

Producing guidelines to record efficiency and resilience in small ruminants

Authors: J. M. Astruc - IDELE and all the SMARTER partners

One key objective of SMARTER was to promote harmonisation and international cooperation on breeding processes in small ruminant. The across country genetic evaluations implemented in SMARTER on existing traits as a proof of concept have underlined the importance of analyzing traits that have been collected and/or calculated on a same way across country. It is therefore fundamental that novel traits, such as the efficiency and resilience related traits, which are not still widely routinely recorded on-farm for selection purposes, be recorded identically in the next future, or at least in the most similar way as possible.

In this respect, one of the main practical outputs of SMARTER was the production of recommendations on recording efficiency and resilience traits in sheep and goat. The materials used to write the recommendations are mainly those produced by SMARTER, but also materials from other projects (H2020 iSAGE, POCTEFA ARDI, ERA-GAS GrassToGas). The ICAR network contributed as well.

The recommendations include seven sections: two on efficiency traits (feed efficiency and greenhouse gases emissions), four on resilience traits (health and disease, survival of fetus and young, behavior traits, lifetime resilience), one on the record of the environment (especially the meteorological data and the diet). In these guidelines, proxies of gold standard traits, that can be more easily collected on-farm, are highlighted.

The final aim is to publish these recommendations in the ICAR guidelines, to target a larger community, including academic and non-academic, as well as services organizations in selection. This will strengthen the impact of SMARTER.



Brebis Lacaune sheep



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