



Innovation for Sustainable
Sheep and Goat
Production in Europe



Innovations to support the viability of Sheep & Goat sector in Europe

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WP 4 LEADER

Task 4.2 Testing selected innovative strategies on case study farms

- Task 4.2 Leader: Agrifood Research and Technology Centre of Aragón - **CITA (Spain)**
- Duration: 6-44 month of the project
- 21 partners involved

Objectives

- Design and **test** innovative management practices on **case-study farms**
- Understand the **impact** of these practices on farm level → ***Sustainability*** of the Sheep & Goat farming
- Drivers and constraints

Innovations?

- It is not just technology, but...

“The implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations which can be new to the firm, new to the market and new to the world”

(OECD)

- Innovation depends on the system/situation analyzed

Methodological Approach

- Identify challenges of S & G sector ~ Task 4.1
- Case study proposals
- Review of case studies by iSAGE expert groups
- Implementation and monitoring
- Reporting and dissemination of outcomes

Innovation case studies

- ✓ 31 case studies
- ✓ Selection depended on:
 - Resources available
 - Organizational constraints
 - Main interest and expertise
 - Challenges considered critical for each case

Summary of case studies

8 “BROAD” innovation types	No of case studies
Breeding and genetics	6
Feeding	3
IT & individual recording technologies	6
Environment	4
Products and marketing	3
Reproduction	4
Training	2
Other	3
Total	31

Impact

- On the **sustainability** of the sector through the promotion of solutions at farm and industry level
- On the **innovative capacity of the sector** as it provides farmers, industry and policy makers with best practice guidelines on how innovation should be implemented and under which conditions impact can be maximized
- In this respect, this task valorised the iSAGE networks and tested innovative practices in order to enhance the competitiveness of different systems and to promote a **balanced development** of economically diversified EU regions

Innovation case studies sessions

Day 2, Tuesday 14th January 2020 – iSAGE TRAINING COURSE

9:00 – 10:30

Innovations to support the viability of sheep and goat industries in Europe. Practical examples, methods and recommendations for their adoption. (WP4)

Introduction. Method for innovation development and testing.

Speaker: Alexandros Theodoridis (AUTH, Greece)

Presentations of innovations and discussion

- Effect of an alternative rearing method on milk production and lamb weight gain. *Sofia Termatzidou (ACOP, Greece)*

- Small ruminant farmers' perception on climate change impact and assessment of adaptation innovations. *Nazan Koluman (RRAP, Turkey)*

- Innovation in reproduction: new speculum for artificial insemination. *Fernando Freire Fernández (Assaf.E, Spain)*

10:30 – 11:00

Coffee break

Innovation case studies sessions

10:30 – 11:00	<i>Coffee break</i>
11:00 – 12:30	Participatory research and case studies in farms to test and adapt innovations Methodology and examples (T4.2) (Cont.) Presentations of innovations and discussion <ul style="list-style-type: none">- Training and implementation of farm management application (AWIN). <i>Mata Trivizaki (AUTH, Greece)</i>- Disruptive innovation in sheep breeding for ensuring complete traceability of lambs. <i>Ebru Emsen (ATAUNI, TR)</i>- Assessment of the Young Ambassador programme. <i>Stefano Orsini (ORC, UK)</i>- Potential and limitations of genomic selection in small ruminants. <i>Clara Diaz Martin (INIA, Spain)</i>
12:30 – 13:30	<i>Lunch</i>

Innovation case studies

iSAGE

ISAGE Workshop


13-14 January 2020, Thessaloniki



iSAGE
Innovation for Sustainable
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Innovation case studies

Type	Innovation case study	Country
Breeding & genetics	1) Evaluation of reproductive performance of crossbreeds of Romanov and Turkish Native Breed	Turkey
	2) Potential, drivers and constraints of genomic selection in sheep and goat sector	Spain, France and Greece 
	3) Analysis of farmers perception of the drivers and constrains for the uptake of a new selection index for ewe productivity	Finland
	4) Assessing parasitic resistance of UK local and newly introduced sheep breeds in organic/low input and conventional farms.	United Kingdom
	5) Assessment of ROA GENE effect on Rasa Aragonesa breed productivity	Spain
	6) A new longevity breeding goal for Lleyn sheep	United Kingdom
Feeding	7) Better utilisation of farm forage– reduce reliance on imported concentrates and forages on the farm	France
	8) Assessment of feeding alternatives in sheep and goat farms in Turkey	Turkey
	9) Grazing in arable rotations	United Kingdom

Innovation case studies

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Type	Innovation case study	Country
IT technologies and individual recording	10) Extension activities for individual recording	Greece
	11) Mobile flock management of intensive sheep farm	Turkey 
	12) Reproductive performance recording in intensive dairy goat farming	Turkey
	13) Assessment of Eskardillo: a platform based on individual data collection to improve decision making and management in dairy goat farms.	Spain
	14) Individual data collected from RFID for several purposes	France
	15) Training and implementation of farm management application (AWIN)	Greece 
Environment	16) Ecological knowledge transfer and sharing expertise from Transhumance	Turkey
	17) Carbon efficiency and footprint comparison for various farming systems	Turkey
	18) Small ruminant farmers' perception on climate change impact and assessment of adaptation innovations	Turkey 
	19) Holistic Management and Farm Sustainability Assessment Tools	United Kingdom

Innovation case studies

Products and marketing	20) Participatory Guarantee System for Brogna sheep Association in Lessinia	Italy	
	21) Functional food production from goat milk and lamb meat	Turkey	
	22) Marketing innovations for transhumance dairy products	Greece	
Reproduction	23) Testing of a new sheep and goat AI speculum	Spain, France and Greece	★
	24) Controlling reproduction in sheep and goats and developing easycare breeds	Turkey	★
	25) Testing assisted reproduction technologies in dairy goats and maternal sheep	Turkey	
	26) Drivers and farmers perception on hormonal control uptake in extensive farms in Turkey	Turkey	
Farmer training	27) Assesment of Ambassador programme	United Kingdom	★
	28) Assessment of Flock Health Programme	United Kingdom	
Others	29) Controlled weaning in organic goat rearing	Italy and Greece	★
	30) Managing Haemonchus burden in lambs using a copper oxide bolus	United Kingdom	
	31) Portable milking machine in different farming systems	Turkey	

Innovation case studies

Challenges addressed by innovation case studies in each participating country

		Challenge	Finland	France	Greece	Italy	Spain	Turkey	UK	
INTERNAL WEAKNESSES	FARM	Lack of profesionalization	X	X	X	X	X	X	X	
		Slow adoption technology and innovations	X	X	X	X	X	X	X	
		Poor business management training			X		X			
	SECTOR LEVEL	No attractive for young farmers							X	
	Relative to some farming systems	Low adaptation of high productive breeds to some enviornments	X					X		X
		Breeding programs of adapted/local breeds not welldeveloped in some areas	X					X		X
EXTERNAL THREATS	SOCIETY	Societal awareness of farmers role								
		Low consumers demand								
		Lack of society knowledge on sheep and goats farming								
		Recognition and valuation of public services of livestock farming								
	ENVIRONMENT	Climate change threats							X	