FEEDING THE WORLD

15th International Feed Congress and Exhibition - TUYEM

20 April 2024

Hsin Huang

International Meat Secretariat

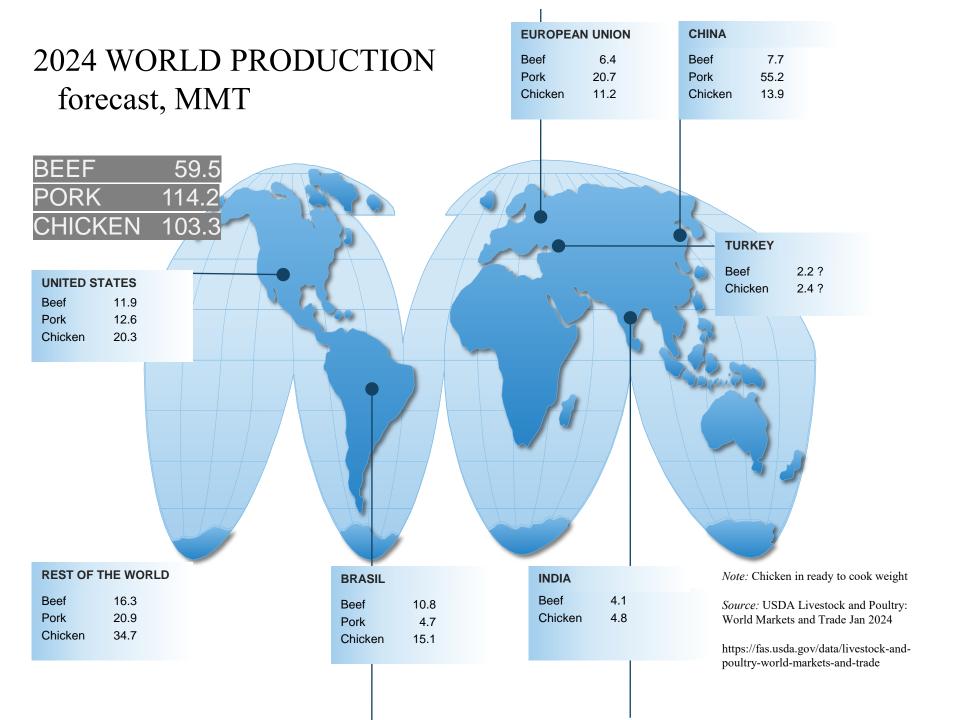


INTERNATIONAL MEAT SECRETARIAT

- Non-profit making association: www.meat-ims.org
- Members: national meat and livestock organisations, corporations and other bodies connected with the meat and livestock sector
- Red meat: from cattle, sheep, pigs
- Members from countries representing > 75% global meat
- Forum for the exchange of ideas and experiences on international issues: conferences, meetings, publications
- Official representation in international organisations: FAO, WOAH, Codex Alimentarius, OECD, UNFCCC, UNECE, etc.

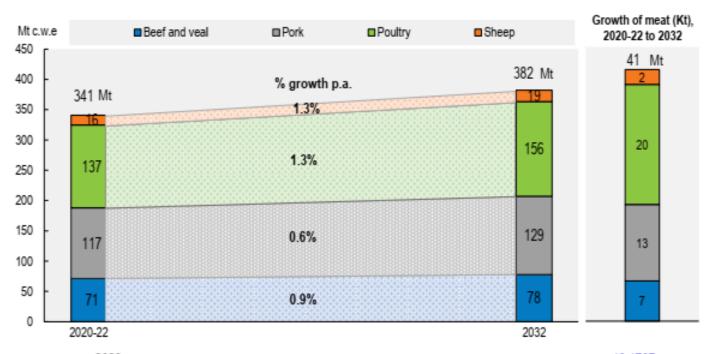
GLOBAL CONTEXT





GROWTH MEAT PRODUCTION

Chicken increases



Source: OECD/FAO (2023), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-outl-data-en.



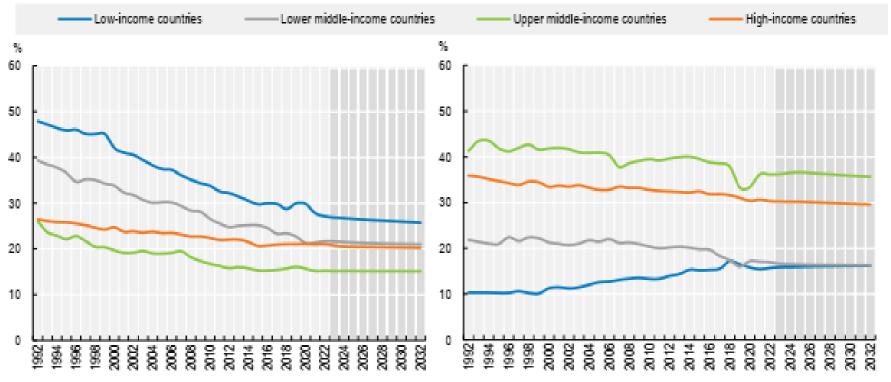
SHARE OF TOTAL MEAT PROTEINS

Beef declines

Pork slower decline

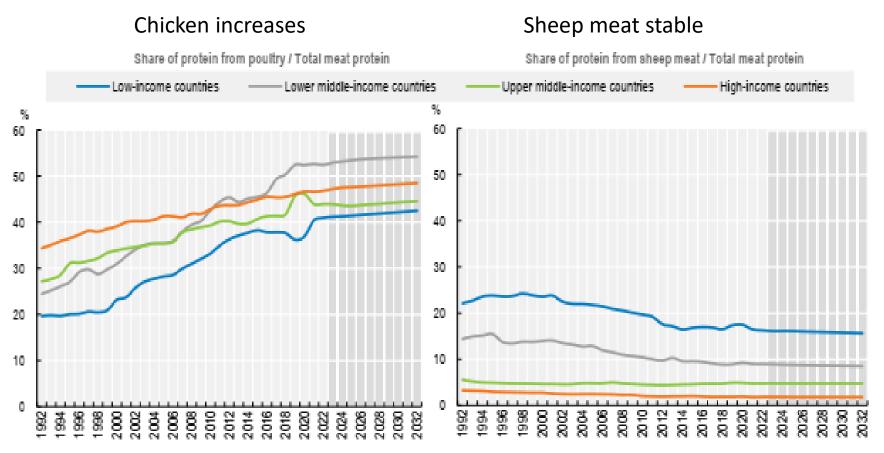
Share of protein from beef / Total meat protein

Share of protein from pigmeat / Total meat protein





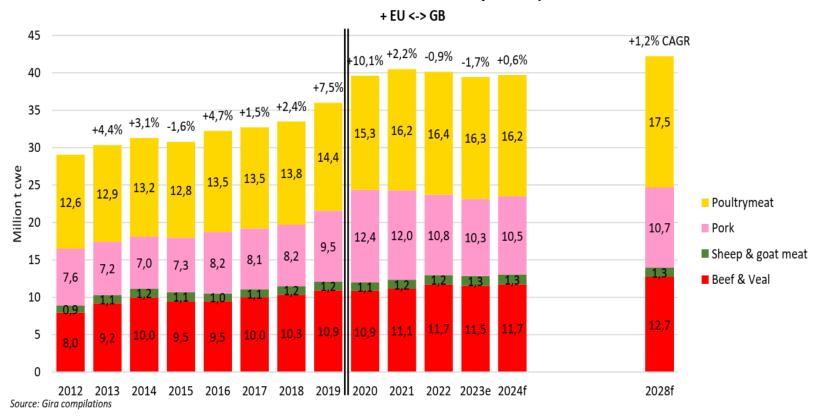
SHARE OF TOTAL MEAT PROTEINS





TRADE — DISAPPOINTING POST-COVID

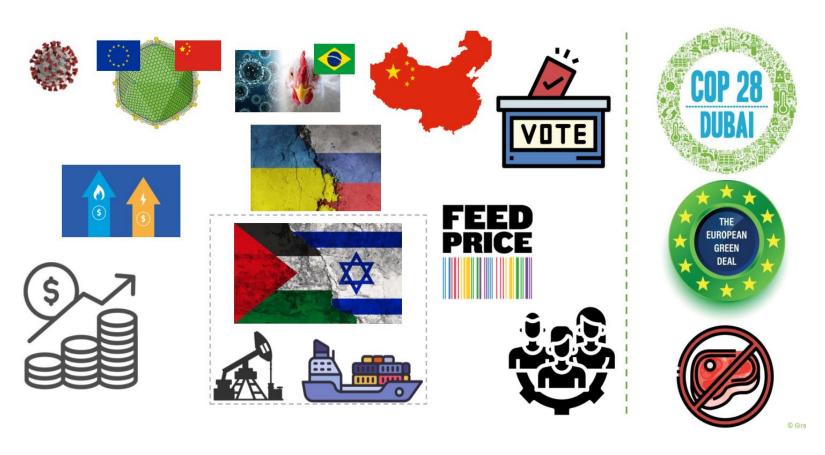
Global Meat Trade Volume: main species, million t cwe







CHALLENGES FOR MEAT SECTOR







SUSTAINABILITY



SUSTAINABILITY IS COMPLICATED

EUDR set for full implementation, despite missing details

Animal welfare is never far from market and regulatory requirements

Company reporting requirements are growing in scope to encompass sustainability

Central tool is supply chain traceability

Rabobank



WHAT IS EUDR?

European Deforestation-free Regulation

"aims to prohibit the placing on the market or export from the European market of products that have contributed to deforestation or forest degradation after 31 December 2020. The scope of the text covers seven commodities: coffee, cocoa, rubber, palm oil, **soy, beef** and wood, as well as some derived products such as leather, charcoal, printed paper ...

In particular, they will have to geolocate the origin of the products up to the production plots ...

This regulation will apply from 30 December 2024 for companies (excluding SMEs) and from 30 June 2025 for SMEs."

https://www.deforestationimportee.ecologie.gouv.fr/en/the-european-deforestation-free-regulation/article/the-european-deforestation-free-regulation

WHAT IS EUDR?



Be "Zero Deforestation"

No deforestation or degradation after cut-off date



Be legal

Comply with the relevant legislation of the country of production



Be covered by a due diligence statement

Non-SME operators and tarders

- Due diligence and checks on transmitted information
- Due diligence statement
- Transmission of due diligence statement and informations to downstream stakeholders

SMEs

 No due diligence or statement unless the product has not been subject to due diligence and prior due diligence statement

Operators and traders must keep this information for 5 years



BRAVE NEW WORLD?



CELL BASED FOODS

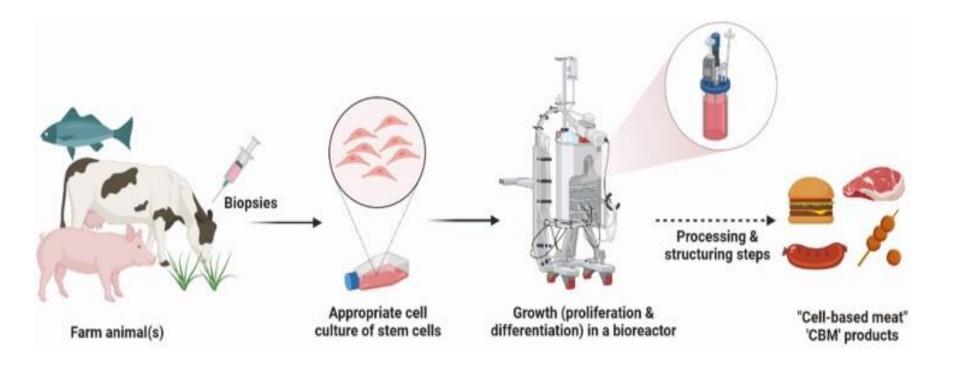
FAO Definition

"Cell-based food production involves culturing cells isolated from animals followed by processing to produce food products that are comparable to the corresponding animal versions, such as meat, poultry, aquatic products, dairy products and eggs."

https://www.fao.org/food-safety/scientific-advice/crosscutting-and-emerging-issues/cell-based-food



CELL BASED FOODS: SIMPLIFIED



Wood P, Thorrez L, Hocquette JF, Troy D, Gagaoua M. "Cellular agriculture": current gaps between facts and claims regarding "cell-based meat". Anim Front. 2023 Apr 15;13(2):68-74. doi: 10.1093/af/vfac092. PMID: 37073316; PMCID: PMC10105885.

CELL BASED FOODS

'CBM' products are not yet available for consumption.

'CBM' products are not identical to the product (meat) they intend to replace mainly in terms of sensory, nutritional & texture properties.

'CBM' products are not available for independent evaluation economically, scientifically and by consumers.

'CBM' does not yet meet food sustainability pillars

- safety & healthiness (no available data),
- environment impact (scientific evidence not confirmed),
- economic (expensive & not widely affordable),
- cultural acceptability
 (Uncertainties on aesthetics & naturalness)

Wood P, Thorrez L, Hocquette JF, Troy D, Gagaoua M. "Cellular agriculture": current gaps between facts and claims regarding "cell-based meat". Anim Front. 2023 Apr 15;13(2):68-74. doi: 10.1093/af/vfac092. PMID: 37073316; PMCID: PMC10105885.

CELL BASED FOODS

The protocols to produce 'CBM' are not available to be independently tested by academics and/or regulatory agencies.

The current industrial production is still not economically viable due to the high production costs at scale as well as lack of regulatory framework.

Standards for safety and sustainability claims are required to protect the consumer.

Regulatory measures and scientific evidence are needed to fuel product innovation, to monitor the technology and to promote 'CBM' products while ensuring consumer safety/acceptability & low environmental impact.

Wood P, Thorrez L, Hocquette JF, Troy D, Gagaoua M. "Cellular agriculture": current gaps between facts and claims regarding "cell-based meat". Anim Front. 2023 Apr 15;13(2):68-74. doi: 10.1093/af/vfac092. PMID: 37073316; PMCID: PMC10105885.

CELL BASED FOODS NOT SUSTAINABLE

Nutrition (Health)

No available data or only a few available data

Sustainable food

(Socio-) Cultural

Weak to average potential acceptance



Environment

No available data on biodiversity and ecosystems

No consensus on global warming (review from Mancini et Antonioli, 2022)

(Socio-) Economic

Cost still high What's about incomes of farmers?

Definition of sustainable food is from FAO (FAO, WHO, 2019. Sustainable healthy diets -Guiding principles. Rome - Italy)

Source: Jean-François Hocquette, presentation to FAO Sustainable Livestock Transformation, September 2023



POSITIVE NARRATIVE



WE NEED LIVESTOCK AND FEED

- Uses mainly land not suited for crops and for which there is no other productive use.
- Transform > 80% feed not edible grass, biomass, crop residues and by-products - to high-value food source
- Essential for food security
- Livelihood of poorest 1Billion (FAO)
- Important co-products -offals, hides and skins, tallow, gelatin, retinol (for cosmetics), etc.



INDUSTRY STRATEGY?

"Food not feed" debate?

Will consumer pay more for sustainability?

Will your government impose sustainability (and higher costs)?



FUTURE IS IN OUR HANDS



Teşekkür Ederim



