gdaa

The Global Dairy Agenda for Action

dsf

Dairy Sustainability Framework

Annual Report **2015 - 2016**

A collaborative approach to sustainability in the global dairy value chain

The vision of the Dairy Sustainability Framework is:

A vibrant dairy sector committed to continuously improving its ability to provide safe and nutritious products from healthy cattle while:

1. Preserving natural resources

2. Ensuring decent livelihoods across the industry

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The DSF welcomes those working in the dairy value chain who wish to either share existing initiatives or establish new sustainability programs that will align with the global vision and key criteria.

Interested parties are encouraged to contact:

info@dairysustainabilityframework.org
www.dairysustainabilityframework.org

Chairman's Introduction

It is my pleasure to provide the introduction to the 2015 - 2016 Dairy Sustainability Framework (DSF) Annual Report.

The Framework continues to evolve as we learn and adapt to address points made by stakeholders and to ensure a robust mechanism that demonstrates the sector's continuous sustainability progress.

After 30 months of operation, the governors have commissioned SustainAbility, the consultants who assisted in developing the DSF, to conduct a Post Implementation Review (PIR). The objective of the PIR is to pro-actively assess the progress made and to help chart the course for the next stage of development. The outcomes of the PIR and future plans for the DSF will be shared at a special meeting to be held in advance of the World Dairy Summit in Rotterdam in October of this year.

Over the past year, members of the Dairy Working Group of the Sustainable Agriculture Initiative Platform (one of the GDAA governor organizations), undertook a series of five pilot studies focusing on capturing the process of 'getting started' as a member of the DSF. Each pilot was in a different geography and each had a different approach and experiences as they developed their respective models.

The learnings from these pilot projects along with feedback from other members of the DSF, customers of dairy and the broader stakeholder community, will be considered as part of the PIR project.

We have also been working to expand and understand the DSF's engagement with emerging dairy nations. Working in support of the FAO multi-stakeholder program, the Global Agenda for Sustainable Livestock, the GDAA and DSF were able to support initiatives such as Dairy Asia and LEAP. This work has demonstrated the flexibility of the DSF as a framework that can engage in emerging as well as established dairying regions.

Key to reporting of the DSF is the development of indicator metrics for the 11 sustainability criteria. In 2016 we will launch the first three with a plan to address a further three each year until all criteria are covered. These indicators will enable us to track and report the sector's continuous improvement.

Meeting with and continuing the work with the GDAA Advisory Council has been highly valuable to the development of our thinking about the way in which the DSF can evolve to address existing and emerging sustainability challenges and opportunities. The governors would like to express their thanks to the members of this multi-discipline Advisory Council for the thoughtful contribution they are making.

We have successfully developed and implemented the 'Aggregating' approach for membership of the Framework. This allows countries, regions or even small groupings of dairy sector organizations who are collaborating on sustainability programs to register and report through one coordinating body. Already we have three Aggregating Members - representing 187 organizations in total. This model demonstrates the flexibility and inclusiveness of the DSF as a framework that allows for local ownership and management while at the same time enabling the DSF to scale more quickly.

To further communicate the DSF on a global level, we have produced a number of videos, hosted on the DSF website, answering frequently asked questions about the Framework. These are available in six languages.

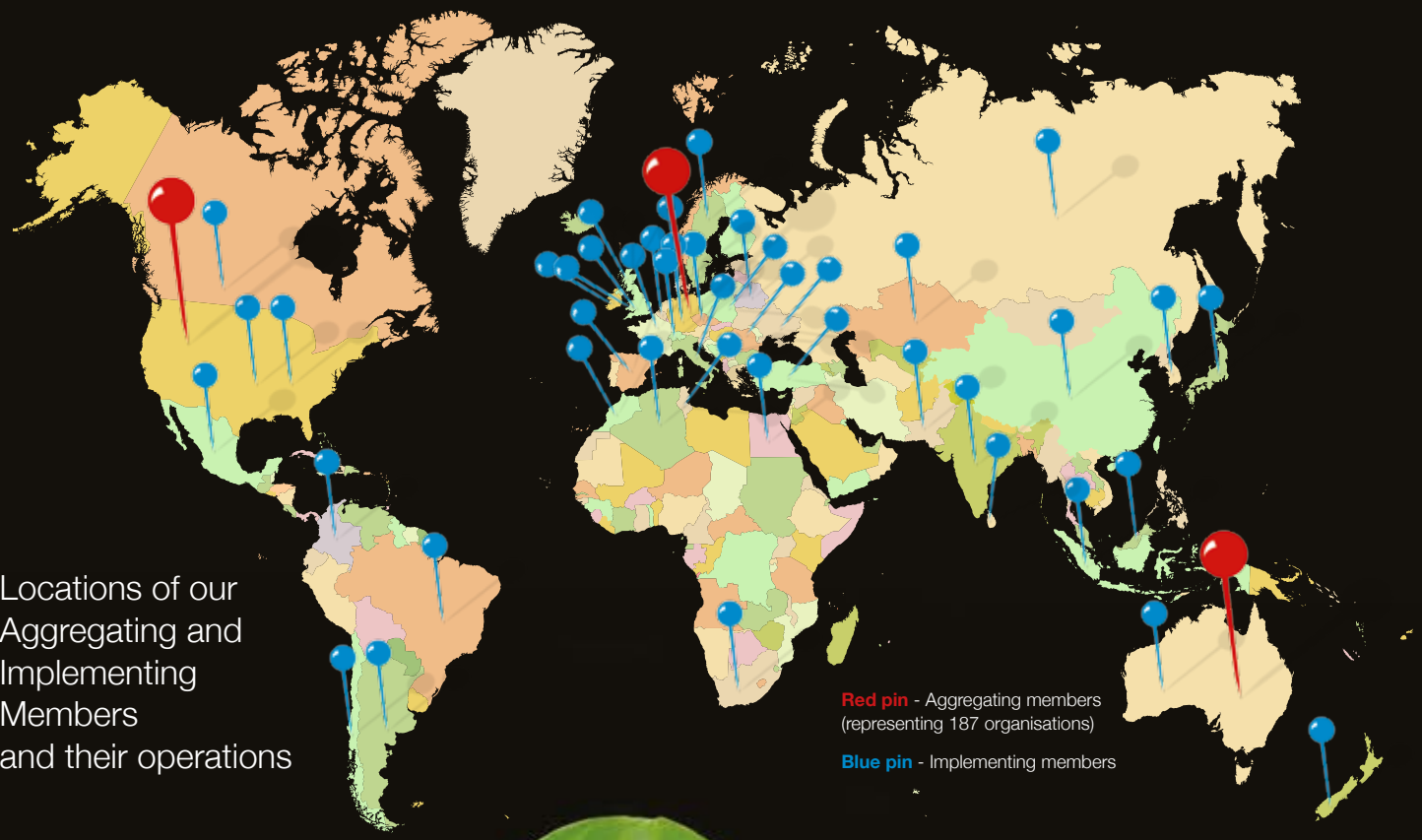
I am sure that the next twelve months will be an exciting time for the GDAA and the DSF as we evolve to the next phase of development.

I encourage you all to take the opportunity to provide your feedback to the PIR process (due to be completed in July 2016) via the online survey, details of which will be sent out to all members.

And finally I would like to offer my thanks to my fellow governors, the secretariat and all members of the DSF for their passion and commitment to a more sustainable dairy sector.

Donald Moore

Donald Moore - Chairman GDAA



Locations of our Aggregating and Implementing Members and their operations

The objective of the DSF

The Dairy Sustainability Framework (DSF) is a global, pre-competitive and collaborative project led by The Global Dairy Agenda for Action (GDAA), involving dairy stakeholders from around the globe.

The DSF provides an umbrella mechanism for organizations from throughout the dairy value chain to map and connect their sustainability activities with other similar organizations in a coordinated way. The DSF, through the provision of annual progress reports from members, will monitor and report on these activities, demonstrating the sector's continuous sustainability improvement.

The Framework exists as an innovative way for the sector to develop its sustainability improvement plans. Recognizing the diversity in dairy production and processing globally the Framework is sufficiently flexible to accommodate both the wide variation in approaches and the different starting points of members. It is the local setting of priorities, progress measures, and the quantification of progress against these, that is the underpinning basis of the DSF's ability to report sector-wide continuous improvement.

The Dairy Sustainability Framework has been designed on the following three principles:

Align

Ensure regional or localised sustainability programs are aligned under the sector's vision for sustainability

Connect

Bring together all regional and local activity and share this with the membership to increase the speed of solution finding

Progress

Through a collaborative and focused framework, the speed of activity and subsequent progress is accelerated

Align

Ensure regional or localised sustainability programs are aligned under the sector's vision for sustainability

The DSF has 11 key Sustainability Criteria under which the global dairy industry prioritizes and develops mitigating projects for implementation – it is these projects, with appropriate measures, under which members quantify progress.

Members are able to align their programs under these Criteria and demonstrate activity over a wide range of initiatives.

Greenhouse Gas Emissions	51
Soil	7
Soil Nutrients	15
Water	18
Waste	17
Animal Care	17
Market Development	15
Product Safety and Quality	20
Biodiversity	16
Working Conditions	9
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Table 1 Number of initiative per Criteria currently being tracked by the DSF

A **Review** of the Year

Updated growth statistics of the DSF over the past 12 months (from the 2014 report)

30.8 million Cows
up
42%

3700 Processing plants
up
78%

662,000 Farmers*
up
15%

211 billion litres processed
up
38%

658,000 Farms
up
11%

27% of the global milk production
up
10%

* Some farms may have multiple owners including family members


The Dairy Sector: Ready to Help Achieve The Sustainable Development Goals

Working together

A key development of collaborative effort driven by the GDAA was the development of a resource for use by the dairy sector in relation to the COP 21 climate change negotiations. This communicated an aligned approach in both supporting the delivery of the UN's Sustainable Development Goals and the continued desire to improve the sector's GHG emissions performance.

The document, freely available from the DSF website in English and Spanish, continues to be used by the dairy sector to share a consistent message of dairy sector activities in these immensely important topics. This has never been possible previously. Download your copy from the DSF website at www.dairysustainabilityframework.org

Aggregating membership

Recognizing regional sustainability efforts already implemented by the dairy sector in different parts of the world, it was important that the Framework established a way of capturing these activities in a manner that was robust.

Launched in 2015, the 'Aggregator' level of membership is a substantial boost to the Framework.

Simply, the nominated Aggregating organization becomes an 'Implementing Member' and has the same reporting requirements as any other Implementing member, plus the provision of annual case studies. The annual reporting is provided against the targets agreed to between all organizations represented by the Aggregator.

See www.dairysustainabilityframework.org for more information on DSF membership.

Dairy Asia

Dairy Asia
for health and prosperity

The Dairy Asia platform, initiated and driven by a multi-stakeholder leadership group with the FAO acting as the secretariat, brings approximately 15 different Asian countries (both public and private representatives) together to discuss and work towards establishing a sustainable dairy sector in their respective regions.

There is already an excellent working relationship between Dairy Asia and the Dairy Sustainability Framework and it is increasingly evident (as the Dairy Asia platform evolves), that there is substantial benefit to both programs from a closer working relationship. Work is in place to explore the needs of the Dairy Asia program in transitioning from concept to implementation.

Connect

Bring together all regional and local activity and share this with the membership to increase the speed of solution finding.

The member's database was developed during the latter part of 2015 to allow for the input of initiatives and annual reporting by members. The database allows an 'at a glance' view of projects being undertaken throughout the world, connecting and aligning the DSF membership.

The information provided by members into the database is a powerful resource to provide evidence of the continuous improvement of the dairy value chain in its sustainability efforts. It also gives members the opportunity to share projects and to view those underway by others, providing ideas and inspiration of ways to approach sustainability challenges.

The DSF is also developing a tool box of resources which have been identified for members to consider for use in their own situation. The tool box will include a number of papers, tools and examples of solving sustainability challenges. Members will be able to search the database for relevant information. Members, when they identify additional resources, are encouraged to share these with the DSF.

Progress

Through a collaborative and focused framework, the speed of activity and subsequent progress is accelerated.

Global Criteria indicators

In order to report on the continuous sustainability progress of the dairy sector globally, the GDAA Governors agreed in 2015 to the development of 'indicators' that will allow progress reporting under each of the 11 criteria of the DSF.

Three indicators will be developed each year, agreed with the membership and introduced. Each Implementing/aggregating member will be asked to incorporate this indicator alongside their own KPIs/measures and will be required to include these results as part of their reporting procedure to the DSF.

The reporting will be a high level 'indication of progress, allowing the sector to appreciate the 'delta' between each subsequent reporting period. Importantly, this commitment to aggregated global reporting will highlight areas of genuine progress yet also identify areas of lesser progress, triggering a review as to why and subsequent strategy development to address this.

This is an extremely important aspect of the DSF. The Governors have taken considerable time and counsel on how best to report progress in a transparent, robust and meaningful way.

The first three indicators that will be introduced in 2016 are for the criteria:

- **Animal Care**
- **Rural Economies**
- **Greenhouse Gas Emissions**

Aggregating and Implementing Members have been sharing initiatives through the DSF database. Here are a few examples of actual projects making real improvements in dairy sustainability.

Greenhouse Gas Emissions

Since 2009 Dairy Farmers of America have partnered with Ensave, an agricultural energy efficiency service provider, completing over 140 energy audits. These have identified a total of 8,371,492 kWh in annual electrical energy savings and 11,709 MMBtus annual heating fuel savings.

The identified energy savings on these dairies equates to approximately 5,693 metric tons of CO_2 equivalent in annual greenhouse gas emission reductions and US$1,067,360 in annual energy cost savings. One of the more commonly identified opportunities has been in the upgrade of lighting systems (typically from metal halide or high pressure sodium to LED).

Soil Nutrients

Spruce Haven Farm in Union Springs, NY, has been trialing nutrient boom machinery to enable nutrients (raw manure or digestate effluent from anaerobic digesters) to be applied to growing crops.

The prototype manure nutrient boom deposits the liquid digestate at ground level between the rows of growing corn. The nutrient boom can also distribute raw liquid manure.

The initial indications are higher yields from those plots that received the benefit of manure digestate feeding during the corn growing period

Animal Care

Arla Foods' program Arlagården includes a number of detailed requirements regarding animal welfare with all 13,500 farms being assessed every three years.

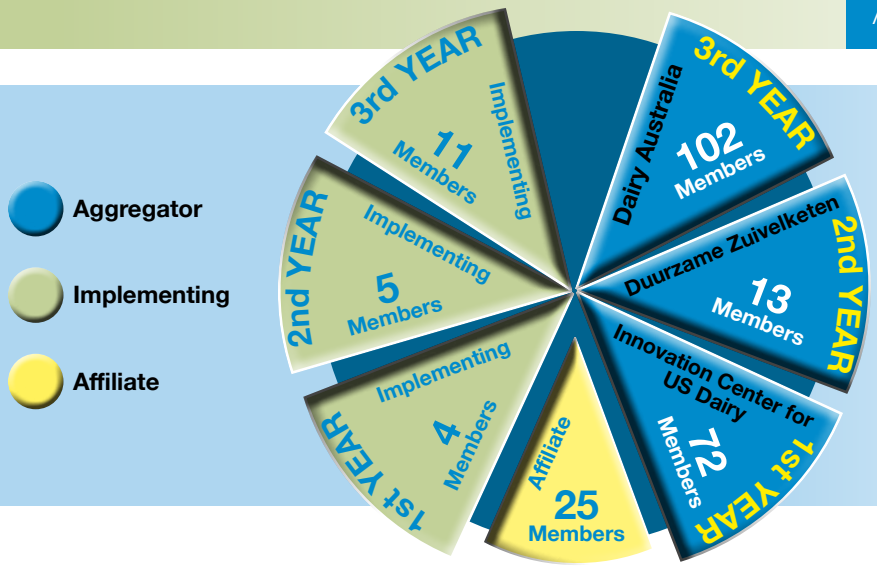
In September 2015, in the UK alone, a series of eight workshops was organised specifically for vets. In conjunction with these seminars, 60 vet-led on-farm workshops followed for 2000 Arla farmers. A key focus was on the farm management measures that can be taken to minimise the risk of infection among cows in the run up to calving, particularly mastitis, and therefore reduce the requirement for antibiotics.

Waste

Dairy Australia's Murray Dairy and the Cohuna-Leitchville Discussion Group are trialling an alternate approach to handling and recovering plastic film used for baled silage wrap and pit covers, currently used on 77% of farms but only recycled by 35%. While this group recycles 82% of their silage wrap, it only represents 28% of all silage wrap used. The trial will use a sturdy, laminated cardboard bin that can be left out in the farmyard where the waste plastic is generated.

Silage wrap is made of a high quality linear low-density polyethylene (LLDPE) and if recovered, can be recycled into plastic products such as pipes, liners, furniture, boards, and stakes.

Aside from the environmental benefits of recycling used materials, recovering plastic that may otherwise have been buried in landfill or burnt (now an illegal practice) will help the dairy industry to meet its customers' expectations around on-farm waste management practices.



Length of membership by type

Rural Economies

Nestlé's Dairy Farming Institute in Northeast China, is one of the company's biggest dairy investments, helping modernise Chinese dairy farming practices to enable farmers to meet the country's fast-growing milk demand in a sustainable manner.

The institute in Shuangcheng district in Harbin, the capital of Heilongjiang province, has trained more than 850 people in 47 courses since it was started in October 2014, with students coming from 15 provinces and four international countries. There are currently 1,225 enrolled at the Institute – aged 25 to 50 years old.

Water

Fonterra and the New Zealand Department of Conservation have a 10-year, $20-million partnership called "Living Water", focused on improving water quality and biodiversity in five significant freshwater catchments in dairying areas across New Zealand.

The partnership works with farmers, local community groups and iwi (the largest social unit in Māori culture) on programs including pest control, riparian planting and research to improve the health of these special places and show that sustainable dairying can be part of healthy functioning eco-systems.

Market Development and Product Safety and Quality

Many initiatives being undertaken by DSF members cover more than one of the 11 Global Criteria. This is just an example.

Rwanda's dairy sector once lagged behind its neighbors. Since 2007, Land O'Lakes International Development has been instituting a dual-pronged approach to build up dairy at both the national and district levels, which is notably improving smallholder production, and also increasing consumer demand and regulatory support for safe, high quality products.

In collaboration with Inyange Industries, Rwanda's largest dairy processor, Rwanda Dairy Competitiveness Program II (RDCP II) has also developed the "milk zone" concept – a franchising arrangement that allows for pasteurized milk to be distributed through a consumer-facing kiosk system. Consumers can deposit as much money as they want to spend, and instantly access fresh, pasteurized milk. This concept has shown that Rwanda's consumers are willing to adapt to a pasteurized product, which is safer and cleaner than raw milk sold in traditional kiosks. So far, 24 kiosks have been established, and they are expecting a 136% annual return on investment with demand outstripping supply.

Soil

An estimated 70% of grassland soils in England and Wales exhibit severe or moderate soil compaction. Damaged soil structure will reduce grass yields, limit grazing days and also cost money because of the costs of remediation.

Research by UK levy organization, the Agriculture and Horticulture Development Board (AHDB) has been assessing the impact of soil compaction on grass yield and soil health and how compaction from animals and machinery differs.

Results showed compaction resulted in an increase in soil bulk density reducing pore spaces for air and also increased water retention in the soil with grass yields at first silage cut significantly reduced.

Results have been shared with dairy farmers through events, demonstration farms and resources.

Biodiversity

The continuation and further development of sustainable dairy is one of the pillars of the Corporate Social Responsibility (CSR) approach of Royal Friesland Campina (RFC). Biodiversity is one of the three focal points in this pillar with three related objectives:

- Transparent and visible approach for landscape and nature conservation.
- 100% sustainable soy by 2015 (achieved).
- An improved soil mineral balance.

Along with several partners, FrieslandCampina is currently developing a biodiversity monitor tool. The first prototype will be finished in 2016 with a testing phase with farmers in 2017.

Working conditions

With 190 processing plants worldwide, employee safety has been one of Danone's main priorities implementing an approach based on participatory methods.

The Work In Safe Environment (WISE) program raises employee awareness of the importance of workplace safety and of reducing the number of work accidents.

Since 2004, over 350 auditors have been trained worldwide to be able to carry out WISE audits.

By empowering all staff members in this way, absences generated by work accidents have reduced by five times.

Governance

Donald Moore,
Executive Director, Global Dairy Platform
Chairman, GDAA

Alexander Anton,
Secretary General, European Dairy Association

Ian Halliday,
Managing Director, Dairy Australia

Jeremy Hill,
President & Chairman of the Board, International Dairy Federation

Chairman, GDAA Advisory Council

Ariel Londinsky,
Secretary General, Pan-American Dairy Federation – FEPALE

Peter Mwaniki Ngaruiya, Executive Director of the Eastern and Southern Africa Dairy Association (ESADA)

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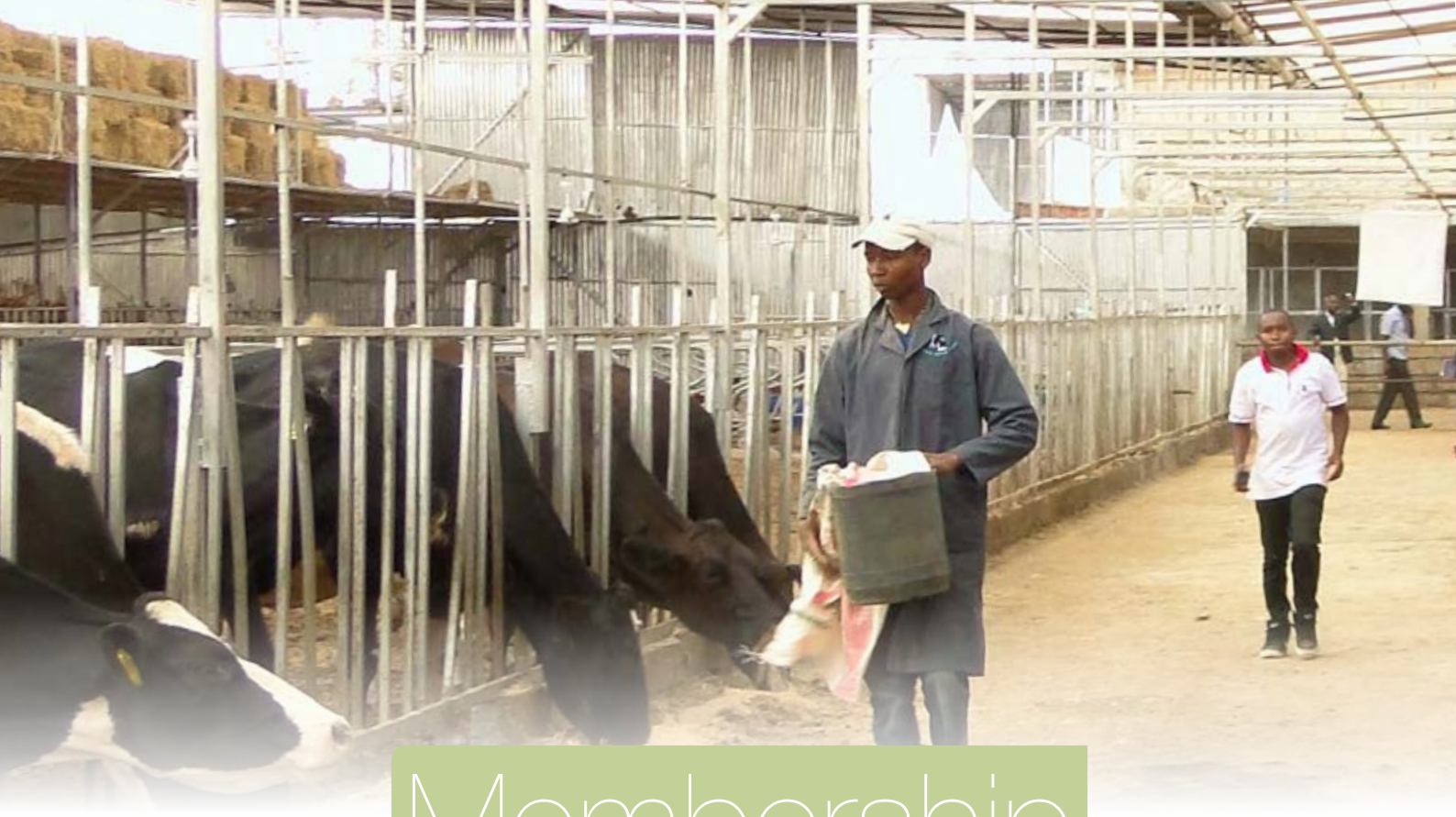
Gert van der Bijl
Solidaridad International Programme Coordinator Livestock

GDAA Advisory Council



Membership

Aggregating

Dairy Australia
DUURZAME ZUIVELKETEN
INNOVATION CENTER FOR U.S. DAIRY

Implementing

AHDB Dairy
Ahold
Arla
Brazzale
CARBERY
Clover
DFA Dairy Farmers of America
Dairy Farmers of Canada
Les Producteurs laitiers du Canada
DANONE
Fonterra Dairy for life
FrieslandCampina
glanbia
Reny Picot
Kenya Dairy Board
LAND O'LAKES
meadow foods
Nestlé
Spruce Haven Farm
Tetra Pak

Affiliate

ADPF
Bord Bia Irish Food Board
California Dairies Inc.
California Dairy Research Foundation
Climate & Clean Air Coalition
NSW Dairy Connect
Dairy Council of California
Dairy UK
DeLaval
eda
ESADA
FEPALE
Global Dairy Platform
FIL IDF
IFCN
Lactiker
LELY
Megmilk Snow Brand
Nizo
Ornua
RABDF
SAI Platform
Sheffield University Management School
mOLK
Rabobank

Membership at June 2016