

CHALLENGE

Sheep have a relatively short productive life and the identification of the genetic factors controlling ewe longevity (EL), under different Sheep Production Systems (SPSs) would facilitate breeding for healthier sheep. Sheep genetic improvement schemes across Europe are hampered due to low pregnancy rates that result from cervical insemination with frozen-thawed semen. The exception is in Norway and the challenge is to identify the reasons why cervical artificial insemination (AI) works well in Norwegian ewe breeds but not other European breeds. In addition, there is a requirement to develop strategies to reduce the labour input and carbon hoof print per kg of output.

OBJECTIVES

The overall aim is to increase the sustainability and profitability of European sheep production, by addressing key industry focused problems to better understand fundamental mechanisms influencing on-farm efficiencies.

EXPECTED RESULTS

SusSheP will establish the genetic factors controlling EL, under different SPSs and assess if early life predictors can be used to predict EL. Parallel to this, the most carbon and labour efficient SPSs will be identified. Another objective is to interrogate differences across breeds in cervical physiology and its secretions with a view of developing a socially acceptable AI method.

POTENTIAL IMPACT

The focus lies on genetics, animal welfare and ethical breeding practices, while being cognisant of labour input and the economics of SPSs. Through the participation of strategically chosen SMEs, the knowledge transfer to industry, farmers and scientific communities is maximised..





EUROPEAN RESEARCH AREA ON SUSTAINABLE ANIMAL PRODUCTION



SUSSHEP CONSORTIUM

Country	Consortium partners	Funded by
IE	University of Limerick Sheep Ireland Teagasc	DAFM/ Teagasc
FR	Institut National de Recherche Agronomique	ANR
NO	The Norwegian Association of Sheep and Goat Breeders Norwegian University of Life Science	RCN
UK	Scotland's Rural College Maternal Sheep Group	DEFRA



RUNNING TIME

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