Participation of the SA dairy industry and its projects, via SANCIDF, in the activities of the IDF

(PRJ-0186-2018)

South African National Committee of IDF

Quarter 3 2018/2018 (July 2018 till September 2018)

Project goals

Goal 1 - Review SA representatives on IDF bodies (SC'S, AT'S ETC) so that the best qualified persons can represent SA on these bodies

Achievements

No new representatives were appointed during this quarter

No Non-achievements / underperformance has been reported

Goal 2 - Ensure appropriate and timely (before set deadlines) inputs by SANCIDF and SA representatives on IDF bodies to IDF

Achievements

One questionnaire, 0118/SCNH SCMH SCDST The technology of pasteurisation and its effect on the microbiological and nutritional aspects of milk was completed and one questionnaire, 0218/ SC MH SCDST - Inventory of Microbial Food Cultures - with safety demonstration in fermented food products was received.

No Non-achievements / underperformance has been reported

Goal 3 - Promote the forthcoming World Dairy Summit (Daejeon, South Korea) amongst dairy industry role-players by forwarding all promotional e-mails to MPO/Sampro/DAFF representatives and South African SC members as well as articles about WDS 2018 in industry magazines

Achievements

The following 5 news-mails promoting WDS 2018 were received during this quarter and all were forwarded to industry leaders, SC members and associate members of SANCIDF:
IDF World Dairy Summit 2018 - Tour Programme
IDF World Dairy Summit 2018 - Summit Programme

IDF World Dairy Summit 2018 Wednesday, 17 October Programme
IDF World Dairy Summit 2018 Thursday, 18 October Programme

No Non-achievements / underperformance has been reported

Goal 4 - Send a delegation of SANCIDF officials to attend the World Dairy Summit

Achievements

Not applicable to this quarter

No Non-achievements / underperformance has been reported

Goal 5 - Delegates to the WDS to give meaningful feed-back to the local dairy industry within one month after their return in a format prescribed in a contractual agreement with SANCIDF

Achievements

Not applicable to this quarter

No Non-achievements / underperformance has been reported

Goal 6 - Liaise with IDF re sustainability and environment by providing timeous input from SA and communicating information from IDF to the SA industry

Achievements

Report of Dr Heinz Meissner, SA member of SCENV:

Documents attended to:

1. Comments on the document: GHG Emissions Indicator – Baseline Establishment, October 2017. [Comments addressed to Jess Lindsay, wife of Brian Lindsay].

The suggested global figure of 2.9 kg CO2 eq/kg FPCM appears appropriate. However, I wish to point out that South Africa (SA) again appears to be included in the category ‘Sub-Saharan Africa’, as the FAO always does despite repeated requests that SA should be considered on its own. Tier 2 estimates indicate that the national average of SA is about 2.3 (2.1 to 2.5) kg CO2/kg FPCM, whereas the 20% top large herd farmers have GHG emissions as low as 1.3 to 1.6 kg CO2/kg FPCM. Also, preliminary measured CH4 emissions from pasture-based systems (to enable calculation on a Tier 3 basis) indicate that CH4 emissions from enteric fermentation could be 5-10% lower than calculated from Tier 2 estimates.

I also wish to make a general comment, which I also made to Laurence Rycken as a comment on the Protein White Paper draft: In international organizations (white papers/policy documents/Guidelines) we continue with estimates which only consider carbon emissions, whereas there is now substantial literature which also takes into account carbon sequestration. If one takes sequestration into account there are dairy farms which may be almost ‘carbon neutral’. I think we should consider moving towards calculations based on the net effect (C emissions – C sequestration), which will provide a more comprehensive picture of where we need to concentrate in research/education/management.

2. Comments on the document: Draft IDF White Paper on Dairy Protein. See Annexure 1 (Comments in red). [Additional comments below addressed to Laurence Rycken].

In the previous communication I forgot to mention the following: The IDF-DSF, FAO, IPCC and everybody else only consider GHG **emissions** when they talk about or estimate the carbon footprint of the dairy industry (all livestock industries). What about carbon **sequestration**?! This becomes even more crucial when comparisons are done with other products (in this case protein). One needs to consider carbon emission minus carbon sequestration, i.e. the **net effect**. If one does that, many dairy farms have a zero carbon footprint – which should be a powerful argument.

3. Comments on the document: LEAP3 PROJECT PROPOSAL: ACTIVITIES AND DELIVERABLES. [Comments addressed to Caroline Emond and María Sánchez Mainar].

In general, I support the comments made by you on the LEAP3 Draft, but would like to submit the following:

a) Under the General Objective: Although I understand the reason to do so, I am concerned if we try to distinguish between countries with high and low environmental footprint. We have industrialized (high) and non industrialized (low) countries, but industrialized countries in terms of agricultural (and therefore livestock) environmental footprint may be low per unit product produced because of particular measures such as improved efficiency and production system employed. Overall though the agricultural (livestock) environmental footprint may still be higher because of total scale of activity and numbers compared to non industrialized countries. Also, production system is a function of investment and resources, which sometimes are not available in poorer countries. Another factor, which I have emphasized before, is environmental footprint must be calculated as the net between GHG emissions and carbon storage/sequestration. It is of little use if one increases efficiency by intensifying (lower GHG emissions) but one's carbon stocks and sequestration are low because of conventional tilling practices and high inorganic fertilizer use to produce the corn and soybeans which one uses in the rations of the animals. I can add further examples. This shows that it will be extremely difficult to effectively distinguish between countries with low and high environmental footprint. Some, as yet, haven't even done the calculations.

b) Agriculture (and therefore the livestock sector) has a huge obligation to assist in limiting CO2 accumulation, by yes emissions reduction, but even more so by the carbon sink (sequestration) method. To stimulate participation by global farmers incentive schemes, and to provide suitable carbon offset avenues for companies with high footprints, need to be developed in a standardized way (meaning through guidelines that are suitable to everyone). I therefore support the intended LEAP3 intention of work towards Ecosystem Services, Eco-Toxicity, Biomass carbon stocks and stock changes, etc.

2. Work items of the SCENV:

Nothing to report at this stage, Meetings and discussions will be at WDS 2018.

Annexure 1:

IDF WHITE PAPER ON DAIRY PROTEIN

(version 28 OCTOBER 2017) By Jaap Evers

Key recommendations (My comments in [square brackets]

The TF NCF is invited to consider the following recommendations:
Determine the need whether this draft white paper should be developed further. [**Yes**.] If so, which aspects? Potential issues are listed in Appendix 1. **[Suggestions under Appendix 1 below.]**
IDF has several initiatives underway relating to dairy protein (e.g. within SCNH, TF NCF, SCAMC). However, it appears that an overarching strategy is lacking. To address this would go beyond the current mandate of the TFNCF. Hence, the TFNCF should consider recommending to SPCC that an overarching strategy is needed and to suggest to the SPCC how this could be achieved within IDF. [**An overarching strategy is required as one cannot consider protein requirements/quality/potential production etc in isolation. It is affected by capacity and economics to produce, environmental constraints, global trade possibilities, consumer variability across the globe etc**.]

Appendix 1 Issues that could potentially be (further) addressed in a next iteration of the white paper

In-depth assessment of sustainability claims of dairy and dairy alternatives
Lack of standardised methodology for plant based protein sources. Yes, enormous shortcoming
Milk: IDF methodology Fat & Protein corrected milk basis yes, must be on FPCM basis.
Effect of nutrient density **[Yes, arguments about AA composition and requirements are part and parcel of the larger nutrient density argument and if GHG emissions are part of the discussion, then the carbon footprint must be calculated relative to nutrient density (you eat a 'package' of nutrients, not only protein!)]**
Gap in international policies - Developed vs developing countries. **[Yes, large problem, but not only in terms of policy but also what is possible and what not. One example: in dry (mostly developing countries) water requirements of livestock can be satisfied largely by cheap stored sources of rain water. To change to vegetable and fruit on an equivalent basis will require major infrastructure and irrigation development, plus other investments (energy use, distribution material etc). This is hardly achievable. In terms of culture and habit: People in developing countries use livestock for a number of purposes which cannot be substituted by alternatives.]**
Protein content of "whole food" vs isolated protein. **[Yes, both are important].** Plants generally contain less protein than in cow milk. How does portion size affect protein quantity? **[Yes, portion size becomes important in comparison, but preferably supported/expressed by AA composition and nutrient density.]**
Communication strategy for IDF. **[Yes, of course]**
Identify the science gaps and evaluate them. **[Yes, of course]**
Analyse consumer trends: e.g. protein supplements becoming more mainstream; used to be for bodybuilders only, but now many gym-goers and non-gym goers consumer it. **[Promotion, as we do in South Africa]**
Methodology: A key requirement is that agreement on the definition of protein has to obtained, because it will define the fitness-for-purpose of any future method. This definition should take into consideration both the chemical and the nutritional aspects of proteins, and it should be accepted not only by the dairy sector, but by the food community at large. **[Yes, crucial]**
Methodology: as more protein alternatives will come on the market, hybrid products (part dairy protein, part alternative protein) will likely emerge. This will require method development/validation (*e.g.* matric effects). **[I suppose so]**
Methodology: how could different methods be correlated, i.e. what is the best method and how do standards correlate? **[Correlation up to now has been rather poor, which suggests that conversions and standards generally are product specific. Shouldn't we accept that even if it is rather inconvenient?]**
Methodology: In the protein quality space, the dairy sector is providing funding to validate a new method (DIAAS). What is the possibility that investment in the protein quantity space would speed up development of a reliable and fast method for determining protein content? How much funding would be required (probably much less than for the DIAAS method). **[The DIAAS method is comparatively sound and maybe appropriate. If a reliable and fast method is to be developed, it should nevertheless concur with the principles of DIAAS.]**
Identify which other organisations are working on (dairy?) protein and map out their initiatives. **[?]**
Response to the threat that the evidence related to protein intake in early infancy and obesity will be extrapolated. **[I do not understand the question.]**

No Non-achievements / underperformance has been reported

Goal 7 - Fund travel and accommodation expenses to SANCIDF officials and SC members who need to travel to attend Exco and AGM meetings

Achievements

No meetings were held in this quarter that required members to be reimbursed for traveling expenses.

No Non-achievements / underperformance has been reported

Goal 8 - Obtain annual reports from South African representatives on IDF bodies (Standing Committees, Action Teams, etc)

Achievements

This is not applicable to this quarter as the AGM took place in the second quarter

No Non-achievements / underperformance has been reported

Goal 9 - Promote the use of IDF Bulletins and Standards (SANCIDF subsidy of 50% applies)

Achievements

One Bulletin, N° 493/ 2018, "Proceedings of the 6th Paratuberculosis Forum" was received during the quarter and industry leaders were informed of this new publication of IDF.

No Non-achievements / underperformance has been reported

Goal 10 - Make information about documents produced by the IDF (Bulletins, Standards and Newsletters) available to levy payers and the general public by publishing the titles on the Milk SA website and in The Dairy Mail and Milk Essay

Achievements

During this quarter the following publications was received from IDF
Bulletin N° 493/ 2018, "Proceedings of the 6th Paratuberculosis Forum"
September 2018 - IDF Team Update
IDF: Team insights 2018 – The State of Food Security and Nutrition in the World
The International Dairy Federation I Animal Health Report which addresses key issues affecting the dairy sector. The report is a worldwide journey through the field of animal health and welfare within dairy and provides insights on topics including animal welfare, mastitis, antimicrobial resistance and biosecurity.

These documents will be available on the Milk SA website

No Non-achievements / underperformance has been reported

Income and expenditure statement

Income and expenditure statement	finstate MSA Q3 20180930.pdf finstate MSA summary Q3 20180930.pdf
Unnecessary spending during period	No

Popular Report

Q3 2018 POPULAR REPORT.pdf

Additional documentation

No file has been uploaded

Statement

Levy funds were applied only for the purposes stated in the contract	Yes
Levy funds were applied in an appropriate and accountable manner	Yes
Sufficient management and internal control systems were in place to adequately control the project and accurately account for the project expenditure	Yes
The information provided in the report is correct	Yes