

Developing the concept of livestock value chains:
**Novel value chains based
on ecosystem services**

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Expert meeting

Development/strengthening of small scale
producers' livestock value chain, and value addition
to livestock products

9-10 March 2016, Zaragoza (Spain)



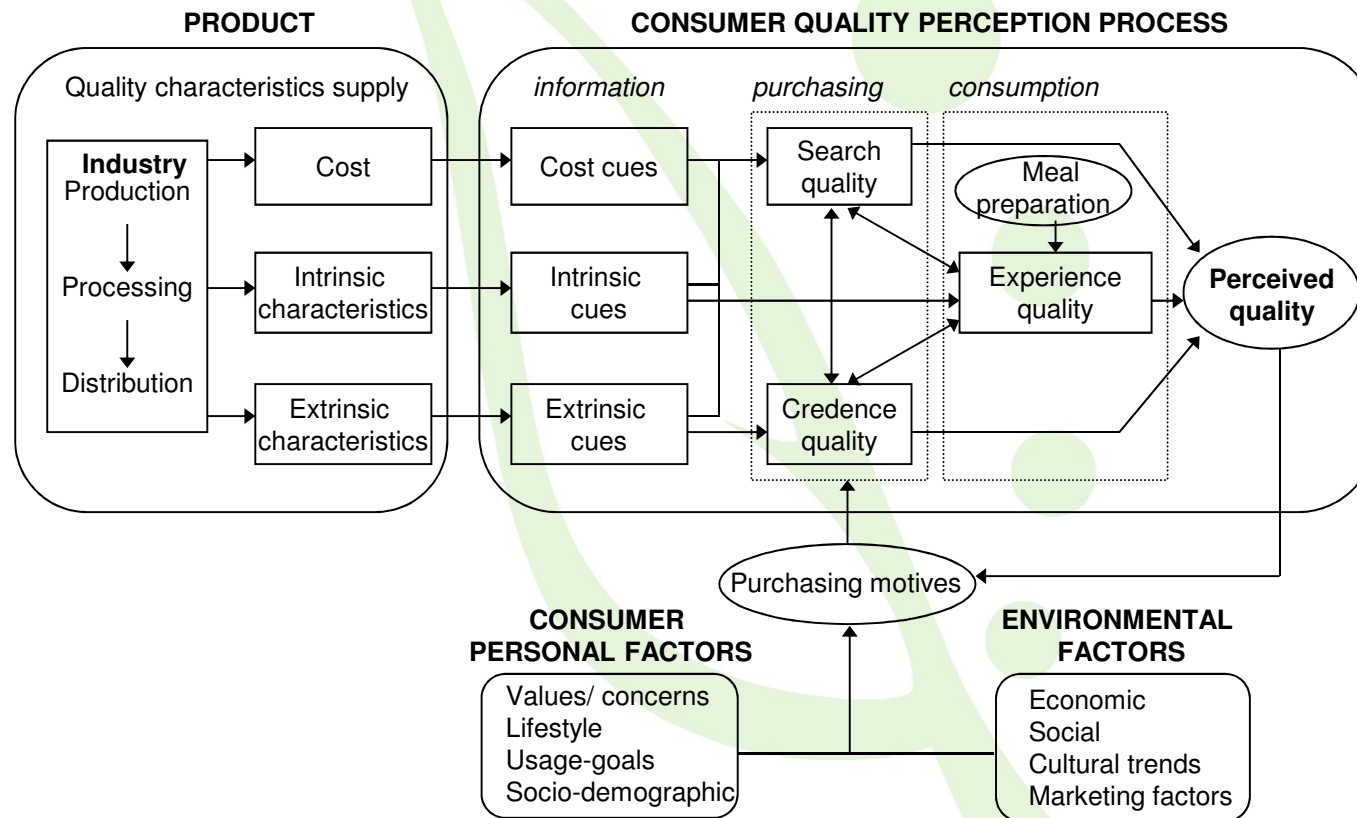
1. Introduction: defining quality

- how good or bad something is (Cambridge dictionary)
- the standard of something as measured against other things of a similar kind (Oxford dictionary)
- a property or group of properties inherent to something that allow to judge its value (RAE)
- characteristics of a product or service that bear on its ability to satisfy stated or implied needs (Am. Soc. for Quality)
- combination of quantitative and qualitative perspectives for which each person has his or her own definition (Am. Soc. for Quality)

So quality is...

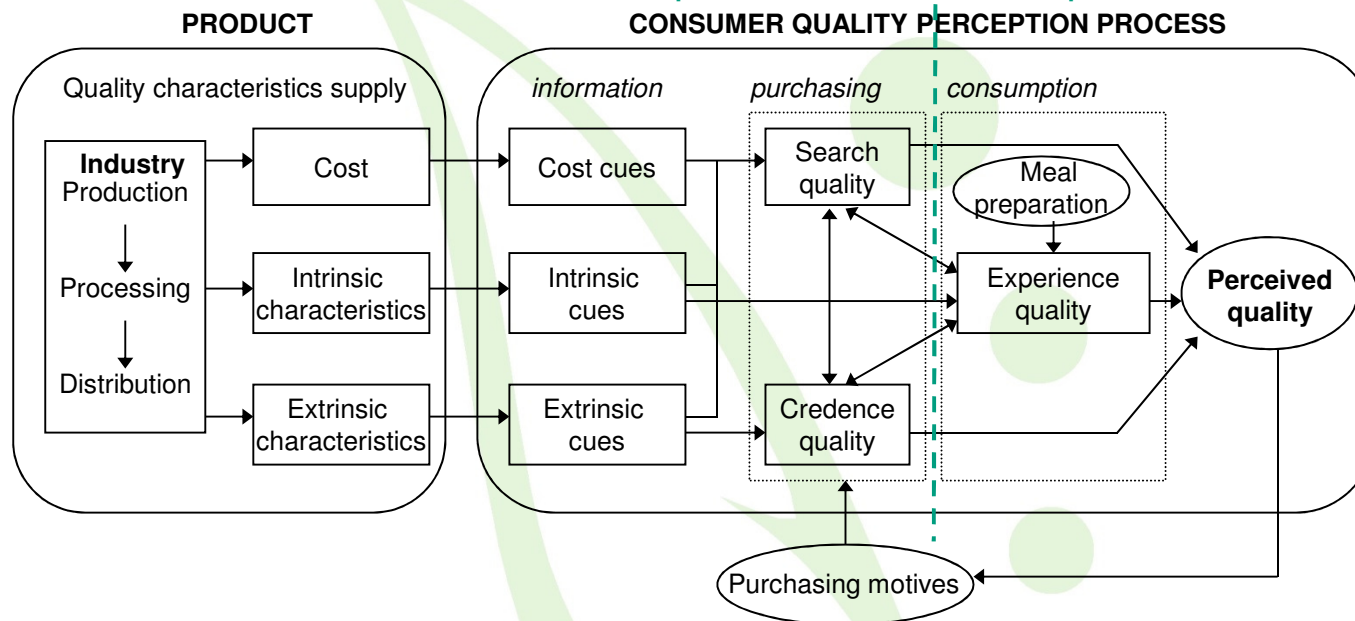
- perceptual and somewhat subjective
- understood differently by different people
- multidimensional, combination of different characteristics
- dynamic, changes with time

Model of supply, perception and demand of food quality



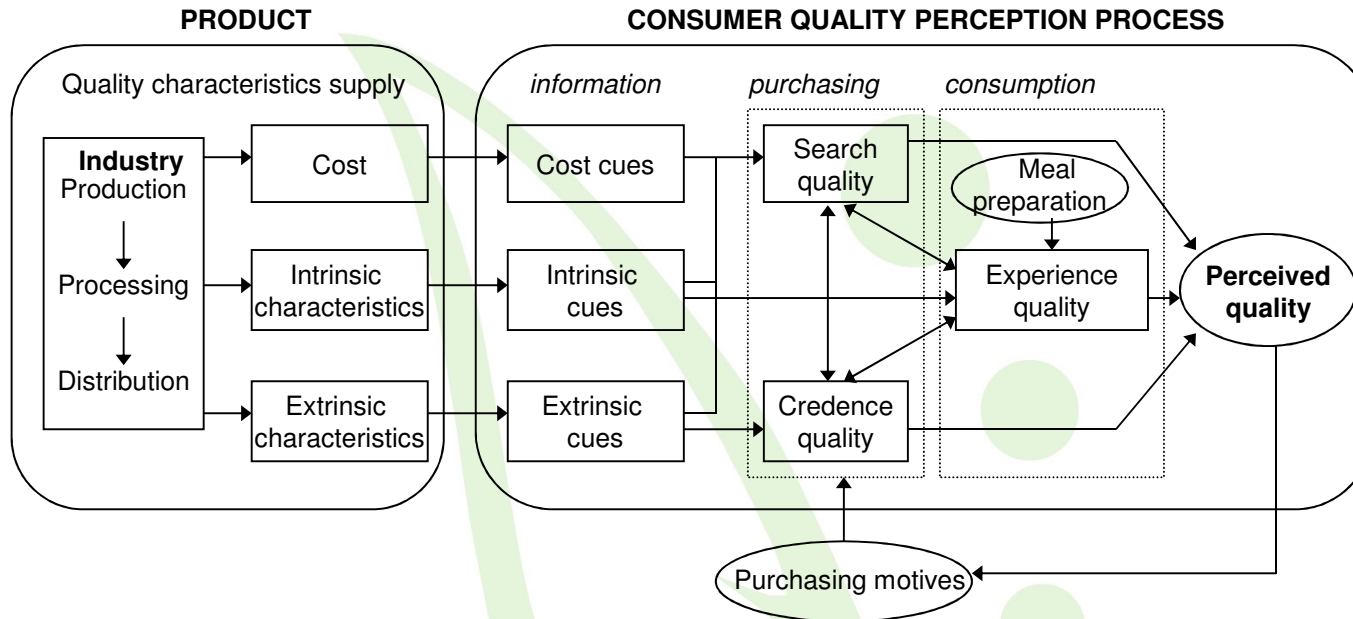
Bernués et al., Food Quality and Preference (2003)

horizontal dimension (t) before purchase | after purchase
 formation of Q expectations | Q experience



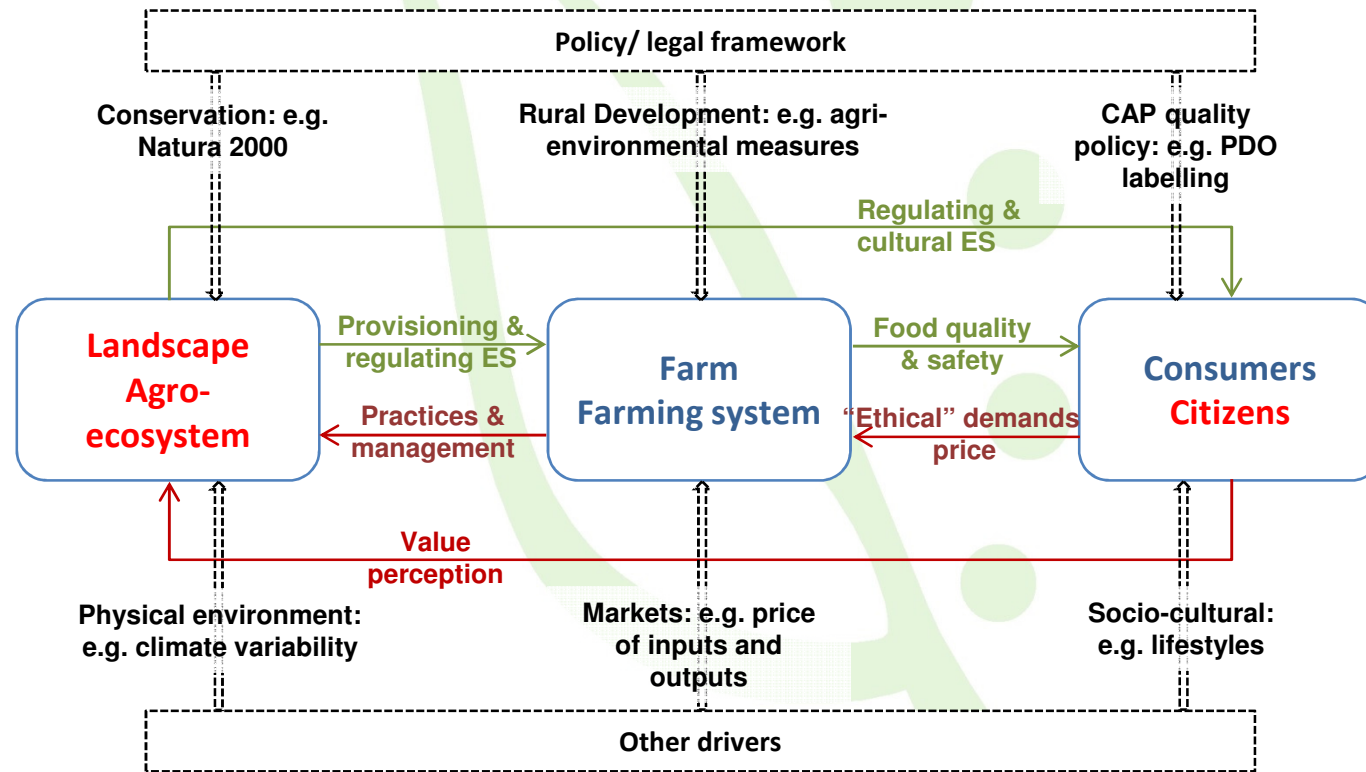
- **Search Q:** available at the time of purchasing (e.g. colour, fat)
- **Experience Q:** actual consumption of the product (e.g. taste, tenderness)
- **Credence Q:** cannot be ascertained even after consumption (e.g. hormones, GMOs, animal welfare, etc.)

vertical dimension: inference of Q from different signals or cues



- **Cost cues:** price
- **Intrinsic cues:** chemical-physical aspects of the product (e.g. colour, nutritional value, appearance, etc.)
- **Extrinsic cues:** aspects of production process (brand, quality stamp, origin, production system, etc.)

From landscape to fork: value chains based on (agro)ecosystem services





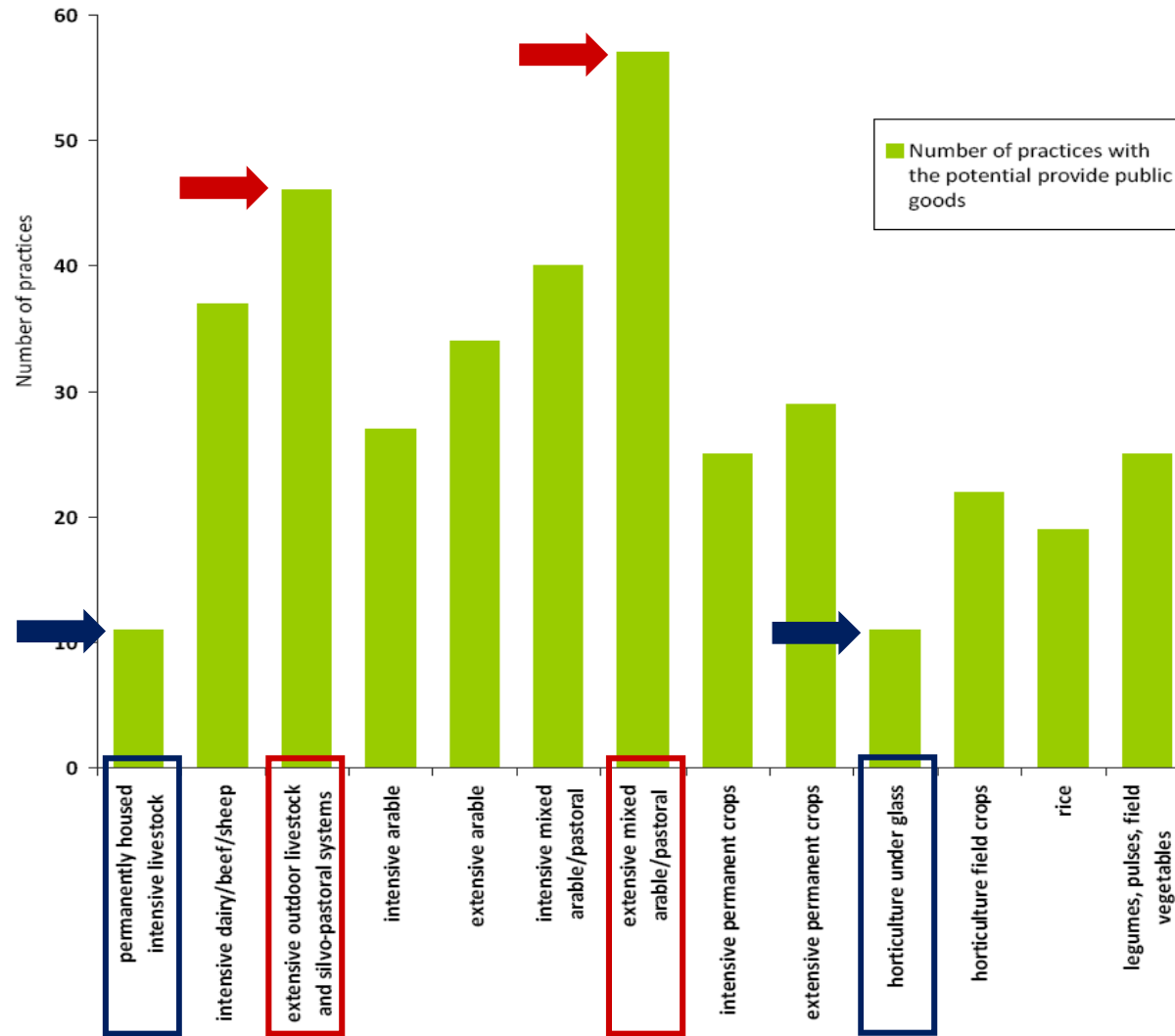
Main ES derived from pasture-based livestock systems

1. **Provisioning:** quality products linked to the territory
2. **Regulating:** prevention of forest fires (Euro-mediterranean basin) soil fertility (Nordic regions), etc.
3. **Supporting:** biodiversity conservation
4. **Cultural:** agricultural landscapes

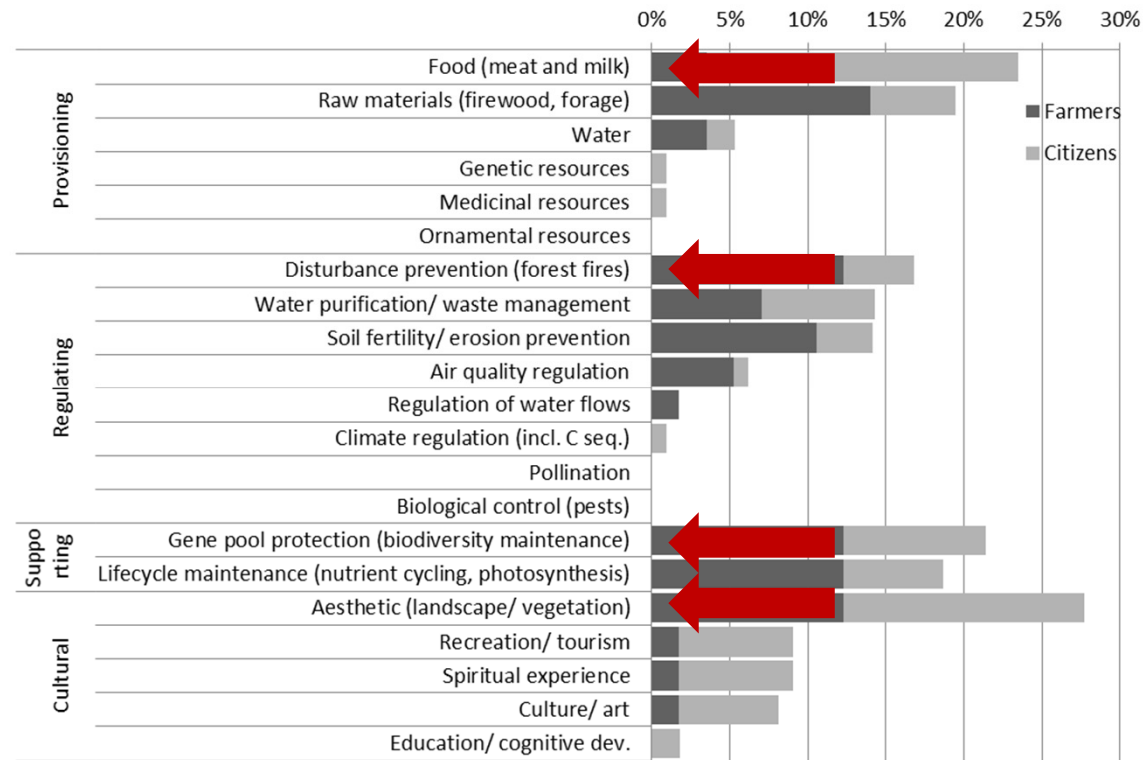
Different farming systems render different ecosystem services/ public goods

Provision of Public Goods through Agriculture in the European Union

Tamsin Cooper
Kaley Hart
David Baldock



Consumers and societal demands



Bernués et al., PLOS ONE (2014)

To conclude

- Consumers and farmers clearly perceive the distinctive quality characteristics of food linked to an agricultural landscape or territory
- Raising societal demands for better targeting public goods, and “ethical” concerns about model of agriculture and the food chain
- Whole-system approaches are needed to identify and quantify the ES (public goods) that are meaningful to consumers (society), and develop animal products based on “extrinsic” quality attributes
- **Value-chains based on ES (agricultural landscapes)**

Thank you

