



# Methodology «Sustainable Milk»

# What does «sustainable milk» mean to us?



There is no recognized standard that enables a holistic sustainability assessment of milk production. Emmi has therefore developed a catalogue of criteria together with the Bern University of Applied Sciences for Agriculture, Forestry and Food (HAFL). This is based on international methodologies. The WWF, as Emmi's partner, has assessed the catalogue of criteria as comprehensive.

Our criteria catalogue assesses the sustainability of milk production with the help of 32 criteria spread over 8 topics. A farm can receive 0, 1 or 2 points per criterion. The assessments are partly regionally adapted, for example regarding the number of grazing days, which is also influenced by the local climate. The data is collected either per dairy farm or at producer cooperative level. The result is an overall score for sustainable milk and for each topic. This shows the strengths and weaknesses of milk production. Accordingly, the companies set targets together with the milk producers to improve.

With this approach, we want to do justice to the different conditions of milk production in different countries. In addition, we focus on the continuous development of all milk producers. Comparisons with the regional average - as formulated in our objective - are still difficult to collect in large part because the necessary data is not available.

The criteria catalogue is also being continuously developed - in line with findings from science and practice, in cooperation with experts and partners such as the WWF, but also the Pathways to Dairy Net Zero initiative.

## The next pages show:

- Overview of the 8 topics for sustainable milk production
- Overview of the 32 criteria for sustainable milk production
- References

# The criteria catalogue covers 8 sustainability topics



## Social

### Strategy

Strategy contributes to the sustainable development of the farms so that it can continue to supply milk in the future.

### Work & Income

The farm managers and all employees can lead a good life with the income generated.

## Environment

### Biodiversity

Farms preserve biodiversity and buy GMO-free feed for which no land was cleared.

### Material & Energy

With closed cycles and adapted intensity, the farms take care of the resources.

## Milk & Animal Welfare

### Milk Quality

Our consumers receive products made from high-quality milk.

### Animal Welfare

The dairy cows are kept animal-friendly and free from pain and stress.

### Climate

For more climate-friendly milk, farms reduce their GHG emissions, and store carbon in the soil and trees.

### Environment

Farms care for the environment by protecting soil and water from damage and pollution.



# The 8 topics are measured via 32 criteria



## Strategy

1. Farm plans to still produce milk in 10 years

## Work & Income

2. Legal work contracts for all employed workers
3. Minimum wage for all employed workers
4. Profitability of farm operation

## Milk Quality

5. Average somatic cell count in milk
6. No antibiotics residues in milk
7. Average microbial count in milk

## Animal Welfare

8. Adequate animal housing facilities
9. Regular access to pasture
10. Optimized feed rations
11. Adequate dehorning
12. Limited transport times to slaughterhouse
13. Restrictive use of antibiotics
14. Adequate productive lifespan / number of lactations
15. Rearing of calves / fawns / lambs

*Goats & sheep:*

*adequate castration & no tail docking*

*adequate animal welfare*

*restrictive use of anthelmintics*



## Bio-diversity

16. Share of extensively used and natural habitat
17. No conversion of extensively used land to intensive use
18. Feed: No or deforestation-free palm oil
19. Feed: No or deforestation-free soy
20. Feed: No genetically modified components

## Energy & Materials

21. Regional nutrient cycles: Feed from own farm or region
22. Minimization of waste
23. Animal feed without irrigation
24. Generation of renewable energy
25. Energy efficiency: Use of heat recovery

## Climate

26. Calculation of GHG balance (kg CO<sub>2</sub>e / kg milk)
27. Average lifetime daily milk yield
28. Measures taken to reduce GHG emissions
29. Measures taken to increase carbon stocks

## Environment

30. Protection of open water
31. Protection of groundwater
32. No visible soil degradation on the farmland

# References

## **Dairy Sustainability Framework (DSF), International** ([Link](#))

The *DSF* focuses on eleven key sustainability criteria that are considered relevant for the dairy sector worldwide. Development of the DSF by the [Dairy Industry Platform \(website\)](#). The members are e.g. Dairy Asia, Dairy Australia, European Dairy Association (EDA), Eastern and Southern Africa Dairy Association (ESADA), Federación Panamericana de Lechería (FEPALE), International Dairy Federation (IDF), Global Dairy Platform, Innovation Center for US Dairy, SAI-Platform, World Farmers' Organisation (WFO).

## **FAO SAFA Guidelines, United Nations** ([Link](#))

The SAFA tool is used for both ex-ante sustainability assessment for decision-making and ex-post monitoring, progress tracking and sustainability impact assessment in the international food and agriculture sector.

## **RISE 3.0, Switzerland & international** ([Link](#))

Method for agricultural extension and training developed by the *Berne University of Applied Sciences*. RISE can be used to measure & improve the sustainability of farms. 48 Indicators measure 10 themes. Applied to over farms 5'400 in more than 60 countries.

## **Vision Dairy Leadership Position and Core Criteria, International** ([Link](#))

*Barry Callebaut's Vision Dairy Charter* consists of 15 principles for sustainability in dairy farming. The goal is to identify and demonstrate best practices for cow and calf welfare. It supports efficient, resilient and ethical practices for cow and calf welfare.

## **WWF Milk-Benchmark, Switzerland** ([Link](#))

Assessment scheme with sustainability requirements in six areas to provide an overview of the Swiss dairy sector's sustainability efforts. Applied to a number of selected private Swiss milk production standards.