JOINT MEETING OF THE ICAR WORKING GROUPS ON PERFORMANCE RECORDING OF DAIRY SHEEP ANG GOATS PERFORMANCE RECORDING

20th May 2014, Berlin, Germany

Draft minutes

Attendants : Jean-Michel Astruc (France), Veysel Ayhan (Turkey), Zdravko Barać (Croatia), Francis Barillet (France), Daiva Beinoriené (Lithuania), Irfan Daskiran (Turkey), Maja Drazic (Croatia), Zeljka Fatović (Croatia), Mauro Fioretti (Italy), Denis Gaumont (France), Tilman Hoefelmayr (Switzerland), Charl Huy (South Africa), Gintare Kisieliene (Lithuania), Dalia Laureckaite-Tumeliene (Lithuania), Ricardo Negrini (Italy), Axel Prediger (Switzerland), Franz-Josef Romberg (Germany), Sotero Salaris (Italy), Alessia Tondo (Italy), Brian Wickham (Italy), Ming-Che Wu (Taiwan)

We decided 2 years ago to held in Berlin in 2014 a joint meeting of small ruminants working groups (goats and dairy sheep), given the similarity of the concerns and issues of both groups.
The meeting was open to non-members of the working groups. The attendance was quite huge compared to the previous years, with 21 persons from 9 countries.

The meeting which was held from 8.30 to 12.00, was chaired by Zdravko Barać (chairman of the goats performance recording WG) and Jean-Michel Astruc (chairman of the performance recording of dairy sheep WG).

The agenda (see below) was adopted.

Agenda

1-Constitution of the WGs

The working group on performance recording of dairy sheep includes 8 members from 6 countries:

Jean-Michel ASTRUC (France)
Zdravko BARAĆ (Croatia)
Francis BARILLET (France)
Antonello CARTA (Italy)
Elisha GOOTWINE (Israel)
Drago KOMPAN (Slovenia)
Franz-Josef ROMBERG (Germany)
Alessia TONDO (Italy)
Eva UGARTE (Spain)

There has been no change in the constitution of the WG over the last two years.
For the next future, Francis Barillet will retire next year. He has been the first chairman of the dairy sheep working group from the late 80's until 2000. He wrote the first version of the guidelines in 1992 and has been a faithful participant to all ICAR sessions since 1988.

The working group on goat performance recording includes 7 members:

Zdravko BARAĆ, Croatian Agricultural Agency (Croatia)
Jean-Michel ASTRUC, INRA Toulouse, (France)
Joanne CONINGTON, Scottish Agricultural College (UK)
Silverio GRANDE, Italian Breeders' Association (Italy)
Pierre van ROOYEN, South African Stud Book and Livestock Improvement Association (South Africa)
Juan Manuel SERRADILLA MANRIQUE, University of Cordoba (Spain),
Drago KOMPAN, University of Ljubljana, (Slovenia)

There has been no change in the constitution of the WG over the last two years.

2-Changes in the guidelines

21-General features (by Brian Wickham)
Brian Wickham puts forward some general comments on the guidelines:

- -the standards are very important for ICAR
- -there is a need for clarification of the standards (not only small ruminants but all the guidelines). A work in this way is carried out.
- -the guidelines are standards and not rules. We have to remove the term "rules".
- -we must not be afraid to make proposals to have a more accessible read of the guidelines.
- -in top of each section (and it must be the case for our small ruminants sections), a short summary must introduce the section.

22-Guidelines on goats
Guidelines on goat recording have been discussed during previous meetings. Editing and changes of the document have been disseminated between group members prior to this meeting in Berlin.
Zdravko Barac presented proposed changes of the Guidelines. It was concluded to disseminate final guidelines text to the WG member and to sheep WG members with revision and clean text for easier follow up.
After final comments, the material will be sent to ICAR Secretariat for further procedure.

23-Guidelines on dairy sheep

A new version of the guidelines (section 2.2) is to be agreed by the General Assembly in Berlin (at the time this report is written, the new guidelines have actually been approved). The title of the section has been changed from “ICAR rules, standards and guidelines for milk recording in sheep” to “**Standards and guidelines for performance recording in dairy sheep**”.

This version includes 4 main evolutions which have been discussed for several years within the working group and whose last version was sent to the members of the WG on 15 May 2014:

- quality assurance for AC method (see 2.2.2.7). A procedure is proposed both to control and elaborate an alternative AC coefficient. It consists in introducing one monthly record at the two milkings per flock-year in order to check the quality of the AC design in the flock. This approach should permit to obtain a flock coefficient (average of individual coefficients) either to be directly applied to all test dates or to check the quality of the actual AC coefficients. The detail of the procedure is written down in a technical document available on the ICAR website. The procedure is optional: it is up to the organization / country to decide to apply it, as far as the situation requires it.
- include udder traits in the guidelines (see 2.2.3.2). The purpose is to propose different udder appraisal tables with udder morphology traits. This sub-section is informative and not normative.
- revision proposed by Brian Wickham for harmonization and modernization (guidelines written in 1992 … needs for technical/functional updates … some anachronisms): remove ICAR rules; replace ICAR stamp with ICAR certificate of quality; check on pedigree: add “by DNA testing”.
- linguistic revision.

During the session, following the suggestion of Brian Wickham, a statement of principles is proposed, presenting the key considerations in designing a recording scheme for sheep. This statement of principle is attached in the appendix.

3-Presentation of the results of the on-line enquiries (sheep and goats)

The data from the on-line enquiry have been valorized and are presented through different slides (with tables and figures).

Goats

Zdravko Barac reported results of the on-line milk recording survey for goats. At the time of the meeting, 9 countries had submitted data: Canada, Croatia, Czech Republic, France, Italy, Latvia, Slovak Republic, Slovenia and Spain. In relation to report from two years ago new countries that added data are France, Italy and Latvia, however, Portugal did not.

The slides presented and discussed during the meeting concern the following topics: recorded population (by countries and by countries/breeds), methods and recording intervals, breeding schemes and selection criteria, milk yield: type of lactation calculation and results for some populations, milk recording equipment, molecular information, recording of other traits.

It was also discussed to add tables on milk composition to the on-line survey.

The slides presented and discussed during the meeting will be available on the ICAR website. The raw data (from 2012 and 2013) are published in a brochure prepared by the ICAR secretariat and distributed during the Berlin session.

Dairy sheep.

At the time of the meeting, 11 countries had submitted data: Belgium, Canada, Croatia, Czech Republic, France, Germany, Greece, Italy, Slovak Republic, Slovenia and Spain. Portugal is missing, probably because Portugal is no longer member of ICAR.

The slides presented and discussed during the meeting concern the following topics: recorded population (by countries and by countries/breeds), methods and recording intervals with a focus on

simplification of milk recording (quantitative and qualitative recording), breeding schemes and selection criteria, milk yield: type of lactation calculation and results for some populations, milk recording equipment, molecular information, recording of other traits.

A valorization of the enquiry carried out since 1988 (year of the first survey organized for the Oslo session) had been presented in 2013 in the Aarhus session. Apart from the traditional slides presenting the situation of milk recording in the last year, some tables and figures give an overview of the evolution of milk recording over the last 25 years in the main countries.

The different slides will be available on the ICAR website. The raw data (from 2012 and 2013) are published in a brochure prepared by the ICAR secretariat and distributed during the Berlin session. Both the brochure and the slides from the WG are two complementary documents which can be useful for anybody.
Some key features: official milk recording represents on the whole 1,198,139 ewes. D recording, which is a non-official and "free-of-rules" milk recording, is described only in France and represents 536,460 ewes on the whole.

10 ICAR countries reported to set up milk recording. They are ranked below by decreasing number of recorded ewes (in official milk recording): Italy (399,610), Spain (359,781), France (305,490; 841,950 with D recording), Greece (85,345), Slovak Republic (10,306), Croatia (8,354), Slovenia (4,507), Czech Republic (1,669), Canada (1,485) and Germany (666). Belgium has no official recording.
The 5 top breeds are: Sarda (220,268), Lacaune (172,462; 663,327 with D recording), Valle del Belice (118,959), Manchega (114,963), Manech Tête Rousse (80,260; 98,036 with D recording).

As proposed in Cork, additional information have been asked, concerning milk quality results and electronic on-farm milk meters. These information were not included in the on-line enquiry, but were to be filled in 2 additional excel tables sent by e-mail. The purpose was to assess the interest of the data before formalizing them in the on-line enquiry.

Milk quality: it was asked to report the performances (by country or by breed) of fat content, protein content, lactose content and somatic cell count, and to precise whether the data came from milk recording (individual data) or from bulk milk (for example from payment data). Only 3 countries sent data: Croatia, Czech Republic and France.

Electronic on-farm milk meters: this issue was raised by Elisha Gootwine 2 years ago, with questions about the way to take into account daily records. The group proposed to set up an enquiry to have a look at the state of the art. The survey concerned the milk meters used, the number of equipped farms, whether the meters were used for milk recording or not, the frequency of records used for lactation calculation, whether samples were taken or not. 4 countries sent data: Israel, Belgium, Czech Republic and France. Nevertheless, such meters are reportedly used in other countries (at least in Spain and Italy). In France, there are very few farms equipped (2 reported … meters are not yet used for milk recording). No such meters in Belgium and Czech Republic. In Israel, the on-farm electronic meters are used in 88 farms (60 with Afifree, 28 with MM25 SG). Data are used for milk recording (valorization of daily records). No sample are taken.

4- Milk recording devices

As discussed during the previous meetings in Riga and Cork, the question of the accuracy of the electronic meters have been raised by several participants. It was suggested to bring in Berlin some returns on the different experiences from domestic organizations. In addition to the survey (see above) about on-farm milk meter, measures have been carried out in Italy and France, especially in farms equipped with MM25 SG De Laval.

In France, comparisons of milk yields obtained with MM25 SG with milk yield obtained with jars actually used for milk recording were done in one farm in D recording, with a high line parlor.
In Italy, AIA performs milk recording in roughly 50 farms equipped with DeLaval MM25 SG. Assessment on the accuracy of on-farm milk meters was carried out in sheep in 2 case studies: one in low line, one in high line.

In each case (France and Italy), a lower accuracy is shown with electronic devices, especially in high line situation (probably due to higher vacuum level). Both bias and standard deviation were substantially above the limits of error proposed by ICAR.
Nevertheless, we must be very careful with these results obtained with a methodology of comparisons that could be questionable, especially in France. However the results seem to be always in the same way.

From these presentations and discussion, the following decisions are proposed:

- follow-up with the tests
- wait for DeLaval corrections. “The market should solve the problem”.
- take contact with the Sub-Committee on Recording Devices to present the issue. A suggestion would be that when a meter is approved, ICAR displayed the conditions (for example low line or high line) in which the meter was tested on-farm. An alternative to this suggestion would be that the meters should be tested in at least 2 conditions (for example low line and high line). A note to the Sub-Committee will be produced.
- In any case, the ICAR brand must be high-leveled.

In addition, another concern (experimented in France) is the sampling. Whatever the quality of the sampling, the conditions of sampling are very difficult with the electronic meters in small ruminants: a lot of ewes to sample and high speed of milking routines make the manipulations (pouring the sample collector in the vial, cleaning the collector, fixing it again on the meter) time-consuming.

5-Addition to the agenda

The presence, for the first time in ICAR, of a Turkish delegation was an opportunity to present the 12th International Conference on Goats which will be held in Antalya in Turkey on 25-30 September 2016.
Moreover, an important project on sheep and goats breeding programs has been launched in turkey. This project is coordinated by the Ministry of Agriculture. Irfan Daskiran will make a presentation during the small ruminants session on 23 May 2014.

6-Date of next meeting

Given the success of the meeting in term of attendance, it is proposed to schedule a new joint meeting in 2016 in Chile.

Appendix

Guidelines Dairy sheep - Statement of principles:

The aim of this section is to provide definitions, guidelines and standards on performance recording in dairy sheep.
The guidelines have been set up for the first time in 1992 with the purpose of being informative more than normative. They have been regularly updated since then. The reader must have in mind the following considerations to clearly understand the principle of the guidelines.

Unlike the simple situation of exclusively milking soon after calving which predominates in dairy cattle, the dairy sheep systems are much more varied and complicated. In most cases, normal husbandry systems include a suckling (or suckling plus milking) period of at least one month. These variations in systems play a major role in determining the difference in milk recording methods and lactation calculation used for sheep.

Moreover, the impact of milk recording is weak in dairy sheep, even more for qualitative recording, due to its high cost. Therefore, simplified methods such as AT and AC designs are strongly promoted and official milk recording with a purpose of collective valorization should be concentrated in farmers involved in breeding schemes. For commercial flocks within this pyramidal management of the

population, a very simplified non official recording called D method, designed only for technical and economic development within a flock, has been proposed.

To meet specific situations in which basic rules of milk recording might not be respected, alternative official milk recording are described, such as E recording or alteration of AC recording.
Finally, as functional and health traits are of growing interest, the last updates in 2014 include udder morphology recording.