African beef and sheep markets: situation and drivers

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Outline

1. Basic quantities, projections

2. The nature of sheep and beef markets

3. Drivers of change

4. Opportunities and challenges faced

… emphasis on developing countries in Africa

Numbers of animals

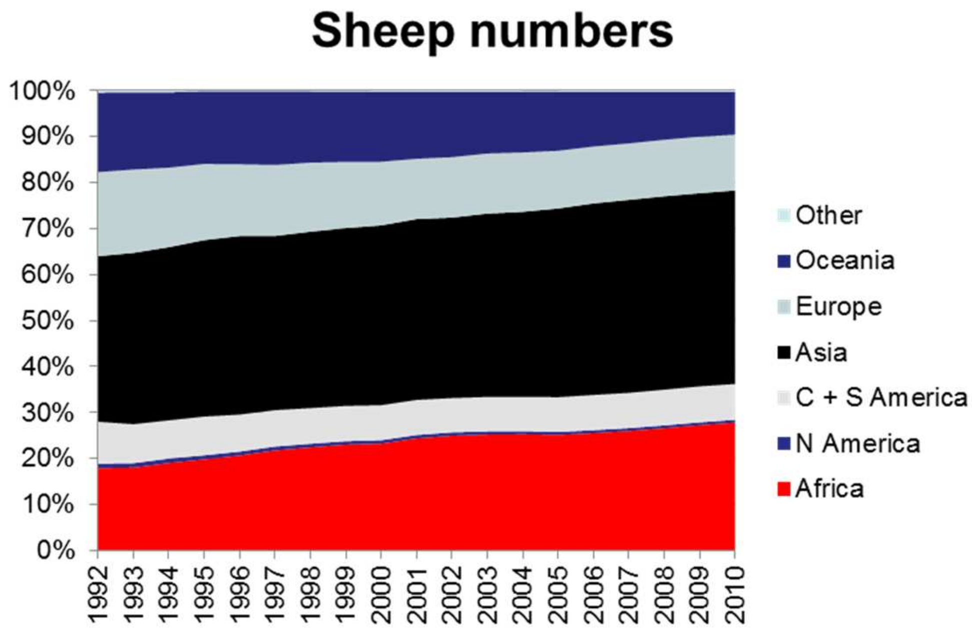
Global sheep (2010) 1.1 billion

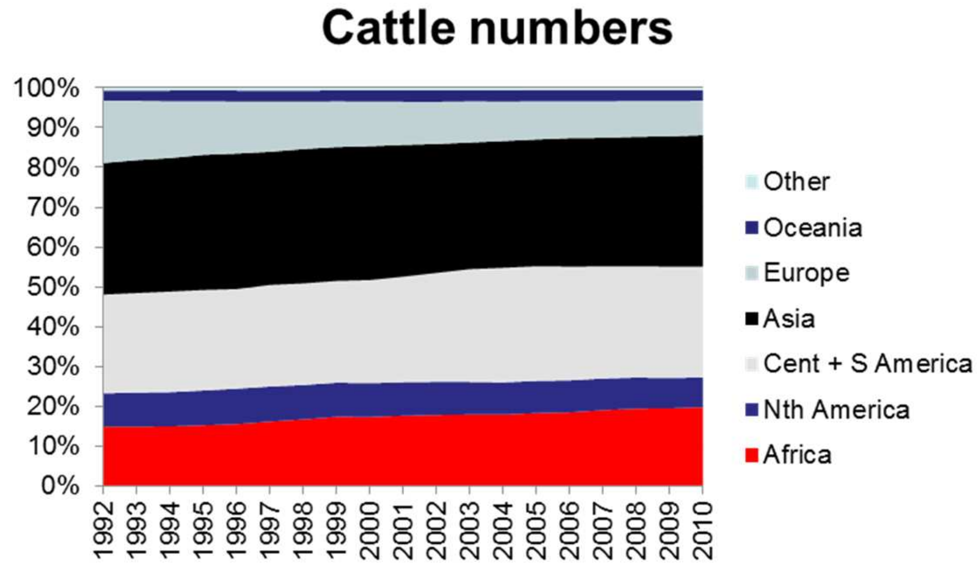
(7% decline in 20 years)

Global cattle (2010) 1.4 billion

(9% increase in 20 years)

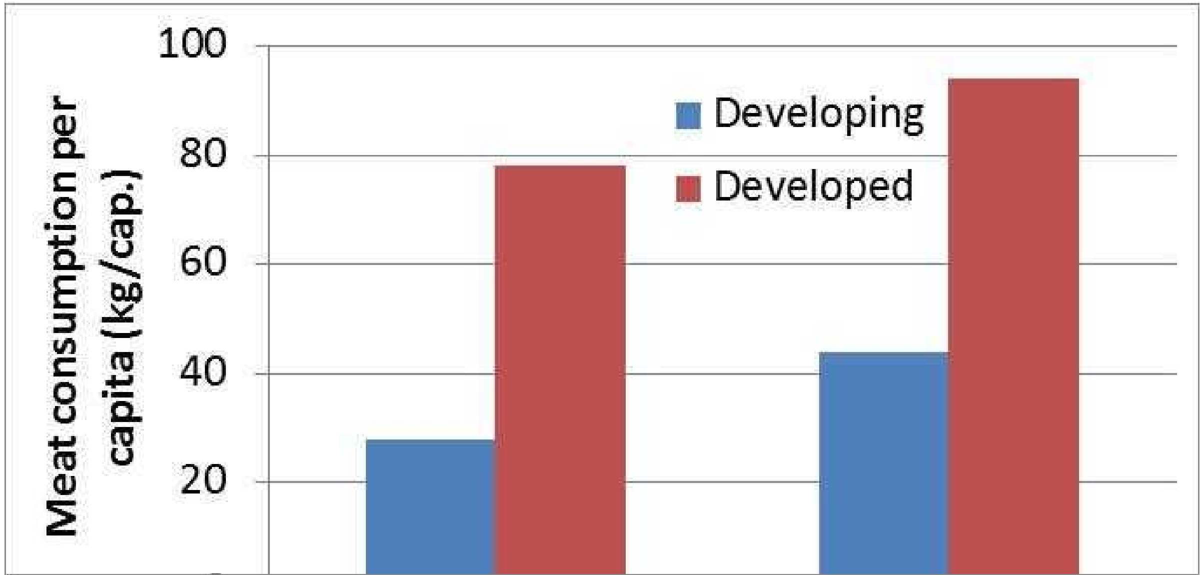
FAO, 2012

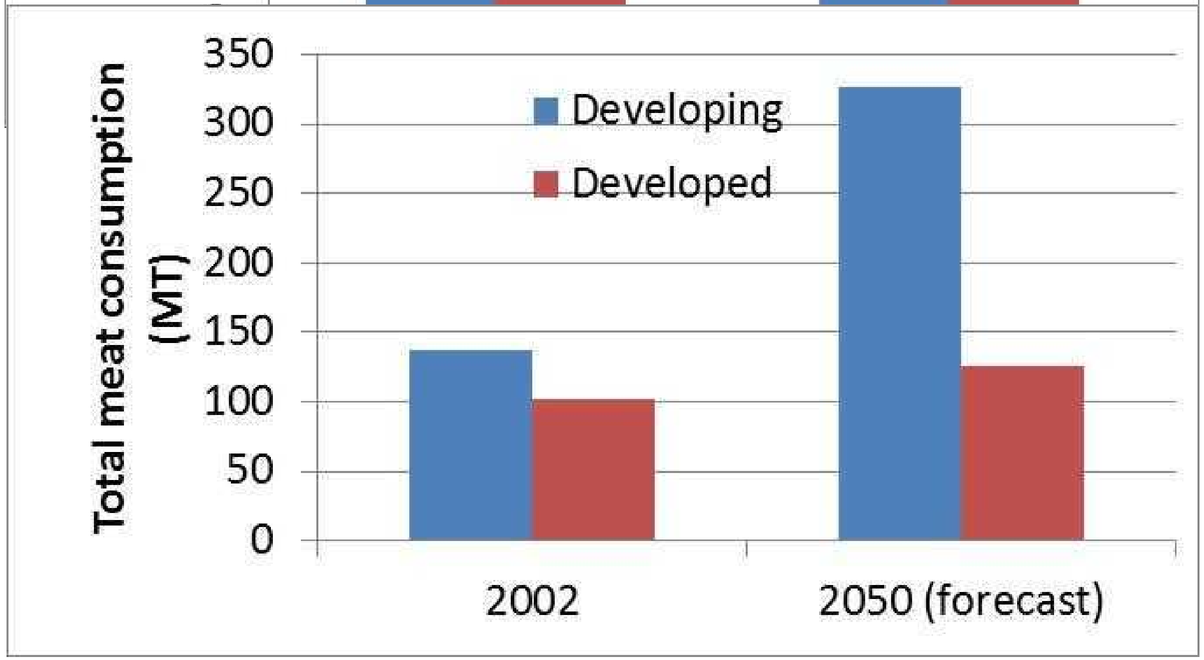




Consumption numbers: a World view

Demand: increasing in the developing world

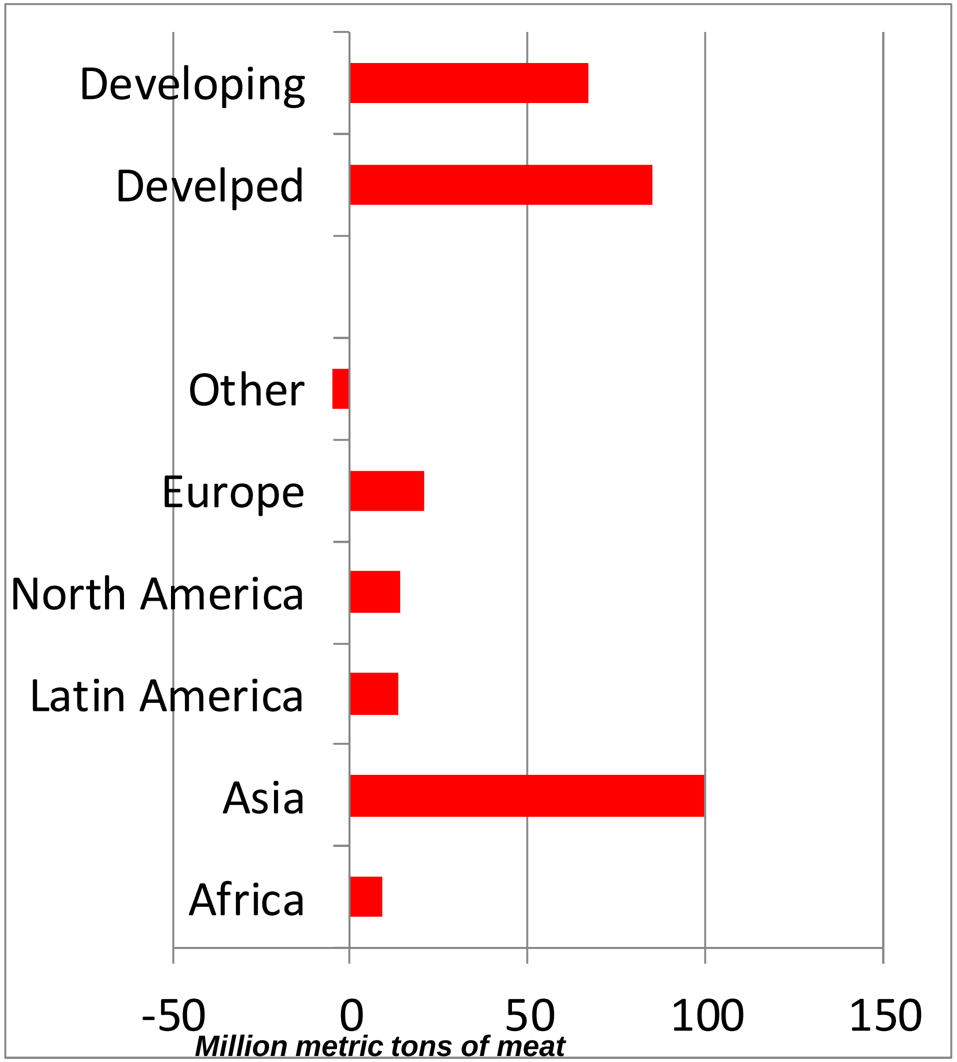




The 4 billion people living on less than $10 a day constitute a food market of US$ 2.9 trillion per year. (Hammond *et al* 2007).

Rosegrant *et al.* 2009

Recent consumption change: 1982-2008 disaggregated by region



Global meat consumption more than doubled (129=>285 MT).

Of the more than 150 MT increase, Asia accounted for 100 MT.

African consumption increased less than 10 MT

FAO, 2009

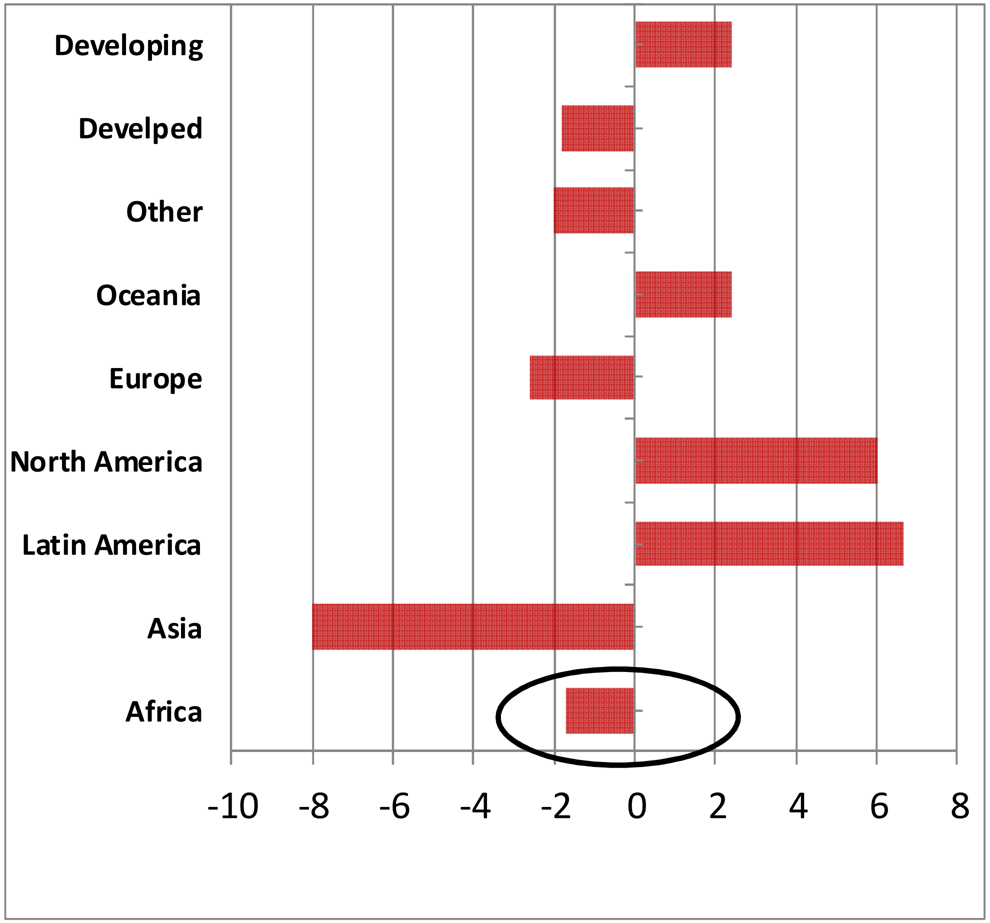
Consumption per capita: 1990-2008

African consumption per capita has increased far more slowly than in the rest of the world

Per capita Meat Consumption, in Selected Countries in Africa and the World, 1990 and 2008								
	Beef		Pigmeat		Poultry		Total	
Kg/caput								
	1990	**2008**	**1990**	**2008**	**1990**	**2008**	**1990**	**2008**
Uganda	4.7	3.5	3.3	2.8	1.7	1.6	12.0	9.6
Chad	12.6	8.7			0.6	0.5	2.9	3.9
Ethiopia	4.9	4.5	0.0	0.0	0.8	0.7	9.5	8.4
Tanzania	7.3	6.1	0.3	0.4	1.0	1.3	10.3	9.3
Malawi	1.8	1.2	1.1	2.0	1.2	1.3	4.5	5.0
Mozambique	3.1	2.1	0.9	0.7	2.1	3.0	2.1	3.0
Niger	3.7	2.9	0.2	0.1	2.8	2.2	2.8	2.2
Nigeria	2.4	2.1	1.2	1.6	2.0	1.7	2.0	1.7
Africa	**6.5**	**6.6**	**1.0**	**1.0**	**3.3**	**4.9**	**13.8**	**15.6**
Developed	27.4	27.6	29.1	28.4	19.7	28.4	79.8	81.9
Developing	5.2	6.5	8.3	12.0	3.6	10.1	18.7	31.5
World	**11.3**	**11.0**	**13.6**	**15.1**	**7.7**	**13.9**	**34.3**	**42.1**

World trade in meat: Africa’s role

NET MEAT TRADE STATUS, 2008



Million metric tons

<u>Key Importing Regions:</u>

Asia: 40% imports
Europe: 22% imports
N. America: 10%
Africa: 1%

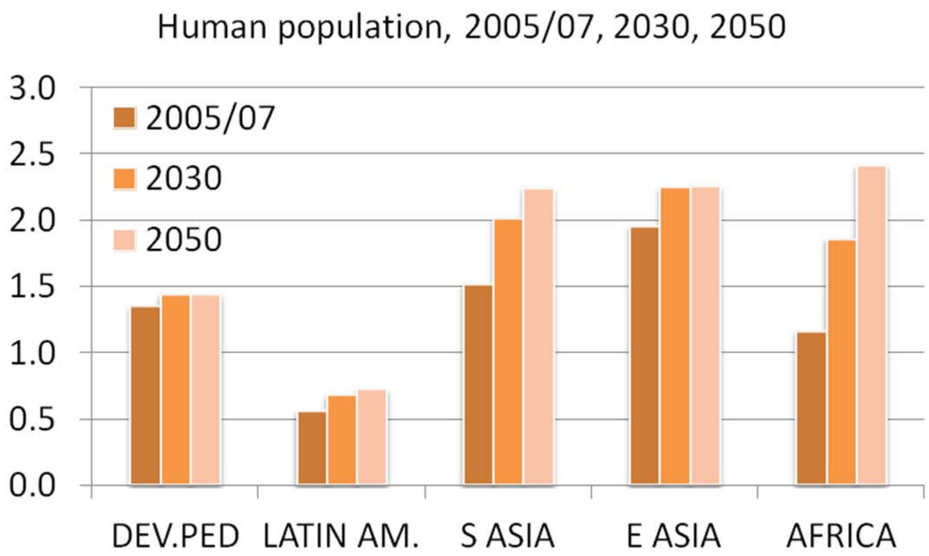
<u>Key Exporting Regions:</u>

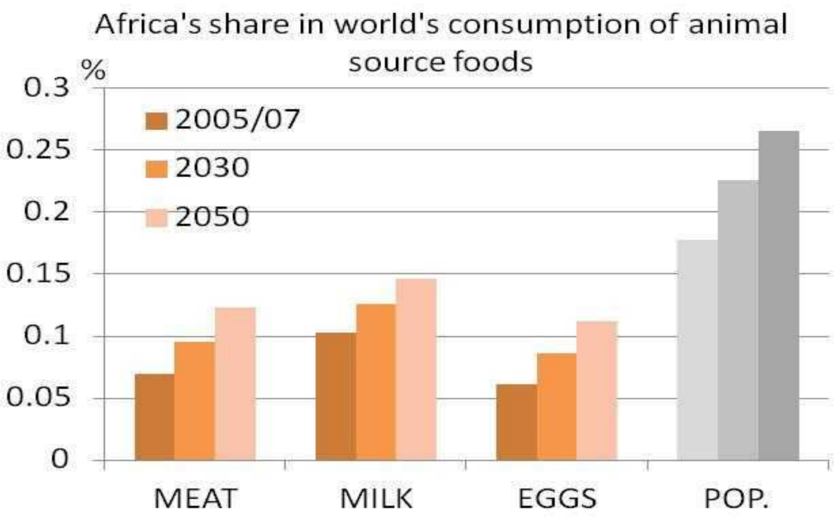
N. America: 30%
Latin America: 30%
Europe: 13%
Oceania: 12%
Africa: 1%

FAO, 2009

African demand and consumption: looking to the future

- By 2050 Africa is estimated to become the largest world's market in terms of pop: 27% of world's population.



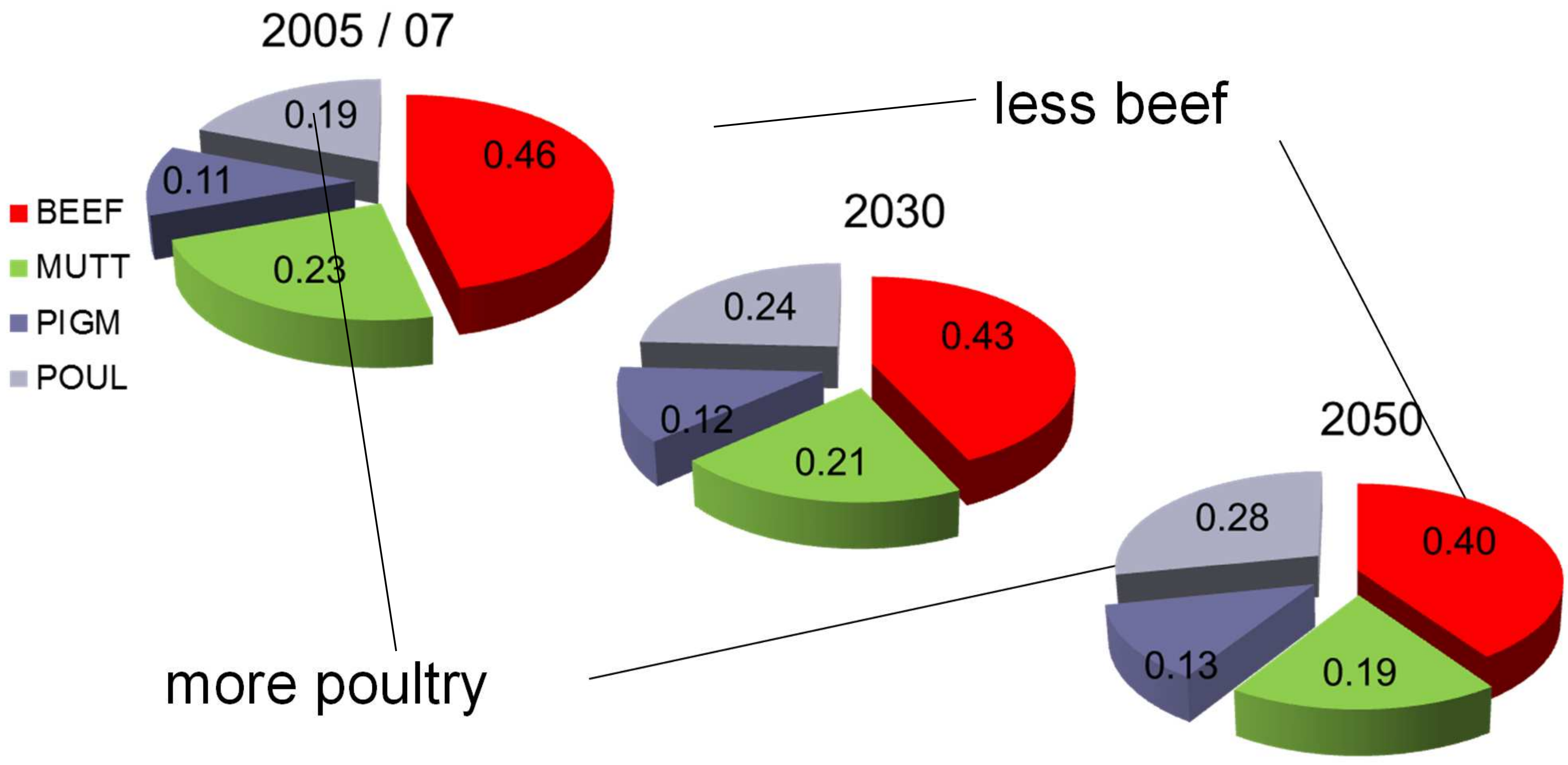


- Africa's consumption of meat, milk and eggs will increase to 12, 15 and 11% resp. of global total

FAO, 2009

Changing African meat consumption: 2005 – 2030 – 2050

Projected % shares of projected total meat consumption



FAO, 2009

Consumption: demand and markets

Demand: willingness to pay for meat products' quality and safety

Kenya: WTP for beef attributes

Attribute	Premium (USD/kg)*
Official inspection stamp	1.42
Cleanness of the meat	1.12
Soft texture	1.00
Low fat cover	0.62
* approx, due to exchange rate change	

Ethiopia: % of consumers WTP a price premium for beef attributes

	Low income	Middle income	High Income
Safety	53%	63%	81%
Good quality	51%	64%	83%

Jabbar *et al.* 2011

Based original figure by IFPR/John McDermott 2012.

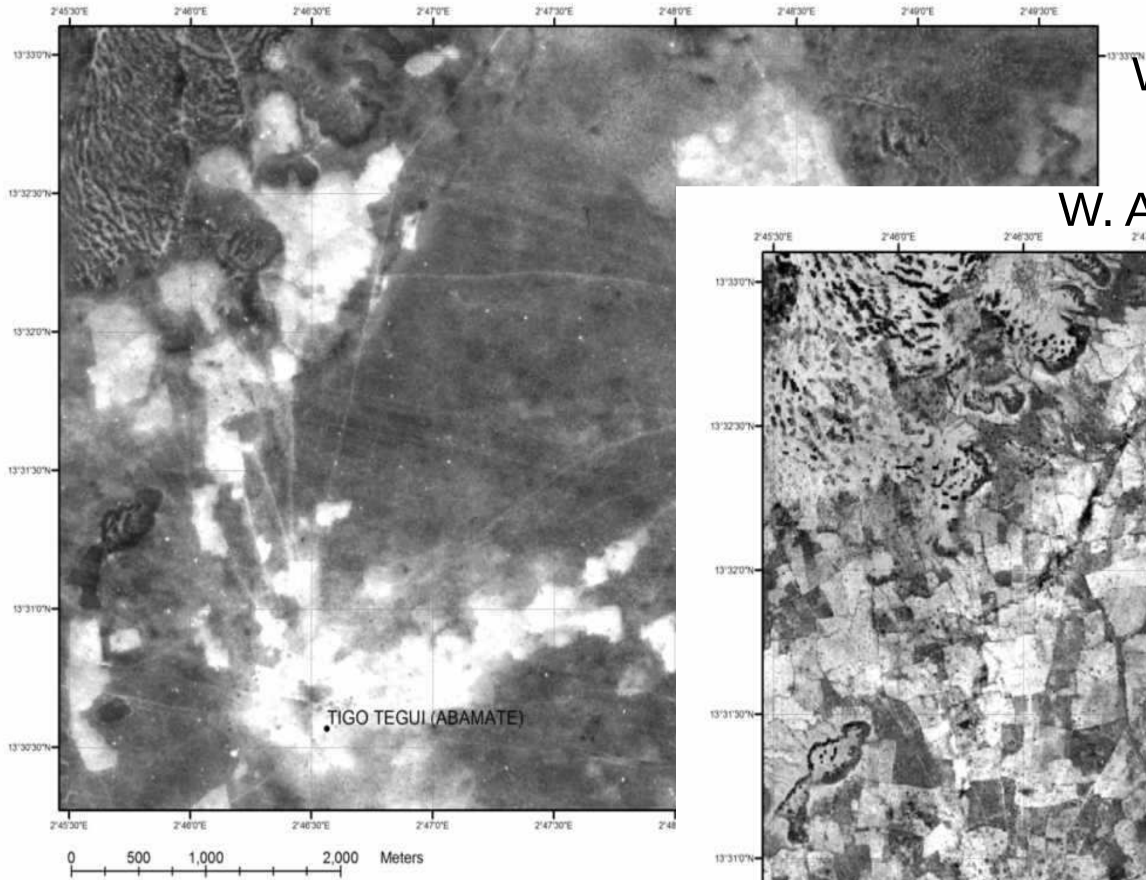
Public health in informal markets

Food safety: informal markets are often beyond the reach of regulation

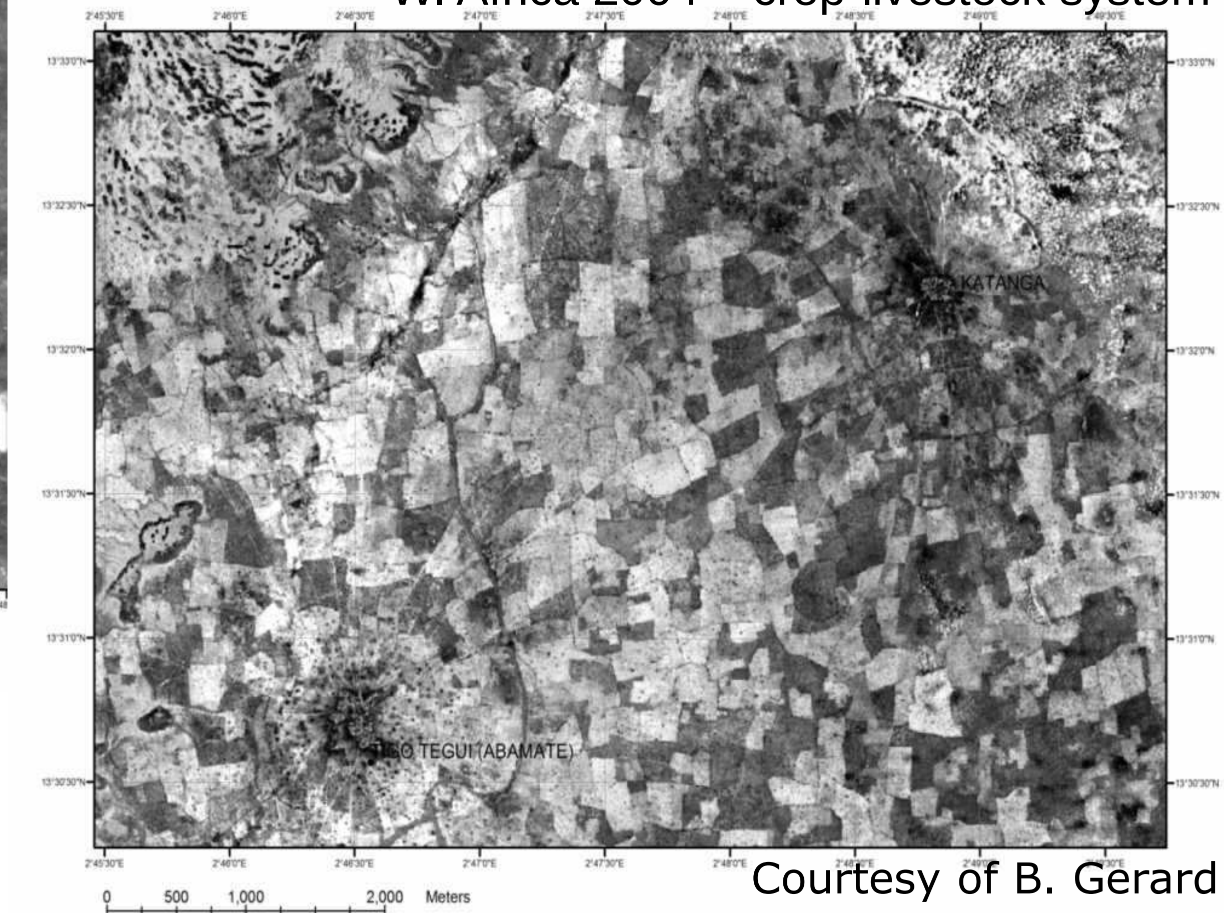
Land use

The changing nature of livestock systems

W. Africa 1966 – pastoral system



W. Africa 2004 – crop-livestock system



Mixed systems in developing countries produce ca. 50% of the World's cereals

Courtesy of B. Gerard

Feeds

Projected increases in African livestock numbers often fail to take account of feed constraints.

Extensive grazing/pastoral systems have probably reached their carrying capacities.

- *Monogastric species: grains + spec. feeds*
- *Dairy: fodder crops + crop residues + by-products*
- *Ruminants: some crop residues + grazing (often communal + public + other)*

African marketing systems: in general…

- ***Low off-take rates***
  - *Multiple uses of livestock*
  - *Crop-livestock interactions*
  - *Low productivity*
  - *Lack of information*
  - *Risk management*
  - *High transaction costs*

- ***Lack quality standards at all levels***

- ***Smallholder dominated***

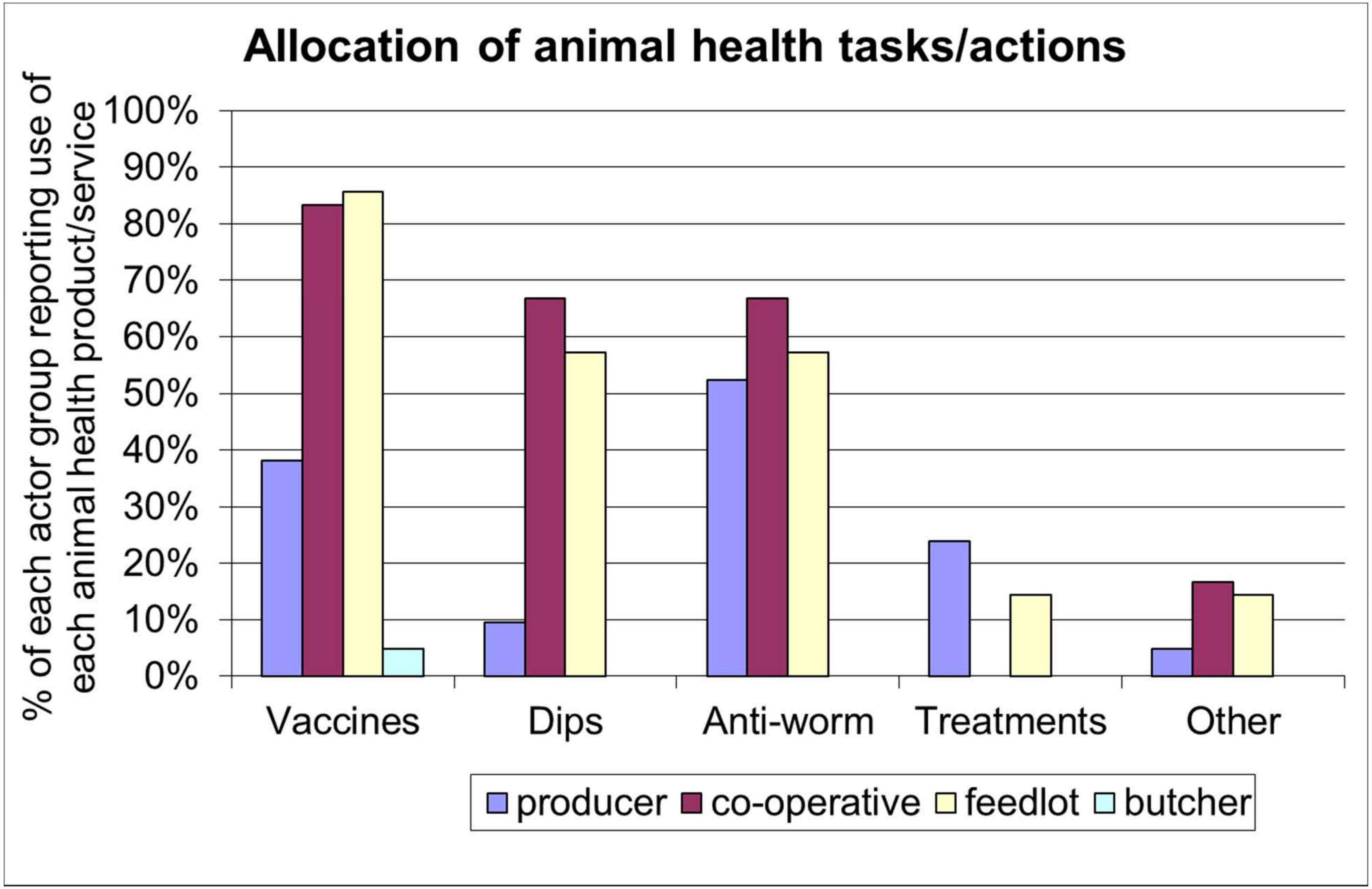
- ***Informal***

- ***Lack vertical co-ordination***
  - *Payment*
  - *Quality and quantity/timing/inputs*

- ***Beef + dairy interaction***

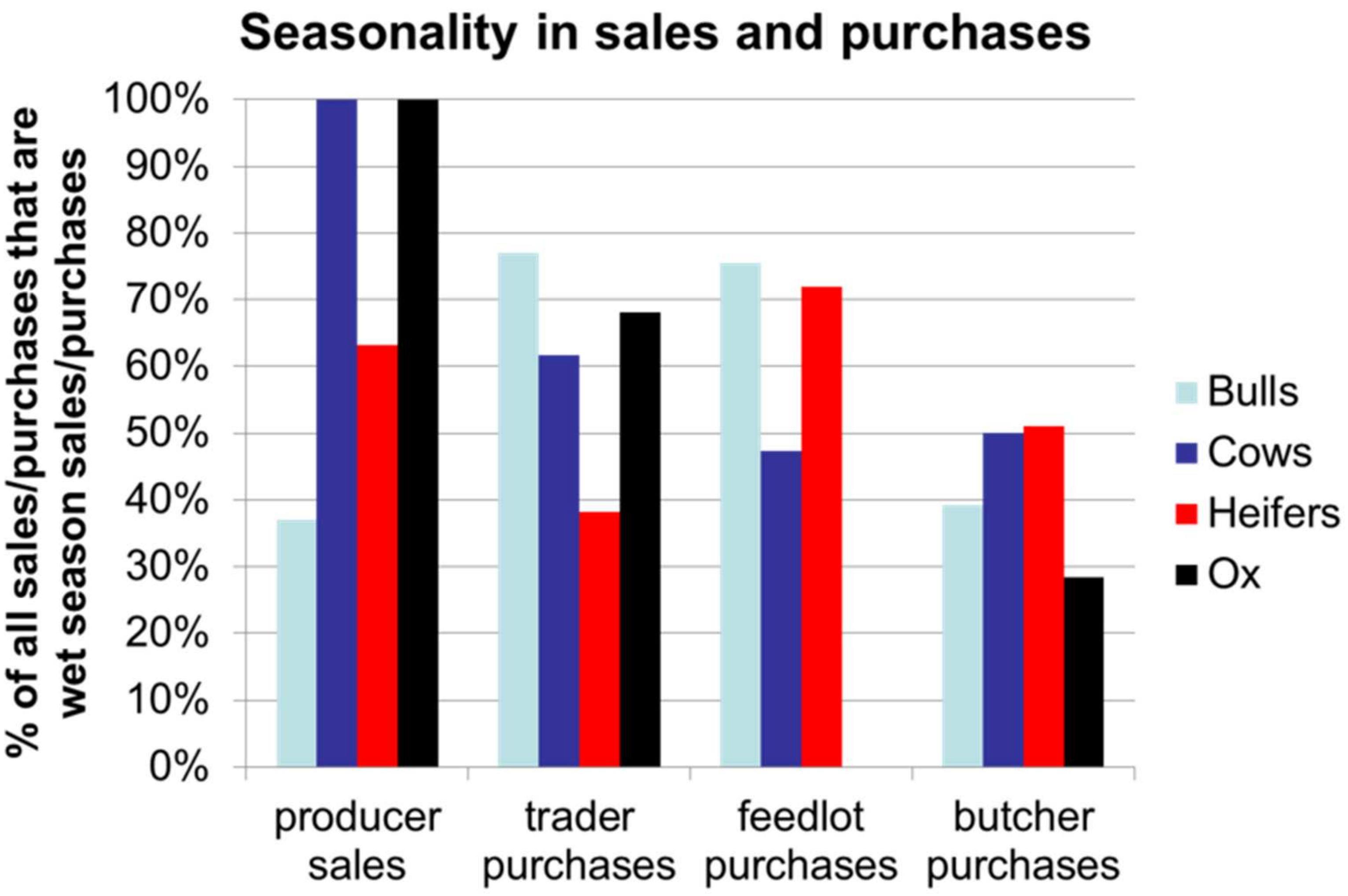
- ***Complex seasonality***

Co-ordination - 1



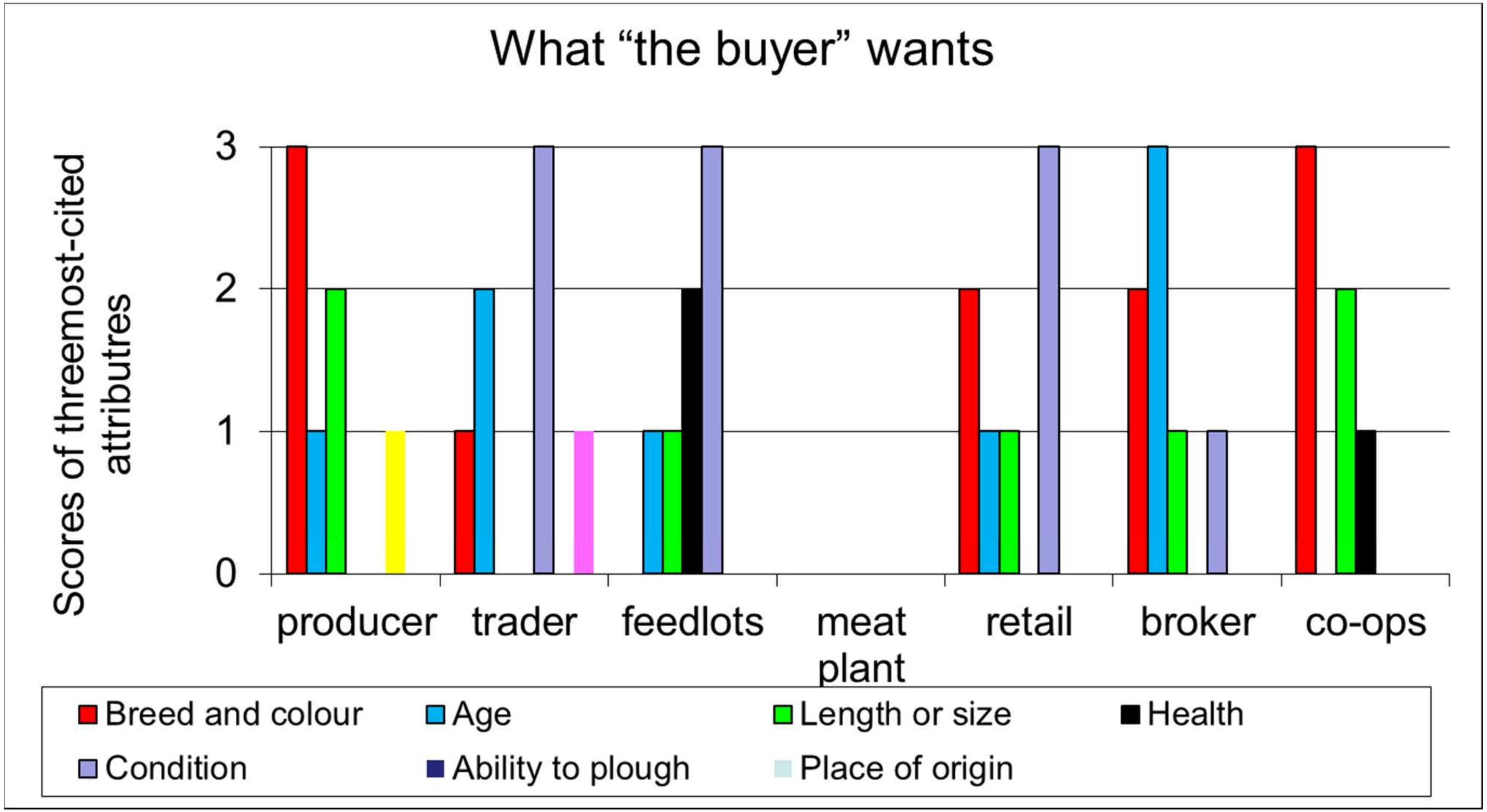
Source: ILRI beef VC survey in Ethiopia

Co-ordination - 2



Source: ILRI beef VC survey in Ethiopia

Co-ordination - 3



Source: ILRI beef VC survey in Ethiopia

Opportunities

- ***Raising productivity***
  - *Breeds*
  - *Feeds*
  - *Animal Health*
  - *Training, knowledge/extension*

- ***Exploiting consumer demand elements***
  - *Specific safety/quality attributes*
  - *Lifestyle and convenience, ethnic markets*
  - *Population growth*
  - *Regional trade*

- ***Value chain cost efficiencies***
  - *Scale and scope, esp. via structure*
  - *Co-ordination, transaction mechanisms*
  - *Storage and transport*

- ***Rural services***
  - *Financial*
  - *Technical*
  - *Risk management*

Challenges

- ***Appropriate breeds***
- ***Feed***
- ***Environmental carrying capacity***
- ***Access to land, water***
- ***Market structures***
- ***Barriers to market entry (all levels)***
- ***Identifying and serving high WTP***
- ***Understanding consumption trends: population vs per capita vs WTP***
- ***Competition from imports***

Research tasks

- ***Productivity***
  - *Animal health*
  - *Breeding*
  - *Genomics*
  - *Feeds and feeding*
  - *Access to inputs*

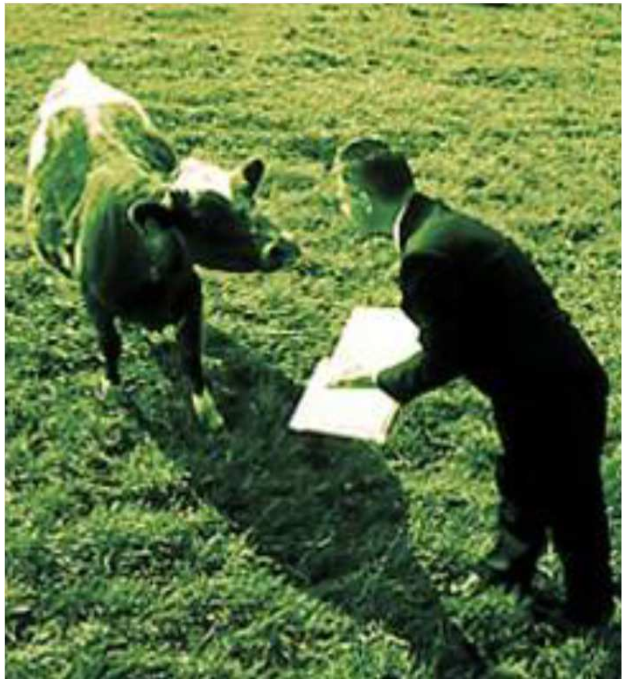
- ***Environment and climate change***

- ***Human health and nutrition***

- ***Market participation***

- ***Whole-chain approach***
  - *Co-ordination around quality and quantity*
  - *Identifying smallholder/commercial synergies*
  - *Incentive-based change*
  - *Seasonality*
  - *Commodity-based trade*

- ***Policy environment***



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