INTERNATIONAL DAIRY FEDERATION - GERMAN NATIONAL COMMITTEE

NEWSLETTER

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FRIDAY 25 SEPTEMBER 2009

IDF World Dairy Summit
United Dairy World 2009

BERLIN 20-24 SEPTEMBER

PLEDGE TO A SUSTAINABLE DAIRY SECTOR

Richard Doyle
IDF President

A successful beginning for a sustainable dairy sector

Why is the Global Dairy Agenda for Action so important?

The Agenda for Action is about sharing technologies, knowledge and practices within the global dairy industry to achieve a reduction in emissions. It makes sense to reduce GHG emissions as it saves money and improves efficiency in production. This initiative encourages and shares new and innovative technologies and practices for including energy efficiencies on our farms, by food manufacturers and in our warehouses.

Why is the Declaration so unique?

The idea of this Declaration is about a year old with the idea coming from New Zealand. Today seven organisations have come together for the first time to address the challenge of climate change and sign a global declaration on behalf of the world's dairy associations and companies. The members of these companies represent about 85% of milk processing worldwide.

Did the dairy industry change on September 24?

On 24th September was the first important step. We now have the online catalogue of more than 260 initiatives illustrating the continuous improvements already made by dairy sector. Our next step is to have a firm dialogue in the dairy sector about other initiatives and improvements in ongoing initiatives.

Can you explain a little about how the project will work?

IDF will maintain the website, the Green Paper portal, and constantly be updating it with new information. I think the portal is a great way to show that the worldwide dairy industry is addressing the issue of sustainability. It is also a good opportunity for dairy farmers and anyone working in the dairy chain to visit the portal and learn about the initiatives of others, perhaps even finding inspiration to create their own initiatives.

There are some good initiatives that already exist in the dairy industry, for example, Arla Food's project that pledged to reduce GHG 25% by 2020. Since 2005 they have already reduced by 7.5%.

You seem very enthusiastic; do you think this collaboration will be a success?

The global dairy industry is working together in a unique way and many people from dairy organisations to the dairy industry and farmers have worked together on the development of the Global Agenda. It is a good Agenda. Our portal will inform politicians, governments and consumers that the dairy sector is making progress on GHG and are responsible for healthy products while maintaining a respect for the environment.

Can you give some examples of the targets you have for the future?

Setting targets is difficult because of the diversity of the industry. We will target a reduction in emissions though much will depend on how effective we are able to share best practice research, knowledge and technologies.

COLLABORATION TO TACKLE CLIMATE CHANGE

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"Now is the moment to sign Global Declaration on Climate Change"

Wesley Judd is president of both the Australian Dairy Farmers and the International Federation of Agricultural Producers (IFAP). He shares his views on this collective initiative on climate change.

Why do you say it is the right time for IFAP for signing?

Milk prices have hit an all time low, too low for farmers to have a reasonable income for their families. At the same time we understand that the problems with GHG have to be solved and most of these emissions are from the activities at farm level. For IFAP that is part of the reason to sign the declaration. It is clear that the reduction of GHG is a collective problem and not only one for the dairy farmers. The cost of reducing GHG is also a collective matter.

What do you mean by part of the reason for IFAP to sign?

The other reason is simple. We must reduce GHG in the period of a growing world population and, therefore, there must be a balance between the reduction of GHG and food production. During the last 20 years there has been an increase in milk production because of the consumers; we are big user of natural resources and bring a lot of employment to the rural areas. I believe we need collaboration from other partners in the dairy chain in order to solve these problems. We also shouldn't forget, when dramatic measures are taken too rapidly at farm level, it will effect milk production.

What is the best element of the Global Dairy Agenda?

For me it is the size of the initiative. The Green Paper will demonstrate a comprehensive overview of all the ongoing initiatives. That is what we want and so together, with all partners in the chain, we can reduce GHG.

What will be the next steps for IFAP?

The work has just started for all of us. There are still dairy farmers who have to recognize the problems yet and we have to ensure that everybody takes their responsibility seriously. We will rely heavily on science in bringing us new ideas, new methods and new technology and we will also need governmental partnership to solve these problems.

Do you believe you will succeed in solving these problems?

Yes, I am quite sure that the dairy sector as a whole can solve this problem. I feel confident that agricultural production will be a part of the solution.

Wesley Judd
President of International Federation of Agricultural Producers (IFAP)

THE GLOBAL DAIRY AGENDA FOR ACTION HIGHLIGHTS

Worldwide dairy industry signs Global Declaration on Climate Change

In Berlin (DE), seven organisations signed the Global Dairy Agenda for Action on climate change. The declaration is an industry pledge to reduce carbon emissions as part of its contribution to help address global warming. This pledge builds on past performance to address climate change.

The global dairy industry has a shared interest with governments and the global community to produce nutritious food for today and for future generations in a sustainable way. The declaration also seeks the support of policy makers to provide a supportive regulatory policy environment that recognises the important economic, social and environmental contributions of the dairy industry.

Povl Krogsgaard presenting the Greeen Paper at the signing ceremony

Five point commitment

In order to facilitate the industry's efforts to reduce GHG and promote the long term sustainable supply of milk and dairy products, the Global Dairy Agenda for Action consists of a five point commitment.

1. To promote the development of a standard methodology framework for assessing the carbon footprint of milk and dairy products based on robust science.
2. To promote adoption of the world's best practises and actions regarding reducing GHG and complement initiatives in other areas of sustainability within the global dairy sector.
3. To advance the establishment of tools to facilitate measurement and monitoring of emissions both on-farm and in dairy manufacturing.
4. To promote improved farmer understanding of agricultural emissions and opportunities to reduce greenhouse gas emissions on farm.
5. To support the sharing of information and aligning research efforts to develop cost effective mitigation technologies for both on farm and manufacturing applications.

Mr. Brian Weech, director livestock of World Wildlife Fund (WWF), warmly supported the initiative of the global dairy sector and is anxious to see what the next steps will be. 'WWF will follow these initiatives closely', he said.

The Global Dairy Agenda for Action is intended as a living document and committed to reporting progress on a regular and transparent basis. The first such report will occur 24 months from the date of signing, 24 September 2011, and biannually thereafter.

The declaration was signed by Richard Doyle, President of the International Dairy Federation (IDF), Alfonso Moncada Jimenez, Coordinator for the harmonization of standards for the Central American and Caribbean Dairy Sectors of Pan-American Dairy Federation (FEPALE), Hans Jöhr, President of the Sustainable Agricultural Initiative Platform (SAI-Platform), Toon van Hooijdonk, Vice Chairman of Global Dairy Platform (GDP), Wesley Judd, President of the International Federation of Agricultural Producers (IFAP), Werner Buck, President of the European Dairy Association (EDA) and Bertus de Jongh of the Eastern and Southern African Dairy Association (ESADA).

FOOD SAFETY AND HYGIENE CONFERENCE HIGHLIGHTS

The OIE activities for the containment of antimicrobial resistance

By Elisabeth Erlacher-Vindel, Deputy Head, Scientific and Technical Dept., World Organisation for Animal Health (OIE)

Antimicrobial resistance is related to the use of antimicrobials in any environment. The dairy industry uses antimicrobials to treat animals for health and welfare reasons and also to prevent mastitis as a specific need for dairy cows. Antimicrobial resistance may also be of concern to the dairy industry as resistant bacteria may be present in the milk or in dairy products.

OIE work in area of anti-microbial resistance

OIE as the international standard setting body for animal health focuses mostly on animal health and food safety linked to animal production, such as milk and meat. In recognising the risks associated with the development of antimicrobial resistance, the approach of the OIE has been to create an acceptable balance between the use of antimicrobials to promote animal health and welfare, and the dangers emanating from the possible misuse of antimicrobials.

To assist its 174 Members, OIE has published standards and guidelines for the responsible use and the monitoring of antimicrobials that are regularly updated.

In parallel the OIE recognises the need for Members to implement new standards and has therefore developed several initiatives to achieve this goal. Some of these include helping countries to have functional veterinary services and laboratories.

OIE has published guidelines to detect and quantify antimicrobial resistance. There are general indications for countries on how they can implement such a surveillance and monitoring programme and adapt it to their situation. OIE has also elaborated a methodology to conduct risk assessment for antimicrobial resistance arising from the use of antimicrobials in animals and participates in the Codex task force that works on food-born antimicrobial resistance.

OIE promotes responsible and prudent use of antimicrobial agents in veterinary medicine, in the objective of preventing and reducing the transfer of resistant bacteria from animals to humans and between animals. They provide guidance on who is responsible for what, i.e. the authorities, the veterinary drugs retailers, the veterinarians and breeders. OIE has also established a network of focal points on veterinary products and conducts training sessions to ensure they are aware of the correct standards.

Collaboration is vital

International interdisciplinary cooperation is essential on the issue of antimicrobial resistance and there is room for IDF and OIE to enhance their collaboration in this area. There already exists a good exchange of information with OIE being part of the IDF Standing Committee on Animal Health, however there is a need to bring together the animal health committee and the hygiene experts and be aware of the continuum of the entire production chain with regard to antimicrobial resistance.

Modern concepts of microbiological risk management, from a hazard-focused to a risk-focused approach

By Olivier Cerf, Professor emeritus, Alfort Veterinary School, Maisons-Alfort France

What is the current state of risk assessment practices?

More risk assessments are being done in research laboratories and public institutions. There is also an increase in governments creating risk evaluation agencies that recruit risk assessment scientists and thus more risk management decisions by the competent authorities are based on outcomes of risk assessments.

The risk assessment process is challenging in terms of resources and time, which is why the work done so far has focused on the most urgent public health problems.

What is the difference between the hazard-focused approach and the risk-focused approach?

According to the hazard-focused approach as enforced in most industrialized countries, it is the responsibility of the food business operators to reduce the level of hazards in foods.

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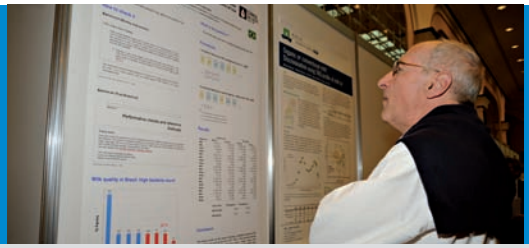
ANALYSIS AND SAMPLING CONFERENCE HIGHLIGHTS



The risk-focused approach, on the contrary, is centered on the so-called level of protection of the public health. According to this approach, the State should first decide on their appropriate level of protection (ALOP) and then determine the corresponding maximum levels of hazards in food at the time of consumption, the "food safety objectives" (FSO). It is the responsibility of the food business operators to derive their own objectives and optimize their hazard control measures to achieve the FSOs.

The hazard-focused approach effectively provides a satisfactory level of protection and is easy to implement, but works "blindly" and is less economical. By contrast the risk-focused approach, though complex and time consuming, is sounder scientifically speaking, more efficient and has a clear aim.

The merits of the two approaches should be weighted depending on the importance of the studied risk and the available resources and time frame.

What are the strengths and weaknesses of current risk assessment methodologies?

The strength of the current methodologies for risk assessment consists of a good mathematical model, even if used with poor data, allowing to determine which hazard mitigation actions would be more useful, and sometimes to uncover some counterintuitive ones. However, the biggest weak point is the collection of valid data, and the correct elicitation of expert opinions. Another problem is the need to distinguish between the uncertainties (lack of valid data) and the variability of the biological world.

What new elements will enhance microbial risk assessment capabilities for the future?

Observatories of the new technologies, new modes of consumption, emerging hazards, etc. could be helpful for the gathering of the data needed within the risk assessment context.

Reference systems

By Harry van den Bijgaart, Ph.D., Qlip NV, NL

The dairy sector applies many so-called routine methods in analysing milk and dairy products. These routine methods need to be calibrated against the official reference methods. In many situations this is a straightforward process, though in some situations is not, particularly where the reference method is cumbersome and lacks sufficient precision. That is where a reference system can be a complementary option for safeguarding equivalence of analytical results worldwide. Moreover, such a system can help to create robustness in reference method analysis by individual laboratories in more general.

Under the aegis of the IDF Standing Committee on Statistics and Automation, the feasibility of a reference system approach is at present being explored with somatic cell counting as a first example. The project is undertaken in joint cooperation with International Committee for Animal Recording (ICAR).

The Project Group not only focuses on the creation of a reference system from the building blocks as such, but also on the communication of the concept. For a successful implementation, a clear understanding and final acceptance of both laboratories and other stakeholders such as accreditation and regulatory bodies is essential.

ANIMALYSIS AND SAMPLING CONFERENCE HIGHLIGHTS

New development in alternative methods

By Christian Baumgartner, Ph.D., Bavarian Association for Raw Milk Testing, DE

Alternative methods are used - instead of the established reference methods - for different reasons. Low costs, savings in time and labour input regarding a single sample, but also feasibility of mass analyses in general are the major driving forces to use alternative methods. The positive cost effects differ of course between the methods. For fat determination, we know that the use of the Gerber method was superseded by modern infrared techniques with an efficiency ratio regarding necessary manpower of >700. This indicates the potential which lies in alternative methods.

Alternative methods are using modern techniques of automation and data processing (data validation and data handling). But the main profit is deriving from using physical or biological effects, which are much more suitable and sapient for the intended purpose than many of the chemical methods used as reference methods since many decades or even centuries. New chemometric methods for linking those physical effects to target parameters are also an essential part of the success of alternative methods today.

Food safety requirements are to have available safe and sound analytical results at any spot of the food chain in order to be able to assess food safety issues in a proper way. As decisions in the food chain are conditional on results on the single production stages, time plays an important role in the whole process. Alternative Methods are in general quicker and less costly than reference methods, so they can be used more widely and they shorten reaction times, what saves again costs. Especially the authorities´ capacity to act is strongly depending on rapidly available results from tests of questionable lots or samples.

Sampling

By Rob Crawford, Fonterra, NZ

Analytical work in the dairy sector is performed to provide assurances to the customer, regulatory authorities to the manufacturer that the dairy product is safe to consume and is fit for purpose. Because most, if not all, analytical test methods in some way damage the test portion being analysed it is impossible to test one hundred percent of any quantity of dairy product and still have product remaining for the producer to sell. Therefore sampling is an integral part of any food assurance programme. Sampling therefore must be conducted in a way that fairly represents the product being assessed

There are many ways the results from a sample can be interpreted depending on exact reason why the sample was collected. For example, if a sample is taken to facilitate payment for milk by a farmer then the farmer and processor are interested in the average fat and protein levels in the milk supplied, whereas a food safety authority may sample dairy products over a range of factories to obtain the range of levels of some parameter in the food chain.

It is always important to ensure that samples are handled correctly to ensure that the sample is representative of the milk, ingredient, or product that it represents. It is important that staff are correctly trained in sampling technique, that they have the correct apparatus, that samples are kept in appropriate containers and stored/ transported under appropriate conditions. ISO707|IDF50 provides guidance on these.

ALSO IN THE NEWS

State-of-the-Art Dairy Science and Technology

By Prof. Dr. -Ing. U. Kulozik

The conference was an open event with the intention to enhance communication between all areas of dairy science and technology on aspects surrounding processing and technology, physical, chemical & analytical science, microbiology & biotechnology. It also aimed to support progress in the dairy industry by means of modern processes and consumer preferred products.
Twelve scientific presentations and a poster-session with contributions from 22 countries focused on novel insights related to:

- Processing and Technology • Physical, Chemical and Analytical Sciences • Microbiology and Biotechnology

Key presentations included:

- The effect of Microfluidization on formation of beta-lactoglobulin fibrils, Lizhe Wang, Moorepark Food Research Centre, IR
- Thermally induced particle formation in whey protein concentrates: modelling for process optimisation, Alexander Tolkach, Technical University of Munich, DE
- Milk Fat Globule Membrane Phospholipids: A new application in liposomal delivery system, Bita Farhang, University of Guelph, CA

The posters session completed the overview with more than 70 posters on up-to-date themes, such as:

- Membrane Technology • Thermal Processing and Novel Processes • Starter Cultures and Probiotic Lactobacilli
- Physiology of Lactation and Milk Quality • Protein Technology and Structure Formation
- Nutritional Aspects of Isolation and Enrichment of Milk Substances • Microbial Safety and Consumer Perception

Highlights of Gala Dinner

The IDF World Dairy Summit Gala dinner last night was extremely well attended and considered a huge success.

The evening took place with the impressive backdrop of Hangar 2 at Tempelhof airport where around 1000 people arrived to experience the extraordinary cultural program of culinary surprises where chefs prepared specialties from Germany's different regions at various live cooking stations.

Participants were provided with the opportunity to network and discuss outcomes from the week in a more social and relaxed environment.

Updated information
www.wds2009.com

Responsible Editor: Marylène Tucci, *IDF Communication Officer*
Layout: Oscar Chavez, *IDF Office Manager*