Measuring to manage

.....and demonstrate!

Brian Lindsay

GASL 2019 - Kansas
A journey not a destination….!

One we are all travelling together!

30% of global milk production
Governance and Advisory

Advisory Council

- American Humane Association
- ASDA/Walmart
- FAO
- Solidaridad
- WWF - observer
- Rabobank
- Global Round Table for Sustainable Beef
- World Bank
- OXFAM
- GFAR
Dairy sector snapshot: Dairy cattle

- Farmers care for 363 million dairy cattle.
- In industrialized economies, herds are often larger: the average dairy farms in the UK and the US manage 90 and 300 dairy cows respectively.
- Farmers in developing countries usually keep them in herds of 2 or 3 cows.
- However, farms with more than 100 cows represent less than 0.3% of all dairy farms globally.
The single issue challenge!
A sustainable development framework for Dairy

- A collaborative **Framework** versus Standards
- **Continuous improvement** versus *point in time* reporting
- **Honest** and **transparent** approach that recognizes we need to improve, versus simply trying to convince everyone we are right
- A single **inclusive** Framework that allows the entire industry to participate, versus multiple exclusive programs that try to define right and wrong - winners and losers
- A Framework that will deliver **global alignment**, **connection** and **quantified progress** across the whole value chain
A Sustainable Development Framework for Dairy
2 types of DSF membership

- Implementing Members
- Aggregating Members
Membership Commitments

• Form local management Group
• Undertake a materiality analysis

• Prioritize the 11 criteria
• Select focus priorities

• Implement improvement/ mitigation programs
• Targets/KPI’s and milestones
• Include DSF Indicators

• Reports at the required reporting interval
The Reporting Transition
From the nice story.....

- Cows: 44.6 million
- Farms: 2.4 million
- Processing Plants: 4,505
- Farmers: 2.5 million
- Global Milk Production: 813 billion liters (estimate)
- Liters Processed: 244.2 billion

Dairy Sustainability Framework

dairysustainabilityframework.org
Indicator Metric Development

• 2.5 years
• Consultative process with membership
  – Member and ADCO consultation
  – Public consultation
• 2 indicators - 2016
• 5 indicators – 2017
• 4 indicators 2018
  – 2019 Reporting – 7 indicators
  – 2020 reporting – all 11 indicators
Nice story with underpinning evidence!
Commitment to report on priority indicators
By March 31 each year
Report the delta change each year/reporting period
# Global dairy priorities

<table>
<thead>
<tr>
<th>DSF Criteria</th>
<th>% of DSF “production” that has prioritised</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG Emissions</td>
<td>72%</td>
</tr>
<tr>
<td>Soil Nutrients</td>
<td>63%</td>
</tr>
<tr>
<td>Soil Quality</td>
<td>52%</td>
</tr>
<tr>
<td>Water Availability &amp; Quality</td>
<td>65%</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>79%</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>57%</td>
</tr>
<tr>
<td>Animal Care</td>
<td>93%</td>
</tr>
<tr>
<td>Waste</td>
<td>12%</td>
</tr>
<tr>
<td>Market Development</td>
<td>12%</td>
</tr>
<tr>
<td>Rural Economies</td>
<td>13%</td>
</tr>
<tr>
<td>Product Safety and Quality</td>
<td>27%</td>
</tr>
</tbody>
</table>
Animal Care

Strategic Intent: Dairy animals are treated with care, and are free from hunger and thirst, discomfort, pain, injury and disease, fear and distress, and are able to engage in relatively normal patterns of behavior.

Indicator Metric: Somatic Cell Count (SCC)

Measurement: 1000’s of cells per ML of milk
Animal Care – Progress

Prioritizing – 93% (Baseline 79%)

Baseline 2016 - 288,000

Reporting 2017 - -3%

2018 - delta change
Working Conditions

Strategic Intent: Across the dairy value chain, workers operate in a safe environment and their rights are respected and promoted.

Indicator Metric: Farm/Facility Safety Plan (FSP)

Measurement: Number of FSP’s implemented
Working Conditions – Progress

Facility Safety Plans

Prioritising – 57% - (Baseline 20%)

Baseline 2017 85

2018 delta change
Soil Nutrients

**Strategic Intent:** Nutrient application is managed to minimize impacts on water and air, while maintaining and enhancing soil quality.

**Indicator Metric:** Nutrient Management Plan (NMP)

**Measurement:** Number of NMP’s implemented
Soil Nutrients – Progress

Nutrient Management plans

Prioritising  63.2% (Baseline 16%)

Baseline  2017  15340

2018  delta change
The Sector is already part of the solution to limit climate change

**30% increase in milk production.** Dairy farming is becoming more efficient. Emissions per unit of product are falling but absolute emissions are rising.

Due to increased demand for high quality nutrition, total GHG emissions from the dairy sector have increased by about 18%.

**Emission intensity** over the 10 years has reduced by 11% from 2.8 to 2.5 kg CO2 eq./kg FPCM.

Without the efficiency improvements made by the sector, total emissions from the dairy cattle sector **would have increased by almost 38%** over this period to deliver the same amount of product.

The largest gains in emission intensity reduction have occurred in low-and-middle income countries with traditionally low productivity. In these countries the concept of emission intensity remains the most attractive mitigation route because it allows for the harnessing of synergies between food security, development objectives and climate change mitigation.

All dairy regions have improved through increased **productivity per animal, increasing farm management efficiency and increased feed efficiency.**
Thank you

www.dairysustainabilityframework.org