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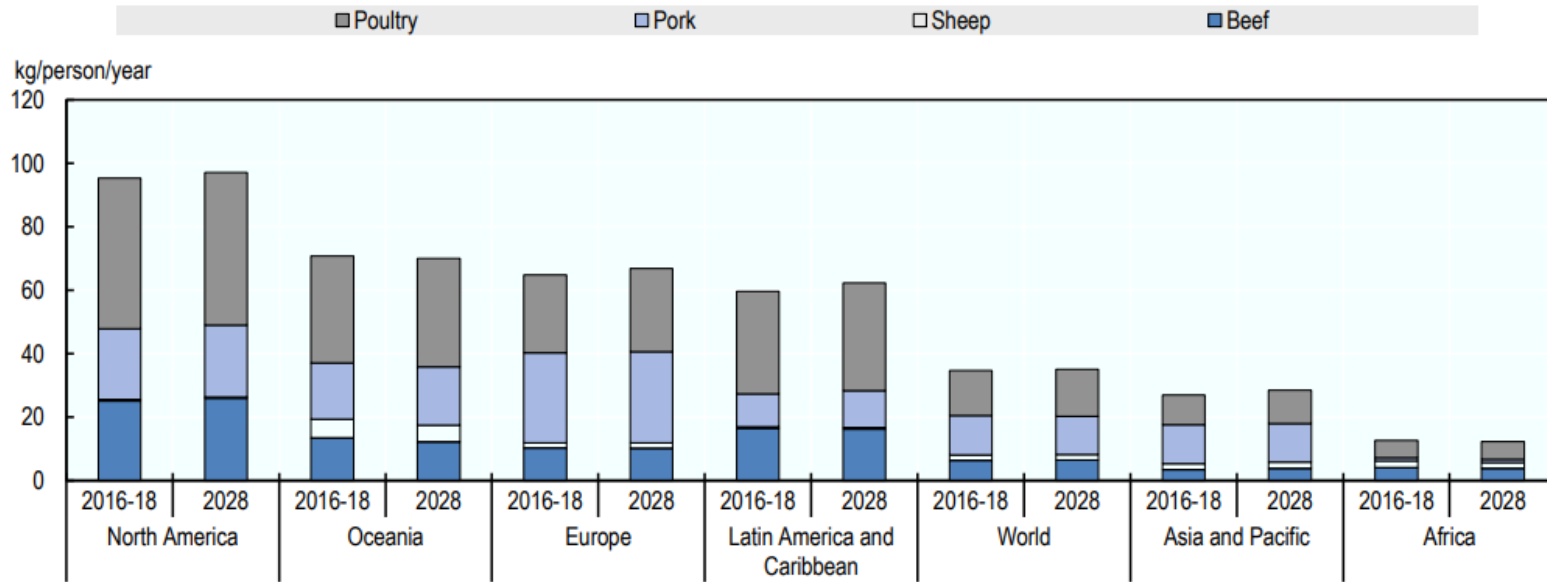
# Transforming the livestock sector to achieving the Sustainable Development Goals

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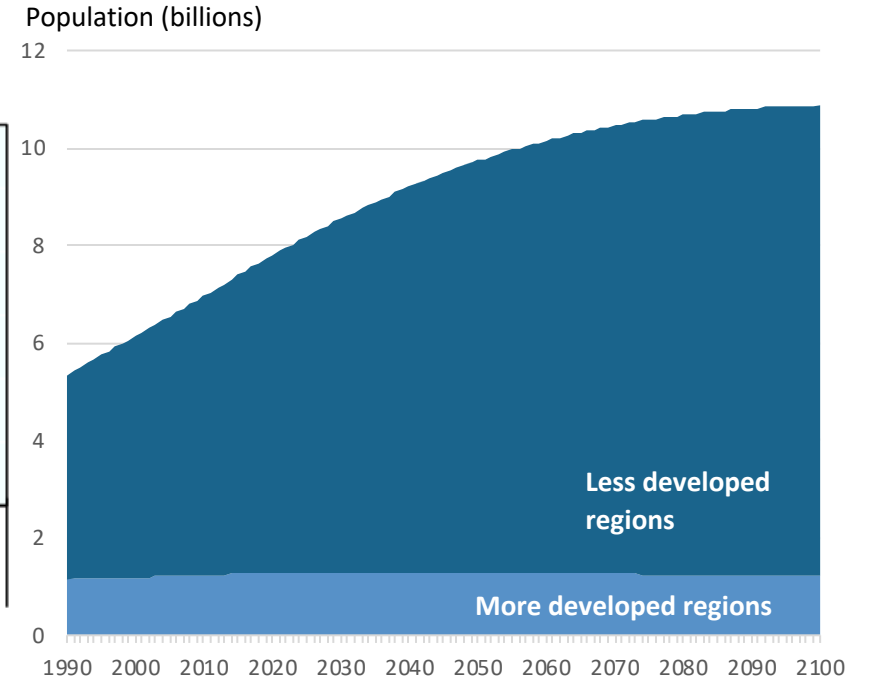
# Livestock consumption levels and world population are on a rise

## The case of meat



Source: OECD-FAO Agricultural Outlook 2019-2028

## World population

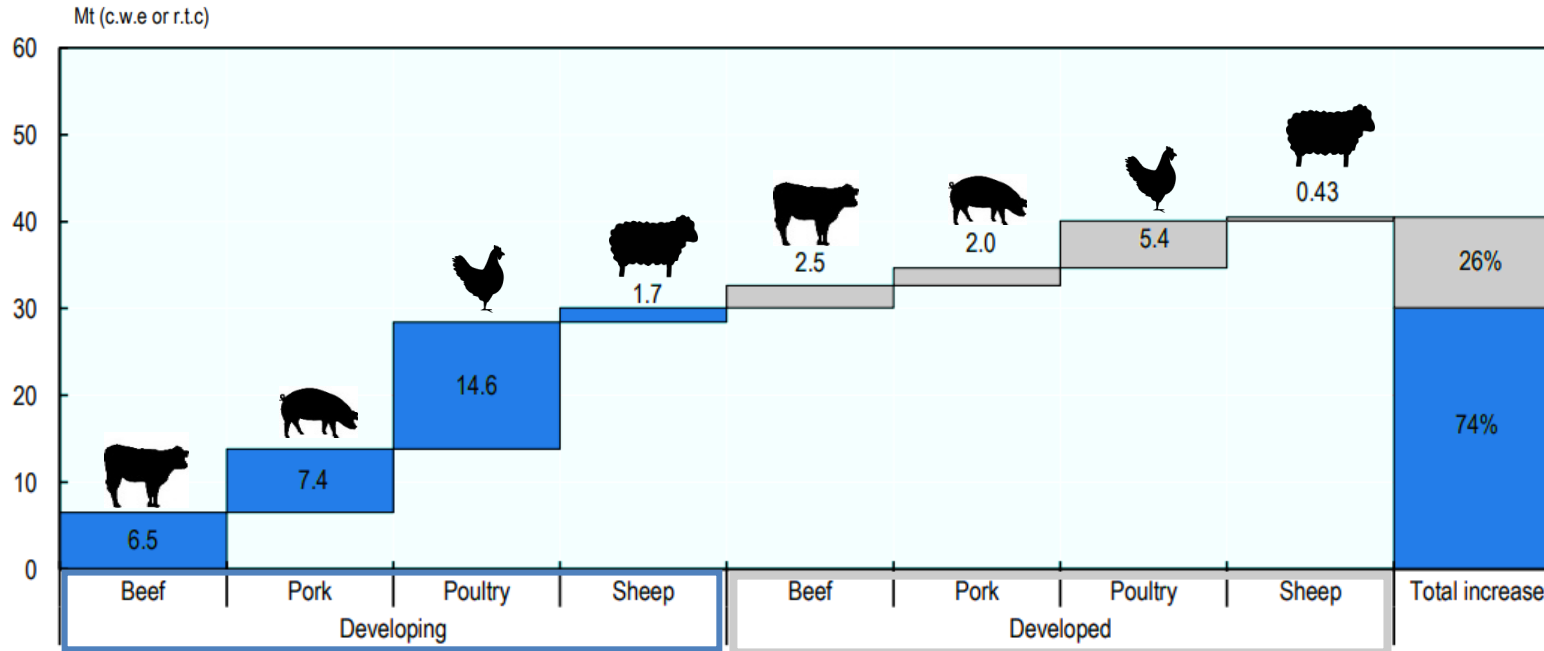


Source: UNDESA. World Population Prospects 2019



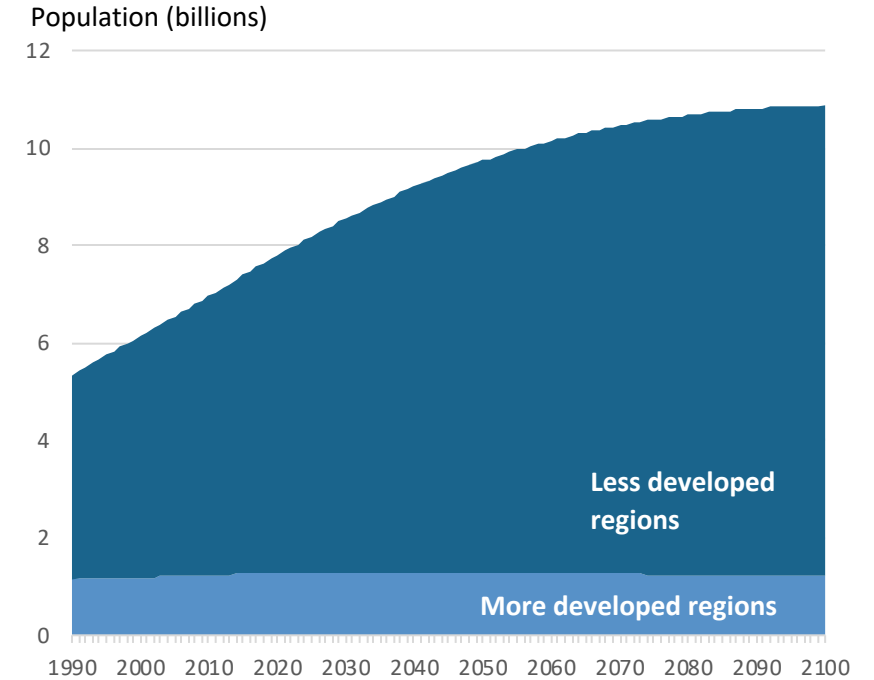
## Livestock production and world population are on a rise

### The case of meat



Source: OECD-FAO Agricultural Outlook 2019-2028

### World population



Source: UNDESA. World Population Prospects 2019



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SUSTAINABLE  
DEVELOPMENT  
GOALS

How can the  
livestock sector  
meet the growing  
demand while  
transitioning  
towards  
sustainability?

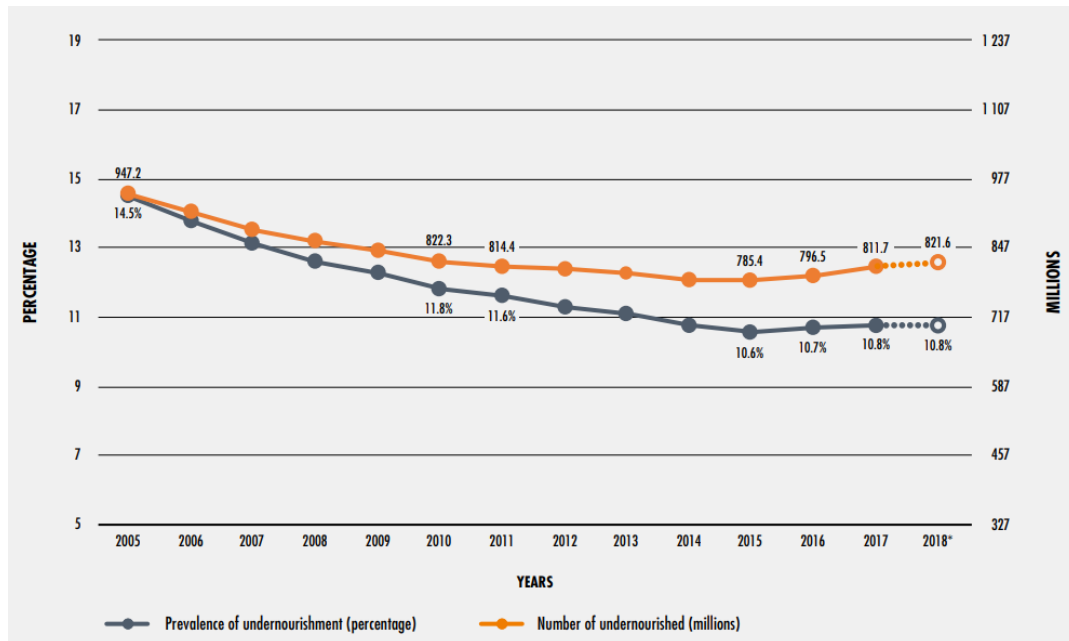


*The adoption of the Agenda 2030 shifted the focus from fostering sustainable production per se, to enhancing the contribution of the sector to the SDGs*

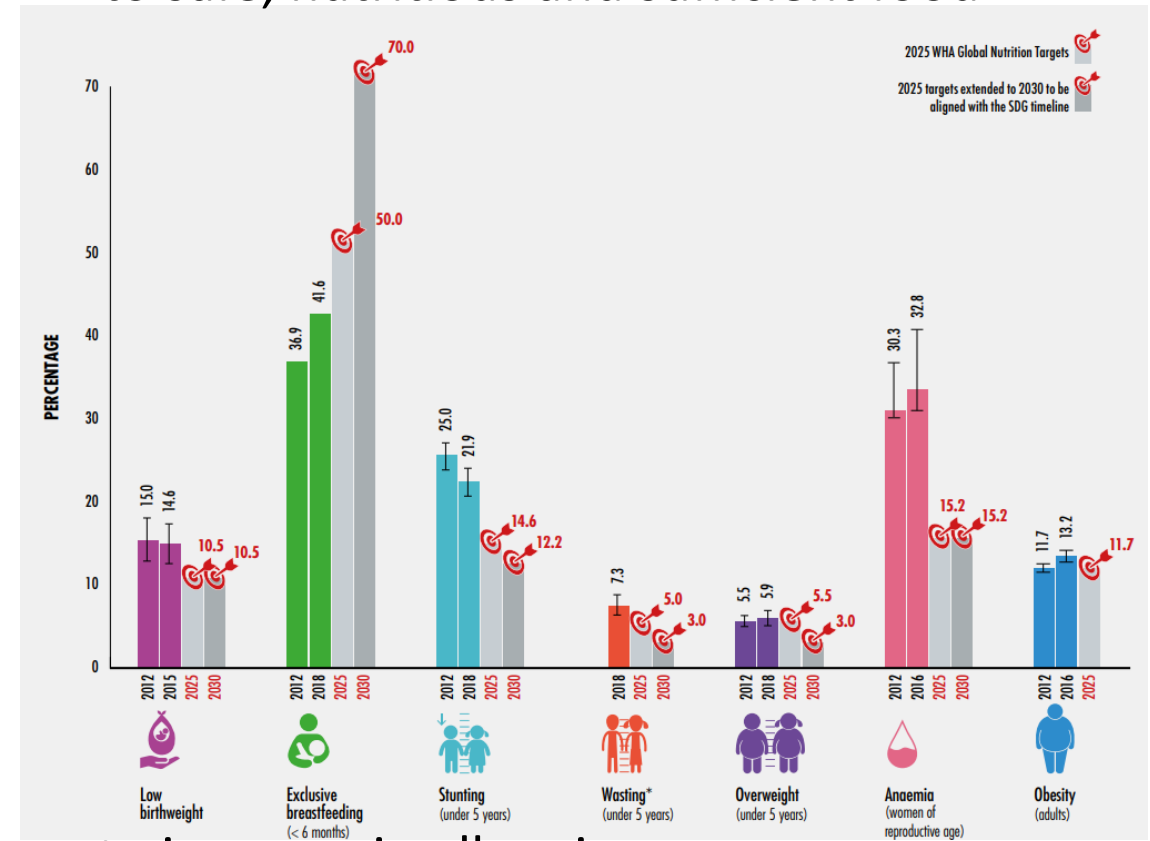


## Food security and nutrition – Key facts

The number of undernourished people is increasing (> **821 million people**)



> **2 billion people** do not have regular access to safe, nutritious and sufficient food



At the same time, **overweight and obesity** continue to increase in all regions



## Food security and nutrition



- Over **80%** of rural households in developing countries own poultry.
- In Sub-Saharan Africa, backyard poultry provides **14%** of meat and **38%** of eggs.

### The contribution of livestock

- **34%** of protein
- **18%** of calories
- **Essential micronutrients.**

### Areas of action

- Address **multiple burden of malnutrition**
- Promote **healthy diets** for all
- Improve **efficiency of livestock systems**

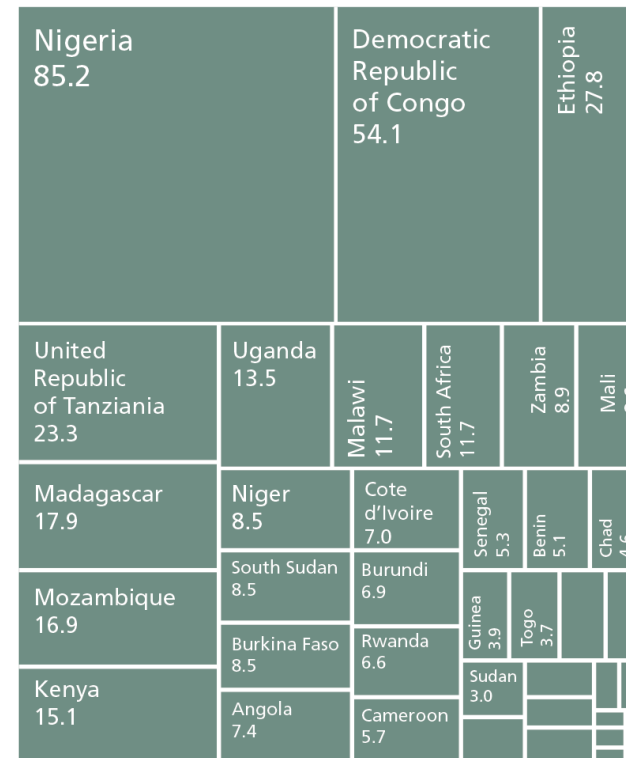


## Livelihoods and economic growth – Key facts

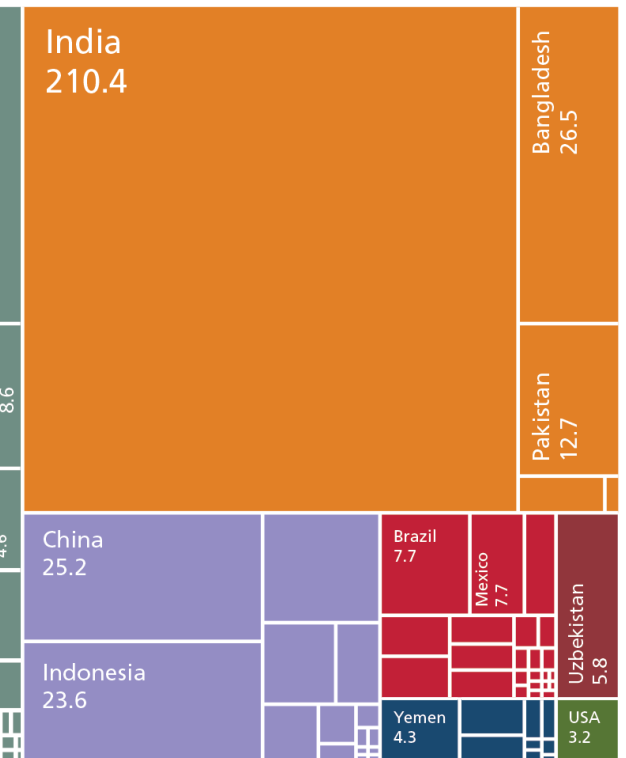
**736 million people** globally, or 1 in 10, live in extreme poverty



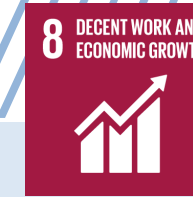
### Sub-Saharan Africa (390 M)



### South Asia (249 M)



### Est Asia & Pacific (74 M)



## Livelihoods and economic growth



Poultry play a key role in the lives of **millions of poor women** in developing regions

### The contribution of livestock

- Diverse **products** and **services**
- **Economic growth**
- **Equity** and **gender equality**

### Areas of action

- Link growth with poverty reduction
- Promote sustainable investment
- Support inclusive value chain
- Support value addition



## Animal and public health

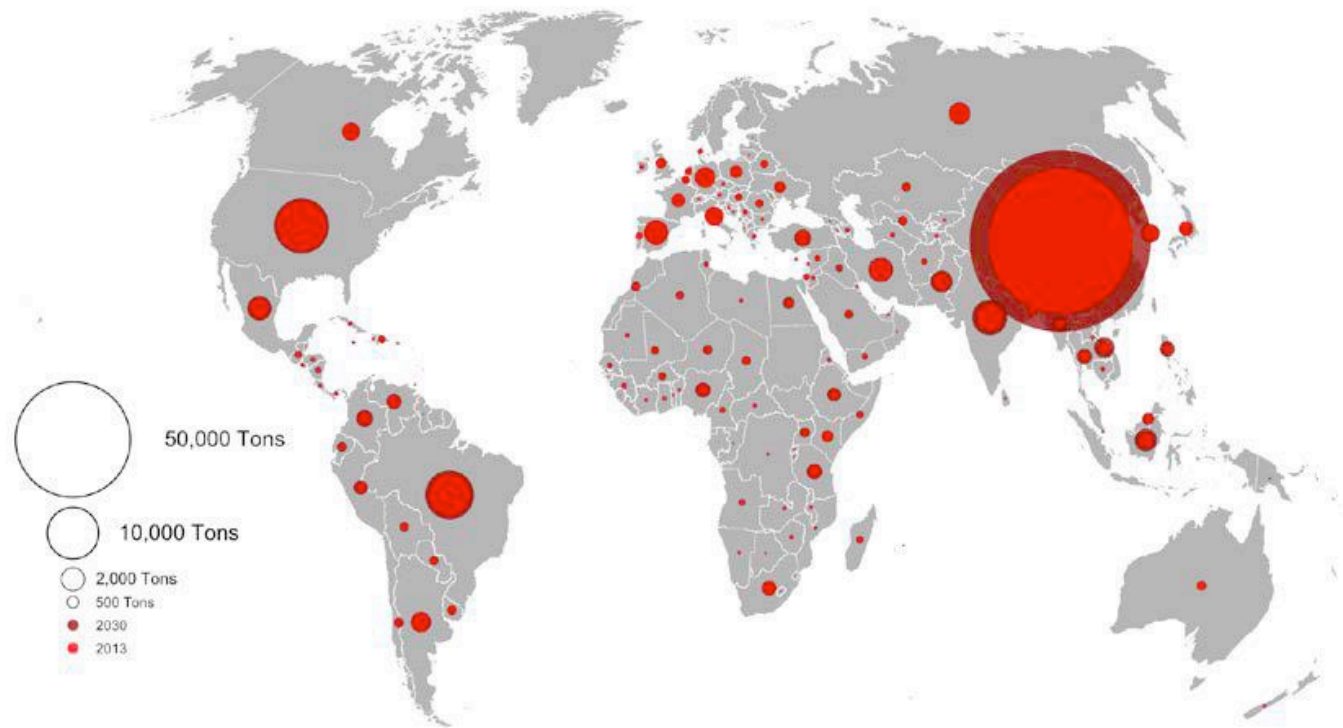
### Key facts

- **70%** of pathogens affecting humans have animal origin (Jones et al., 2008) ; **~2.7 million deaths/year**
- **~ 700,000 human deaths/year** related to antimicrobial resistance (O'Neill, 2016)
- **Animal welfare matters**

### Areas of action

- Promote the **One Health** approach
- Optimize use of **antimicrobials**
- Treat **animal welfare** as a priority

63,153 tons of antibiotics used in livestock globally in 2010



Van Boeckel et al. Science, 2017



## Climate and natural resources use

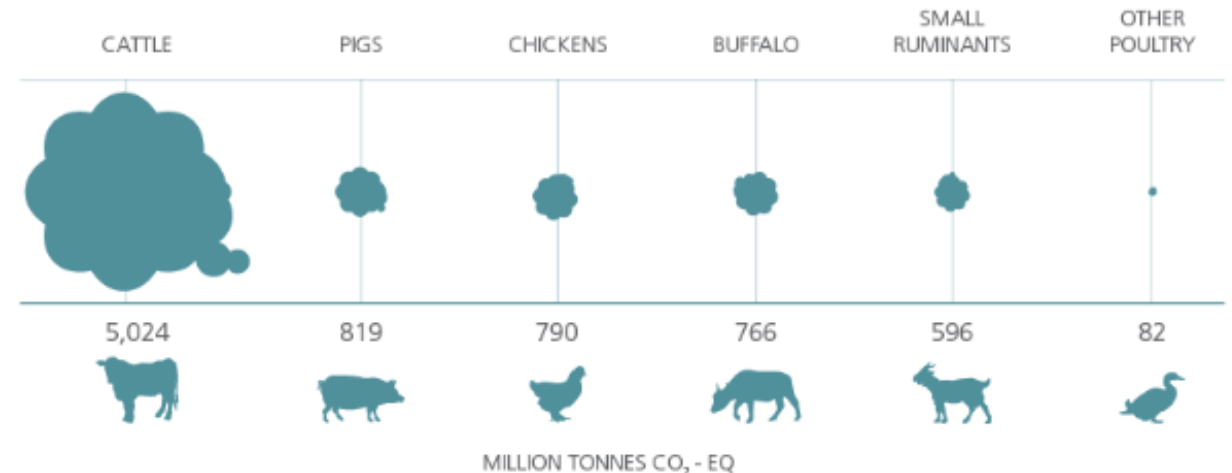
### Key facts

- Use **40%** of global arable land
- Consume **1/3** of global cereal production.
- Account for **14.5%** GHG emissions

### Areas of action

- Promote **productivity improvements**
- **Stock carbon** in the soil
- Integrate livestock in the **circular bio-economy**
- Promote agroecology and enhance **biodiversity**

### Greenhouse gas emissions

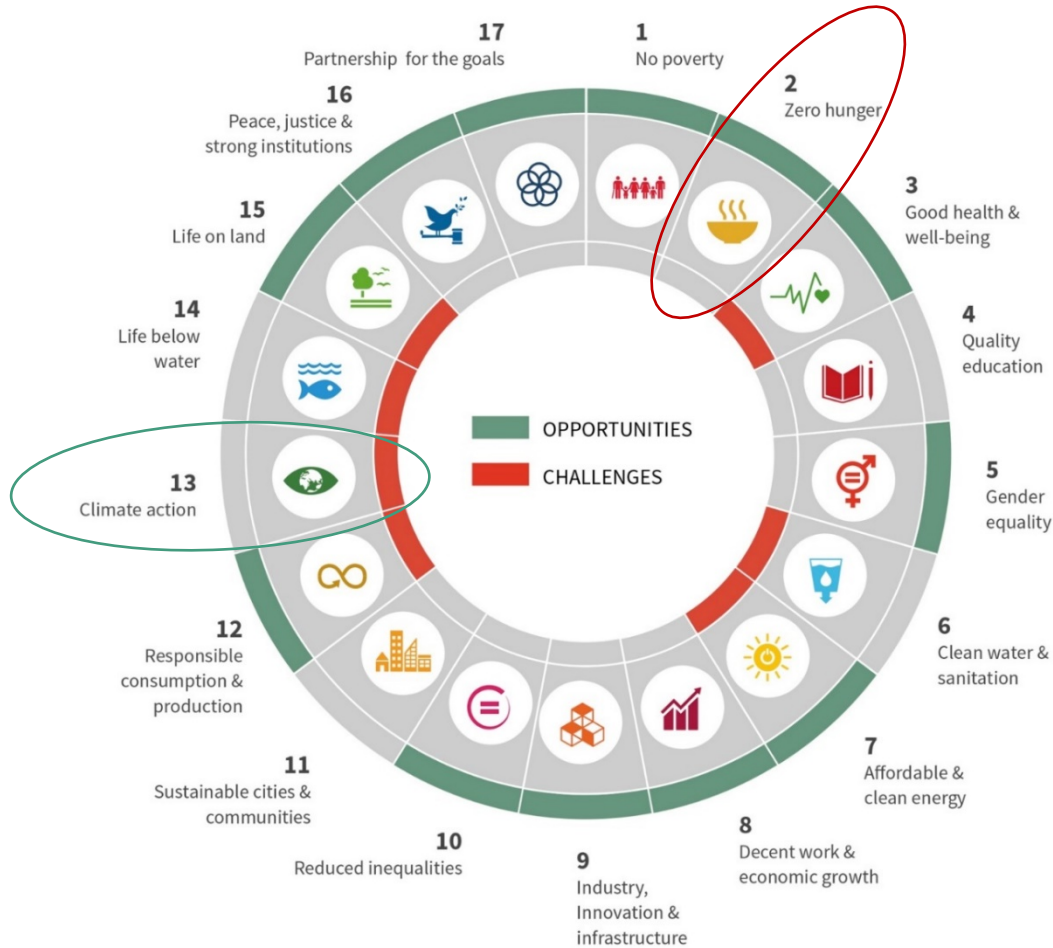


GLEAM, Reference year 2010. FAO, 2016



# Complex interactions and trade-offs are to be addressed

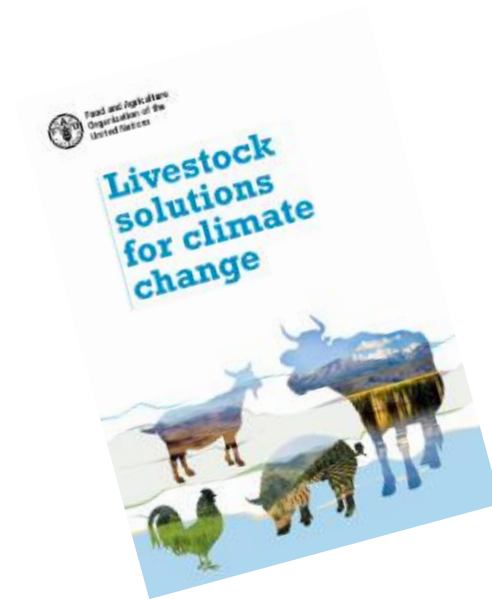
## Example: Shift to monogastrics



- + reduce GHG emissions
- increase the use of grains and legumes for animal feed
- threaten food and nutrition security

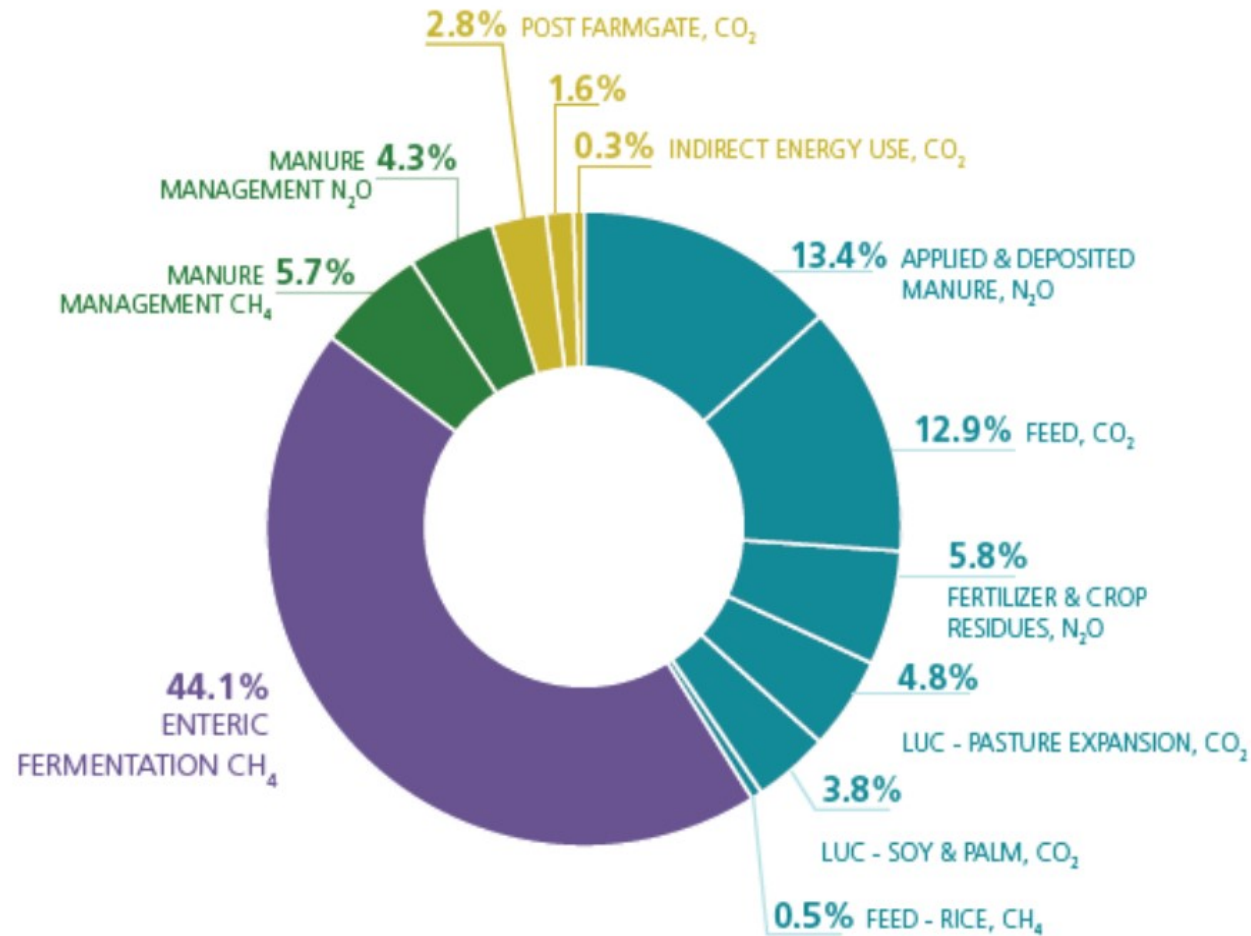


# Thank you





# GHG emissions from livestock supply chains



Reference year 2010. FAO, 2016



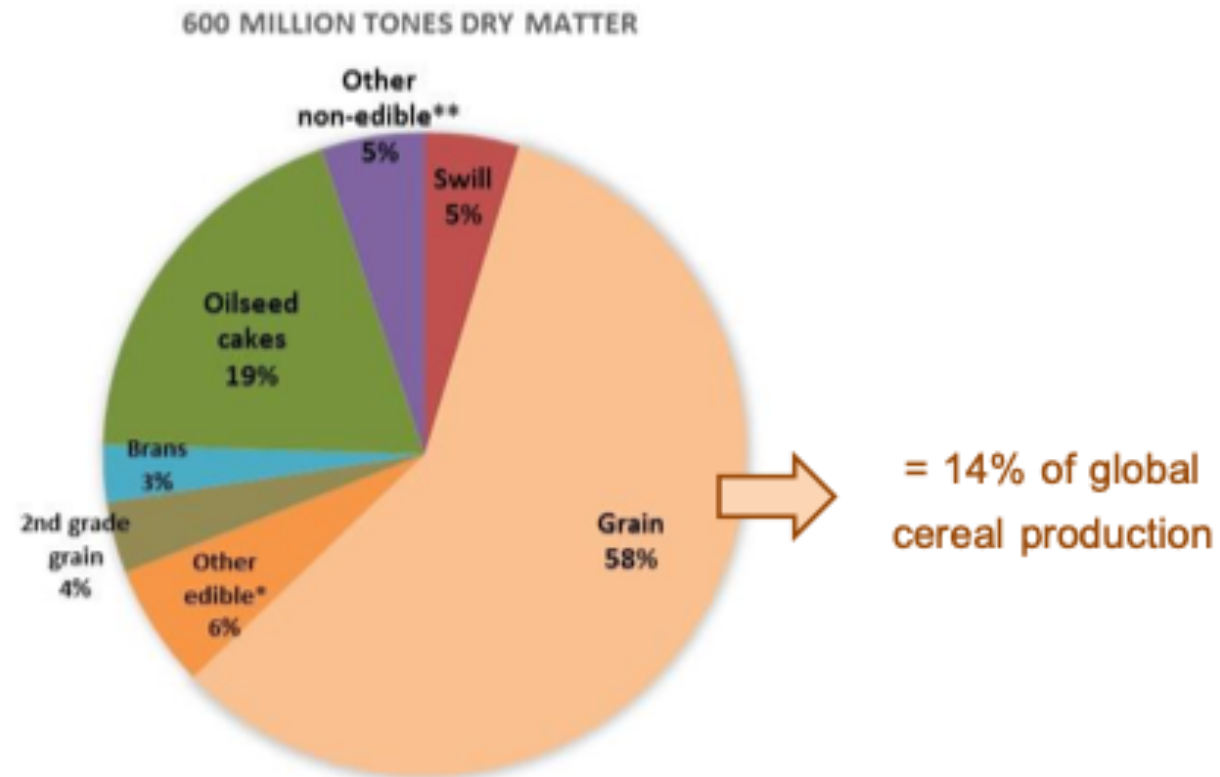
## Climate and natural resources use

### Global feed conversion ratios

	Protein	FCR 1	FCR 2	Meat FCR 2	FCR 3	Protein FCR 2
	Mt/year	Kg DM /kg protein	Kg edible DM /kg protein	Kg edible DM /kg meat	Kg compete DM /kg protein	Kg edible protein /kg protein
Ruminants	36,355	133	6	2.8	6.7	0.6
Monogastrics	38,246	30	16	3.2	20.3	2.0
All	74,601	80	12	3.1	13.7	1.3



# GLOBAL POULTRY FEED RATION



\* Casava pellets, beans and soy beans, rapeseed and soy oil

\*\* Fish meal, synthetic amino acids, lime

Source: GLEAM 2.0