. More **temporary grassland** in rotation
2. Longer rotation with **leguminous crop** for feeding
3. **Grazing management optimization** as additional module in FaST
4. **Extensive livestock management** system
5. Increase **grass-fed production**
6. Investment for **agro-forestry system**
7. Payment for **permanent grassland / peatland / wetlands**

## Manure management

16. Investment in low-emission **manure storage** system
17. **Anaerobic digestion / methanisation**
18. **Organic fertilisers / soil improver**
19. **Nutrient management plans** at local level
20. Investment in and use of low emission **manure spreading techniques** (ground level application of manure and slurry)

## Focus on animals

8. **Feed additives** to reduce methane emissions (3-Nitrooxypropanol, Linseed, Seaweed)
9. **Increased share of co-products** in the feed ratio
10. **Precision protein feeding** (avoiding N surplus in the ratio, reducing leakage)
11. **Use of sexed semen in dairy herd** enhancing meat production from the dairy herd (maintain output using fewer resources)
12. **Increased number of lactations per dairy cow** to increase efficiency (maintain output using fewer resources)
13. Maintain/re-introduce **local resistant breeds**
14. Invest in more **animal welfare**, such as improved **housing** systems (including e.g. new ventilation systems, filters for methane)
15. Support **carbon audits** for better management and for labelling purposes

## Knowledge and innovation

21. vocational or specific **training courses for farmers or advisors**
22. use of **advice by farmers**
23. setting up of **advisory services**, e.g. for **innovation support**
24. **on-farm demonstration** activities



Thank you



## NOW YOUR INPUT: Towards a sustainable transition in livestock farming – challenges and solutions – your input on:

- What are the key problems, threats and opportunities for EU livestock in a broader circular economy perspective?
- How are these distributed among different (sub) sectors, territories and types/sizes of farms?
- Which areas, farms, livestock sub-sectors, production systems, should get particular attention under the CAP to assist just transition

