



Innovation for Sustainable
Sheep and Goat
Production in Europe



Sheep dairy and meat products: from urban consumers' perspective to industry innovations

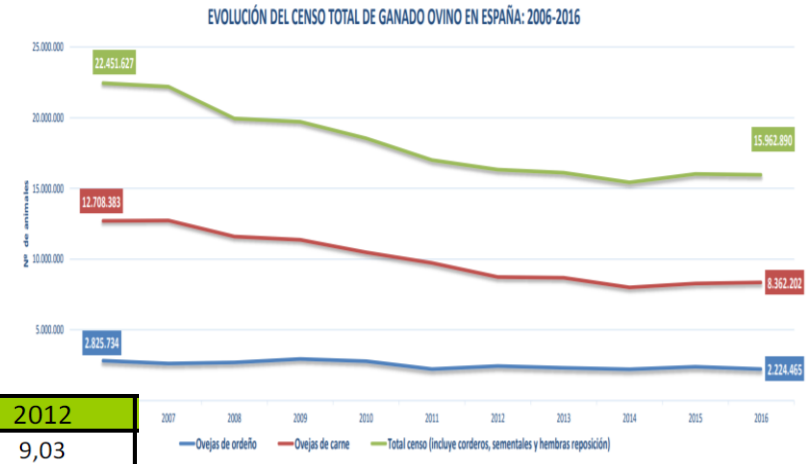


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The sheep sector in Spain

- ❖ Meat; 15 years of negative evolution
- ❖ Dairy products; positive evolution



(€/Hgado)	2006	2008	2010	2012
Leche de oveja D.O.	6,09	8,62	8,77	9,03
Leche de oveja sin D.O.	5,75	7,10	6,62	6,85

- ❖ Changes drivers: CAP policies, liberalization and globalization, inputs price volatility, and consumers demand
- ❖ Change in consumers habits:
 - ❖ Urban way of life
 - ❖ Healthy and environmental concerns
 - ❖ Food scandals
 - ❖ Media
- ❖ iSAGE. Explore consumers awareness, attitudes and preferences → urban consumers in Madrid (Spain)



Methods. Focus Groups

- ❖ 4 consumers FGs
 - ❖ 2 meat, 2 dairy, 8-12 participants
 - ❖ Age, work state, and gender
 - ❖ Regular, occasional and non-consumers
- ❖ Initial questionnaire
- ❖ FG Guiding questions
 - ❖ What kind of products do you purchase or happened to purchase in the past?
 - ❖ What do you like/dislike the most in products?
 - ❖ What would you make to increase the share of products that you purchase?
 - ❖ If you were developing innovations, what would they be?
- ❖ List of innovations → most and least preferred



Results. Dairy products preferences

- ❖ Importance weight* of the most preferred dairy products and their main positive characteristics

Most preferred product	n	Main desirable/positive characteristics						
		Organoleptic properties	Preparation/ cooking features	Health (calories)	Facilitate digestion	Environmental/ natural/ biological	Price	Others
Cheese	6	3.0	2.2	0.3	0.2	0.2	-	0.2
Goat cheese	6	3.3	1.3	0.5	-	0.2	0.5	0.2
Yoghurt	2	5.0	-	1.0	-	-	-	-
Goat yoghurt	1	1.0	-	2.0	3.0	-	-	-
Semi-cured cheese	1	6.0	-	-	-	-	-	-
Goat kefir	1	3.0	-	-	0.0	1.0	-	2.0
TOTAL	+17	3.4	1.2	0.5	0.2	0.2	0.2	0.2

*Characteristics Importance Weight = $(3 \times \text{number of times the characteristic is ranked 1}^{\text{st}} + 2 \times \text{number of times the characteristic is ranked 2}^{\text{nd}} + \text{number of times the characteristic is ranked 3}^{\text{rd}}) / \text{number of participants}$.

+ One out of the 18 FG participants did not choose any product.

Results. Dairy products preferences

- ❖ Cheese is highly consumed
- ❖ Versatility and easiness to prepare
- ❖ Taste is both the main positive and the main negative characteristic of sheep/goat dairy product
- ❖ Wide lack of knowledge about cheese products and farming in general:
 - ❖ Confusion between cow, sheep, goat or mix-milk cheeses, and between brands, cheese types, PDO and PGI

“What moves me, is trying cheeses, but many times I do not know if it is sheep or cow cheese, I just try a cheese and if I like it I eat it for a while. For example I do not know if feta cheese is from sheep; I think so”

(Male, occasional consumer)

Results. Dairy products preferences

- ❖ Price main driver of cheese purchase
- ❖ Most participants buy “mainstream” cheese in the supermarket
- ❖ Some participants more selective when buying high quality cheese
- ❖ Sheep/goat dairy products believed to be more natural than cow dairy products → however cow cheese price is also lower
- ❖ Changes in buying habits usually follow marketing campaigns and/or supermarkets marketing strategies

“I go to Lidl, because there is always a cheese on offer and I buy it. Each week they put a different cheese on offer and that is the one I buy (SPA-FGDairy1-1, male, Occ)”

(Male, occasional consumer)

Results. Views on dairy innovations

Innovations	Positive scores	Negative scores
Improve pasture quality	3	
Improve forage quality	2	
Improve meeting animal requirement and feed supply	4	
More sound and scientific proven use of antibiotic alternatives in feeding	3	
Use of sensor ear-tags as welfare indicators	3	1
Improved fertility through better quality of frozen semen and assisted reproduction techniques		4
Develop new traits to increase longevity, fertility, and health in flocks	1	2
Develop new traits to improve the quality of milk		4
Development of new vaccines		
Implementation of automatic milk machine		6
Freeze dried ewe/goat milk		1
Low fat dairy products		1
Omega 3 dairy enriched products	1	
New recipe books and chefs' involvement to increase product use	2	
Home deliveries of dairy products directly from farms/dairies	2	1

Results. Lamb preferences

- ❖ Importance weight* of the most preferred meat product and their main positive characteristics

Most preferred product	n	Main desirable/positive characteristics							
		Organoleptic properties	Preparation/ cooking features	Health (fat)	Freshness	Environmenta l/ natural/ biological	Geographic origin	Origin (type of store)	Other
Lamb/kid chops	10	3.9	0.6	0.2	0.3	0.5	-	-	0.4
Leg of lamb/kid	7	2.3	0.9	1.1	0.7	-	0.4	0.6	-
Shoulder of lamb	1	4.0	-	-	-	-	2.0	-	-
TOTAL	18	3.3	0.7	0.6	0.4	0.3	0.3	0.2	0.2

*Characteristics Importance Weight = $(3 \times \text{number of times the characteristic is ranked } 1^{\text{st}} + 2 \times \text{number of times the characteristic is ranked } 2^{\text{nd}} + \text{number of times the characteristic is ranked } 3^{\text{rd}}) / \text{number of participants}$.

Results. Lamb preferences

- ❖ Chops are **easier to cook** than other cuts
- ❖ General feeling: nowadays people eat a **smaller variety** of lamb cuts
- ❖ Most participants have lamb **occasionally**; restaurants & celebrations
- ❖ **Taste** is what participant **liked the most and the least**

“I do not like lamb, I only have suckler lamb, I find other type of lamb very strong, that’s why I like suckler lamb, I like chops, well done, almost burn”

(female, regular consumer)

“My mother is from Extremadura region, and there they eat ewe, not lamb, and they make stew, and start cooking for lunch at eight in the morning. They are more used to strong flavours, not like us. They make the most of all cuts”

(female, occasional consumer)

Results. Lamb preferences

- ❖ Many participants prefer to buy lamb at **butcher stores** → higher quality
- ❖ Most participants do **not care about origin**
- ❖ **Farming systems and quality** are believed to be **very similar** everywhere
- ❖ However, when compared to other livestock species, **sheep and goat systems** are seen as **less industrialized**.

“It is true that is like a mental shortcut, and we think that a product from a traditional store is more natural. It’s like I establish a hierarchy; first street markets and biological stores, then traditional shops, and finally supermarkets.”

(male, occasional consumer)

Results. Views on meat innovations

Innovation	Positive Scores	Negative Scores
Improve pasture quality	5	
Improve meeting animal requirement and feed supply	2	
More sound and scientific proven use of antibiotic alternatives in feeding	4	
Use of sensor ear-tags as welfare indicators	1	2
Improved fertility through better quality of frozen semen and assisted reproduction techniques		6
Develop new traits to increase longevity, fertility, and health in flocks		1
Develop new traits to improve the quality of meat in order to make it more uniform, lean and tender		3
Development of new vaccines		3
Innovation in halal slaughtering		2
Stress free slaughter for improved meat quality		
New meat cuts and meat products		1
Use labels to provide more information to consumers about the origin, production method and product characteristics	7	
Home deliveries of meat products directly from farms	1	

Some thoughts. Farmers-consumers miscomm.

- ❖ FG finding in line with industry analysis (Ikerfel 2013a, 2013b, and 2015):
 - Spain has a **strong tradition** on **cheese production** and **consumption**...
...but a **limited cheese culture**
 - **Lack of knowledge** on lamb production and cooking recipes
 - **Taste** main **positive and negative** consumption driver
 - Current **urban cooking habits**: fast, easy and healthy...
...**fit** with **cheese** consumption but **hamper lamb** consumption



The existing miscommunication between sheep farming sector and urban consumers has to be tackled



Some thoughts. Labels and brands

- ❖ DOP, IGP and ETP helped to differentiate products and fill a market niche
- ❖ However...

...most consumers do not know what those labels mean

...and mix them up with commercial brands



Labels have become brands...

...its success might be linked to the capacity of managing as commercial brands

Some thoughts. Buying criteria and marketing

- ❖ Welfare, health and environment...

...but **price** is the main criterion to buy

- ❖ Consumers think **local markets and traditional stores** products are fresher and most...

...most products are sold in **super and hypermarkets**

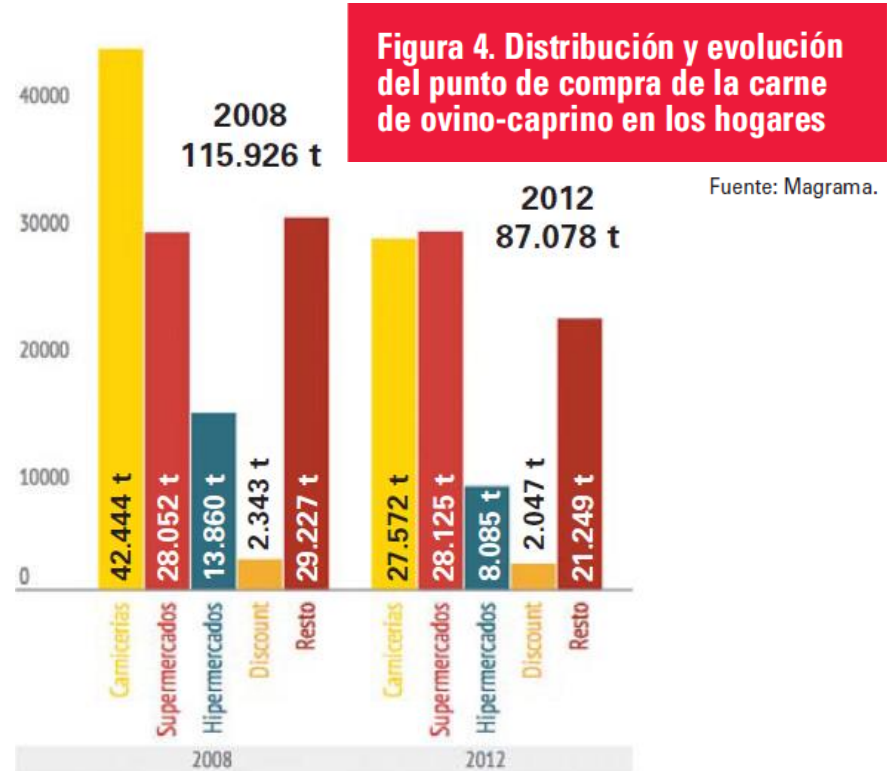


Increasing **availability** at supermarkets and large stores, **new cuts** and **presentation** show a remarkable **potential** (ej. Oviaragón)

It poses some challenges related to **farmer organization** and **industry integration**

Some thoughts. Buying criteria and marketing

Large stores had 90% of dairy products market share
(Mercasa, 2014)



The development of **niche market** is important, especially for product of **outstanding quality**

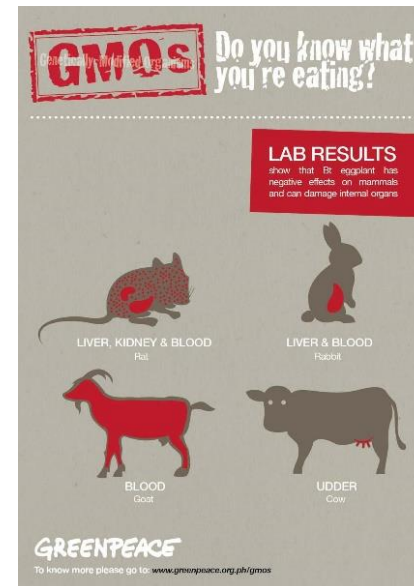
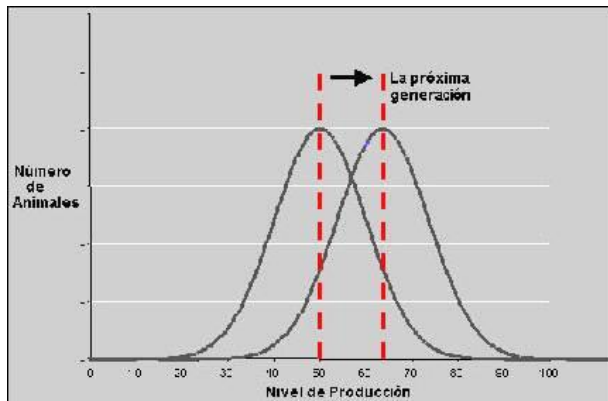
The **future** of sheep and goat sectors will **rely on sales on large stores** where **price** is a decisive criterion

Some thoughts. Genetics

- ❖ Genetic selection for fat content and fat composition...a tool for a most acceptable product

... however...

...consumers should be taught what genetic selection means





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THANKS FOR YOUR ATTENTION!