Abstract Submission Form

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Preferred presentation

Oral

Preferred session

Session 1: WG Animal Data Exchange – Decision Support Tools of the Future – Promoting Sustainability Farm Management

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Title of your paper   Standard operating procedures for efficient management of small ruminant farms

Insert ABSTRACT text

Success in dairy sheep and goat farming depends largely on efficient management of available resources and expertise of farmers. Both, combined with the low level of implementing innovation at farm level dictate animal productivity and farm profitability. The objective was to develop farmer-friendly standard operating procedures (SOPs) for training employees as well as recording protocols to cater the needs of efficient farm management. Initially, a comprehensive review of existing guidelines and relative research studies regarding farm management practices was performed. In particular, milk production recording and udder morphology assessment guidelines of the International Committee of Animal Recording (ICAR) and protocols for Animal Welfare Indicators (AWIN) were examined. Refereed publications about reproduction technologies, newborn management, nutritional management, milking procedures, milking parlor critical points, and biosecurity measures were studied. Decision support tools for farm management and

economic performance assessment were also explored. Based on the above, detailed SOPs, tailored for dairy farms, were developed. Each SOP was divided in subsections detailing objectives, step-by-step procedures, and required equipment/technologies. Specifically, SOPs for reproduction management focused on artificial insemination and natural mating, pregnancy diagnosis, and lambing/kidding management. SOPs for newborn lambs/kids focused on colostrum quality and storage, artificial rearing, and prevention of diarrhea incidents. SOPs for nutritional management included guidelines for meeting energy and protein requirements of each animal category according to their physiological and production stage, and sample collection of feeds for chemical analysis. Milking parlor and milking procedure guidelines focused on maintenance, cleaning, and education of milkers on milking practices. SOPs for animal health and welfare included vaccination protocols, and practical welfare indicators (body condition score, water availability, fleece cleanliness panting, stocking density, hoof overgrowth, body and skin lesions, lameness, fecal soiling, ocular discharge, mastitis). SOPs for milk production and udder health detailed procedures for milk yield recording with volumetric milk meters, milk sample collection for chemical analysis as well as udder morphometric measurements. Biosecurity SOPs, focused on internal and external measures for disease prevention and control. Lastly, the applicability and usefulness of existing decision support tools for efficient farm management and economic performance of small ruminant farms was assessed. Next steps include the integration of these protocols in an online interactive platform. The notion is that those customized SOPs will help farmers become more efficient in managing dairy sheep and goat farms while ensuring animal health and welfare. This work is funded by "Measure 16 'Cooperation" in the framework of National Rural Development Programme and it is co-financed by the European fund for rural development (EAFRD) and national budgets (ProudFarm; Project code M16SYN2-00016).

Enter keywords
small ruminants, training, standard operating procedures, recording protocols, production, profitability