

Indicator Metrics for the 11 DSF Sustainability Criteria

November 21, 2018

The Dairy Sustainability Framework (DSF), launched in October 2013, was established to demonstrate the dairy sector globally considers sustainability seriously. Leading members of the global dairy sector have agreed to focus on a continuous improvement model using the DSF Framework. The DSF Framework approach allows the sector to accommodate the diversity of global dairy production and processing, enabling members to initiate continuous improvement programs that are appropriate for their stage of sustainability development. It does not matter what stage members are at on their journey. The indicators that the DSF is developing accommodate this diversity of value chains and varying stages of development.

The Dairy Sustainability Framework developed eleven (11) high level indicators for global sustainability criteria (see <https://dairysustainabilityframework.org/dsf-membership/global-criteria/>). These indicators enable the sector to quantify the aggregate global progress across each of the 11 criteria prioritized by DSF member organizations. The eleven Global Criteria indicators were developed in consultation with the DSF members and public stakeholders over a three-year period (2016 - 2018). The indicators, their strategic intents, and reporting guidelines are summarized in this report (Table 1). Summaries of each indicator reporting guidelines with links to supporting resources follow the table.

The objective of DSF in creating these reporting guidelines is to make reporting across all 11 high level indicators as simple and efficient as possible, while providing adequate resolution to demonstrate continuous improvement and identify emerging challenges. DSF members represent a range of global dairy organizations, including local to global private enterprises, regional cooperatives, and advocacy organizations. Members are responsible for reporting across their scope of enterprises. In order for DSF to evaluate global performance of the dairy sector, these data must be reported in a consistent manner, with adequate resolution for statistical comparisons. Those member organizations that represent multiple enterprises (aggregators) shall report their total number of participants, the number reporting (this provides a measure of representation), the arithmetic mean (this allows for parametric statistical comparisons), and where possible, the range and standard deviation for each indicator metric. The specific reporting requirements for each high level indicator are available as separate documents for each indicator, simply download those that you have prioritised.

Table 1: DSF High Level Indicators with Strategic Intents, Reporting Timescales, and Reporting Guidelines



	Strategic Intent	Indicator(s)	Reporting Timescale	Reporting Guidelines
Greenhouse Gas Emissions	<i>GHG emissions across the full value chain are quantified and reduced through all economically viable mechanisms</i>	GHG emissions IDF standard life cycle methodology	3-year intervals 2017=Baseline Dec. 2019 = next reporting date	Members must use the IDF methodology when calculating GHG emissions from their business function
Soil Nutrients	<i>Nutrient application is managed to minimize impacts on water and air while maintaining and enhancing soil quality</i>	Implementation of a Nutrient Management Plan (NMP) to enhance production and reduce water and air pollution.	Annual reporting period, calendar year, -March 31 for reporting date, 2017 = Baseline	Member defines NMP , member organizations report the number of their participants who have implemented NMP for reporting period. Can be included with Soil Quality and Retention requirements.
Soil Quality & Retention	<i>Soil quality and retention is proactively managed and enhanced to ensure optimum productivity</i>	Soil quality is maintained or improved by good management practices defined in a Soil Quality Management Plan (SQMP) .	Annual reporting period, calendar year, March 31 reporting date, 2017 = Baseline	Member defines SQMP , member organizations report the number of their participants who have implemented SQMP for reporting period. Can be included with Soil Nutrients requirements
Water Availability & Quality	<i>Water availability, as well as water quality is managed responsibly throughout the dairy value chain</i>	<ol style="list-style-type: none"> Effluent management plan (EMP) adopted to minimize impacts to water quality; Water use efficiency for production and processing is measured. 	Annual reporting period, calendar year, March 31 reporting date, 2017 = Baseline	Member defines EMP and water use efficiency . Member organizations report the number of their participants who have implemented EMP during the reporting period. Member organizations report water use efficiency (volume used per mass of product) on an annual average basis, with range and number of organizations.



Biodiversity	<i>Direct and indirect biodiversity risks and opportunities are understood and strategies to maintain and enhance it are established</i>	A biodiversity plan is implemented to preserve, restore and improve biodiversity on-farm and across the supply chain.	Annual reporting period, calendar year, March 31 reporting date, 2017 = Baseline	Member defines biodiversity plan , member organizations report the number of their participants who have implemented a biodiversity plan during the period.
Working Conditions	<i>Across the dairy value chain, workers operate in a safe environment, and their rights are respected and promoted</i>	A Farm/Facility Safety Plan (FSP) is implemented to ensure worker safety.	Annual reporting period, calendar year, March 31 reporting date, 2017 = Baseline	Member defines FSP . Member organizations report the number of their participants (including farms) who have implemented a FSP during the period.
Animal Care	<i>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 with relatively normal patterns of animal behavior</i>	Somatic Cell Count	Annual reporting period, calendar year, March 31 reporting date, 2017 = Baseline	Average (arithmetic mean) Somatic Cell Count (1000 cells/milliliter of milk) and number of assays across member organization.
Waste	<i>Waste generation is minimized, and where unavoidable, waste is reused and recycled</i>	Farm Level: Implementation of a Waste Management Plan (WMP) Processor Level: Mass of waste to landfill per year	Annual reporting period, calendar year, March 31 reporting date, 2018 = Baseline	Member defines WMP . Farm Level: Member organizations report the number of farms that have implemented a WMP. Processor Level: Members report the mass of waste sent to landfill by processors during the reporting period.
Market Development	<i>Members along the dairy value chain are able to build economically viable</i>	Process in place to inform producers of market opportunities & challenges	Annual reporting period, calendar year,	Member organizations define the process (newsletter, video,



	<i>businesses through the development of transparent and effective markets</i>		March 31 reporting date, 2018 = Baseline	meetings etc.). Member aggregator organizations report the number of their participants who have a process in place.
Rural Economies	<i>The dairy sector contributes to the resilience and economic viability of farmers and rural communities</i>	Total annual payments made to farmers for milk	Annual reporting period, calendar year, March 31 reporting date, 2018=Baseline	[Annual Milk Tonnes Sold] x [Annual Average Milk Price]
Product Safety & Quality	<i>The integrity and transparency of the dairy supply chain is safeguarded, so as to ensure the optimal nutrition, quality, and safety of products</i>	<ol style="list-style-type: none"> 1. Does organization have a product safety & quality recall plan (PS&Q)? 2. How many public product recalls during the reporting period? 	Annual reporting period, calendar year, March 31 reporting date, 2018=Baseline	Member defines product safety & quality recall plan . Member organizations report the number of their participants who have implemented a PS&Q plan during the period. Member organizations report the number of public product recalls implemented during the reporting period.