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

FIRST MEETING OF THE SHEEP, GOAT, SMALL CAMELIDS WORKING GROUP

25th October 2016, Puerto Varas, Chile

Draft minutes

Attendants: Jean-Michel Astruc (Institut de l’Elevage | France), Martin Burke (ICAR), Brian Wickham (ICAR), Mojca Simčič (University of Ljubljana | Slovenia), Mike Coffey (SRUC | UK), Ming-Che Wu (Taiwan Livestock Research Institute | Taiwan), Graham Alder (Beef & Lamb Genetics | New Zealand).

The meeting which was held from 15.50 to 17.10 in B.Center room, was chaired by Jean-Michel Astruc (chairman of the performance recording of dairy sheep WG). Zdravko Barać (chairman of the goat performance recording WG) who should initially co-chair the meeting, had sent his apologies for not being able to attend the Chile meeting.

Agenda

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1-Opening and welcome

This meeting was both the last joint meeting of the former WG on Goat Performance Recording and Performance Recording in Dairy Sheep and the first meeting of the new Sheep, Goat and Small Camelid WG (see agenda 2).

The agenda (see above) was adopted.

2-New organization of Sheep, Goat and Fiber working groups: the Sheep, Goat and Small Camelid working group (SGC-WG)

A new organization of the small ruminants and small camelids in ICAR has been established in 2016 with the following background:
- ICAR has been seeking to expand its role for sheep and goats to include meat, reproduction and maternal traits.
- The purpose is to form a working group that encompasses the interest of Sheep, Goat and Small Camelid.
Therefore, the ICAR Board at its meeting on 19th July 2016 approved the Terms of Reference for the SGC-WG to replace the three existing groups.

The following figures summarizes the new organization:

The former three WG which dealt with sheep, goat and fiber are merged into a unique WG dealing with sheep, goat and small camelid. This new working group has 3 expert
advisory groups (EAG) whose scopes are the type of traits managed: milk recording, fiber recording, meat/reproduction/maternal trait recording.

The objectives of the new SGC-WG are to:

- Provide a forum for members of ICAR to collaborate, exchange and learn on performance recording and genetic evaluation for SGC.
- Maintain, update, promote, extend guidelines for SGC performance recording for the full range of traits relevant to decisions on: genetic improvement, farm management, quality assurance, animal health and welfare.
- Conduct and report results of periodic international surveys on SGC performance recording and genetic evaluation
- Develop and support services relevant to SGC that service ICAR will provide to members of ICAR on a user-pays basis.
- Facilitate and co-ordinate international collaboration in research and development on SGC performance recording & genetic evaluation

The governance of the WG and its EAG will comprise persons covering all geographical regions and technical expertise in: (i) milk, meat, fiber, reproduction & functional trait recording of SGC ; (ii) genetic improvement of SGC ; (iii) farm management, quality assurance, health & welfare in SGC.

The initial composition could be as following:

- The SGC-WG itself should comprise the chairperson of the WG & the chairpersons of each EAG. Jean-Michel Astruc has been appointed as chairman of the working group.
- The EAG Sheep and Goat Milk Recording should comprise the current active membership of the current/former Dairy Sheep WG and Goat WG. To start the job, the chair will be shared between Zdravko Barač and Jean-Michel Astruc in continuity with their former involvement in leadership of Goat and Dairy Sheep WG.
- The EAG Sheep, Goat & small Camelid Fiber Recording should comprise the current active membership of the current/former Animal Fiber WG. The chair of the group will be taken by Marco Antonini in continuity with his former involvement in leadership of Fiber WG.
- The EAG Sheep & Goat Meat, Reproduction & Maternal Trait Recording must be formed primarily from interest of countries with major sheep meat sectors. The leadership of the EAG must be appointed in the next months.

The figure below is a first pattern of the membership of each part of the WG:
Things to do:

- Form the membership of the EAG meat, reproduction and maternal trait recording:
  - Appoint a member from South Africa (meat goats). Discussion took place with Japie van der W. & Charl H. about that.
  - Appoint a member from Australia. Discussion took place with Rob Banks from AGBU who will propose a person from his team.
  - Appoint a member from France. Discussion took place with Laurent Journaux)
  - Appoint a member from Ireland (Brian W. sent an e-mail to Sean Coughlan who will propose a person)
  - Search a person from Spain or Italy
  - Find a chairperson of the EAG

The priorities of the SGC-WG will be established by the Committee taking into account of its Terms of Reference and any request from the ICAR Board. The priorities in the next 5 years are as follows:

- Develop guidelines for the sheep and goat meat performance recording
- Develop guidelines for the sheep and goat reproduction and maternal trait performance recording
- Maintain and develop the ICAR guidelines for milk recording of sheep and goats
- Maintain and develop the ICAR guidelines for fiber production form sheep, goats and small camelid
- Promote genomics (maybe a future new EAG might be formed to deal specifically with this topic)
3-Proposition of evolution of the goat guidelines:

In 2015 in Krakow, Agnès Piacère presented the results of accuracy of the method Liu applied and adopted in France to estimate daily yield and content from a one-milking record. This method allows to correct yields and contents when the design includes only one recorded milking. The French proposition is to include these design in goats as well as the method of correction which is applied. In addition, some other adaptations are proposed by France to update the guidelines. The propositions are presented during the meeting for an approval of the group. The main proposition are as follows (note that the letter used below corresponds to the second letter of the protocols, the first letter meaning who is responsible for the recording [A if representative of milk organization; B if farmer; C if mixed]):

(1) The methods T (alternate method for milk and sampling) and C (recording at any moment [morning or evening] for milk and sampling) already exists. The differences with cattle guidelines must be underlined and reaffirmed: (i) the correction (whatever the method) is not obligatory for T method; (ii) for C method (C for corrected), the moment is not obligatory the same: it can be either morning or evening, regarding that there is a correction applied to estimate daily yields/contents.

(2) The methods Z and Y should be included in the guidelines. Method Z is an alternate scheme with milk yield from the two daily milking and only one-milking sampling alternately the morning and the evening on the next recording visit. As the alternate scheme is realized, there is no obligation to correct daily contents in order to calculate fat yield and protein yield for the whole lactation. Method Y is defined by milk yield from the two daily milking and only one-milking sampling that occur at any milking at each recording visit (whatever the morning or the evening); this scheme implies to use a correction method among those described to estimate the daily fat and protein contents.

(3) Regarding the correction method. Different correction methods may be listed in the guidelines (ex. Liu method or other). But it is up to the ICAR member to describe precisely the correction method in its own situation. This is to render the guidelines more readable and not overloaded.

(4) Frequency and number of milk recording visits: France asks to add the interval of 7 weeks for the reference method. France also asks to add the different intervals as well for method T, C, Z, Y (from 4 to 7). Currently, for T and C method, only a four-week interval is allowed in goats and sheep guidelines. In sheep, this restriction in the current guidelines is driven by shorter lactations (150-180 days) than in cattle and goats => when 1 milking tested, the loss of precision must not be increased by increasing interval. The question for goats is discussed during the meeting (see below).

(5) Lower and upper bound in intervals between visits: in section 2.2 (sheep) and 2.3 (goats), the intervals are defined by an average recording interval, without any lower not upper bound. It must be remained as it is (especially for the absence of lower bound) because it must be possible to tighten the intervals (example: for experimental reasons). This is different from the rules in cattle (section 2.1) where lower and upper bounds are set.

(6) Tolerance regarding the interval between lambing/kidding and first test-day and between 2 consecutive test-days: it is up to each country to describe the tolerance accepted in its breed/situation about:
• Interval between lambing/kidding and first test-day
• Interval between 2 consecutive test-days

(7) **Last test-day involved** in the lactation calculation: it is **up to each country to describe** how the lactation is calculated and in particular what is the last test-day taken into account.

**Main decisions following the discussion:**

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<td>The principles of these propositions are agreed.</td>
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<td>Points (1), (2) and (3): no comment.</td>
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<td>Point (4): OK to introduce an interval of 7 weeks. For the simplified method with records at one milking only (T, C, Z, Y), it is up to each member country to accept an interval larger than 4 weeks. It might depend on the lactation length of the breed (for example, in goats, some breeds have short lactation length as observed in sheep).</td>
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<td>Points (5), (6) and (7): the guidelines should suggest something sensible, even though each country will define the rules according to its breeds/situations.</td>
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**What next:**

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<td>The minutes must now be distributed and possible suggestions must be taken into account.</td>
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<td>After that: the update must be included into the guidelines before approval by the SGC-WG.</td>
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**4-Presentation of the results of the on-line enquiry in dairy sheep**

A comprehensive valorization of the results of the on-line enquiry in dairy sheep (from figures submitted for the years 2014 and/or 2015) is rapidly presented. A set of 58 slides will be available on the ICAR website, as it is the case every 2 years after the ICAR biennial session. The synthesis includes data on:

- milk recording (by country and by breed): size of population, design of milk recording, simplification of milk recording, qualitative analysis;
- milk yield in the different populations;
- breeding schemes and selection criteria, including number of AI by population;
- milk recording equipment;
- molecular information;
- recording of other traits.

Only 9 countries have submitted data in 2014-2015: Spain, Italy, France, Canada, Germany, Slovenia, Slovak Republic, Croatia, Czech Republic. There is a decrease over the last 4 years (13 countries in 2010-2011, 11 countries in 2012-2013).
5-Addition to the agenda

A point is added by Mojca Simčič about the availability of milk recording equipment in dairy sheep and goat. In sheep and goats, according to the guidelines, meters or jars in use before 1 January 1995 that have been accepted by the ICAR member organization, can be used after this date. This is actually the case for almost all the current equipment. Some of these equipments are no longer manufactured. This is for example the case for the equipment used in Slovenia. That means that normally any new meters/jars used must have been approved by ICAR. So far the only meters approved are the Afimilk and the MM25SG (DeLaval) which are on-farm fixed electronic milk meters (the LCS from WMB has just been approved at the Chile session). But on farm-fixed electronic milk meters are not relevant in some situations in small ruminants, such as when milk recording in practiced summer pastures. These situations should require portable meters/jars. Therefore, there is a gap in small ruminants and this gap can only be bridged (at least on short-term) by use of non approved meters/jars. This situation is maybe not ideal regarding ICAR, but the participants at the meeting consider that the priority is to continue milk recording, although it is made with non approved meters/jars.

6-Date of next meetings

The next ICAR session are scheduled in:
- Edinburgh (UK): 12-16 June 2017
- 41st ICAR Biennial Session: Auckland (NZ) on 7-11 February 2018
- Czech Republic: 2019

Regarding the creation of the new SGC-WG, a WebConf meeting of the SGC-WG will be organized during the first months of 2017.

7-Closure

Closure is set at 17:20.