

# WORLD MEAT: MAIN DRIVERS

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# INTERNATIONAL MEAT SECRETARIAT

The International Meat Secretariat (IMS) brings together meat and livestock organisations throughout the world

Non-profit making association.

Forum for the exchange of ideas and experiences on international issues: conferences, meetings, publications

Representation in international organisations: FAO, OIE, OECD, WHO

Members: national meat and livestock organisations, corporations and other bodies connected with the meat and livestock sector

More than 90 members in over 30 countries around the world



# AGRICULTURE KEY DRIVERS

## END OF LOW PRICES IN AGRICULTURE

### 1. Demand

- Population growth
- Income growth, mainly from production deficit regions
- Income growth, grains to meat

### 2. Supply

- Trend yield growth decelerating (productivity treadmill)
- Structural surplus to structural deficit?

# MEAT: CHALLENGES IN DEVELOPED ECONOMIES

## DEMAND STABLE OR DECLINING

- Reached saturation levels
- Health concerns, obesity (energy dense, nutrient poor diet)
- Role of meat in healthy diet not well communicated, particularly for young and old (nutrient dense protein)
- Sustainability
- Animal welfare



Rabobank International

# US MEAT CONSUMPTION TYPICAL OF DEVELOPING WORLD

## US per Capita Annual Meat Consumption

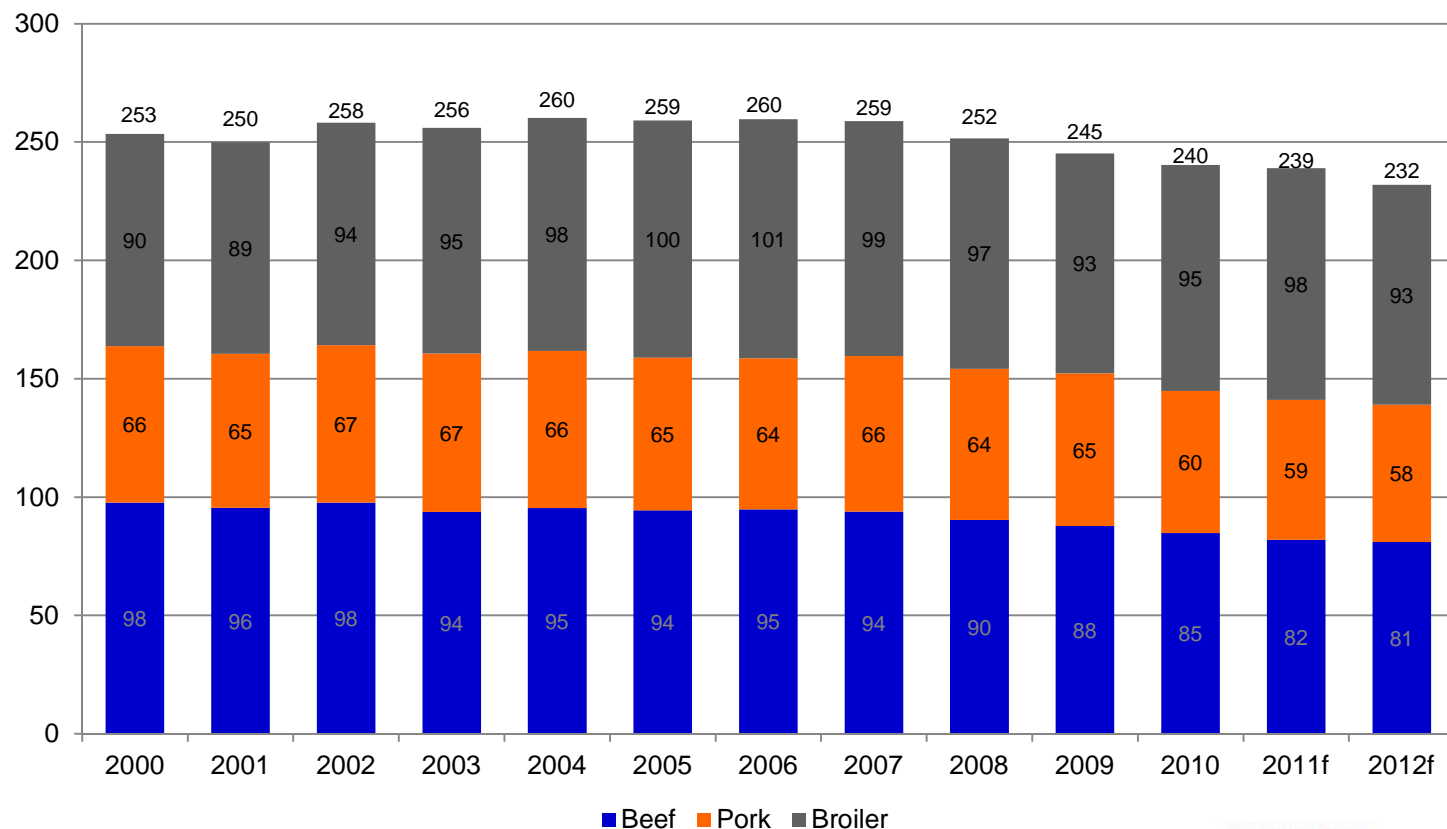
*For US protein companies and their suppliers, part of the challenge is that the US market has matured.*

*Animal protein companies must now look to export.*

*The good news is that the US is a grain surplus country and a low cost animal protein producer.*

*Another positive factor is that except for chicken breast meat, meat protein prices are rising faster than per capita consumption is falling – a sign of strong demand – even in this economy.*

Lbs cwe for pork and beef, lbs rtc for chicken



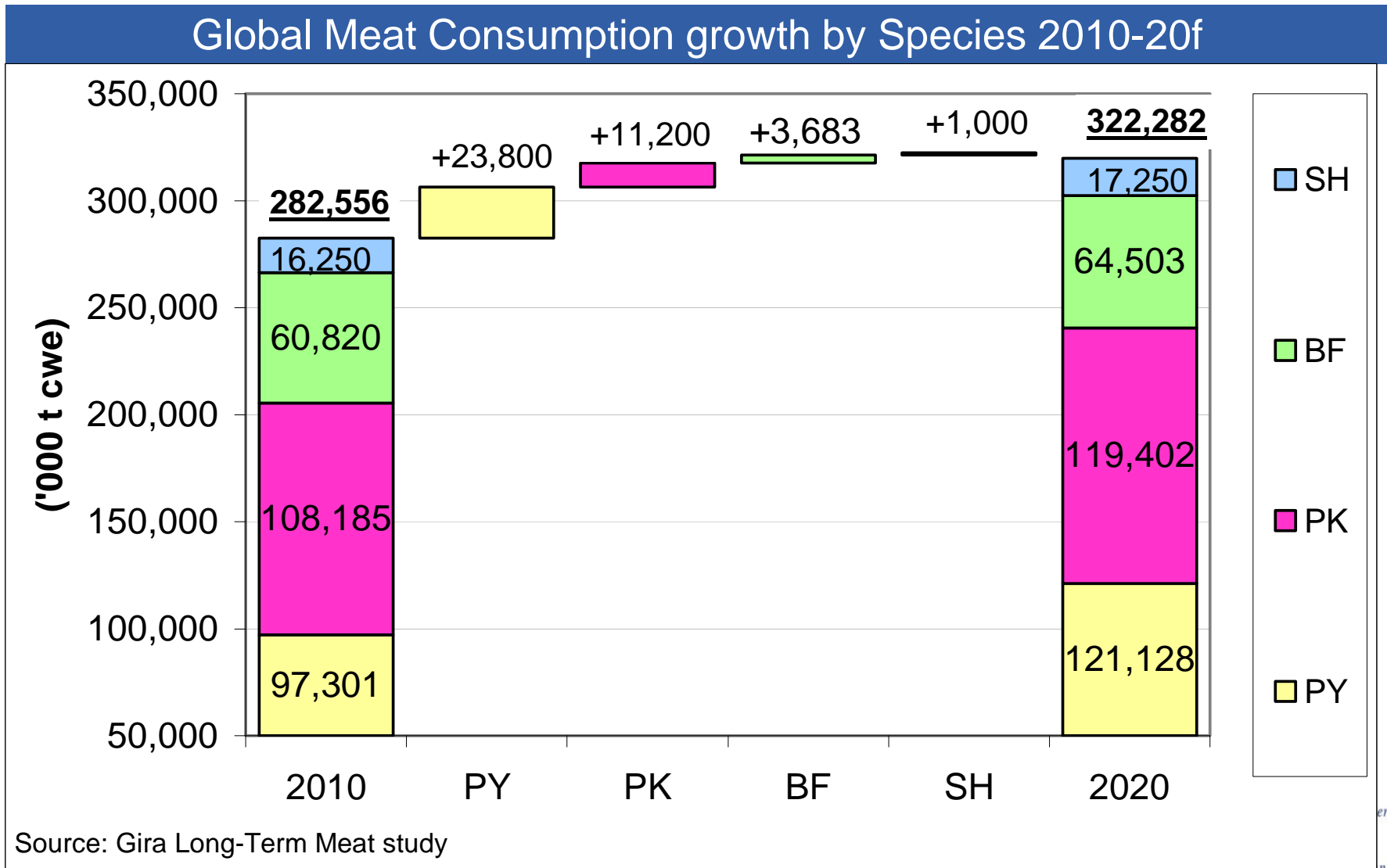
Source: USDA, Rabobank estimates

# MEAT: CHALLENGES IN DEVELOPING ECONOMIES

CHINA, INDIA, INDONESIA ARE 40% WORLD POPULATION

- GDP between 3 000 to 5 000
- Much faster rates growth ( $\gg 5\%$ , compared to developed)
- “sweet spot”, income gains translate into increased demand for meat
- Grain deficit, land poor –will need to import meat (and grains)
- Sustainability?
- Animal welfare?

# Long term consumption growth dominated by poultry, driven by relative price



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**Positive beef demand fundamentals ... and higher producer confidence, but feed and other cost rises evoke cautious herd growth**

## Good long term demand fundamentals

Especially, but not only, in developing markets

But short term EU and US consumption difficulties

## Rising producer prices

But also higher costs, especially feed ... and associated ethical & sustainability costs

## Intensification

From a diverse starting point

Upset by recent low finishing margins

## Selective modest long term **increase in breeding herd**

Expected, but not evidenced, in S.America

Frequently thwarted by pastoral conditions e.g. SW US drought in 2011

## Increasing **trade volumes**

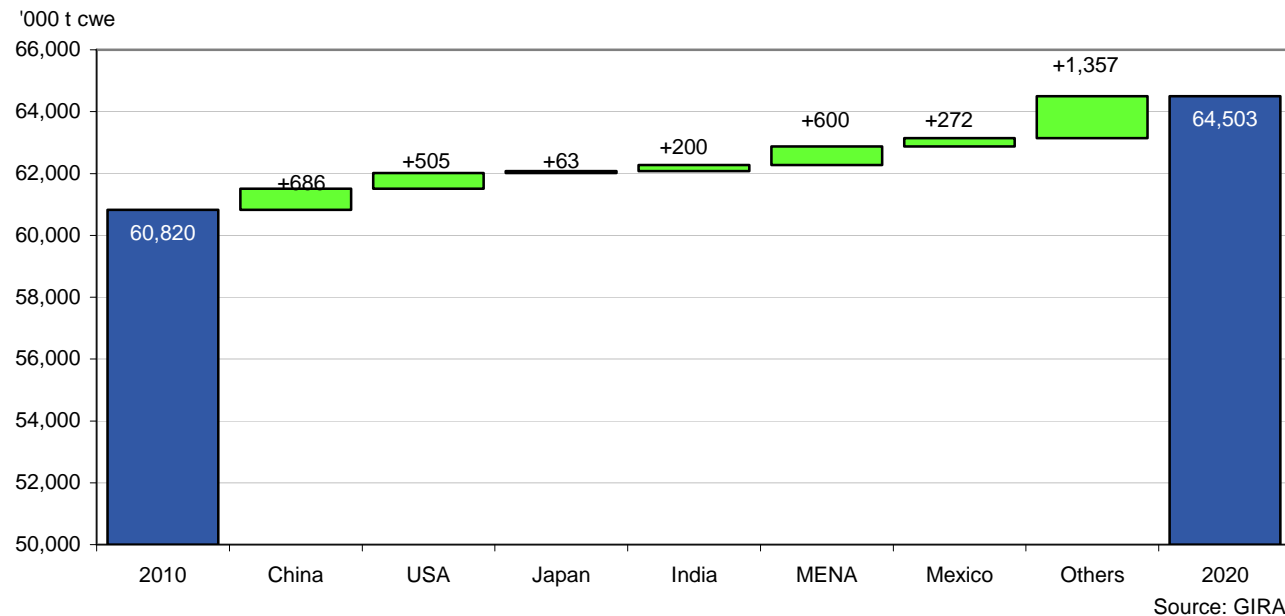
To some new & interesting markets e.g. Turkey

## Slow improvement in **vertical communication** in the beef chain

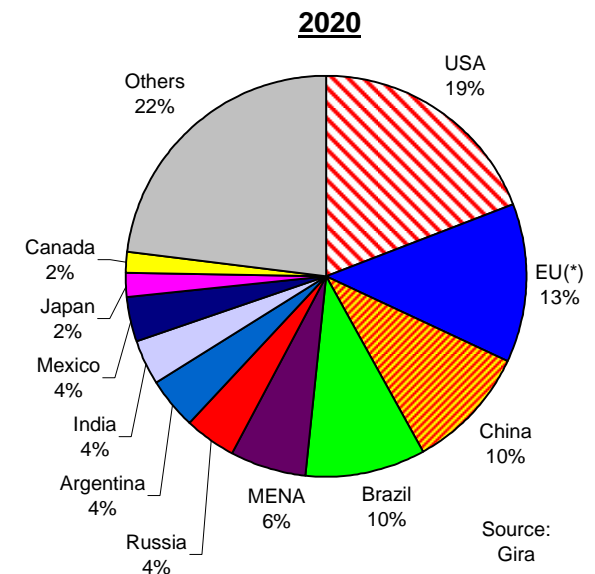


# Broadly spread beef consumption growth in the US, MENA & Asia ... but not EU

## Beef Consumption Growth 2010-20f



## Beef Consumption



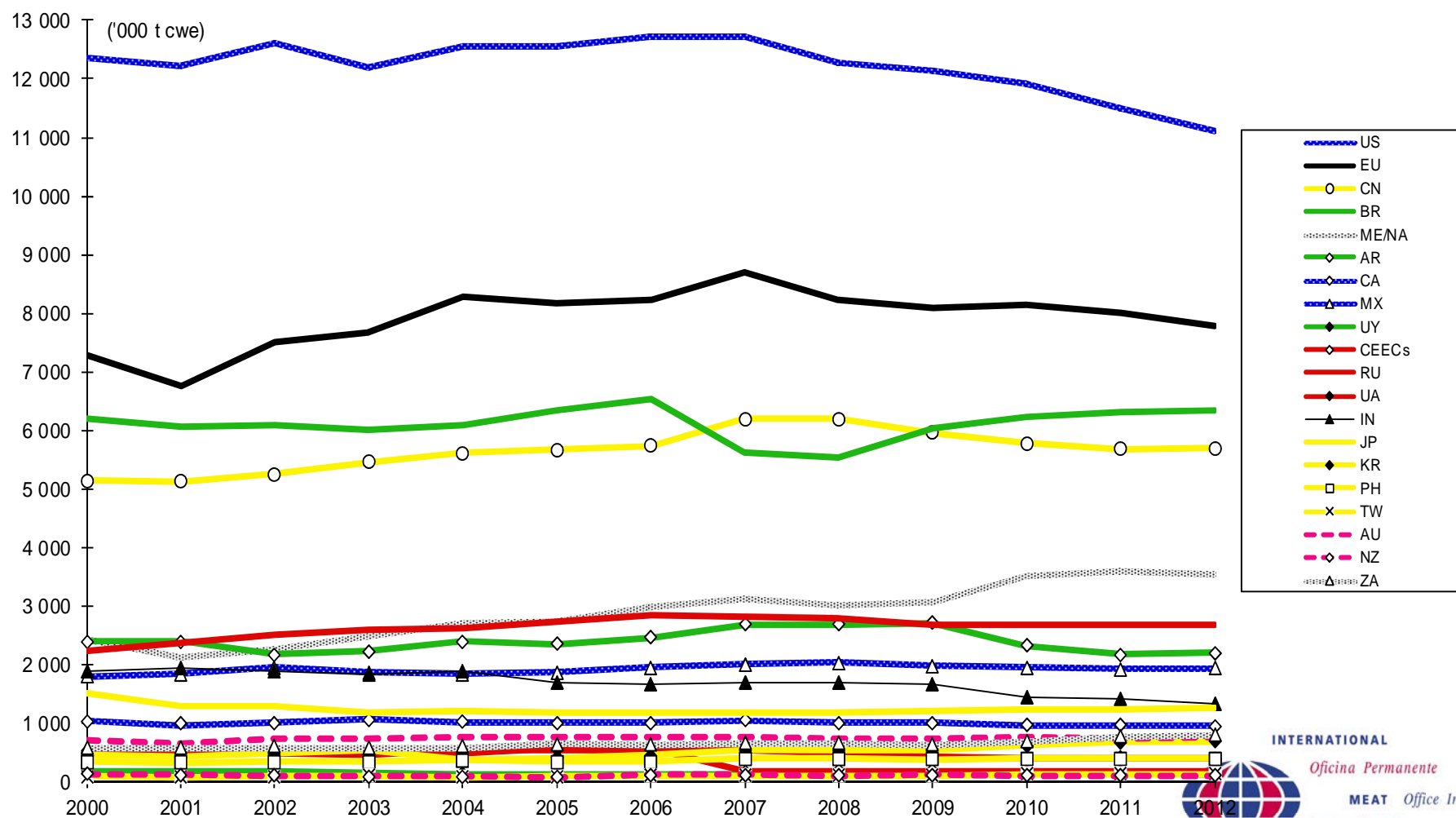
China and MENA growth ... with import opportunities

“Others” reflects broad gains in developing world

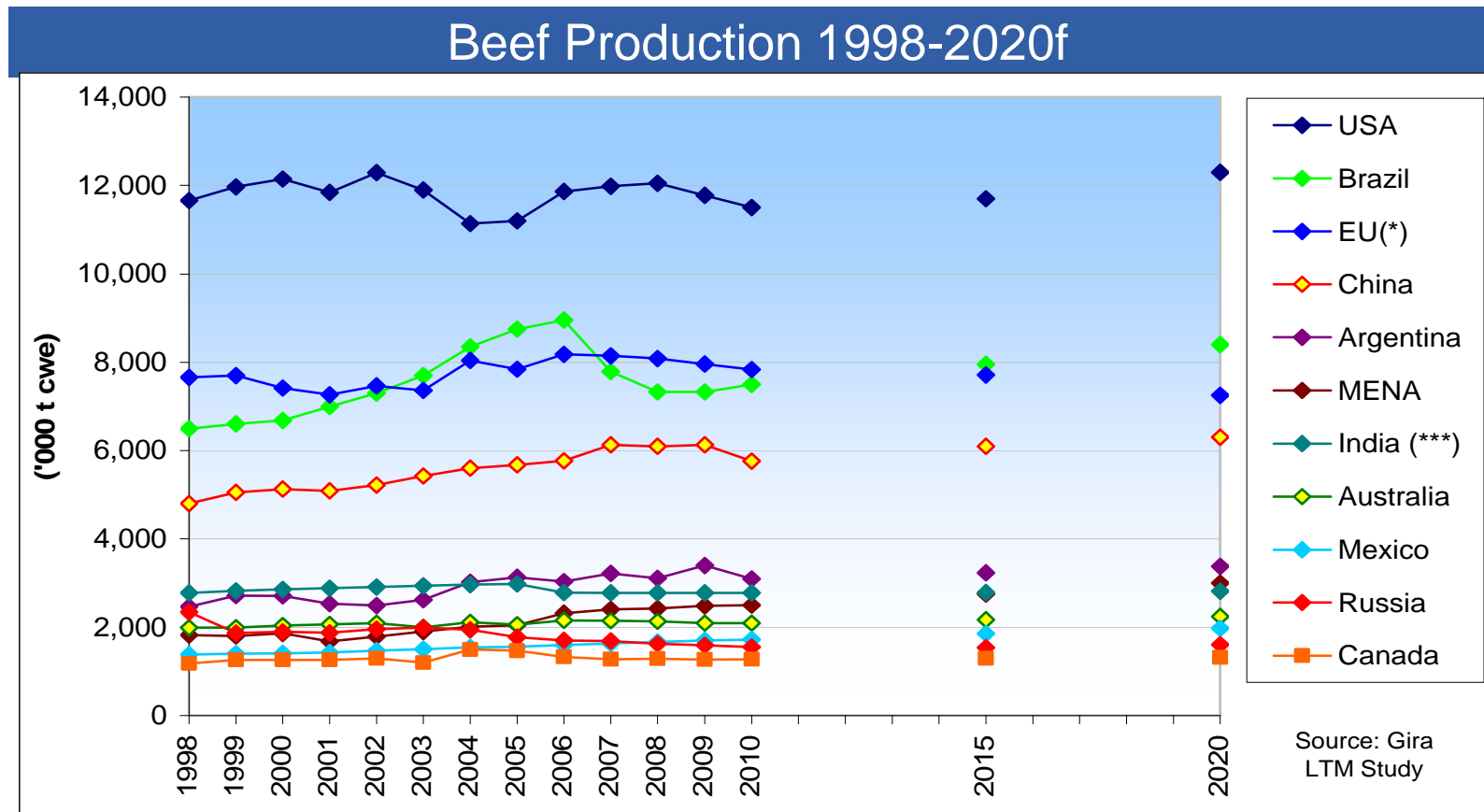
... but also US growth ... although short term downturn

... with short term beef consumption declines in key US and EU markets

Figure SYN-BF 3: Beef & Veal Consumption, 2000-2012



# Outlook for slow increases in global beef supply, led by a cautious US & S.America



Limited herd growth, ... takes time – and can be offset by various problems

shift to more intensive finishing

Good long term global demand outlook ... but even more volatility than usual

## Good long term pigmeat demand fundamentals ... at higher prices

... just as well, because feed and welfare costs are rising

## 2012 price 'downtick' from disease-inflated 2011 price levels

... somewhat offset by slightly lower feed costs

Asian (and Russian) import demand slightly weaker

## Short-medium term outlook fraught with uncertainty

Speed of *Chinese production recovery* from 2011 PRRS leading to lower 2012 import demand

Risk of further *disease disruption*: ASF and PRRS-type outbreaks

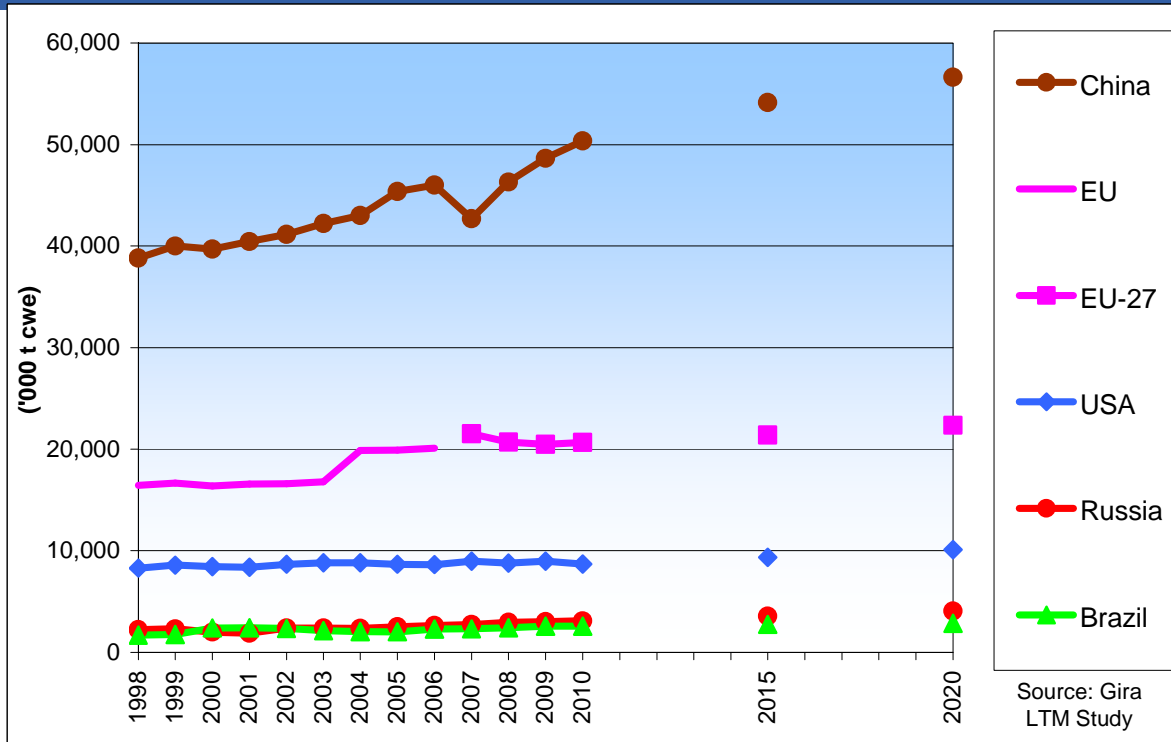
'*Weather market*' in feedgrains

Impact of EU *sow loose-housing regulation* from 1/1/2013

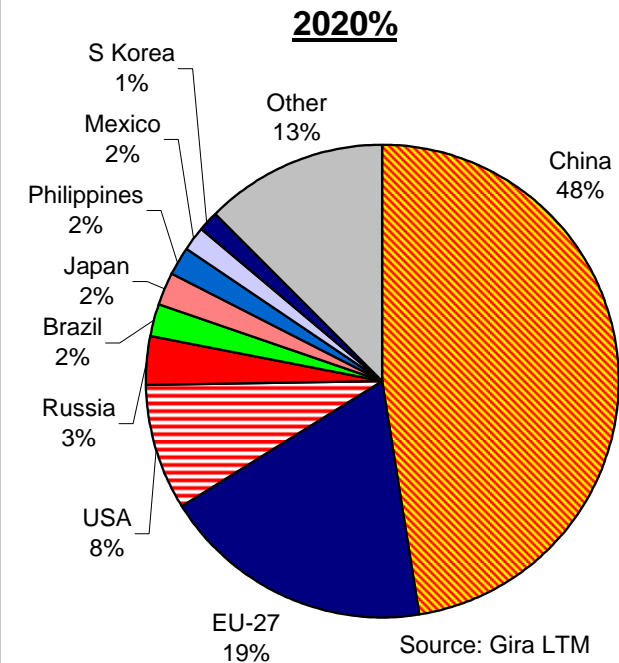
... Mainly upside price potential

# Pigmeat consumption to grow 10%, driven by population growth, preference & low cost

Pigmeat Consumption by Country 1998-2020f



Pigmeat Consumption share

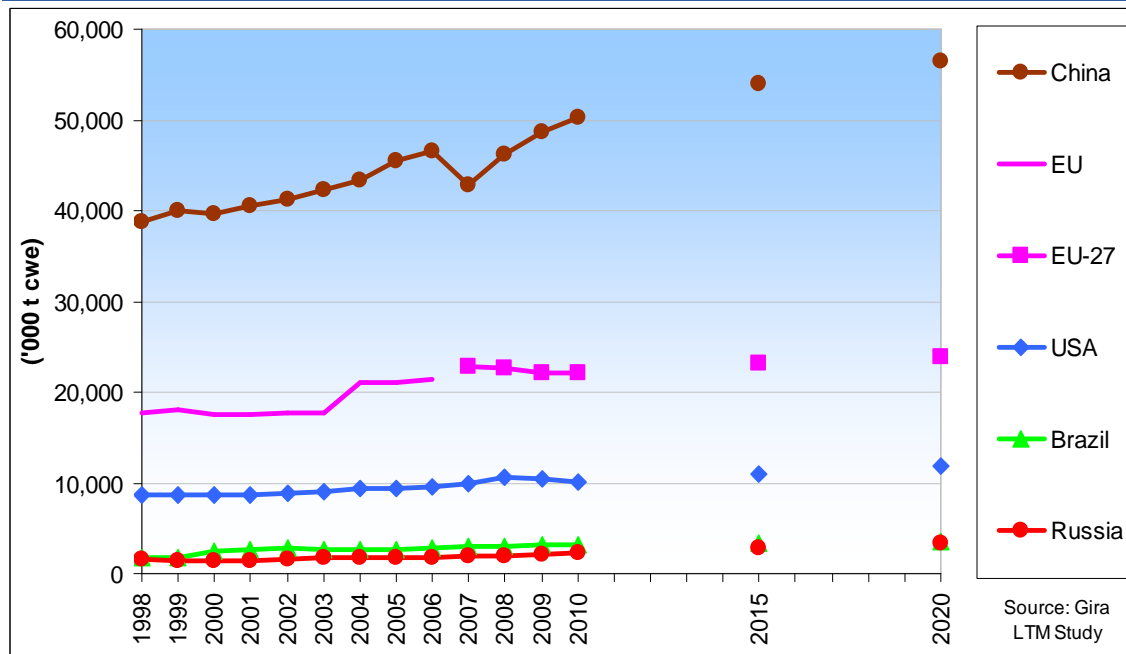


Global PK consumption growth of **11.2mt (+10%)** 2010-20f

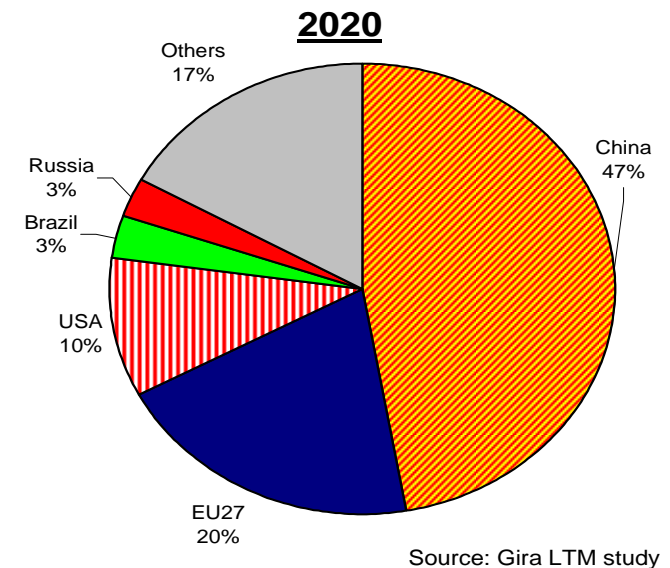
**>60% of which in China:** even though per capita consumption of 38 kg cwe per annum now caught up with Taiwan

# Pig production dominated by Chinese growth, although at a slower rate than in the past

Pig Production by Country 1998-2020f



Pig Production Share



## CN productivity gains much greater than herd growth

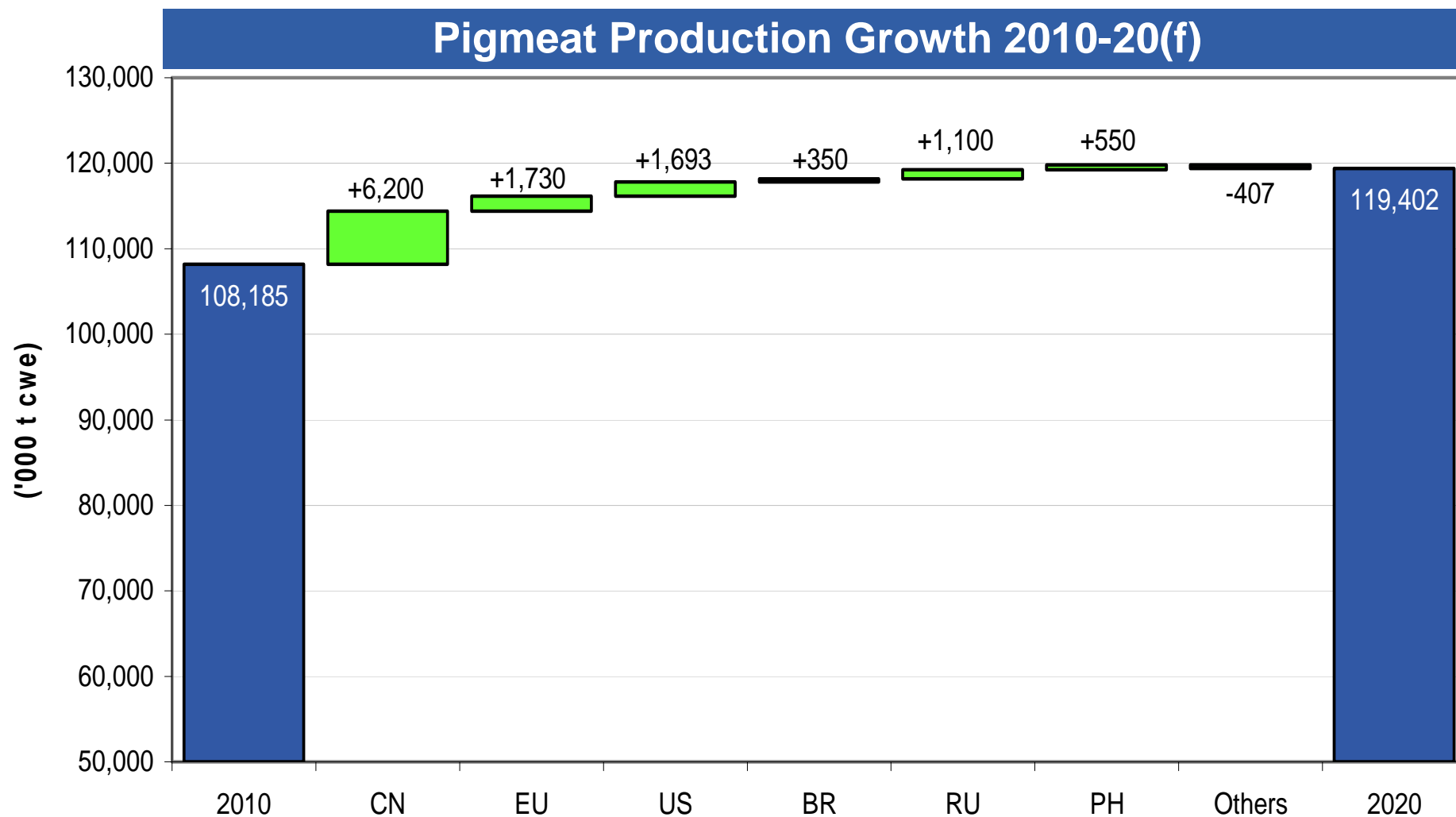
motivated by higher prices

upscaling (with much greater efficiency)

... but even the backyard increases output

2012 production recovery from PRRS seems faster than expected – leading to lower prices, and intervention support

... and a handful of countries which account for bulk of pigmeat production growth



Source: Gira LTM study

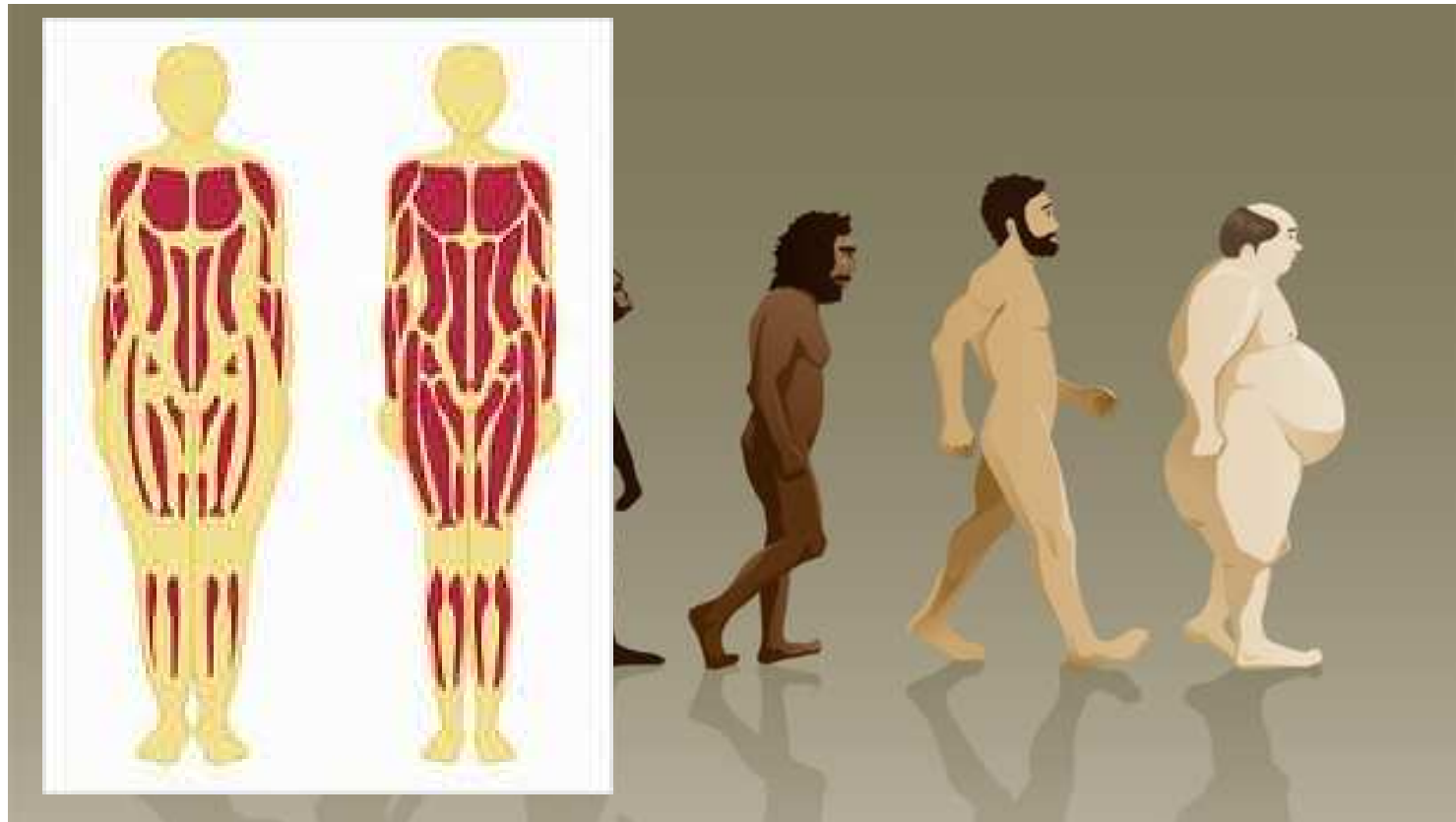
# LIVESTOCK AND SUSTAINABILITY

Livestock is also

- High quality protein, heme iron, vitamin b12
- Leather, wool
- Landscape, biodiversity
- Water and soil quality
- Economic (investment) and social benefits (status)



# Sarcopenic Obesity



# IT'S GETTING COMPLICATED

- HEALTH
- CO2 EMISSIONS
- POLLUTION
- BIODIVERSITY
- ANIMAL WELFARE
- ETC, ETC ...



"THERE'S NOTHING TO EAT!"



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# Relevant functional unit

	kg CO <sub>2</sub> -equiv. per kg or per litre
<b>Coca-cola</b>	<b>&lt;0.25</b>
<b>Apples</b>	<b>0.3</b>
<b>Milk</b>	<b>1</b>
<b>Lamb</b>	<b>9</b>

international

## Relevant functional unit

	kg CO <sub>2</sub> -equiv. per kg or per litre	kg CO <sub>2</sub> -equiv. per kg protein
<b>Coca-cola</b>	<b>&lt;0.25</b>	<b>Infinity !</b>
<b>Apples</b>	<b>0.3</b>	<b>90</b>
<b>Milk</b>	<b>1</b>	<b>30</b>
<b>Lamb</b>	<b>9</b>	<b>40</b>

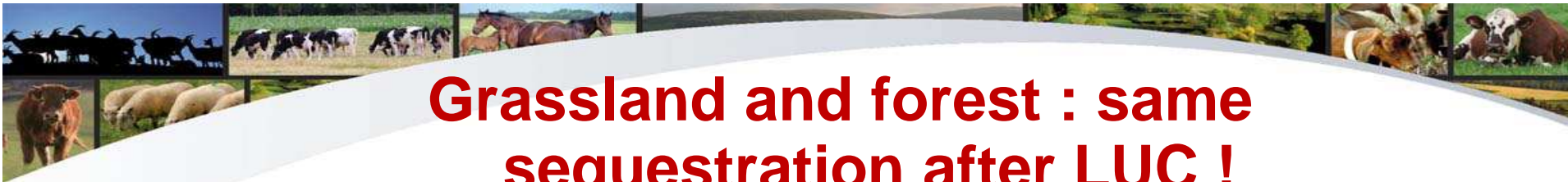


## GRASSLANDS IMPACT:

- ▶ **Climate regulation by carbon sequestration**  
**Ex : France : 33% of livestock farming greenhouse gas emissions offset by carbon storage in pastures**
- ▶ **Water resources & Water availability**
- ▶ **Biodiversity : Species, pollination, environmental services**
- ▶ **Landscape**
- ▶ **Fire regulation**
- ▶ **Soil structure and fertility**
- ▶ **Flood regulation**

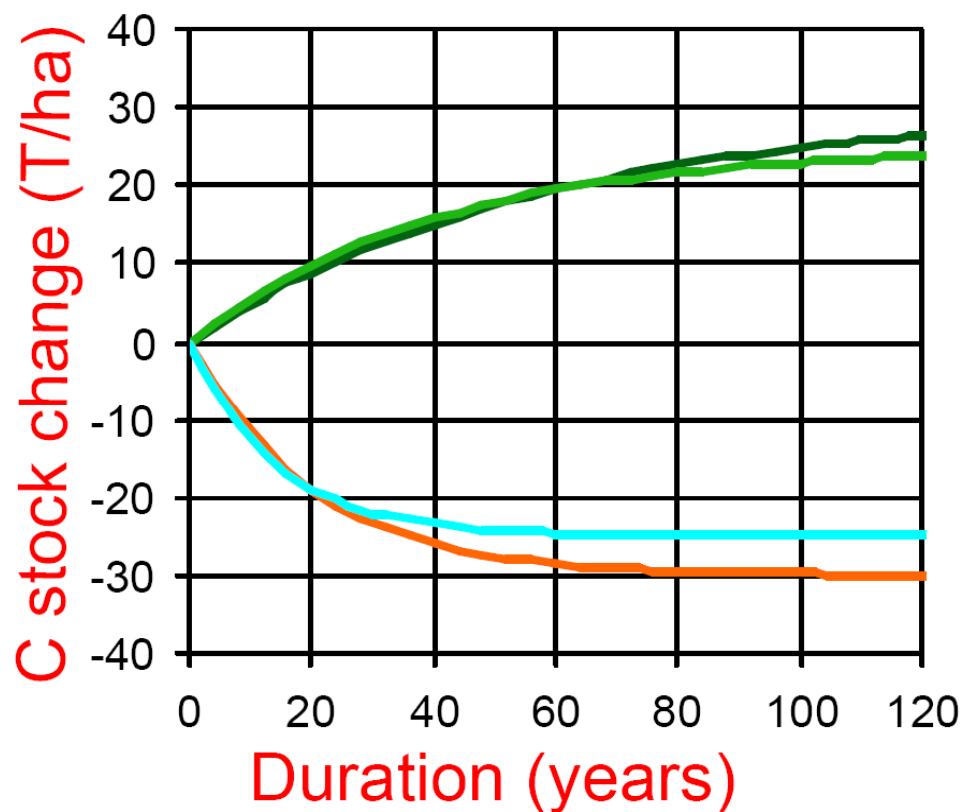


*In Europe (27), 1/3 of agricultural land is permanent pastures, used by livestock*



# Grassland and forest : same sequestration after LUC !

Climate regulation



- Arable => forest
- Arable => grass
- Forest => arable
- Grass => arable



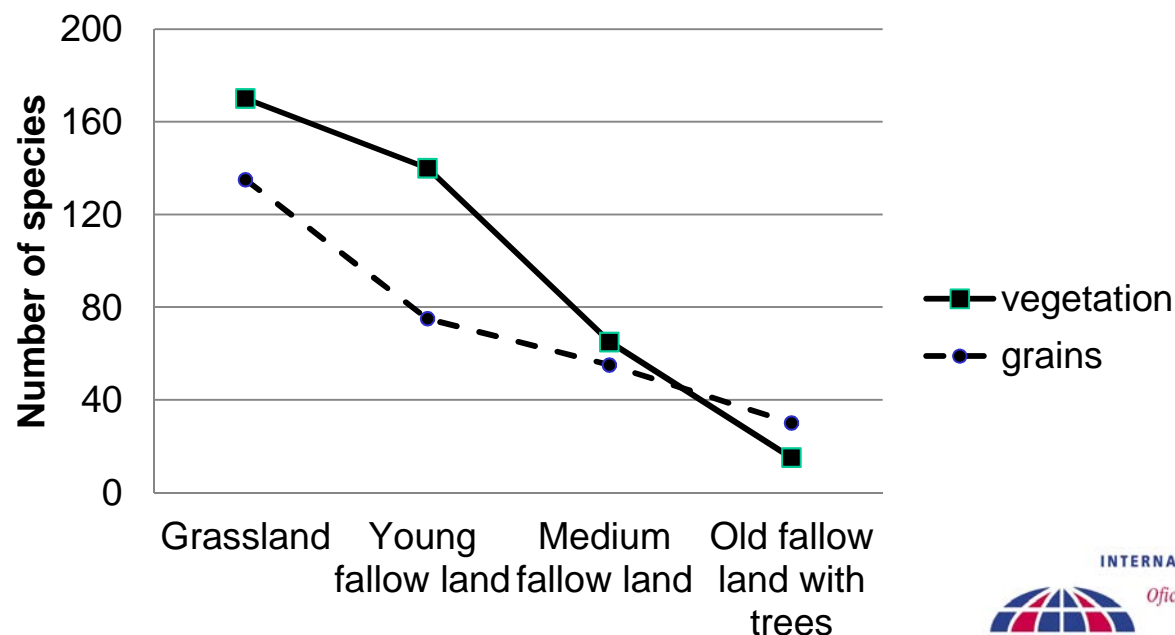
SOURCE : ARROUAYS, INRA, 2003



# Agricultural landscapes : major habitat for biodiversity

## Biodiversity

- ▶ 50 % bird species depend on habitats for breeding and feeding (Pain and Pienkowski, 1997)
- ▶ Grasslands represent the most species-rich vegetation types (up to 80 plant species/m<sup>2</sup>) (Vandewalle et al., 2010 )



**SOURCE : BAKKER & BERENDSE IN INRA, 2011**



# SUSTAINABILITY WISHLIST

## PRODUCERS

- Produce more of what we want
- Produce less of what we don't want
- Continuous improvement « journey » not a « destination »,
- Identify hotspots
- Improve profitability

## CONSUMERS?



# DON'T CONFUSE THE CONSUMER

GREENHOUSE GASES (less is better)

Product A < Product B

Should consumer choose between NZL lamb vs UK lamb? Food miles debate

Should consumer choose between chicken or steak? One industry vs another

Should consumer choose between vegetables or meat? Vegetarian argument

# NEED FOR SHARED ENVIRONMENTAL ASSESSMENT METHODS

- Need for international normalized methods
  - Pre-competitive issue
  - Assess positive environmental impacts and positive social and economic externalities
  - Animal welfare!
- 
- Partnership with FAO on LCA
  - Partnership with FAO on GAA

# FINAL THOUGHTS

# BE PROUD OF MEAT!

- Humans are omnivorous, meat is a natural food adapted to their physiology
- Humans have a natural tendency towards meat; consumption increases along with living standard
- Meat is good for health; it is rich in proteins, iron, zinc, selenium, B12 vitamin
- Synonym of pleasure, social interaction and celebration

# BEEF, DEVILISHLY DELICIOUS!



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