



**EAAP**  
European Federation  
of Animal Science

## The 75<sup>th</sup> EAAP Annual Meeting



**INRAE**

 VetAgro Sup

  
UNIVERSITÉ  
Clermont  
Auvergne

# Evolution of animal and meat research over the past 50 years

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Date: 2<sup>nd</sup> September, 2024



### The new and important challenges (in livestock and meat sectors):

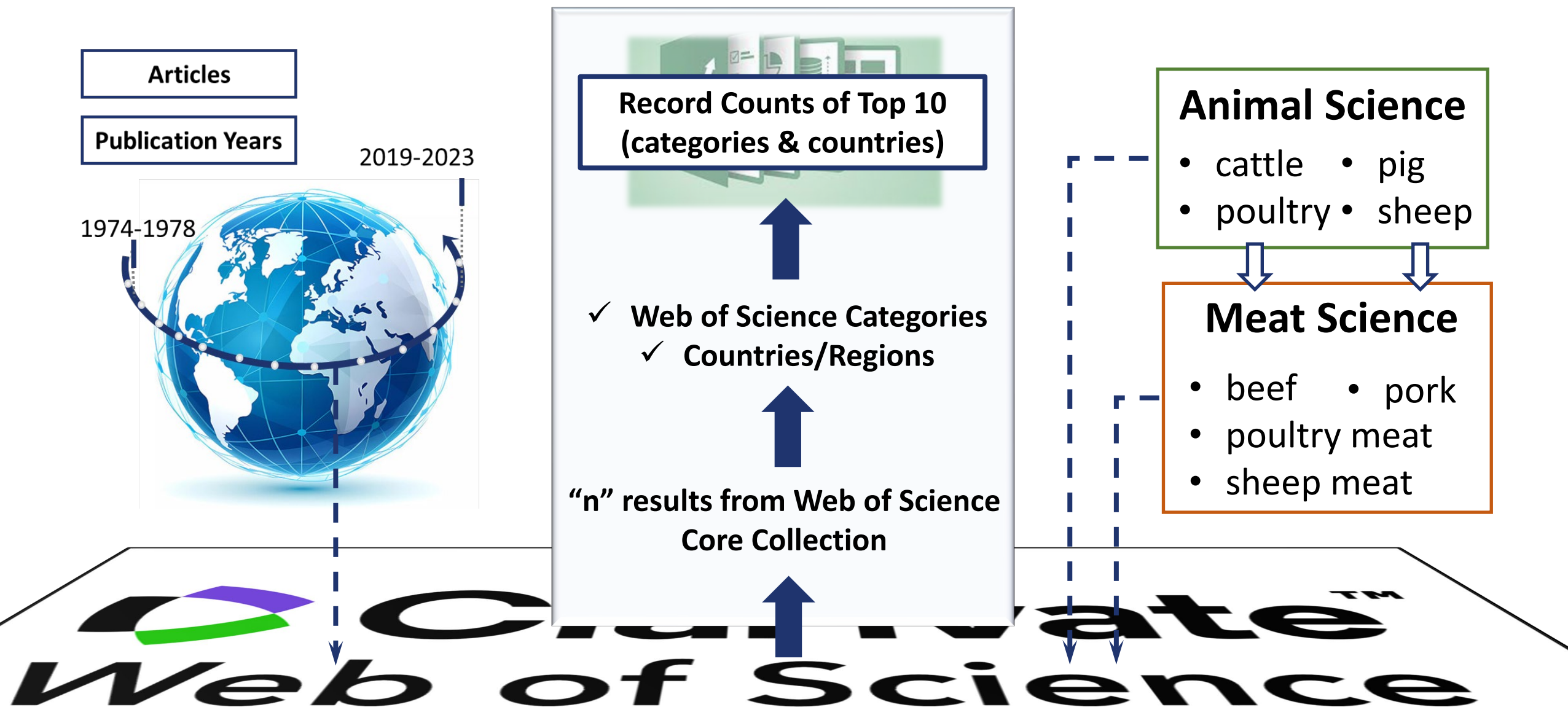
- **Food needs:** the need for increased production of animal products to satisfy the increasing human population;
- **Environmental requirements:** a lower footprint;
- **Societal expectations:** animal welfare and product quality



Are research and innovation in balance?  
How has the research landscape evolved over time?



# ➤ Data Collection

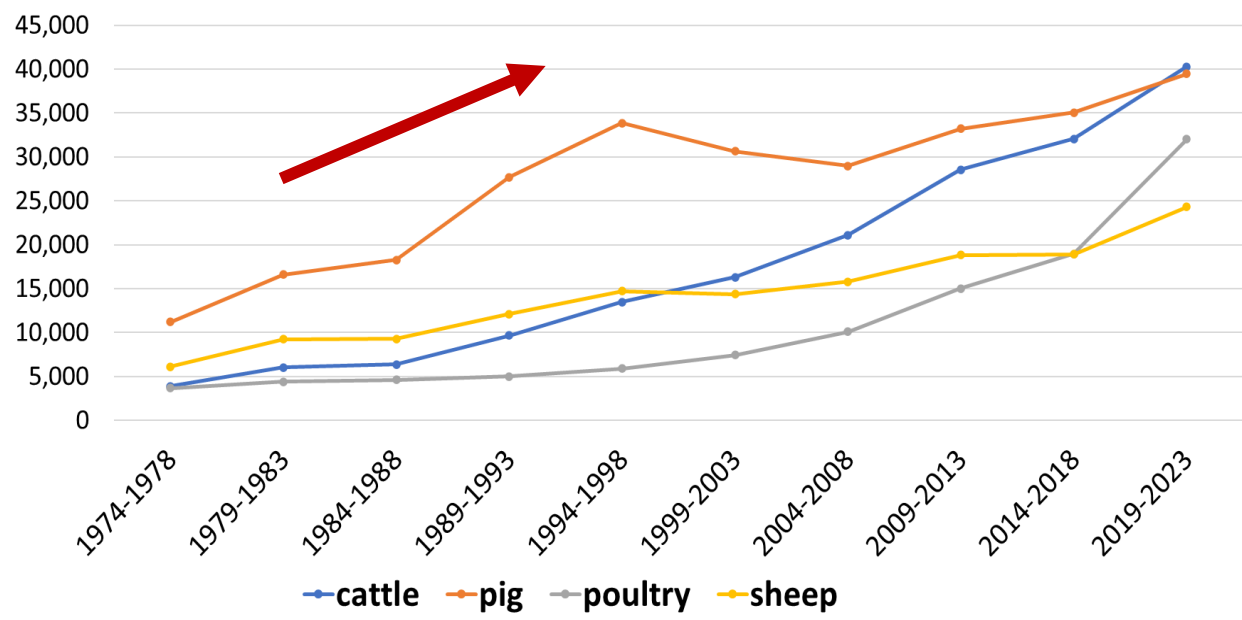




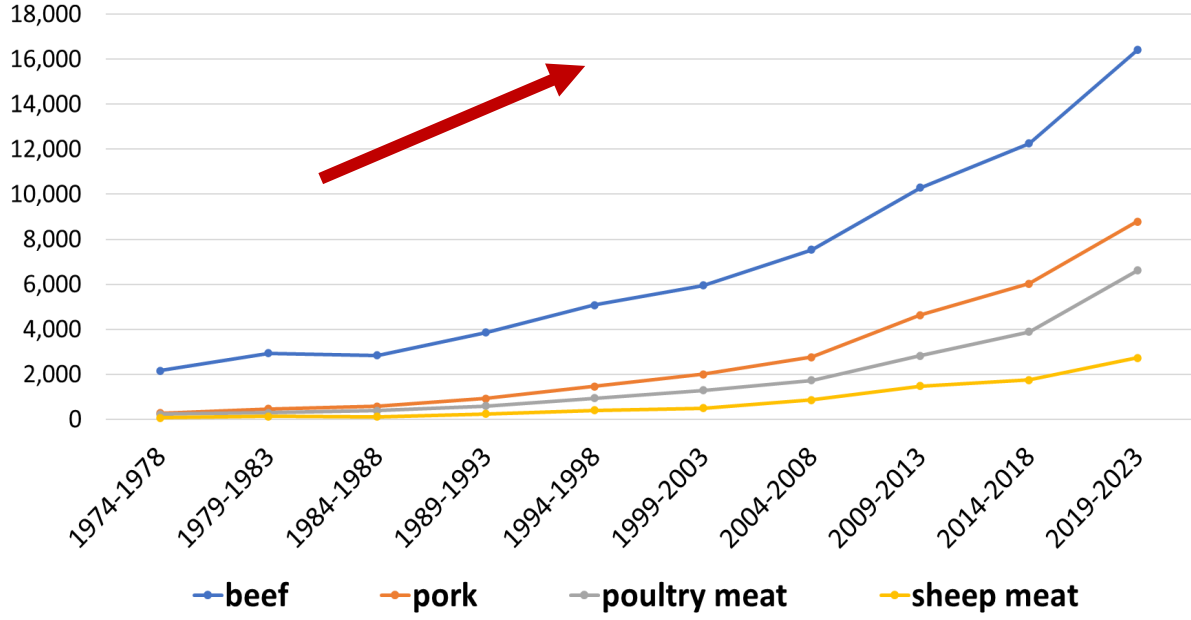
# Results: Publication trends in all fields



Publication Trends of Research Articles in Animal Science(1974-2023)



Publication Trends of Research Articles in Meat Science(1974-2023)

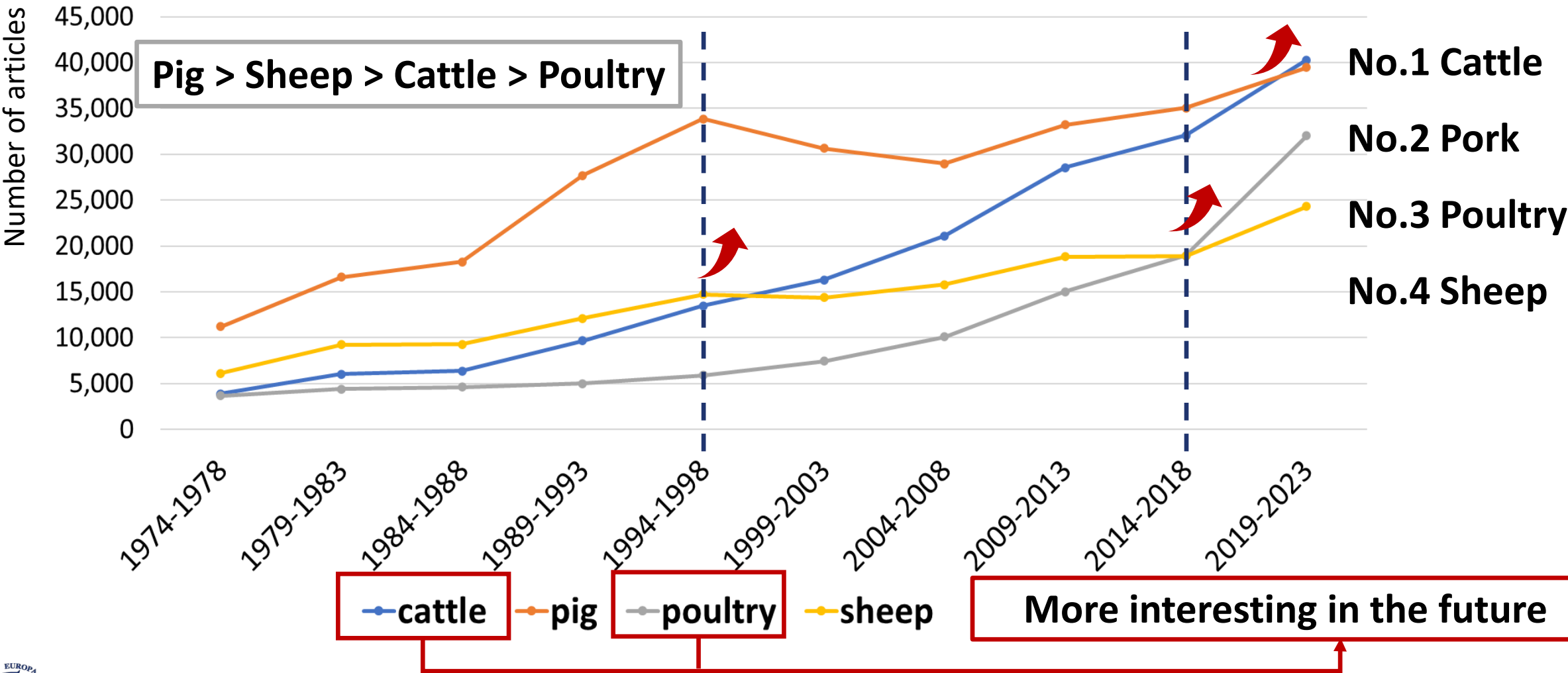




# Results 1.1: Publication trends in Animal Science



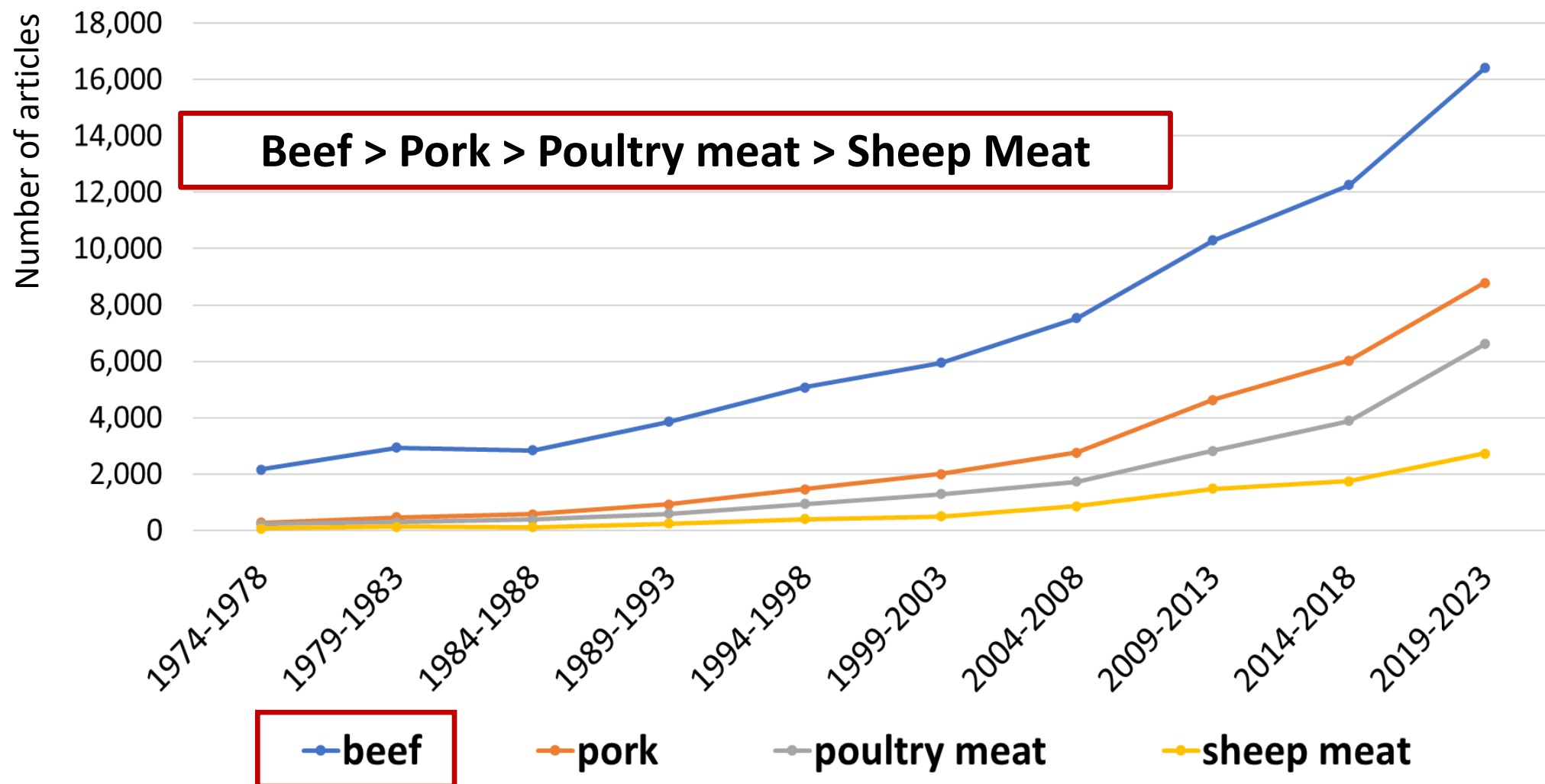
Publication Trends of Research Articles in Animal Science(1974-2023)





# Results 1.2: Publication trends in Meat Science

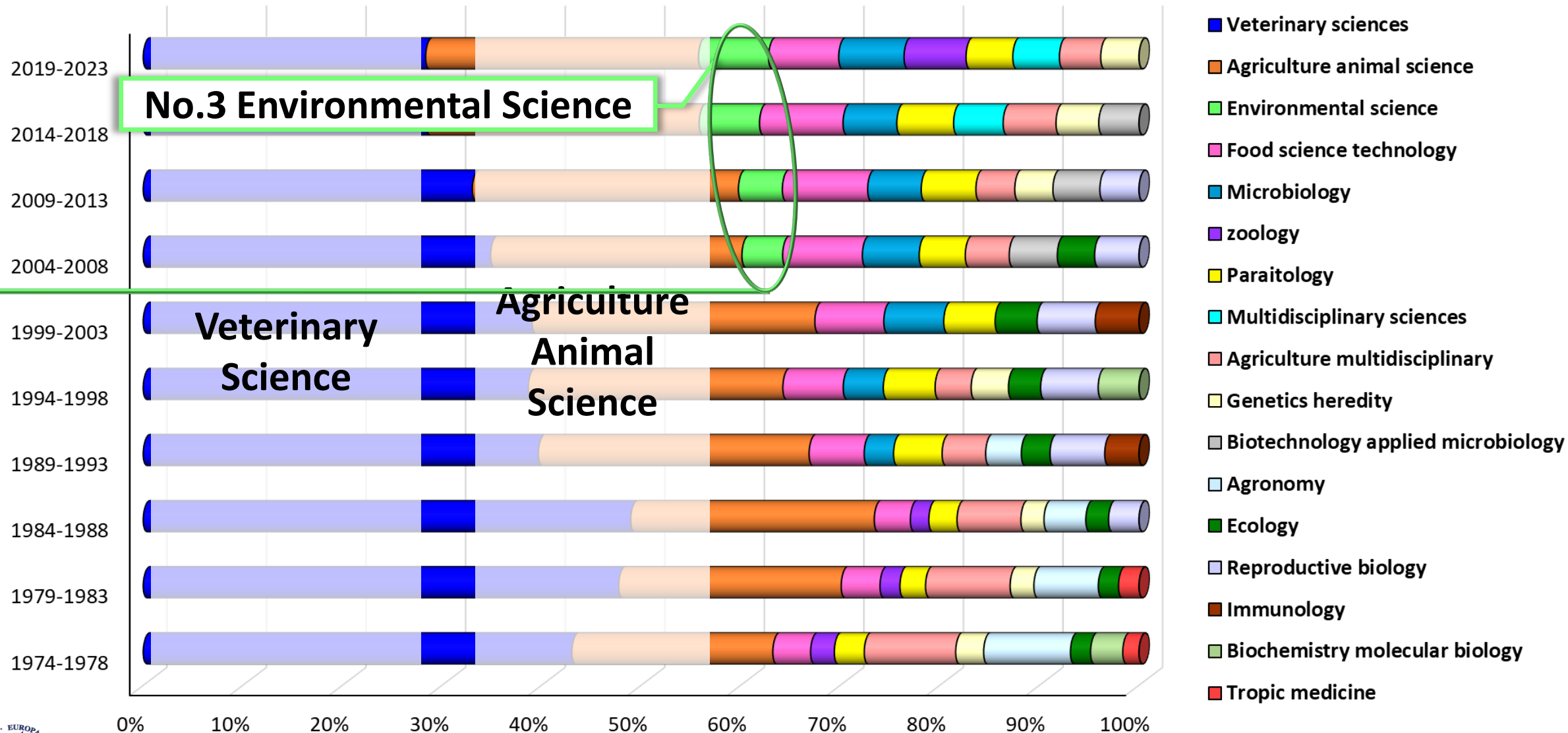
Publication Trends of Research Articles in Meat Science(1974-2023)



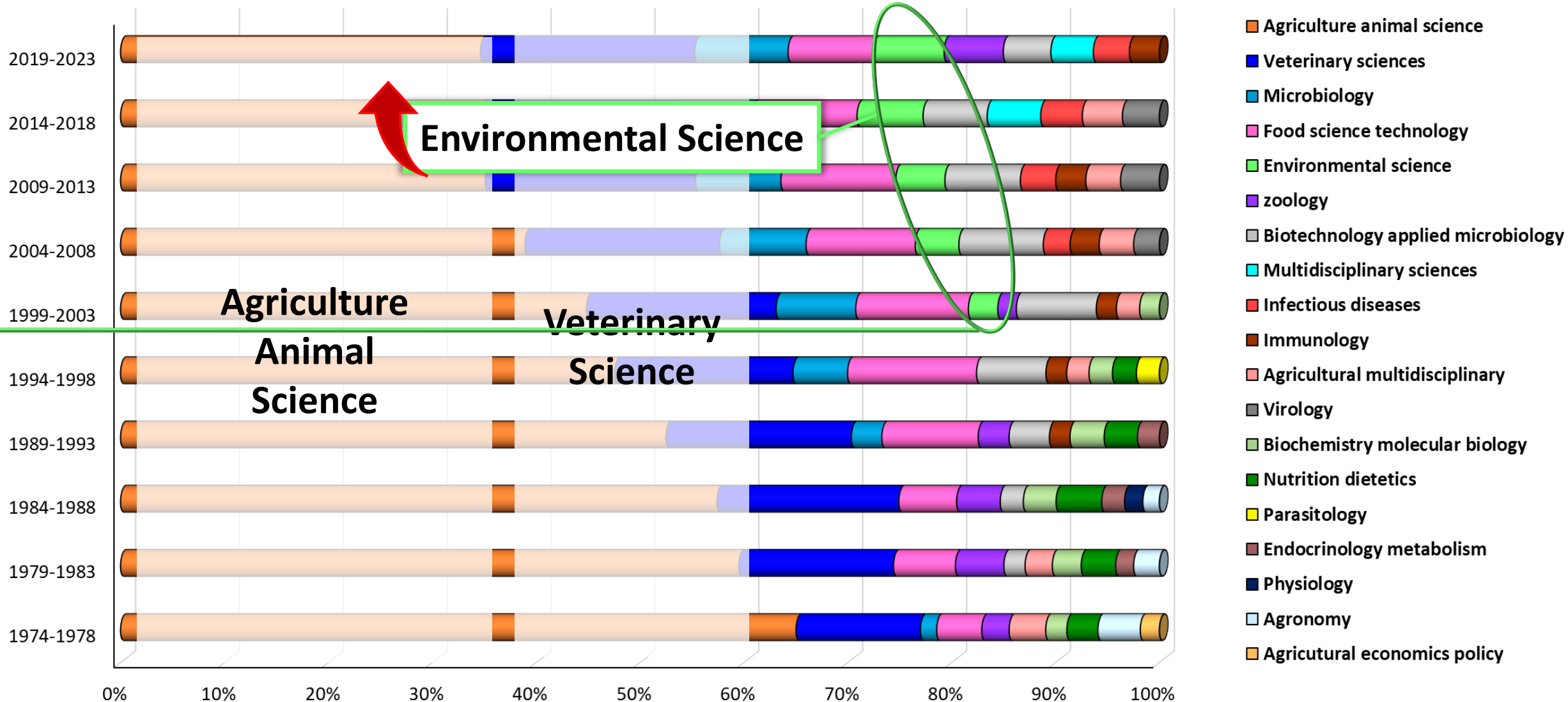




# Results 2.1: Sub-topics in Animal Science (cattle)



## Results 2.2: Sub-topics in Animal Science (Poultry)





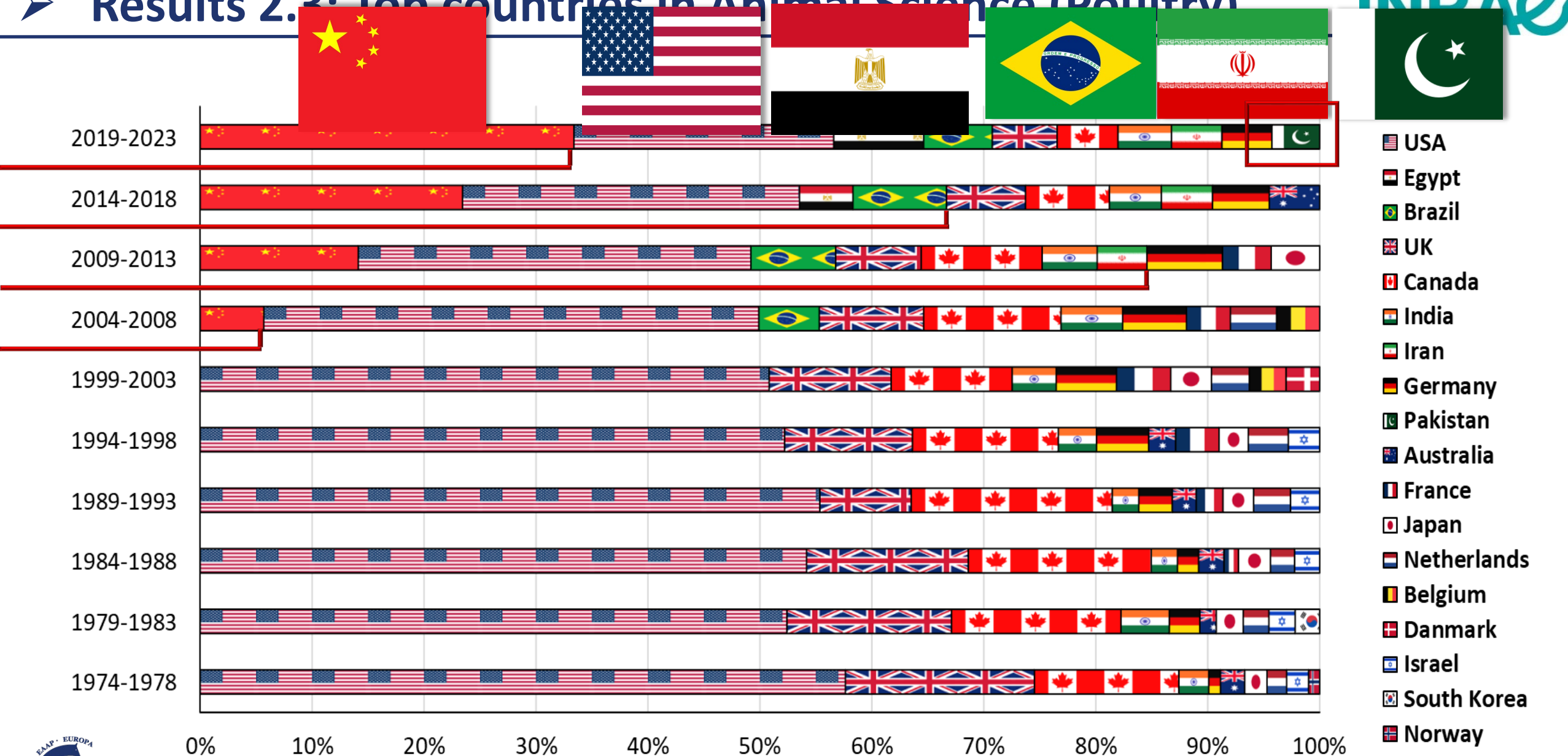


# Results 2.2: Top countries in Animal Science (Cattle)

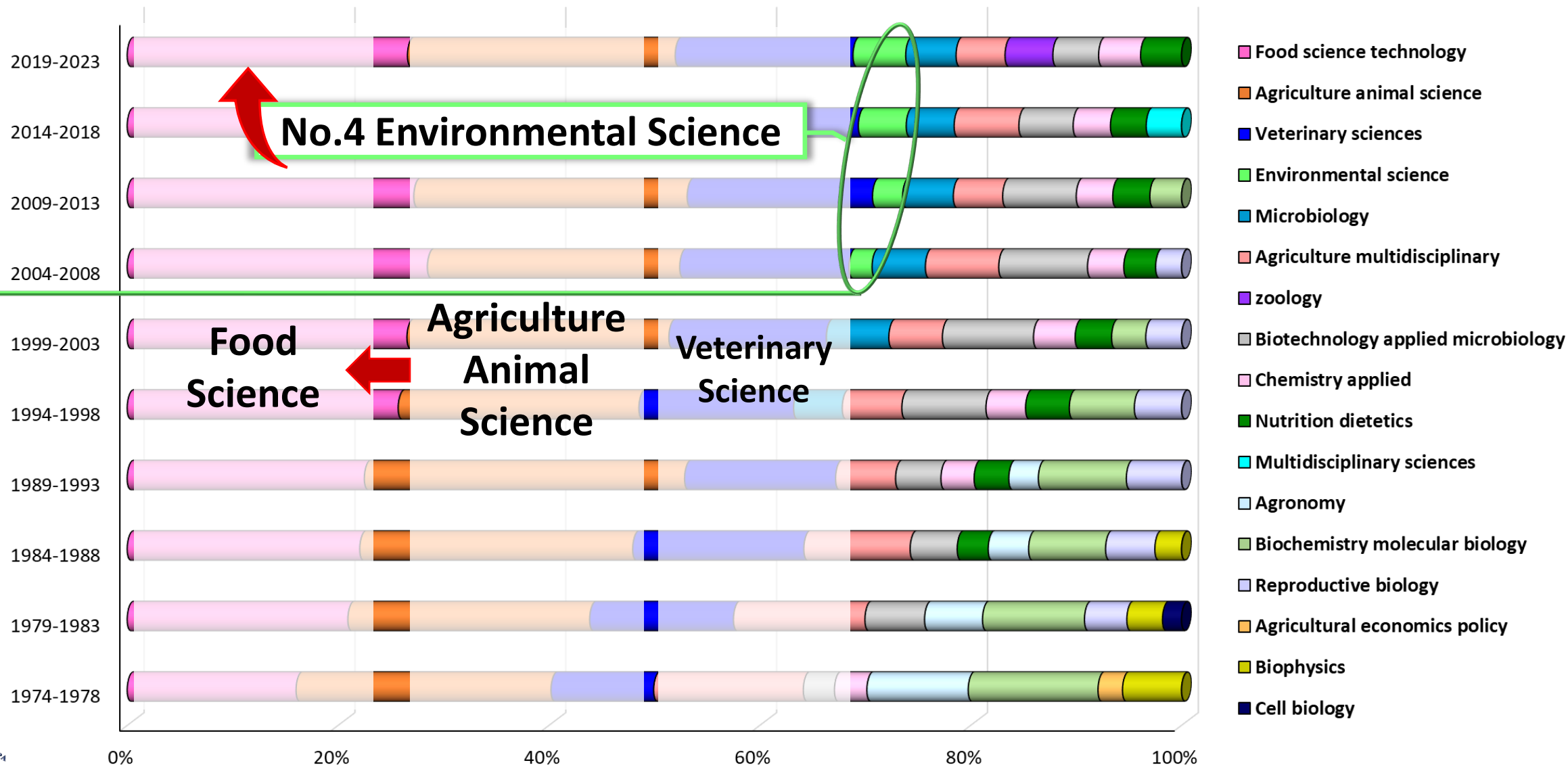




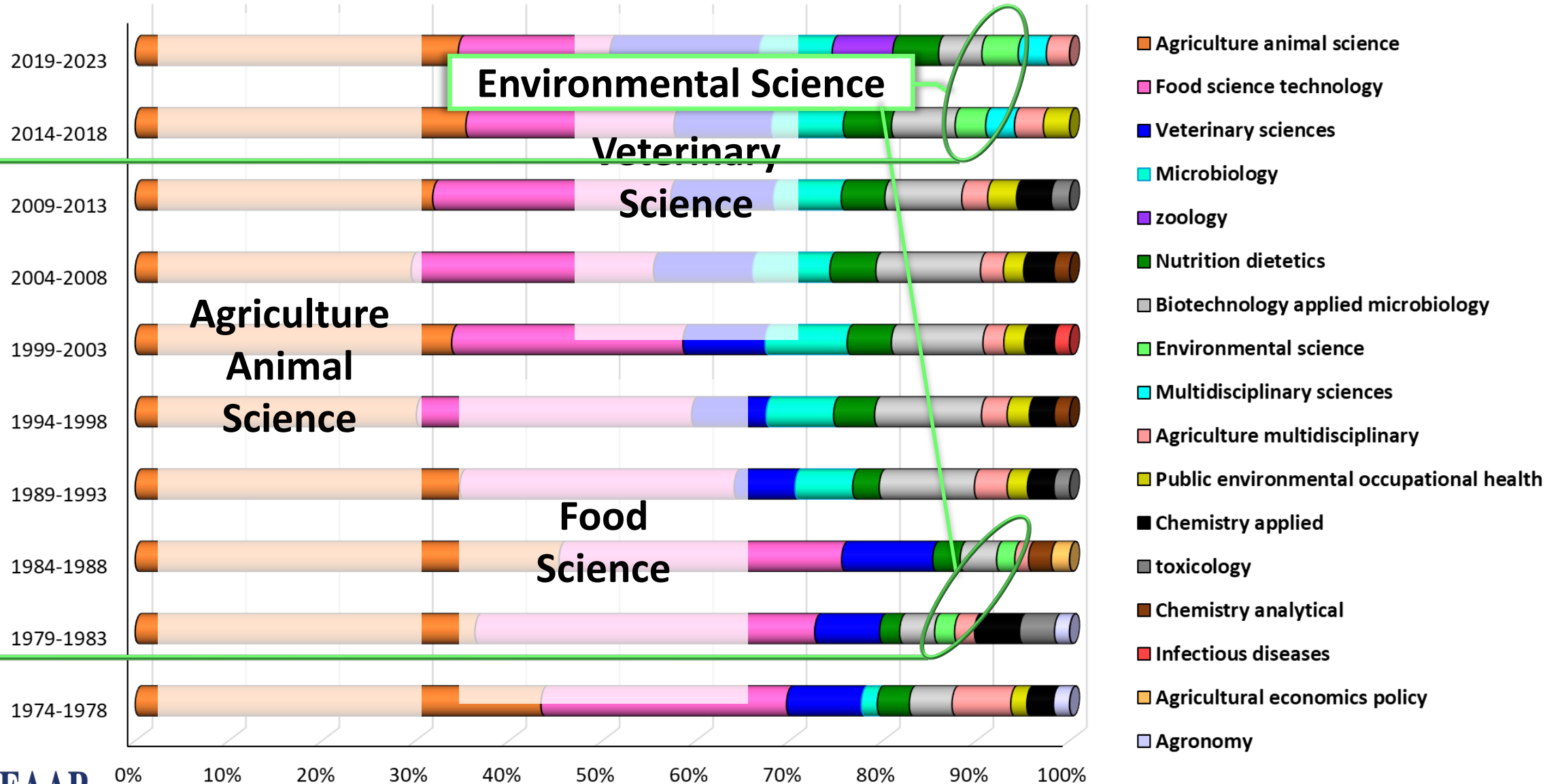
# Results 2.3: Top countries in Animal Science (Poultry)



# Results 3.1: Sub-topics in Meat Science (beef)

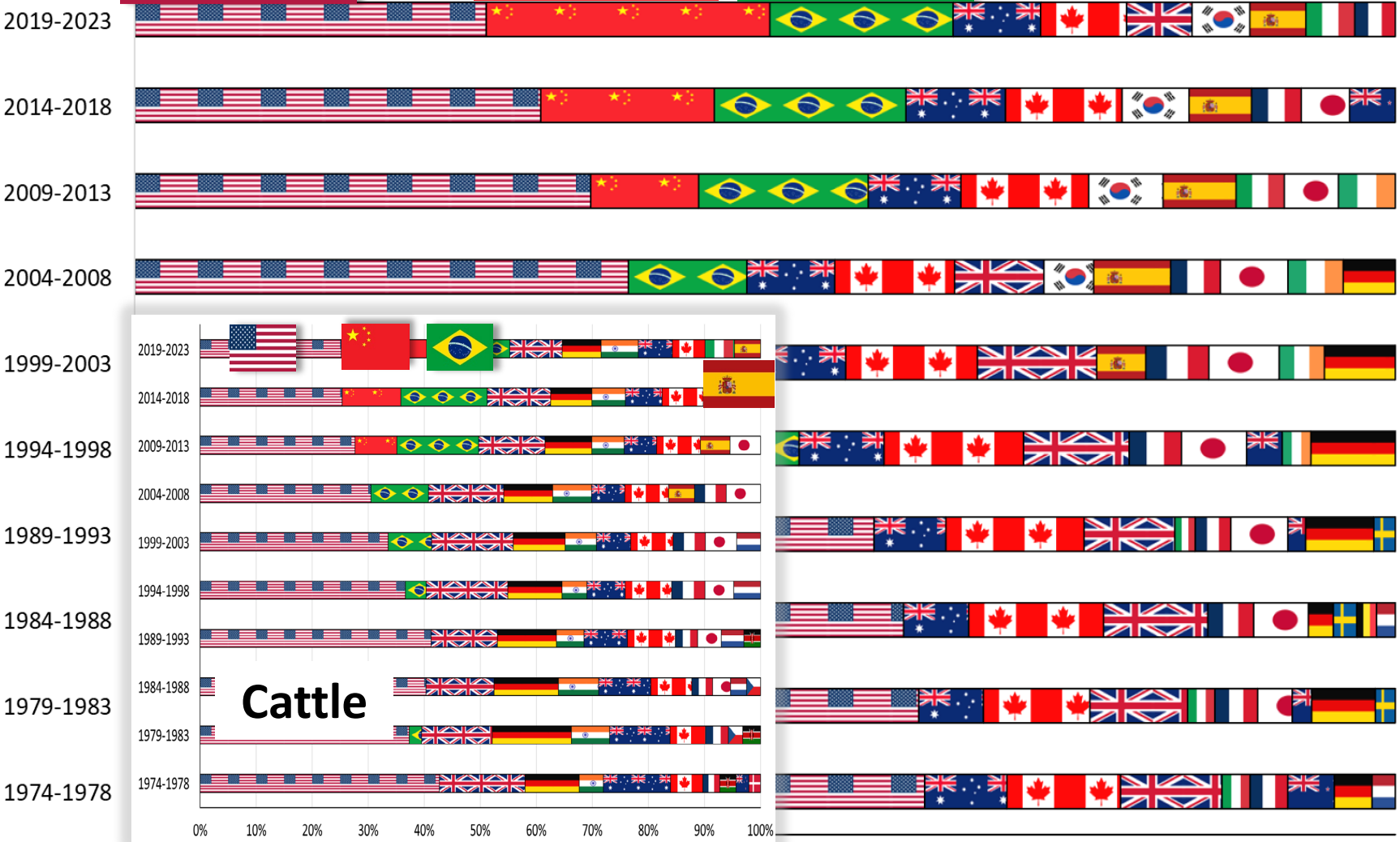


# Results 3.2: Sub-topics in Meat Science (poultry meat)





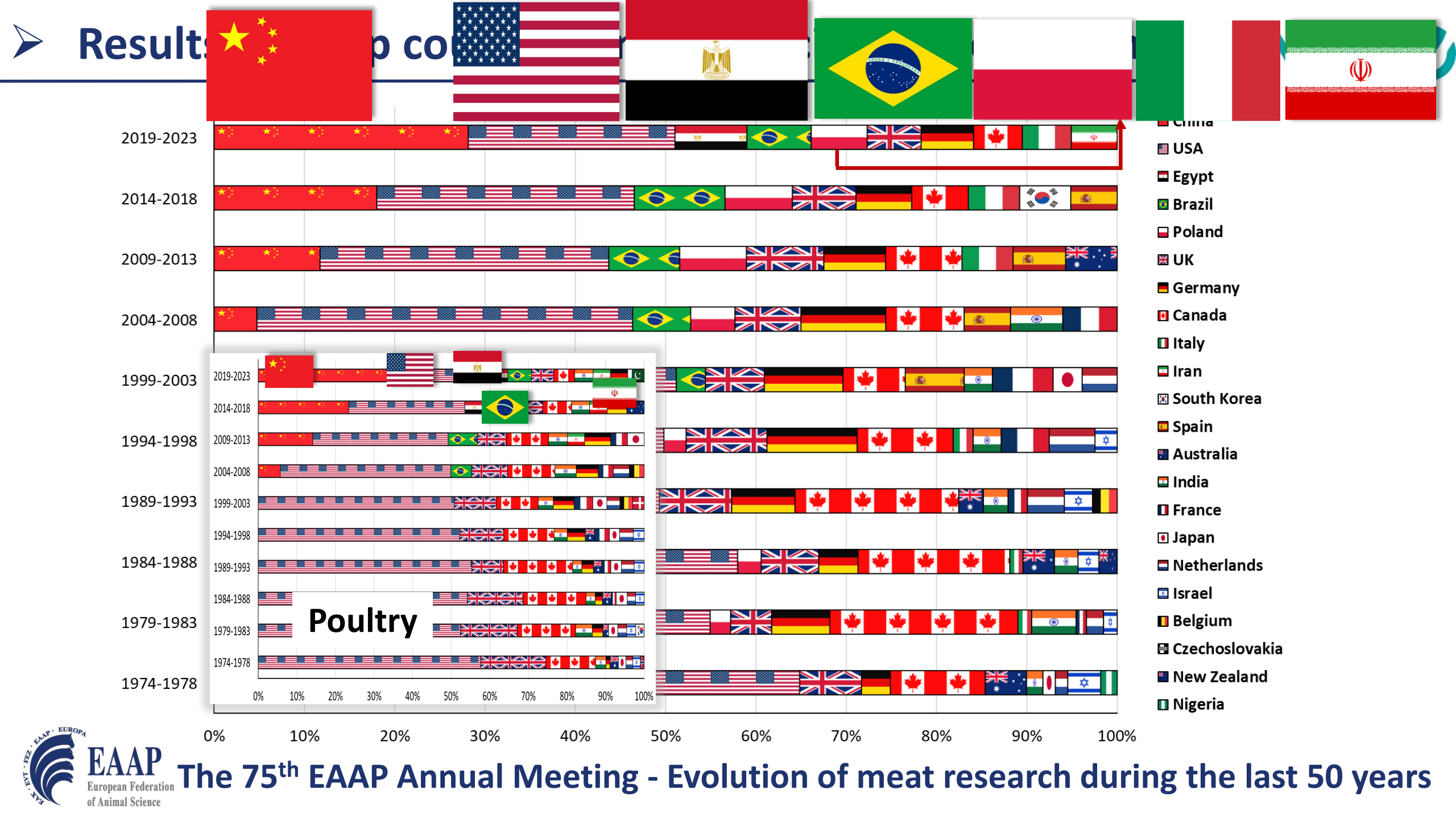
# Results 3 countries



Cattle











- Top research sub-topics:  
Veterinary science, Food science, Agriculture animal science
- Emerging trends: Environmental science

**Balanced and Sustainable development within a global innovative framework (++ developing countries)**

- United States maintains a leading position
- China's research has advanced rapidly and rivaling the US since 2019-2023
- Brazil has shown a substantial increase over the past 20 years





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# Thanks for your attention!

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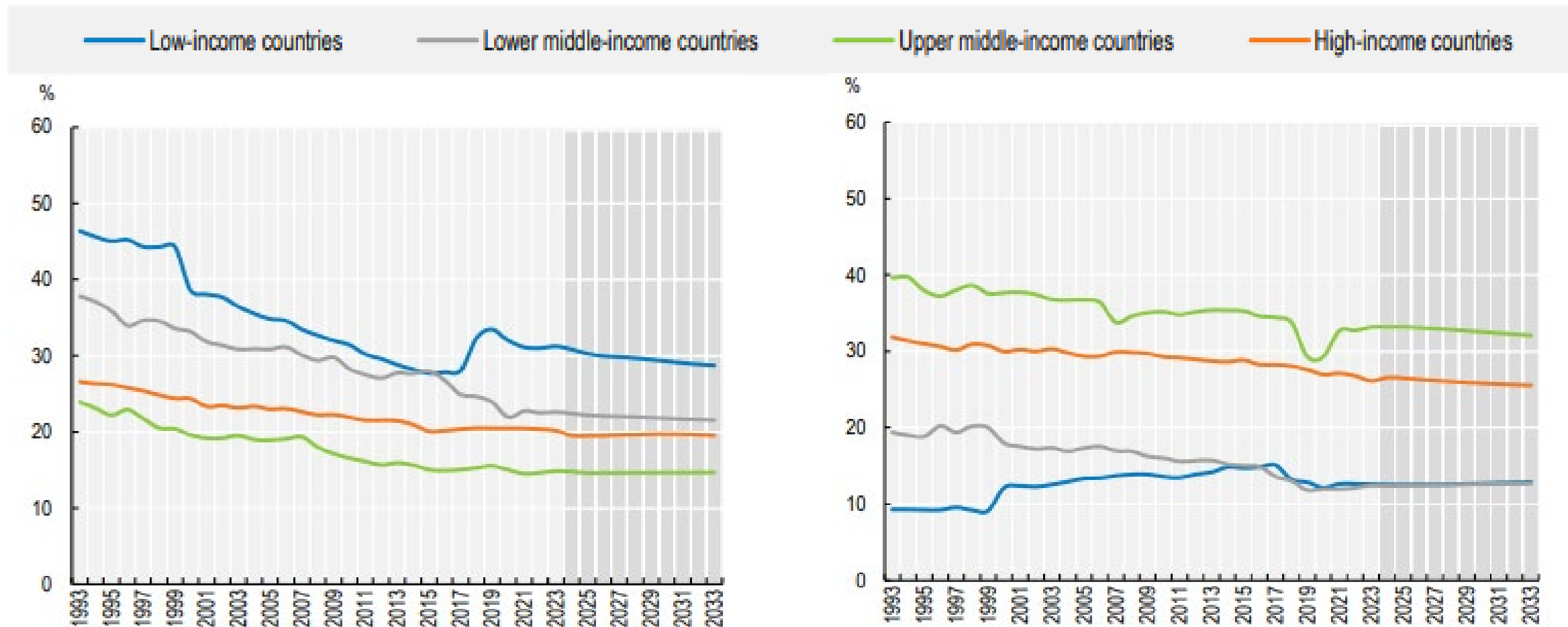




# Results:

| Field      | Sub-topics                 |                            |                    | Countries |           |         |
|------------|----------------------------|----------------------------|--------------------|-----------|-----------|---------|
|            | No.1                       | No.2                       | No.3               | No.1      | No.2      | No.3    |
| Pig        | Veterinary Science         | Agriculture Animal Science | Microbiology       | China     | US        | Germany |
| Sheep      | Veterinary Science         | Agriculture Animal Science | Zoology            | China     | US        | Spain   |
| Pork       | Food Science               | Agriculture Animal Science | Veterinary Science | China     | US        | Brazil  |
| Sheep meat | Agriculture Animal Science | Veterinary Science         | Food Science       | China     | Australia | Brazil  |

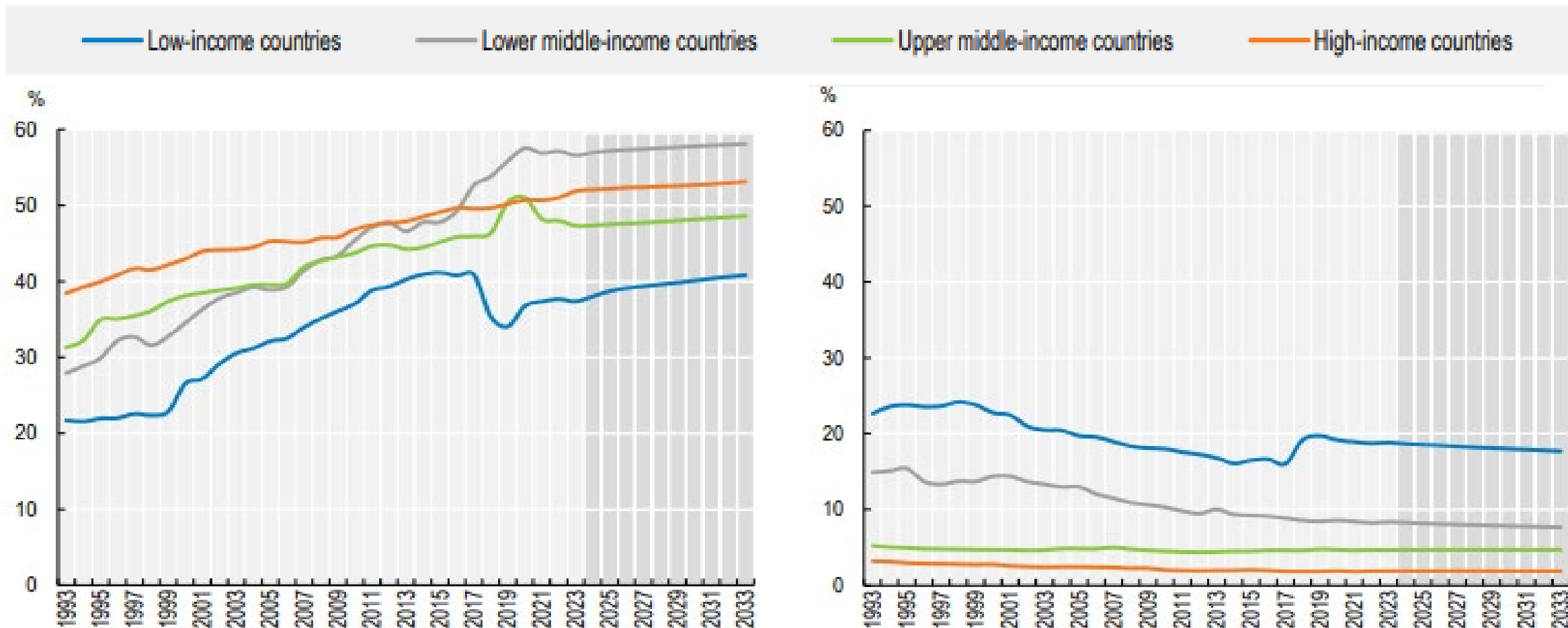
# ➤ Share of proteins in total meat consumption



Share of protein from beef/total meat protein

Share of protein from pig meat/total

# ➤ Share of proteins in total meat consumption

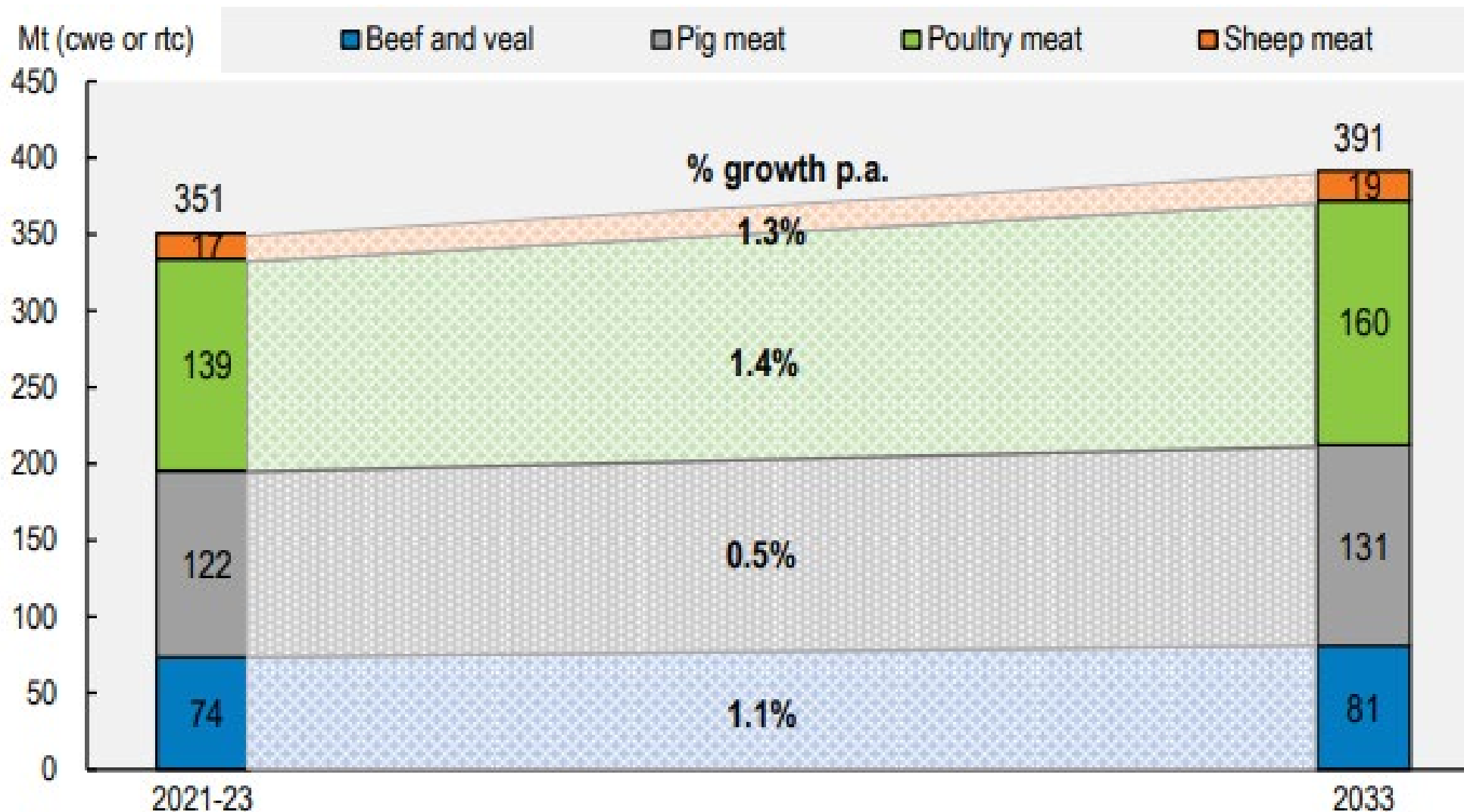


Share of protein from poultry meat/total

Share of protein from sheep meat/total



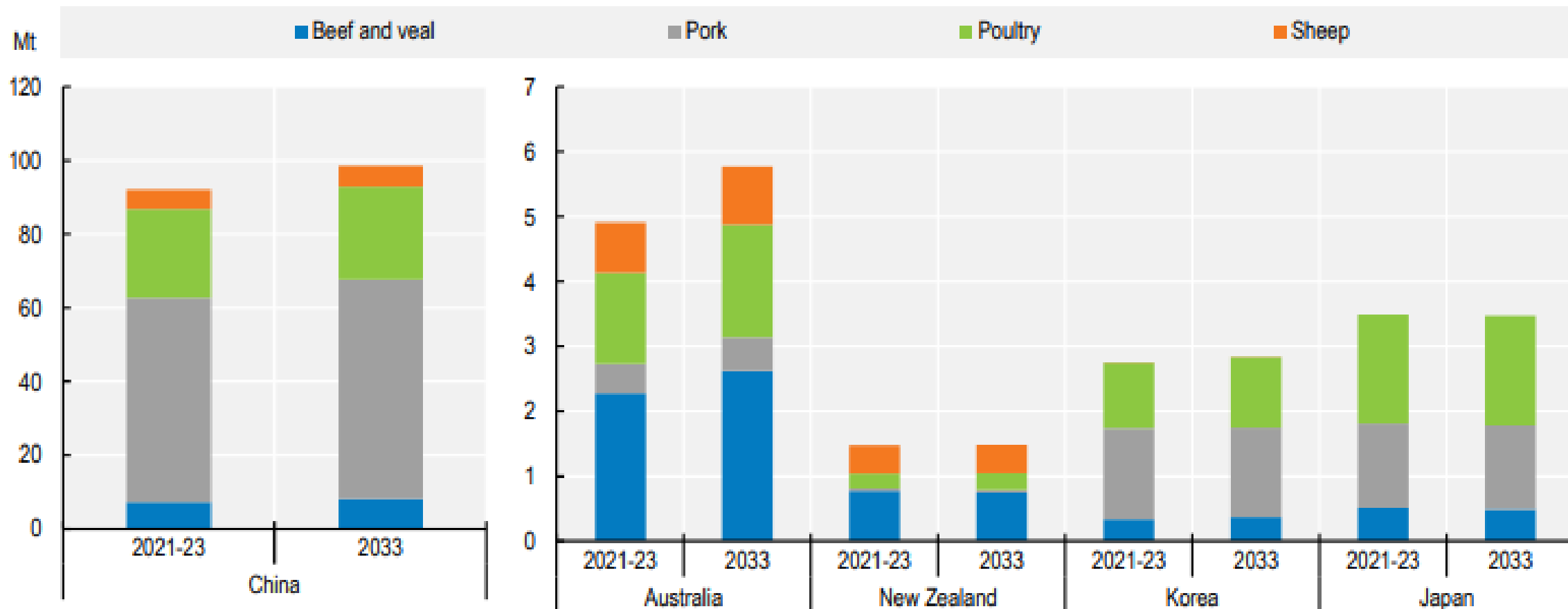
# ➤ Growth of meat production by meat type



Source: OECD/FAO (2024), 'OECD-FAO Agricultural Outlook

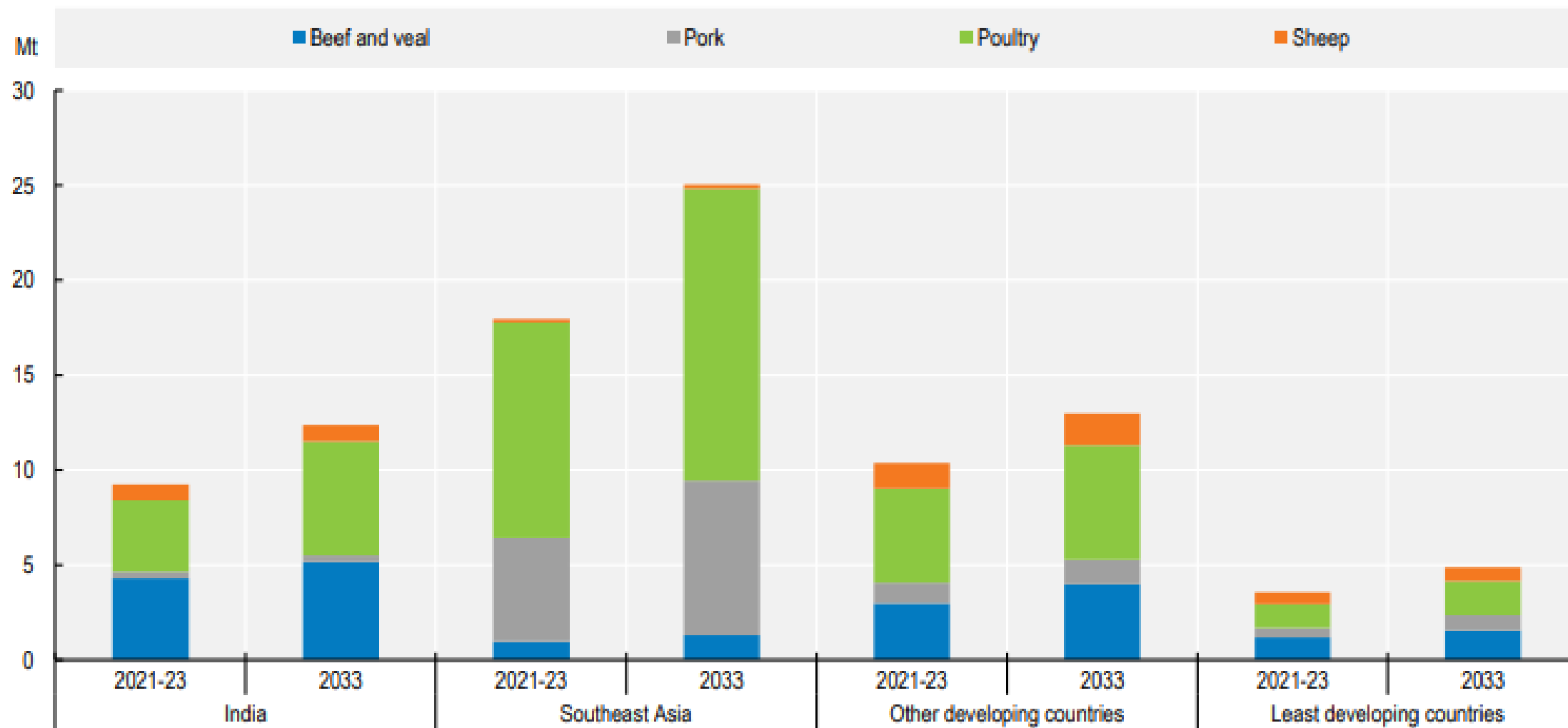


# Livestock production in Developed and East Asia

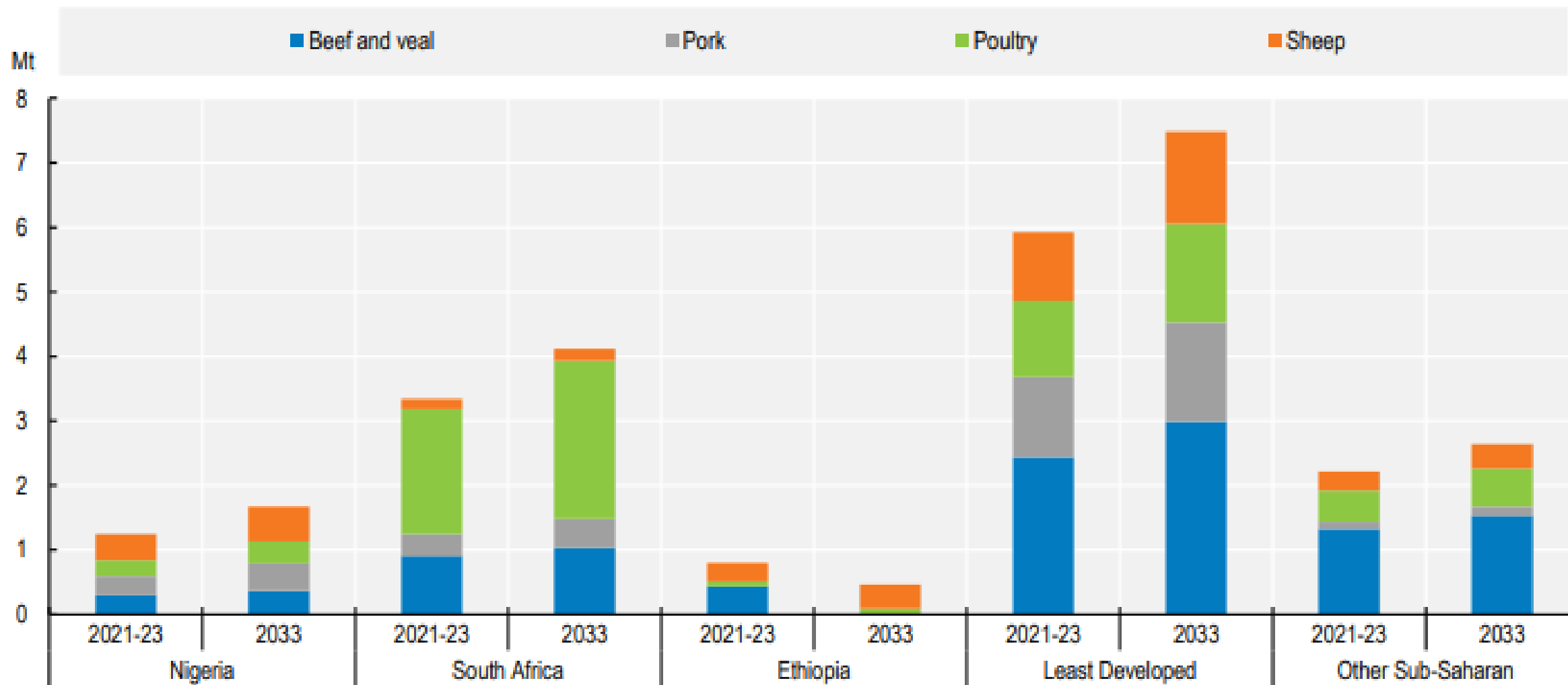




# Livestock production in South and South-east Asia



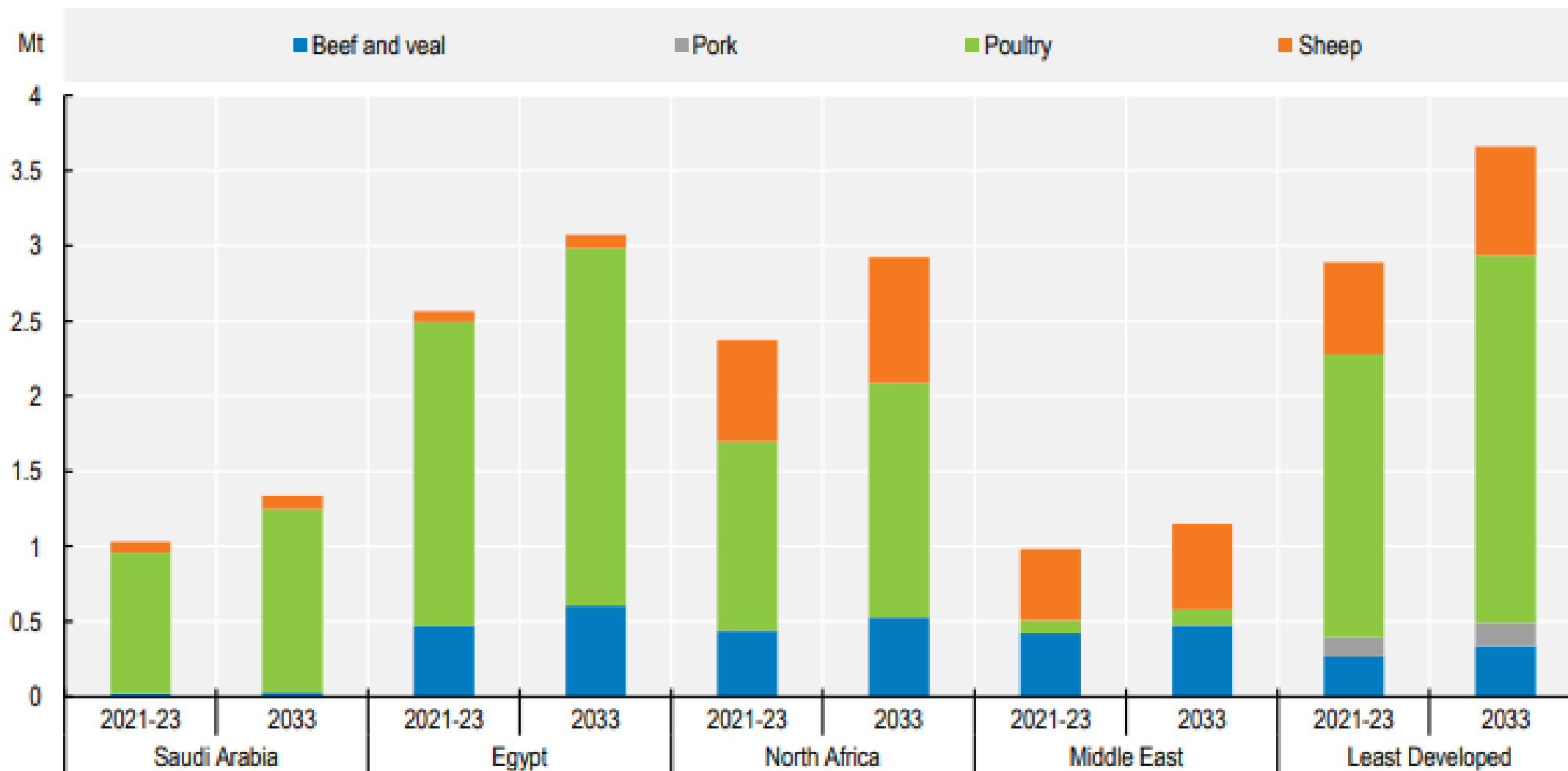
# Livestock production in Sub Saharan Africa



Source: OECD/FAO (2024), 'OECD-FAO Agricultural Outlook

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# ➤ Livestock production in Near East and North Africa



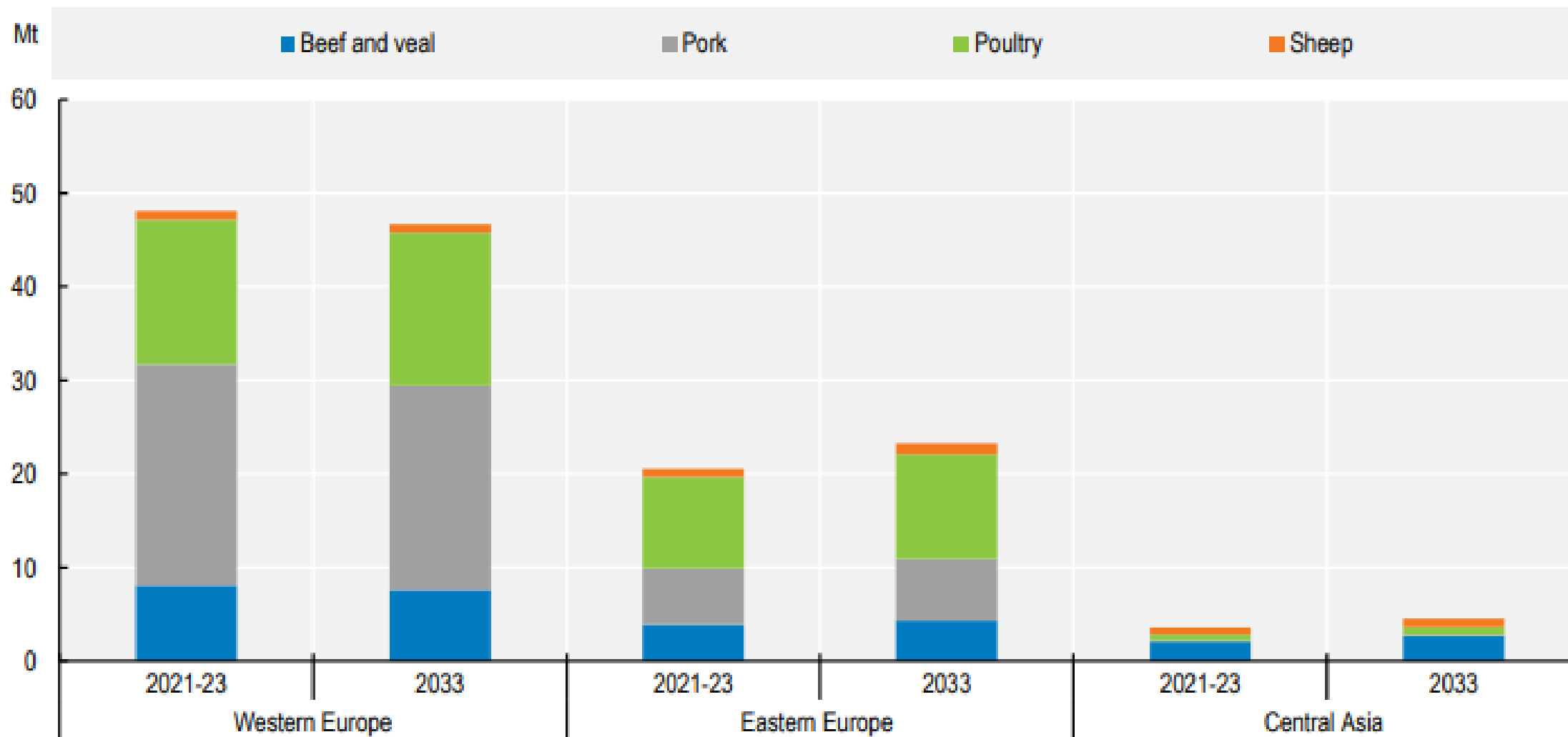
Source: OECD/FAO (2024), 'OECD-FAO Agricultural Outlook

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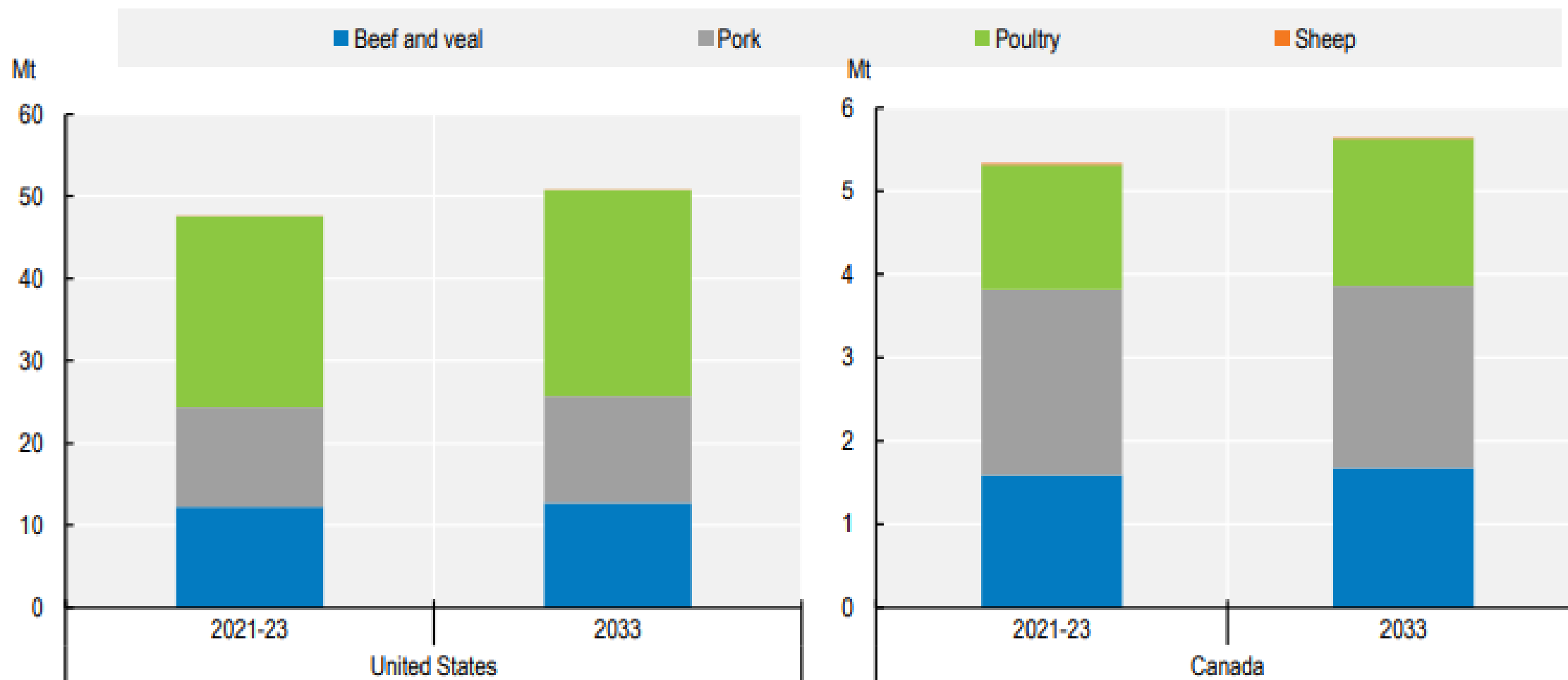




# Livestock production in Europe and Central Asia



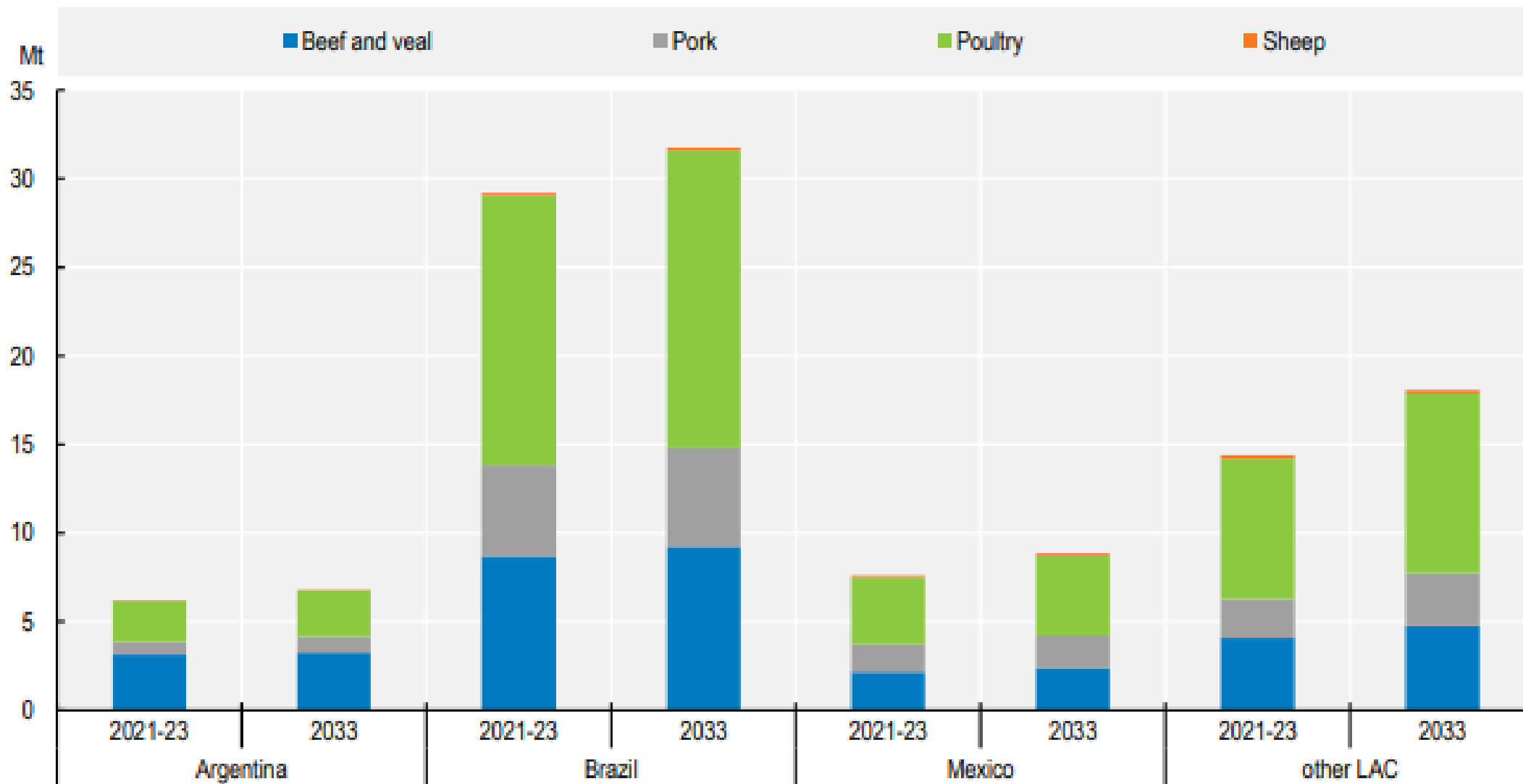
Source: OECD/FAO (2024), 'OECD-FAO Agricultural Outlook



Source: OECD/FAO (2024), 'OECD-FAO Agricultural Outlook



# Livestock production in Latin America and the Caribbean



Source: OECD/FAO (2024), 'OECD-FAO Agricultural Outlook



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