



Innovation for Sustainable
Sheep and Goat
Production in Europe

Innovation strategies – recommendations from the isage farm case studies

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Sheep and goat farming systems are considered to be little innovative specially compared to dairy cows, beef, pig, and poultry farming systems.

Slow adoption of innovation is a **key challenge** that the sector faces for its sustainability

Livestock farming innovations are not just about technology

Innovations are also marketing processes, organizational methods, business practices, or farmer training programmes,

Innovations are context dependent, new to the world, new to a country or a region, new to a farming system and new to a sheep or goat breed

The main challenge of sheep and goat sector in Europe is the **socioeconomic and structural constrains** that prevent farmer acceptance and uptake of innovations at farm level

Socioeconomic constrains

- farmer's reluctance to modify farming practices,
- lack of innovation culture across farmer communities,
- limited farmer skills and knowledge in some areas,
- low farmer investment capacity.
- The ageing of farmer populations,
- rural areas depopulation trends



Structural constrains

At farm level,

- Strong and **well-organized, long-term, farmer collaboration** is required
- Management, process and analyse farm data is a key component of such collaboration.
- The role of farmers' institutions and collective structures (e.g. farmers levy organizations, breeders' associations, cooperatives, etc.) is decisive in regulating and managing such collaboration.

At sector level,

- Internal competence between value chain stakeholder (e.g. farmers, processors, distributors, retailers) within the sector reduces its competitiveness in international markets but also in relation to other livestock species and to non-livestock food products.
- A strong vertical sheep and goat value chain integration in inter-branch organizations or any other organizational structure will facilitate the adoption of innovative practices in products development and marketing.
- Marketing innovations in extensive and semi-extensive systems should focus on informing the society about the environmental and cultural public services that such systems provide.



The latest advances in molecular genetics and DNA analysis have boosted the development of **new tools in breeding programs**, among others the inclusion of genomic information in the breeding programs or the management of major genes

Feed self-sufficiency is at the centre of extensive and semi-extensive farmers' concerns due to the high costs of purchased forages and concentrates and the price volatility in the feed markets.

IT technologies will be fundamental in the professionalization of the sector in the future. The main field of application of these technologies is the recording of individual animal data, its management and its subsequent analysis to support the decision-making process by the farmer

iSAGE **case studies showed** that, if the aim is to make farmers modify their practices to reduce their environmental impact, the most effective approach would be for extension programs to emphasize farm innovation that increase farm efficiency (increasing farm profit) and reduce at the same time the farm environmental impact

There is enough room for **product and process innovation** in meat sheep production. New packaging and cuts, development of quality labels or other certification and traceability systems and new marketing campaigns to make society aware of the environmental and social services of sheep and goat farming systems are key strategies

Participatory farmer-group training programmes seem to be a strategy with high potential to develop a more knowledgeable and competent farming workforce

Requirements:

- National organisation with regional branches,
- Strong national network of farms, businesses, organizations
- Reliable funding source



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What is your opinion?

