Reproductive indicators in sheep farming systems in Europe and Turkey

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INTRODUCTION

EU production

- mainly located in less favoured areas
- 84% self-sufficiency

Key production

- Sheep farming plays a significant role: economic, environmental, social.

Issue

- The number of producers have declined by 50% since 2000

SheepNet

- To enhance sustainable productivity in sheep meat and milk farming

The SheepNet project: **SH**aring **E**xpertise and **E**xperience towards sheep **P**roductivity through **NET**working

… A Network for the improvement of Sheep Productivity in EU and Turkey

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INTRODUCTION

3 key factors affecting
Sheep productivity

1 – Reproduction efficiency

Farmers

Predators

Knowledge/skills

Diseases

Sheep productivity

Environment

Facilities

Management

3 –Lamb mortality

Nutrition

Animals

2 – Pregnancy success

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OBJECTIVE

To assess the current situation of sheep farming in terms of reproductive and sheep productivity indicators, taking into account the wide diversity of conditions within the project member countries (FR, IR, IT, RO, SP, UK and Turkey):

- ewe genotype,
- Climate & environmental conditions (mountain areas, lowlands, etc.), production (meat, dairy or dual purpose),
- Level of intensification: reproduction and nutrition management

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MATERIAL AND METHODS

A set of **indicators** was established for each one of the 3 project topics:

8 fertility rate,
3 pregnancy success,
4 lamb mortality
3 Indicators of productivity
47 indicators to characterize production systems.

The **NF in each member country gathered the existing information** and databases for the corresponding sheep farming system in order to characterise its current situation and recent evolution during the last 5 years

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MATERIAL AND METHODS

SCOTLAND

Hills (1/year)

Uplands (1/year)

Lowlands (1/year)

FRANCE

Mountain areas → 1 / year

Lowlands or grasslands → Accelerated

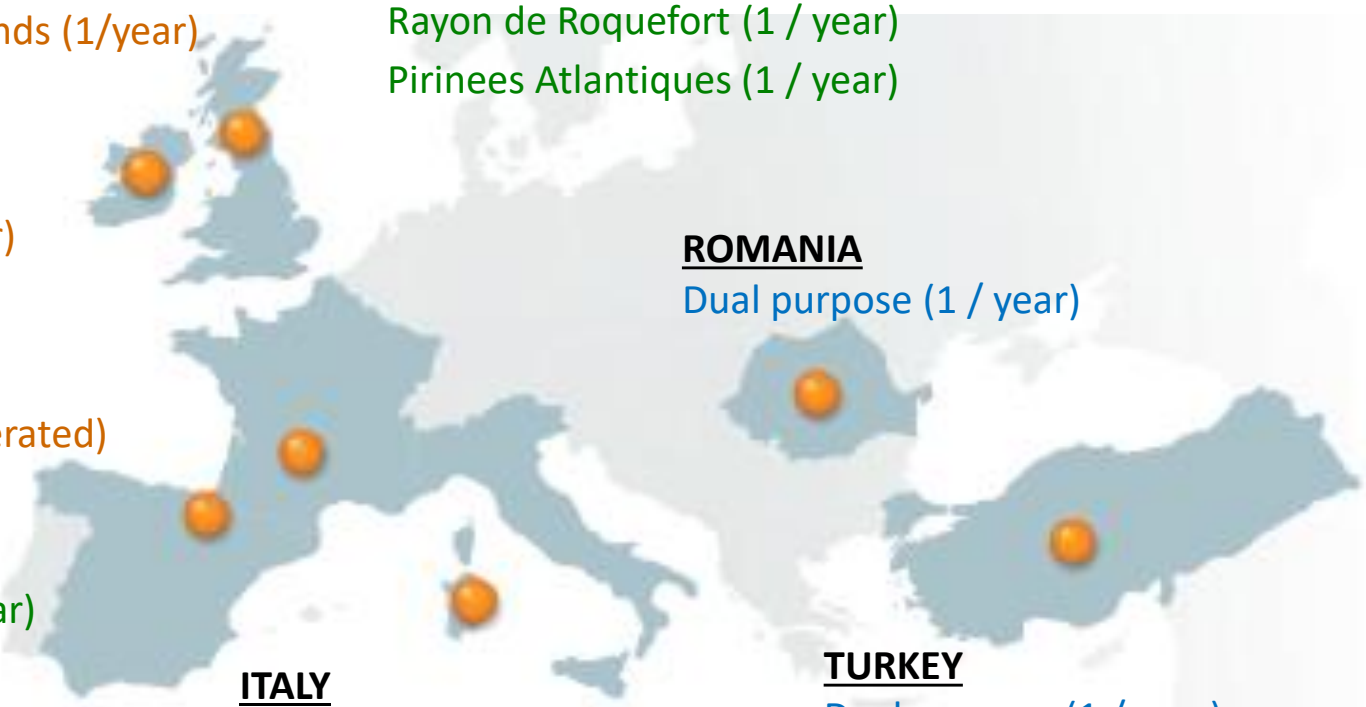
Rayon de Roquefort (1 / year)

Pirinees Atlantiques (1 / year)

IRELAND

Hills (1/year)

Lowlands (1/year)



ROMANIA

Dual purpose (1 / year)

SPAIN

Mountain areas (Accelerated)

Lowlands (Accelerated)

Mountain areas (1 / year)

Lowlands (Accelerated)

Indoors (Accelerated)

ITALY

Sardinia island (1 / year)

TURKEY

Dual purpose (1 / year)

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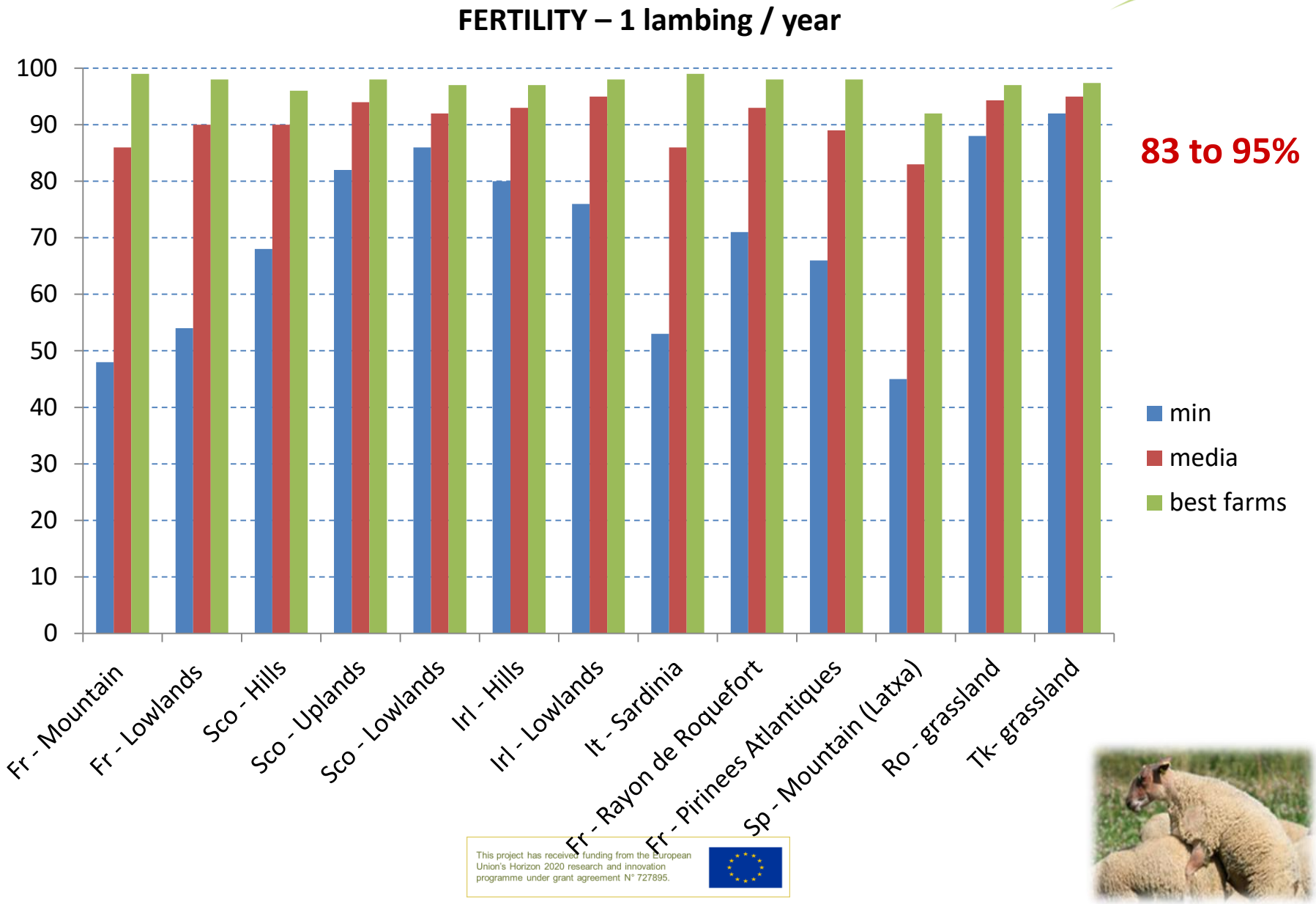
REPRODUCTION RATES

RESULTS



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REPRODUCTION RATES

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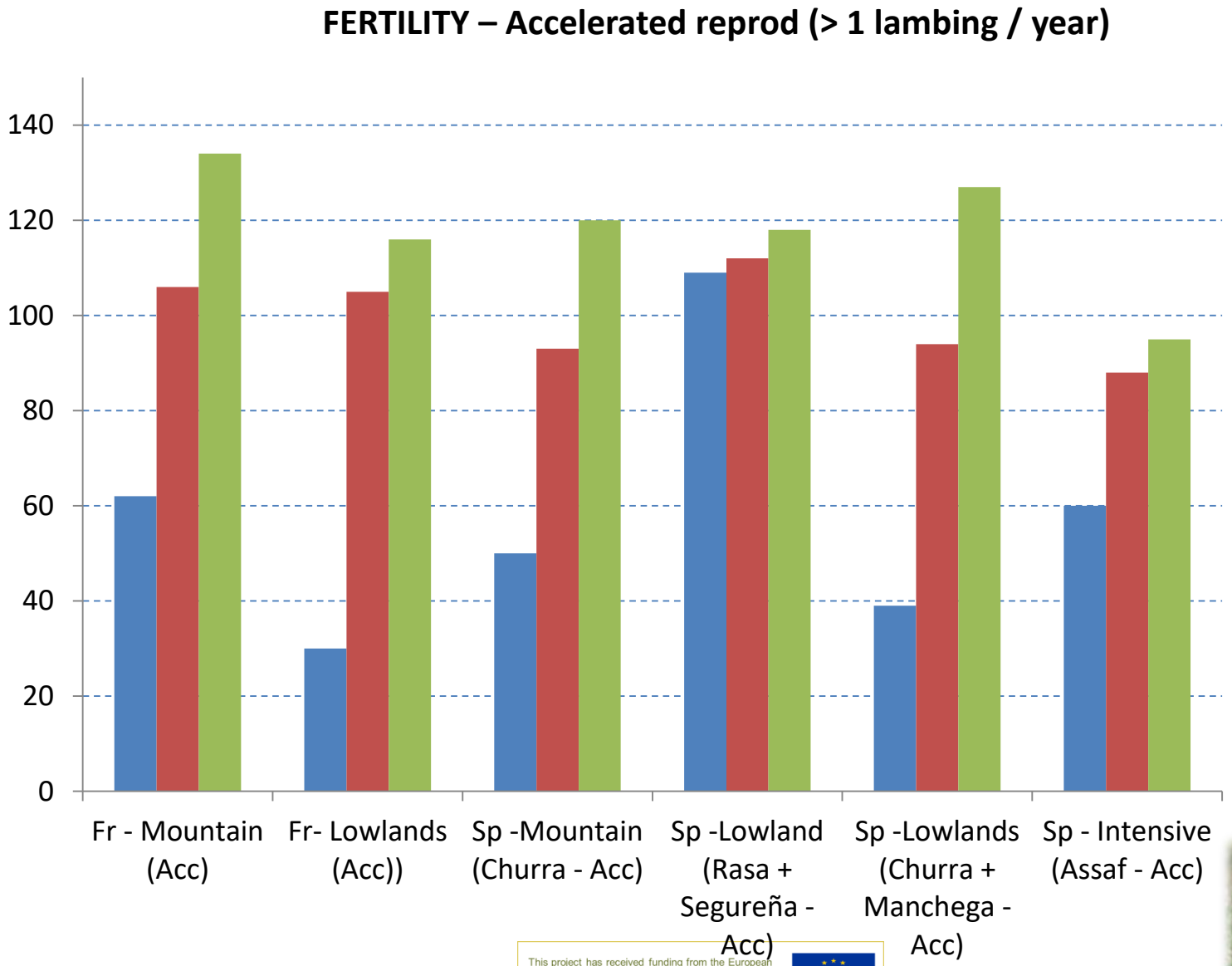

88 to 116%

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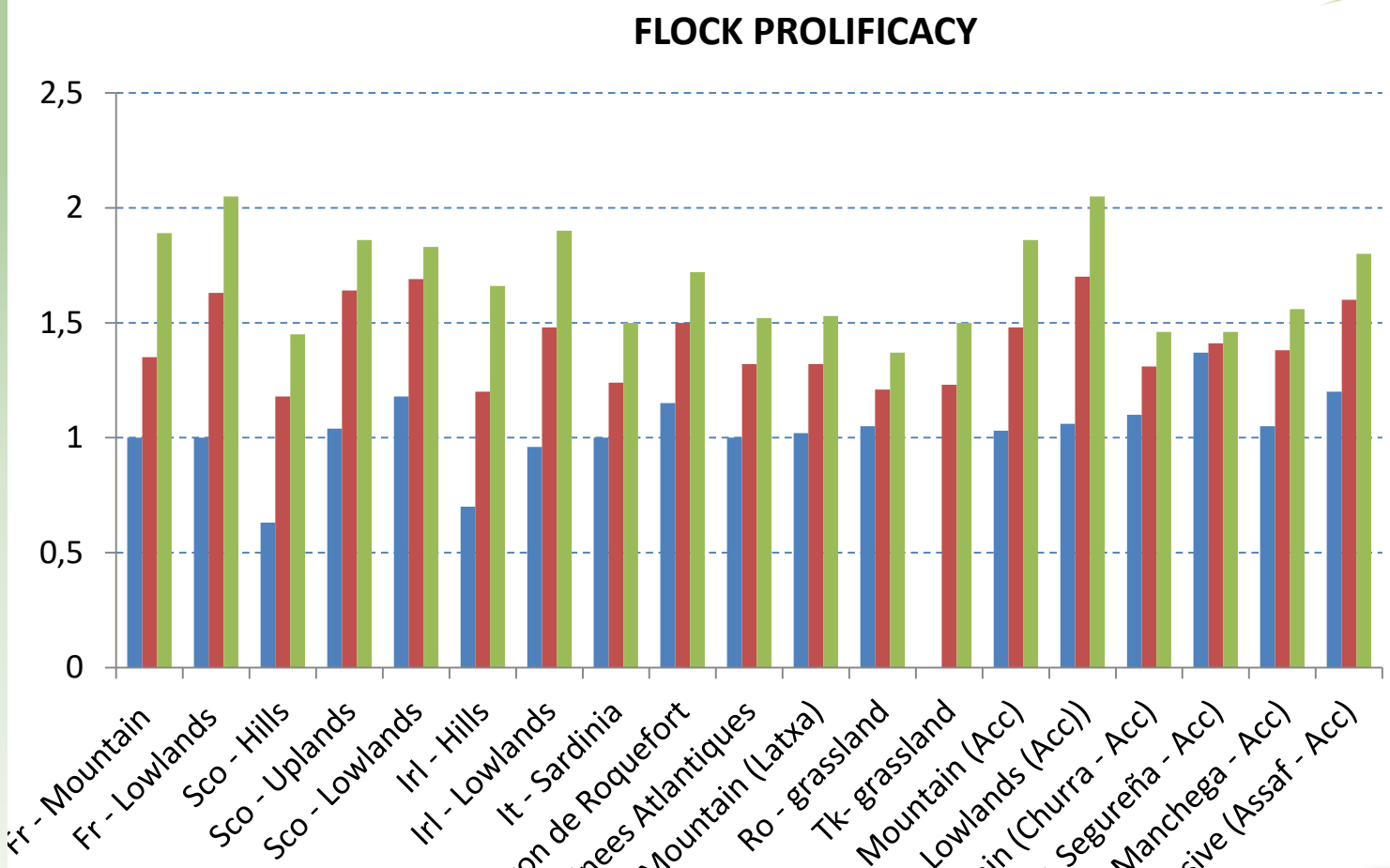
PRODUCTIVITY

RESULTS



Lowlands: 1.40
Mount.: 1.33

1-lambing: 1.36
Accel: 1.48

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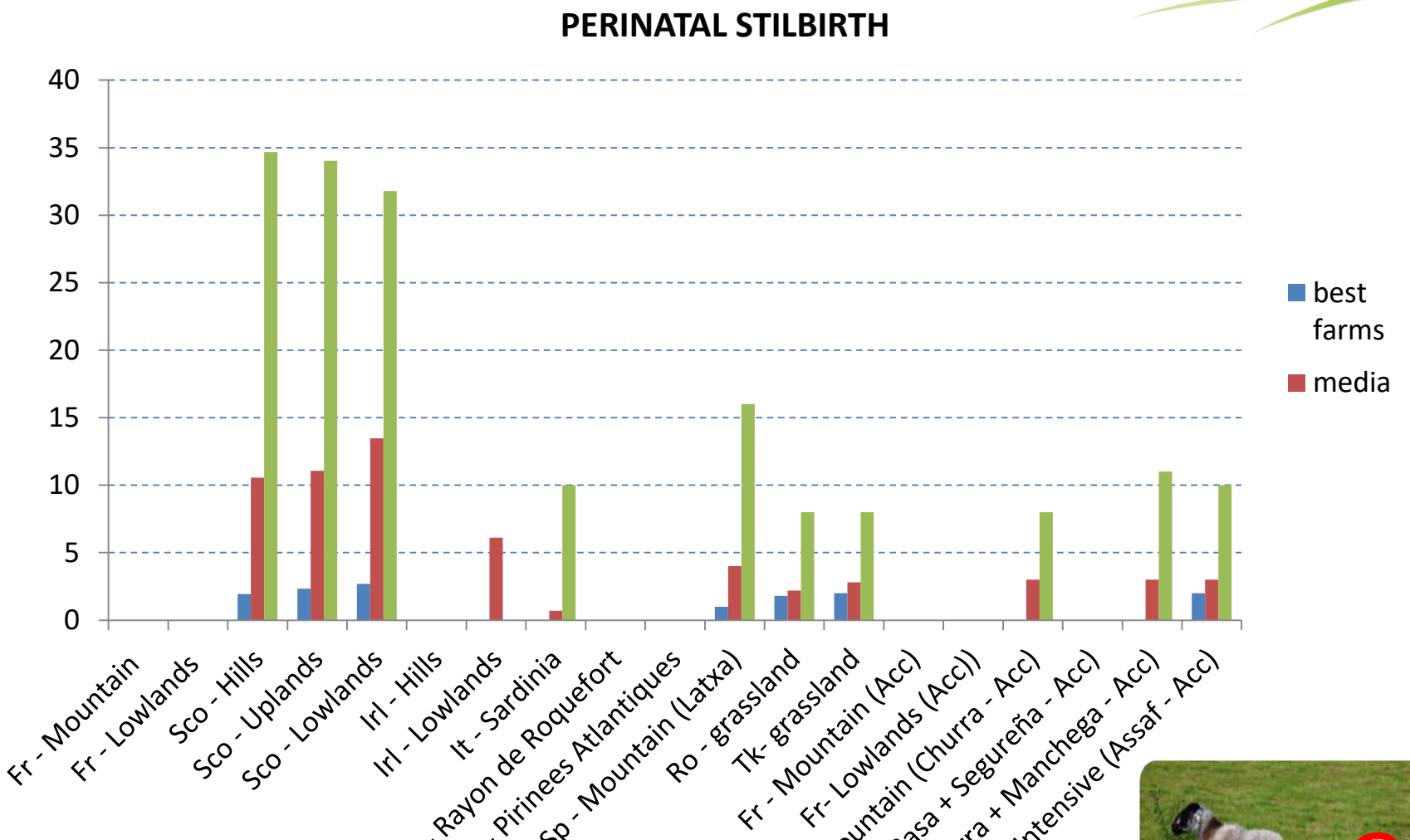
LAMB MORTALITY

RESULTS



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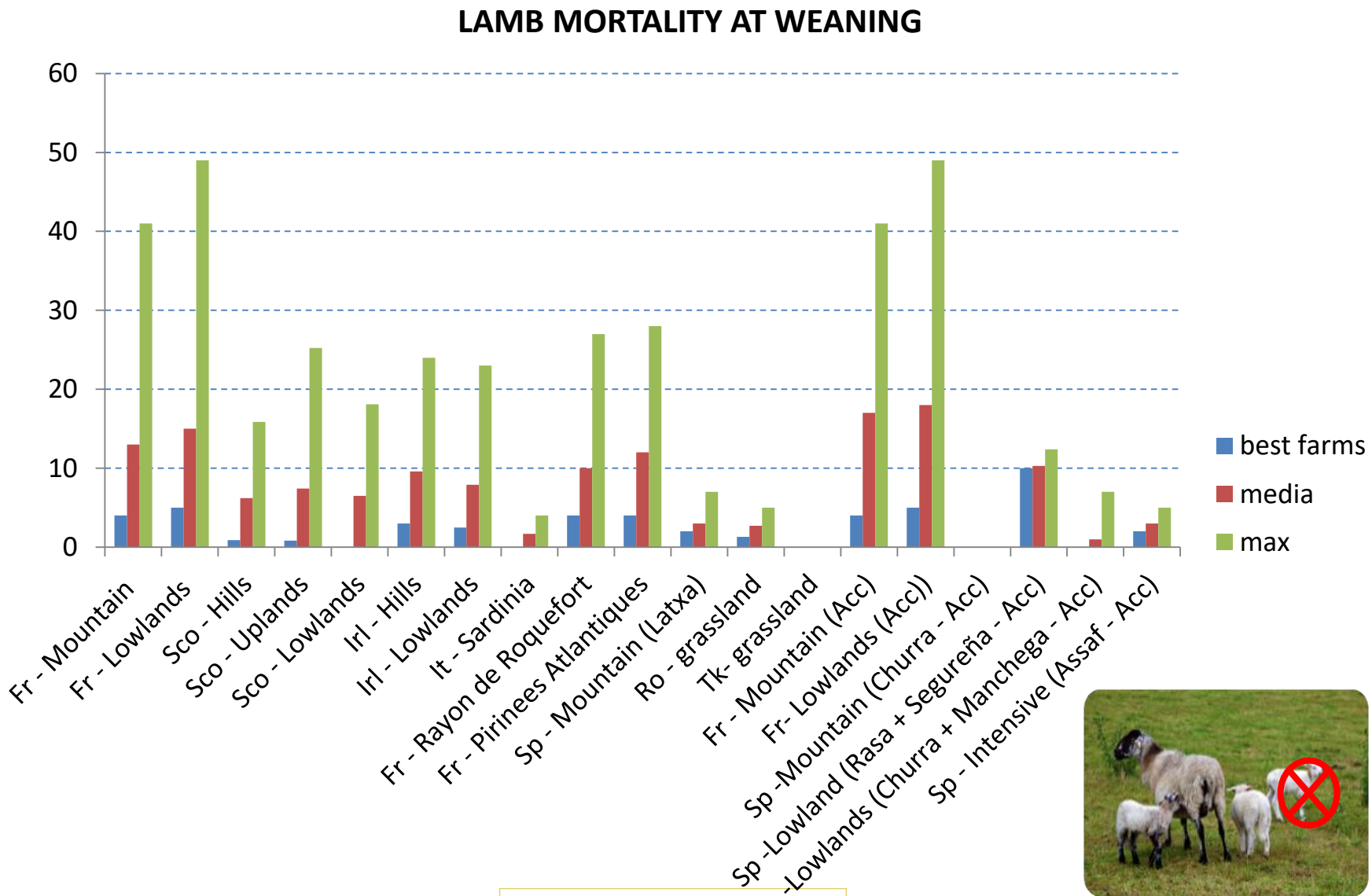
LAMB MORTALITY

RESULTS



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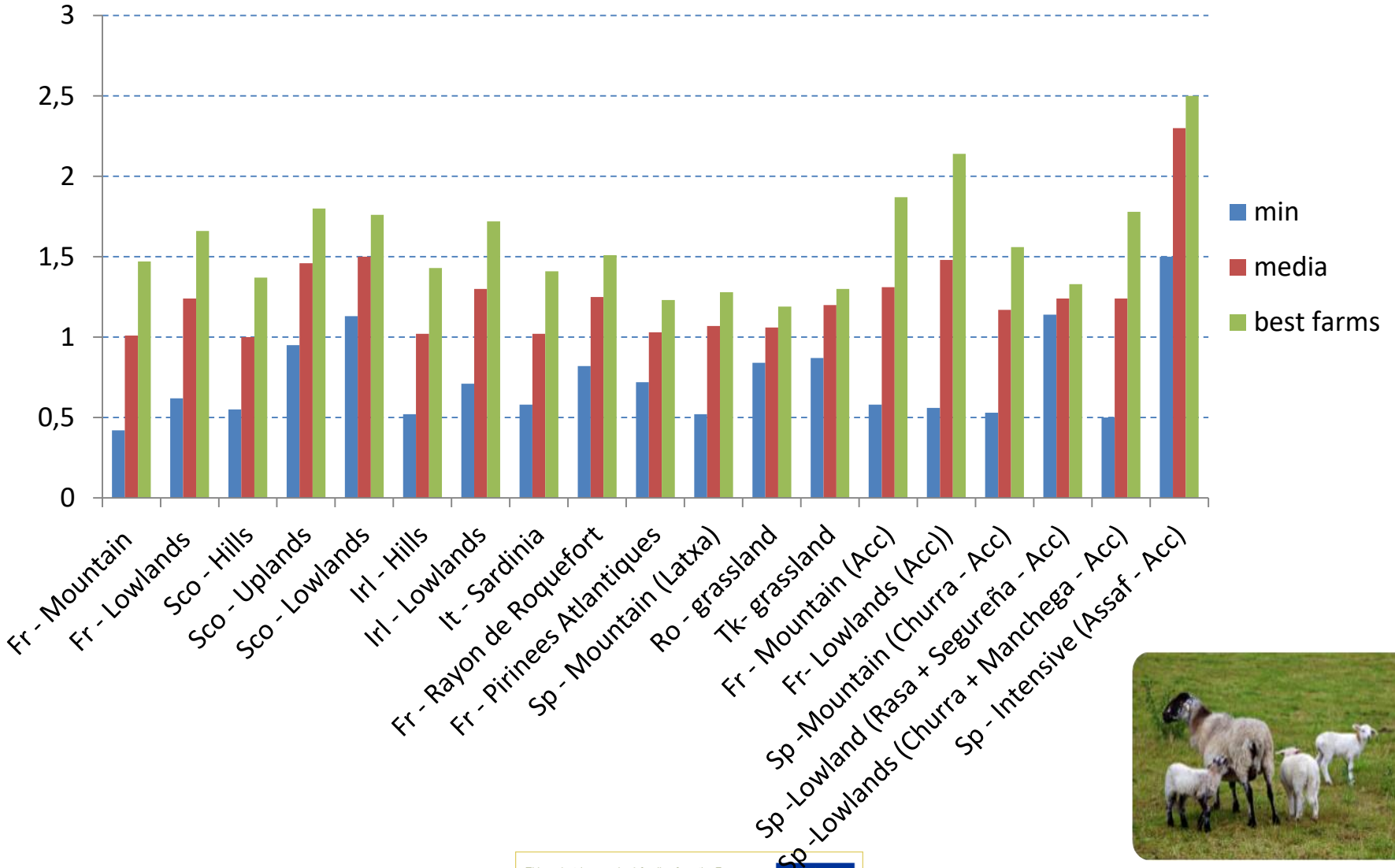
PRODUCTIVITY

RESULTS

NUMERIC PRODUCTIVITY



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Main results and conclusions

- There is a lack of consistent and reliable data for fertility, abortion and lamb mortality hazards;
- Low utilisation of technologies available (oestrus synchronization, artificial insemination and scanning).
- The number of lambs produced per ewe joined to the ram is in general low (<1.5). Even, despite the higher complexity of management for accelerated reproductive strategies, the average litter size achieved (1.48) did not differ much from that obtained in systems following a 1-lambing-season-per-year pattern (1.36).
- In many farms, there is margin for improvement.
- The SheepNet network will try to propose solutions to increase sheep productivity.

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SheepNet
European Knowledge Exchange

www.sheepnet.network/

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Many Thanks!!

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