

Report from the Workshop in Paris

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Abstract

This paper summarizes the Interbull technical workshop on international genetic evaluation of beef cattle breeds. The main purpose of the workshop was to discuss aspects of the development of a system for international genetic evaluations for beef. Discussion focused on better understanding of differences between countries and their breeding objectives at national level, data quality and data editing.

Introduction

Beef cattle breeding has been developing in several countries around the world for the last forty years. Beef genetic evaluations have been performed mainly at national level, although not all countries have an evaluation system in place. In such cases, some breeds are evaluated together with other countries' breeds (Renand *et al.* 2003).

Live animals, semen and more recently embryos were exchanged long before the national evaluations were put in place indicating an interest from the breeders to improve their domestic animals with imported animals that fit their selection objectives (Phocas *et al.*, 2004; Journaux *et al.*, 2006). The best way to provide useful information to breeders to support their choices of foreign genetic material is to conduct an international genetic evaluation.

Successful attempts of international evaluations of beef cattle have been made for a few breeds and traits (Phocas *et al.*, 2004; Renand *et al.*, 2003; Bullock *et al.*, 2003). An expansion of international evaluations of beef to include new countries, traits and breeds are favourably supported by breeders, AI organizations, and international organizations.

The objective of the present paper is to report on the discussion from the Interbull workshop on beef that took place in Paris.

Historical background

The historical background of international evaluation for beef can be traced back to the

beginning of the '90s, and is aptly described by Journaux *et al.* (2006). In June 2006, ICAR decided to contribute to a three-year project aiming at developing a service for beef international genetic evaluations. ICAR member countries led by France and Ireland made resources available for the project to proceed with the development of the service.

Interbull technical workshop

The Interbull workshop was held in Paris at the Salon de l'Exposition on the 9th and 10th of March, 2007. The event was organized and sponsored by l'Institut de l'Elevage, INRA, Salon International de l'Agriculture, CENECA, Limousin and Charolais breed associations. The workshop registered high level of interest among participants who came from several parts of Europe (Denmark, Switzerland, Ireland, France, UK, Sweden, Poland, Germany, Finland, Italy and Hungary), North America (Canada and USA), North Africa (Morocco) and New Zealand.

Aim

Aim of the workshop was to present and discuss the international genetic evaluation project for beef, also known as Interbeef, in order to better understand different breeding objectives and problems related to data recording and editing among countries. There were several country reports presenting the national genetic evaluation system for beef. A group discussion followed in which participants were asked to express their opinion regarding priorities for traits and breeds, information and communication

expectations, and industry acceptance, all in relation to the Interbeef project.

Priorities

Regarding priorities for traits, all participants agreed that attention should be focused on weaning weight, carcass weight, and calving traits. Charolais and Limousin were considered to be good choices, mostly due to the good level of connectedness that these breeds showed during the EUBEEVAL research project.

Concerning other breeds, Simmental was considered as most suitable, due to the probability of high connectedness among countries, especially in Europe and the USA. It was also noted that an expansion across breeds rather than across traits would be preferable at the beginning of Interbeef activity in order to increase interest for the project among countries.

Quality of data

A lot of attention was dedicated to data quality. It was clear that data recording and data editing procedures differ greatly between countries. In France, for example, all animals whether they are registered into a herd book or not, are recorded. In the United Kingdom only purebred animals are recorded, while in Ireland the recording system is determined by each individual breeder. In the USA breeds are independent from the other, and the recording system varies greatly between breed organizations. Also, it was pointed out that definition of “weights” did not always correspond from country to country. All these situations combined could lead to difficulties in estimating international breeding values across breeds and countries. A common agreement was to follow ICAR guidelines for beef performance recording and to utilize Interbull past experiences in harmonization data recording and genetic evaluations. It was suggested that Interbull creates a genetic evaluation form (BEEF form), designed for the beef industry. All countries willing to join

Interbeef will be asked to submit such a form, thereby providing information about their national recording system, with particular attention to explanations for own editing measures. Knowing how the beef recording and genetic evaluation system works in each and every country could result in the useful establishment of editing guidelines. Interbull was designated to develop a verification program and to make it available to the countries willing to join Interbeef.

Communication and information

The general consensus about information and communication issues was to organize regular workshops especially related to data quality matters and to the creation of an Interbeef forum to facilitate the flow of information and documentations among participating countries. Data security was also recognized as an important issue, and the participants in general agreed to utilize Interbull experiences for handling this important question.

Literature

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