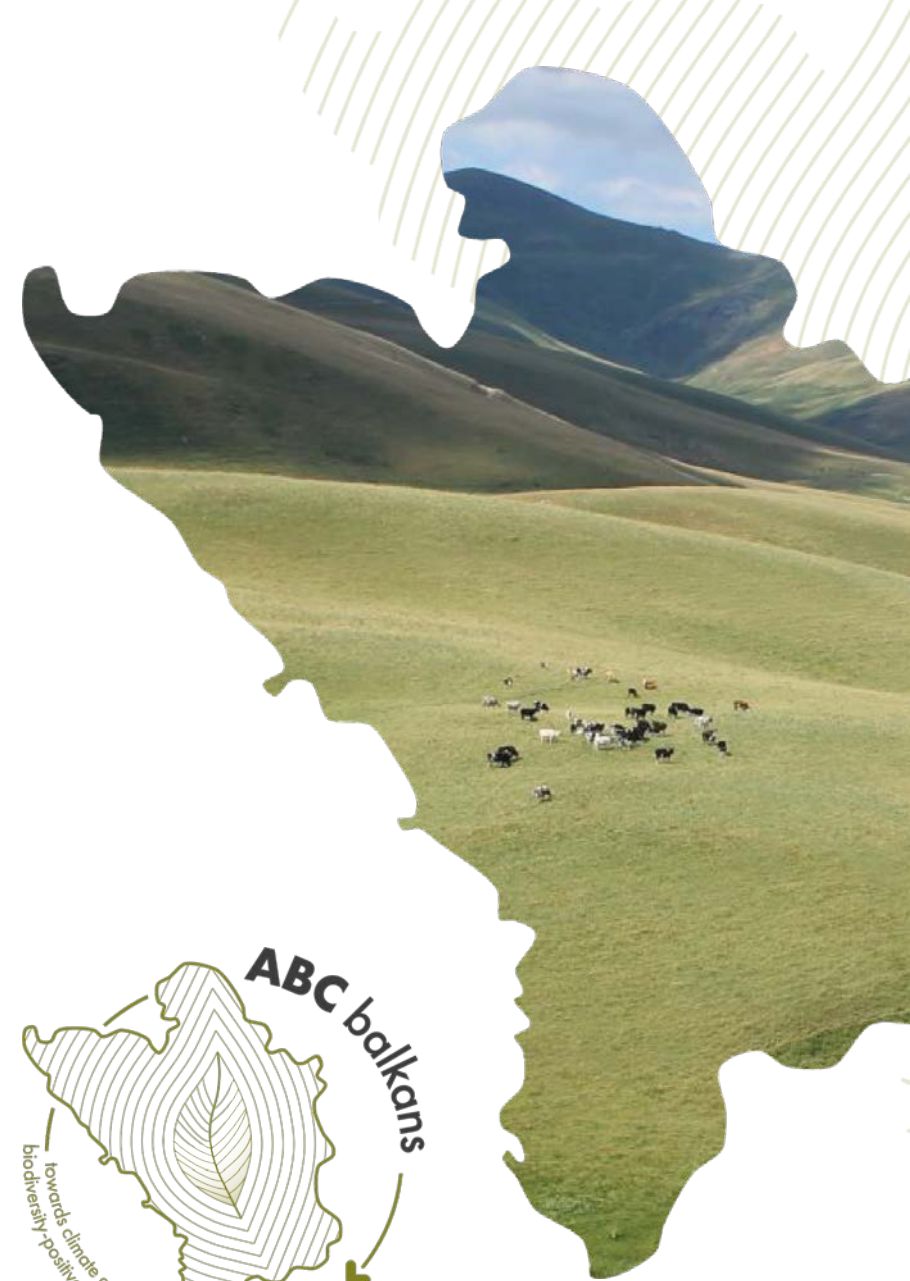
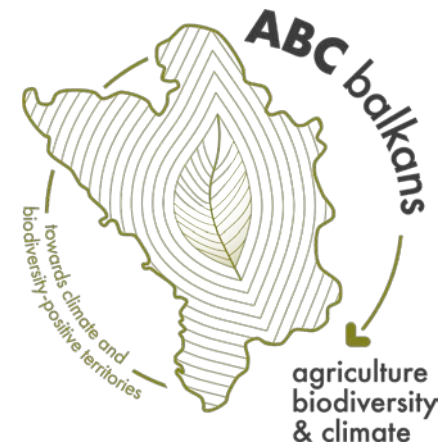


# Agroecology Territories for Climate Action

Network Virtual Seminar #1

# "Agroecology Territories and Pastoralism"

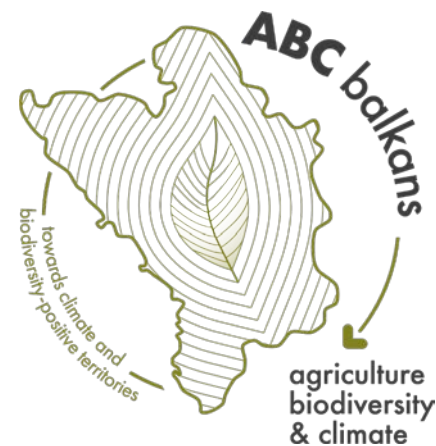
Date: Wednesday 13th of March, 2024  
Hour: 11:00 AM- 01:00 PM  
Where: [on zoom](#)



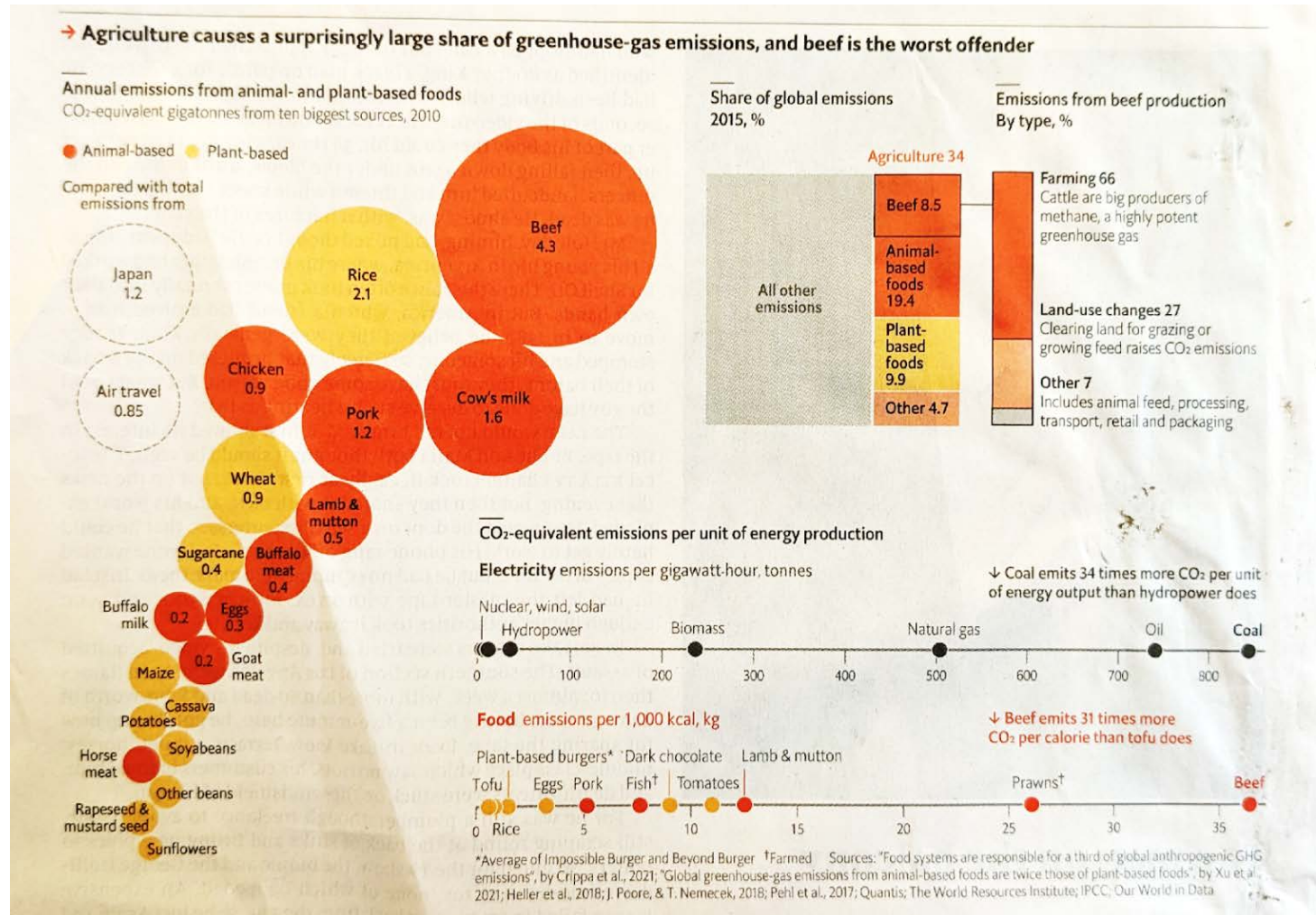
# Climate Change & Biodiversity Nexus

## Why and How pastoralism can play a role at global & Balkan levels?

- ❑ Challenges for the balanced attribution of pastoral environmental impact : François Lerin (AIDA) and Claire Bernard - Mongin (Cirad)
- ❑ Pastoral production in the Balkans context, Jimmy Balouzat (AirCoop)



# Agricultural and Livestock GHG Emissions as a global challenge for climate change

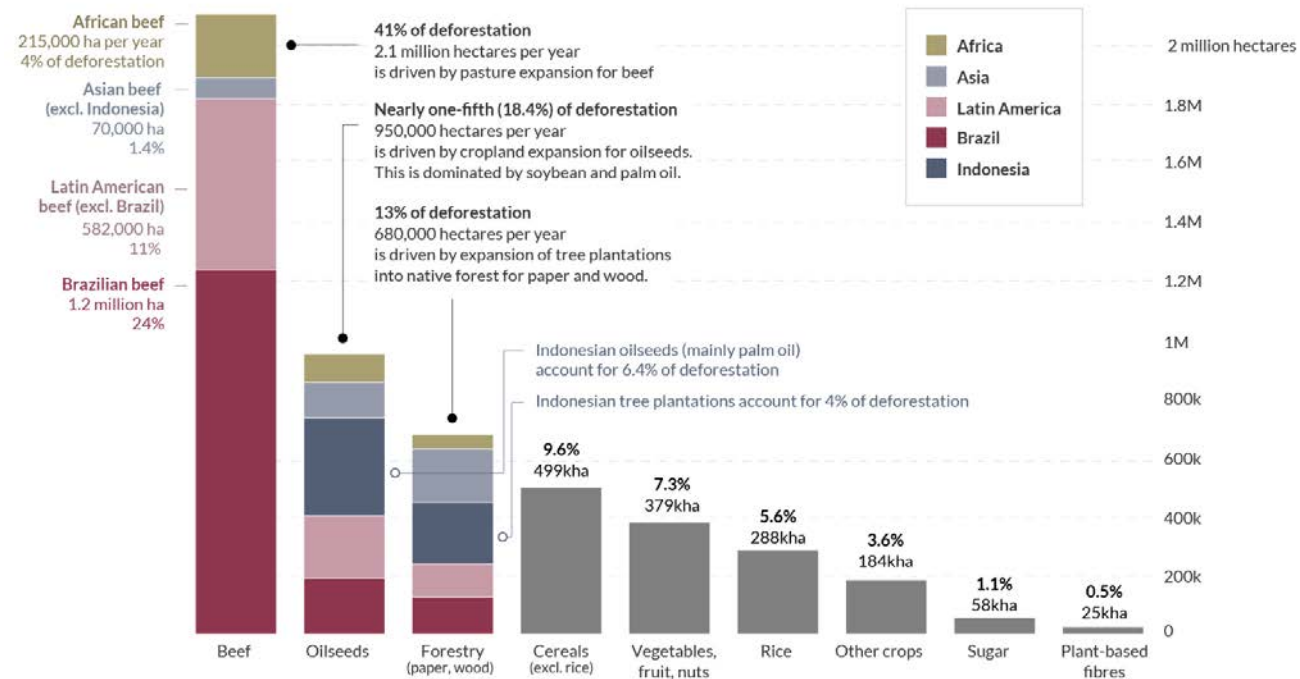


# Agricultural and Livestock activities as a global challenge for biodiversity

## What are the drivers of tropical deforestation?

Our World in Data

Nearly all of global deforestation occurs in tropical and subtropical countries. 70% to 80% is driven by conversion of primary forest to agriculture or tree plantations. Shown is the breakdown of these drivers averaged over the years 2005 to 2013. Further observations since 2013 suggest that drivers have not changed substantially over this period.



Data source: Florence Pendrill et al. (2019). Deforestation displaced: trade in forest-risk commodities and the prospects for a global forest transition. OurWorldinData.org - Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the author Hannah Ritchie.



# Challenges for the balanced attribution of pastoral impact on sustainable transition

These figures (ie. Planet Boundaries), make it necessary to ask agriculture (and livestock) to control and reduce GHG emissions in the same way as other economic sectors (transport, industries)!

But ...“corporatist” resistance from the sector - as we saw recently in Europe, in the face of the Green Deal announcements !

And ... strong critiques push for a “sustainable intensification path” propose a future without meat = plant-based diet or development of alternative sources of protein (continuation of the efficiency paradigm = animals are input-output model, no circularity)



# Challenges for the balanced attribution of pastoral impact on sustainable transition

However, over the last 20 years, in the middle of this polarized debate, numerous researchers and institutions raised their voice to identify certain livestock production models (food and non-food):

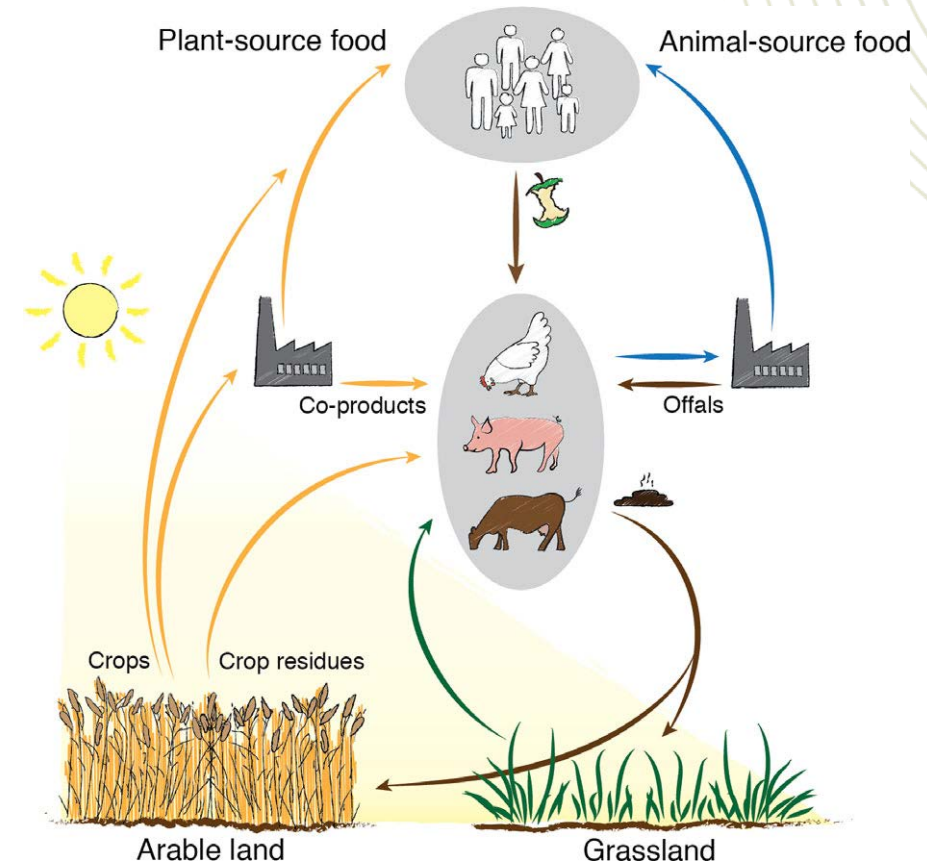
- low-cost livestock
- circular livestock
- mobile pastoralism etc.

that demonstrate “positive externalities” on:

- environment: climate, biodiversity (ecosystemic services)
- other dimensions of sustainable transitions:
  - health & nutrition
  - culture and ethic
  - local economy

And work to define a “safe space” for sustainable livestock consumption, adopting a holistic and place based approach of pastoralism, where (Manzano et al, 2021)

In pastoral systems, livestock convert biomass that we cannot or do not want to eat into valuable products, such as animal source food and manure.



# Challenges for the balanced attribution of pastoral impact on sustainability dimensions

	Nutrition and Health	Environment	Culture and ethics	Economy
Underestimation of Benefits	High quality products due to the diversity of feeds	Open landscape and ½ natural biodiversity (HNV farming) Prevention of mega fires Natural emissions baseline vs mobile pastoralism carbon footprint (Pardo et al, 2023)	Cultural landscapes Food and artisanal biocultural heritage (Frontefrancesco et al, 2022)	Diversity of bio-sourced products (food and non food) Valorization of marginal productive lands = “Low cost livestock”
Overestimation of harms	High consumption level of (red) meat cause non communicable diet-related diseases (obesity, cancer, etc.) (Tilman & Clark, 2014)	Feed-food competition / deforestation (Wilkinson et lee, 2017) - Over grazing, soil erosion Wildlife cohabitation Increasing GHG Emissions (Gerber et al.2023)	Animal welfare /Slaughtering (Fischer, 2020)	Difficult to modernize and intensify (Ricetern et al., 2019)

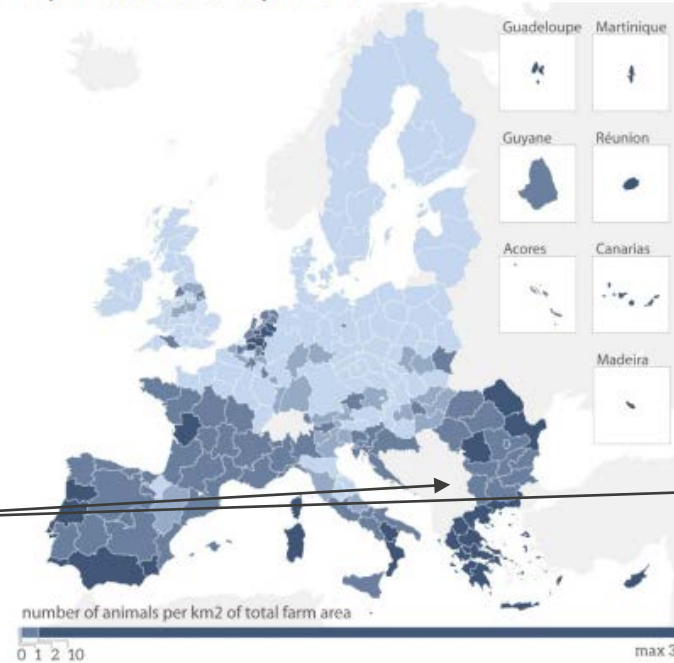
A non exhaustive overview of key messages to rebalance contemporary debates on the role of (Balkan??) pastoralism in a context of food system transition (freely inspired from Leroy, 2023)



# Pastoralism: a role in Agroecological Transitions (in the Balkans) ?

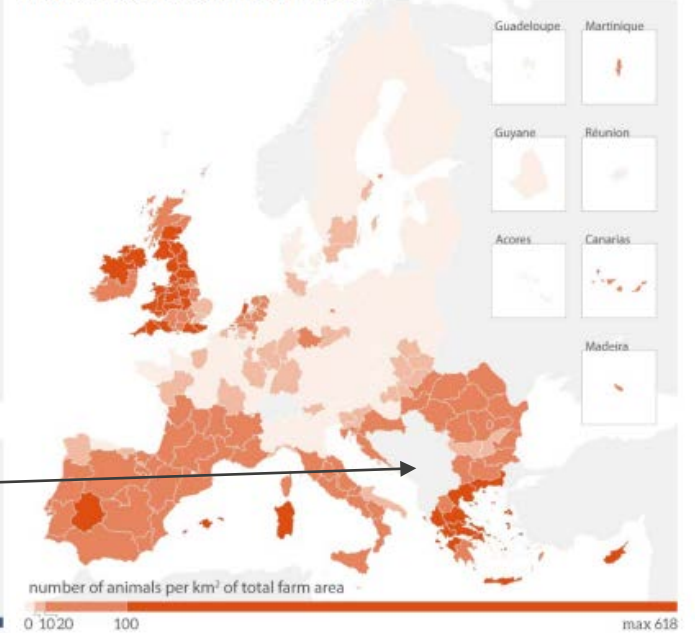
- To what extent should our Network “*Agroecological territories for climate action*” invest in the theme?
- The fading of pastoralists, in Europe and beyond” = What is the importance of these pastoral systems for the network of territories we intend to support?
- To what extent do we know the current situation of pastoral systems in the Balkans in order to contribute to current discussions on the future of pastoralism ?
- How to articulate and promote a Balkan conversation in the international/European discussion?

Map 2 – Goat herd density in the EU



Data source: Eurostat, [Farm structure survey](#), 2013.

Map 1 – Sheep flock density in the EU



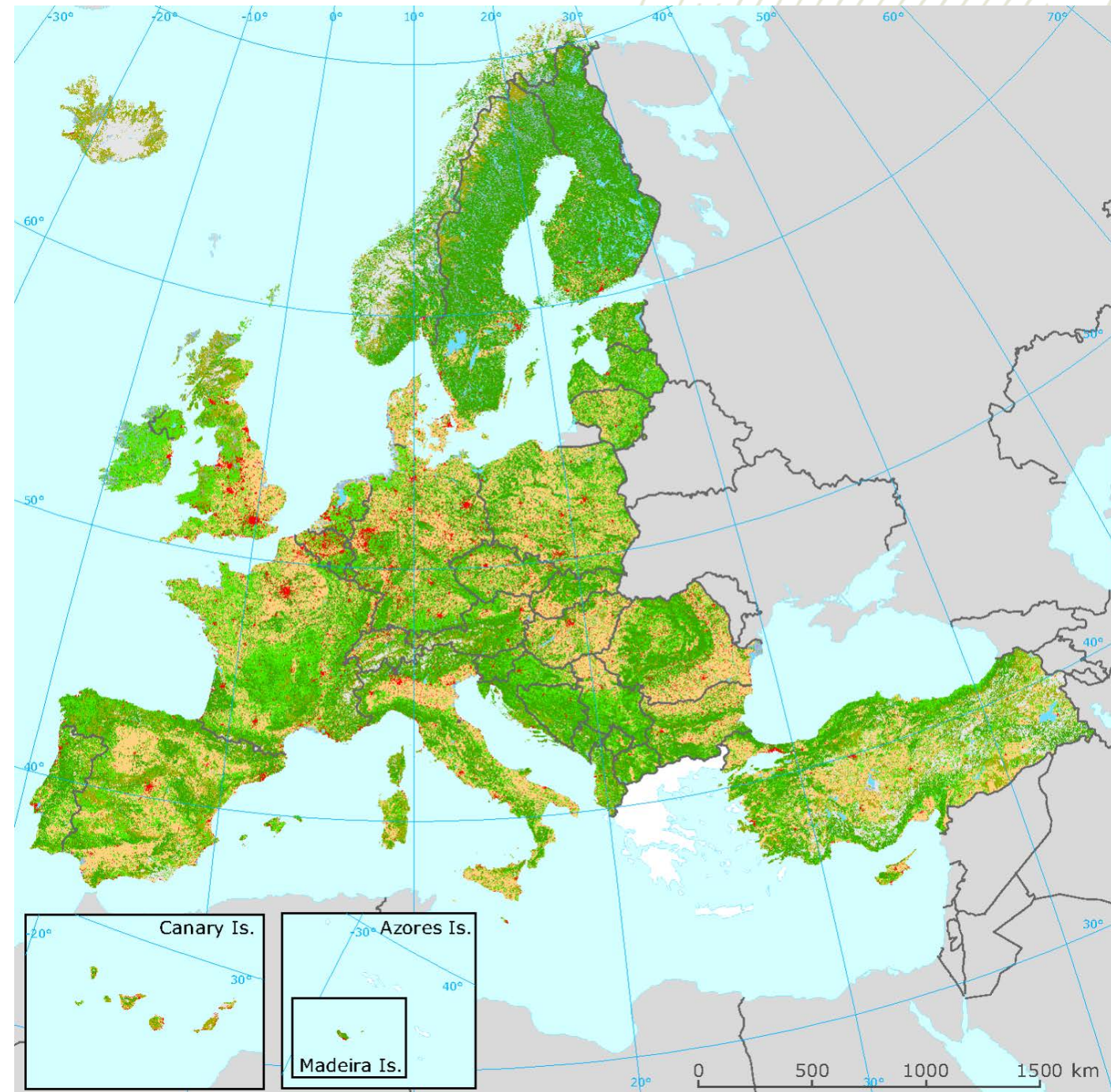
Data source: Eurostat, [Farm structure survey](#), 2013.



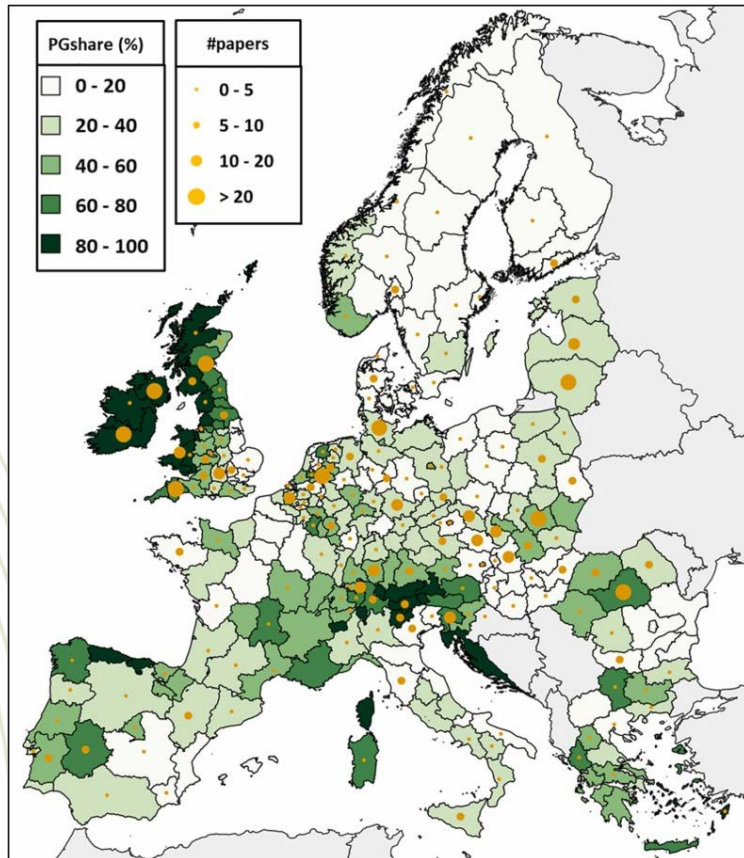


# A Balkan landscape oriented towards pastoralism

## Corine Land Cover types - 2006

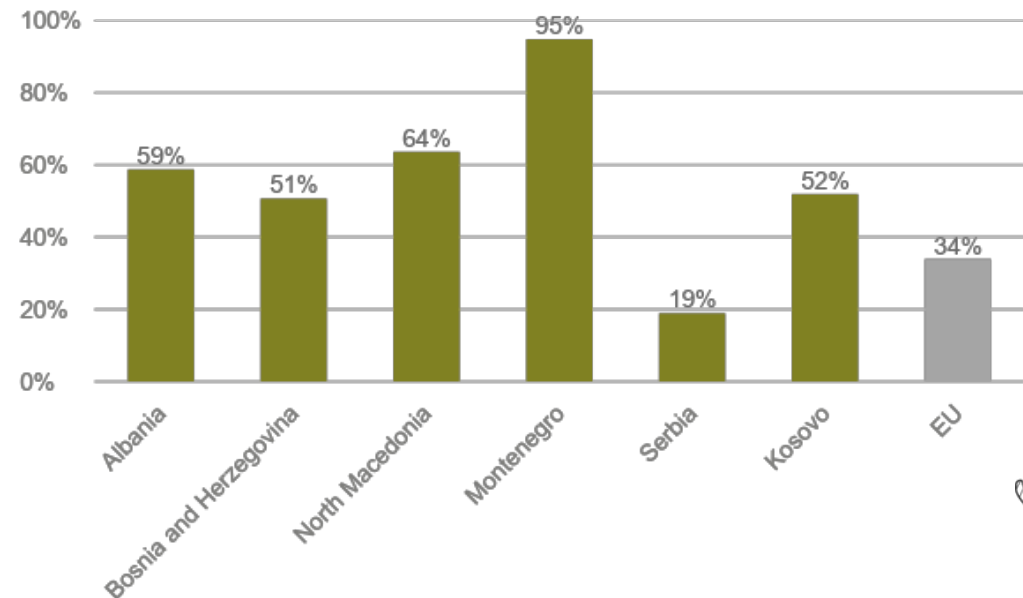


# A Balkan landscape oriented towards pastoralism

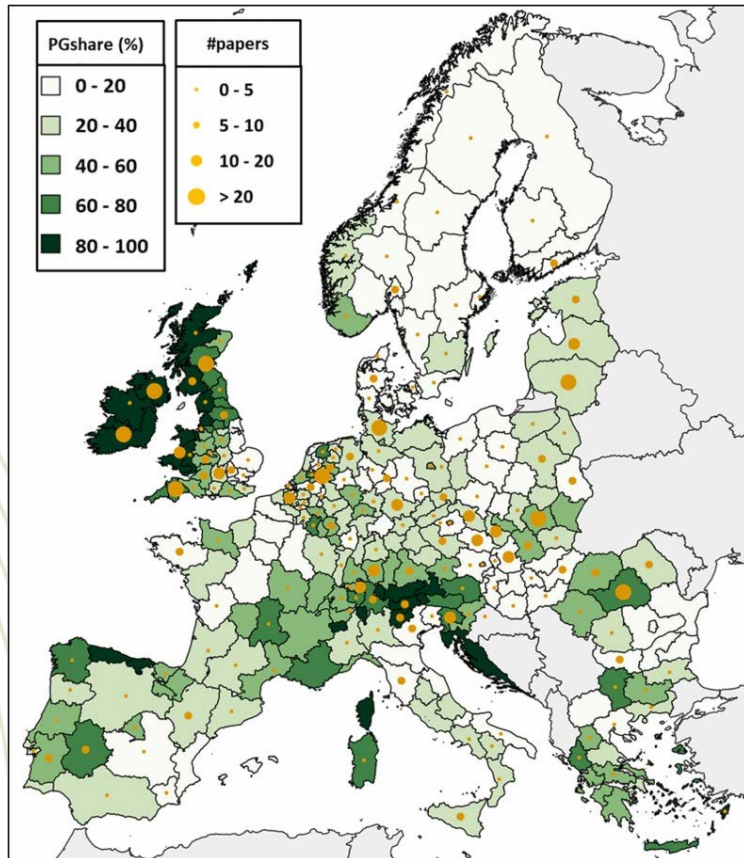


- Permanent grasslands cover **34%** of the European Union's agricultural area (Eurostat, 2020)
- As compared to this map, **WBC would rake amongst the European countries with the highest share of grassland in their UAA** :

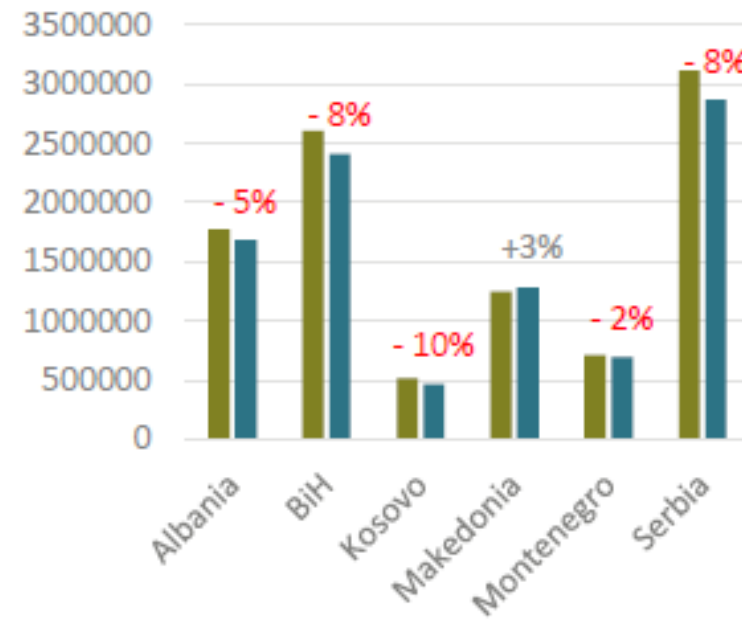
*Share of Grassland in the Agricultural Land, 2021.*  
*Data source: FAOstat, Kosovo agency of Statistics. Edited by AIDA, 2023.*



# A Balkan landscape oriented towards pastoralism



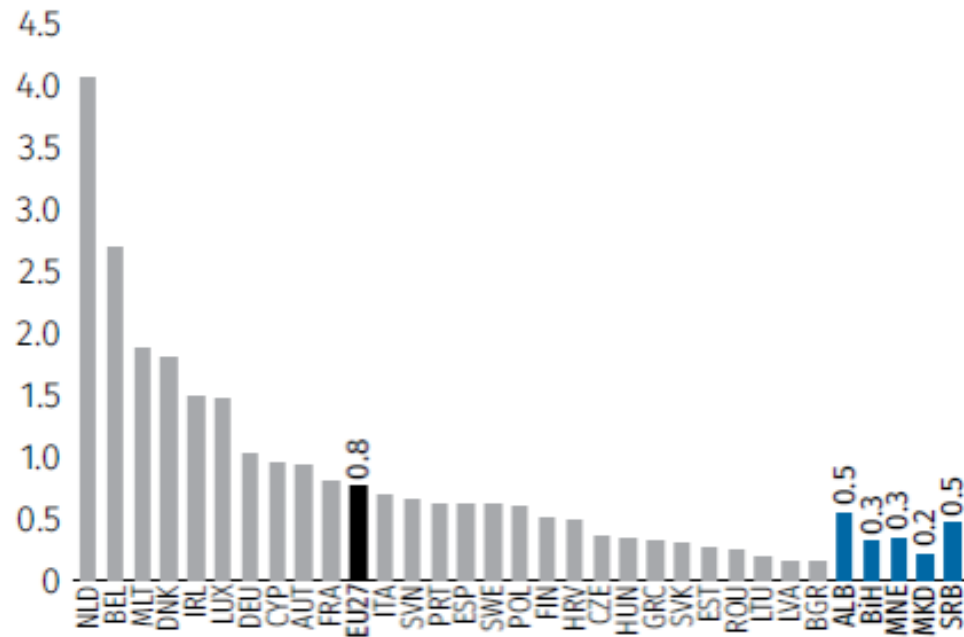
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Evolution of the land cover from 2000 to 2018 (hectares). Data source: CLC. Edited by AIDA, 2023.

# Livestock production in the Balkan: recent trends

a. Livestock unit per ha, 2020



Source: World Bank staff estimates using FAOSTAT data.

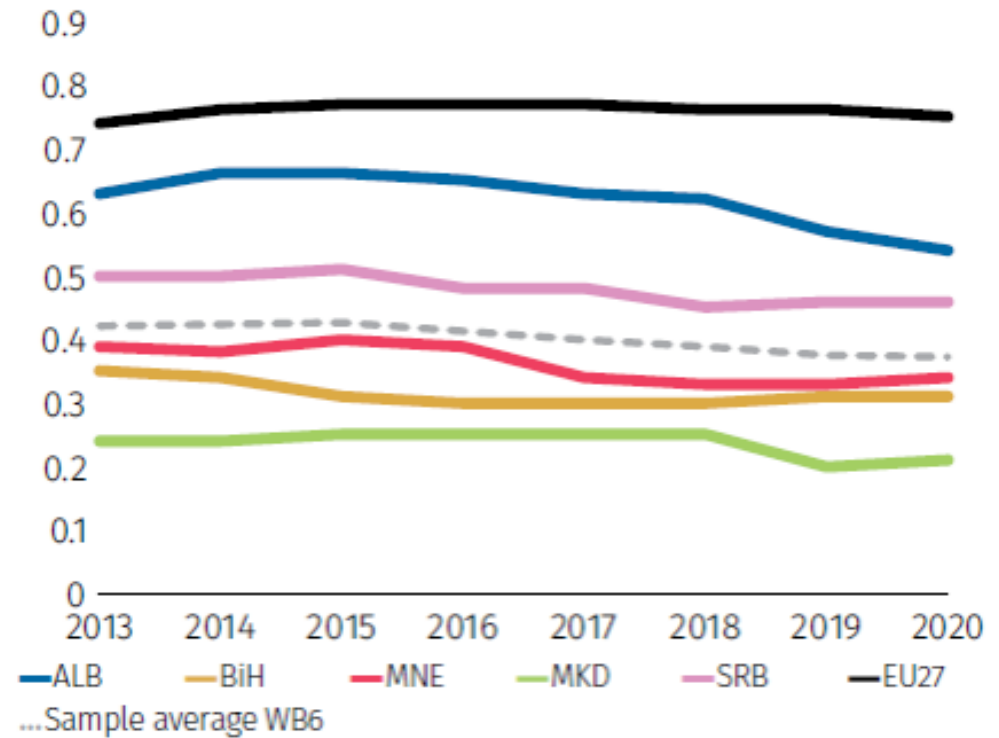
- The density of animals in the WB6 region, at **0.4 per ha**, is lower than the average livestock density in the EU.
- Indeed, it is **much lower** than in the EU countries with large livestock herds, such as the **Netherlands, Denmark, and Austria**, where land is limited, requiring highly intensive production methods and practices to overcome land constraints.



# Livestock production in the Balkan: recent trends

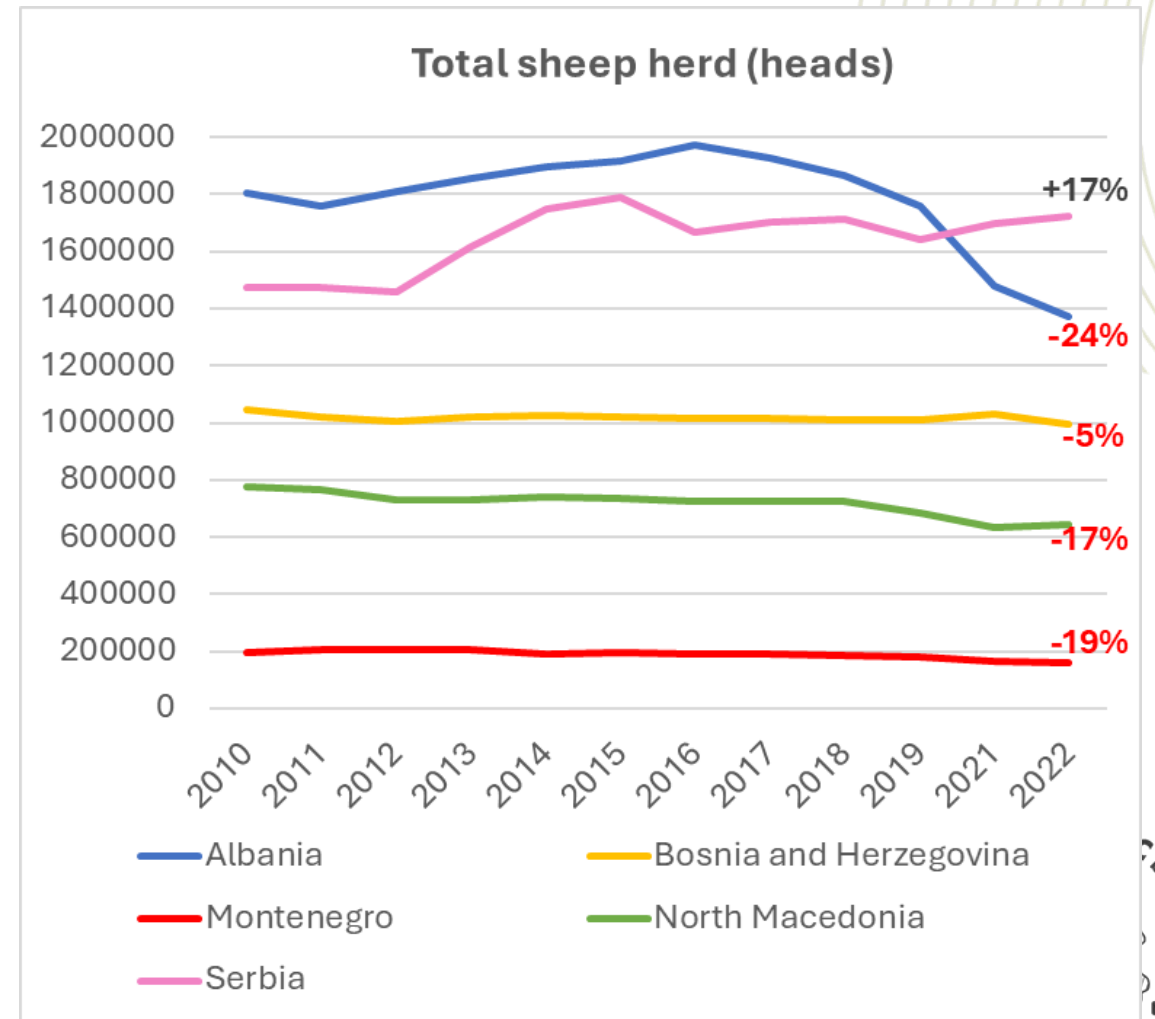
- A long - term stagnation / decreasing trend in livestock production and productivity in the WB6 region :
  - Difficulties for farmers to manage more capital and labor-intensive technologies
  - strict requirements on food safety, traceability and animal welfare in the EU, affecting the WB6 export capacities
  - Strategic choices in WBCs more oriented towards crop production

b. Trends in livestock units by country, 2013–2020



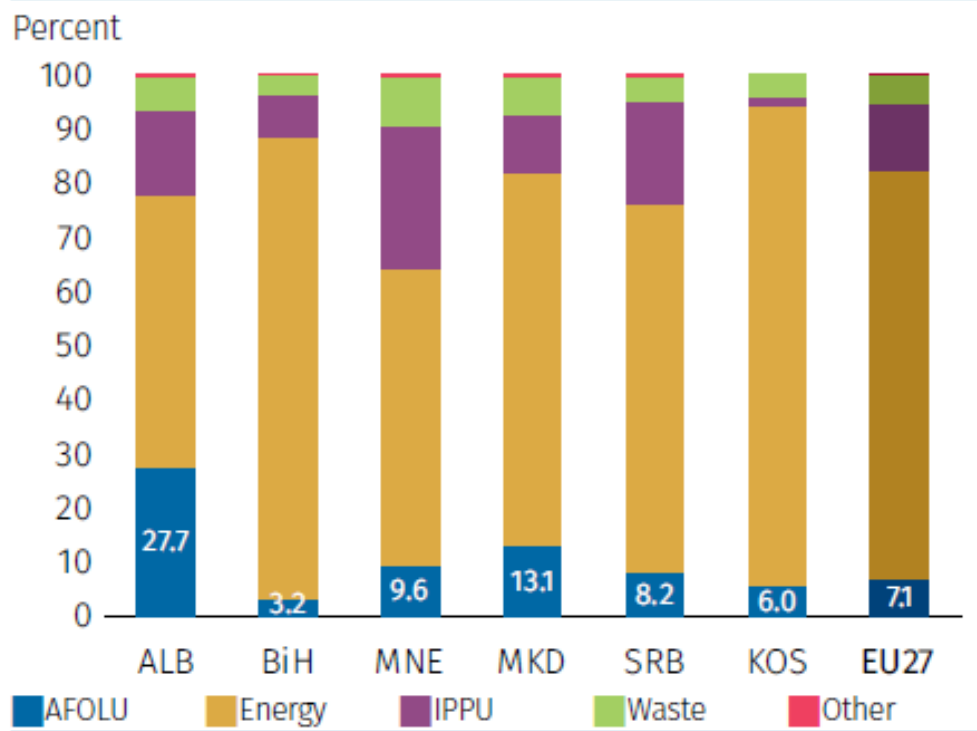
# Livestock production in the Balkan: recent trends

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# Livestock carbon footprint in WB6

**Figure 10.7.** GHG emissions by sector and country in the WB6, 2020



Source: FAOSTAT, 2023.

- The low and declining intensity of livestock production has contributed to the relatively low level of GHG emissions in the WB6 agriculture sector, as well as their decoupling from agricultural growth.
  - Agricultural growth in WB6, 2010-2020 : +0,9%
  - Methane emissions decline in WB6, 2010-2020 : - 1,3%
- In most WB6 countries in 2020, the agriculture sector generated about 10 percent of total emissions. The share was large only in Albania, at 28 percent. In comparison, the agriculture sector **globally generates more than 25 percent** of total emissions.

