



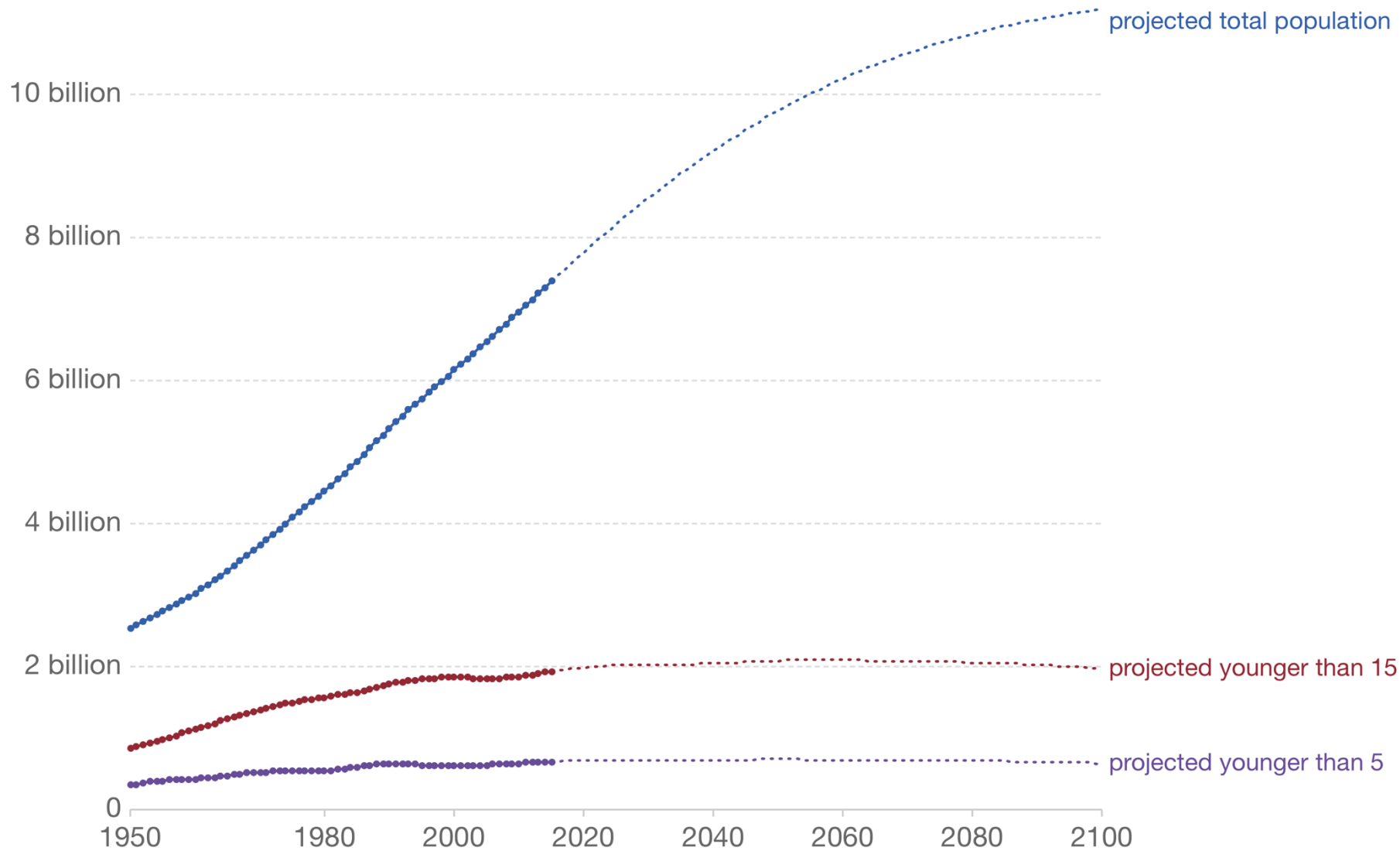
Dairy Sustainability Framework

*Productos lácteos e  
sustentabilidade ambiental II*

Dairy Sustainability Framework



Projections from 2016 through to 2100 based on UN median estimates.



Source: UN Population Division (2015 Revision)

OurWorldInData.org/world-population-future-eductation-now/ • CC BY

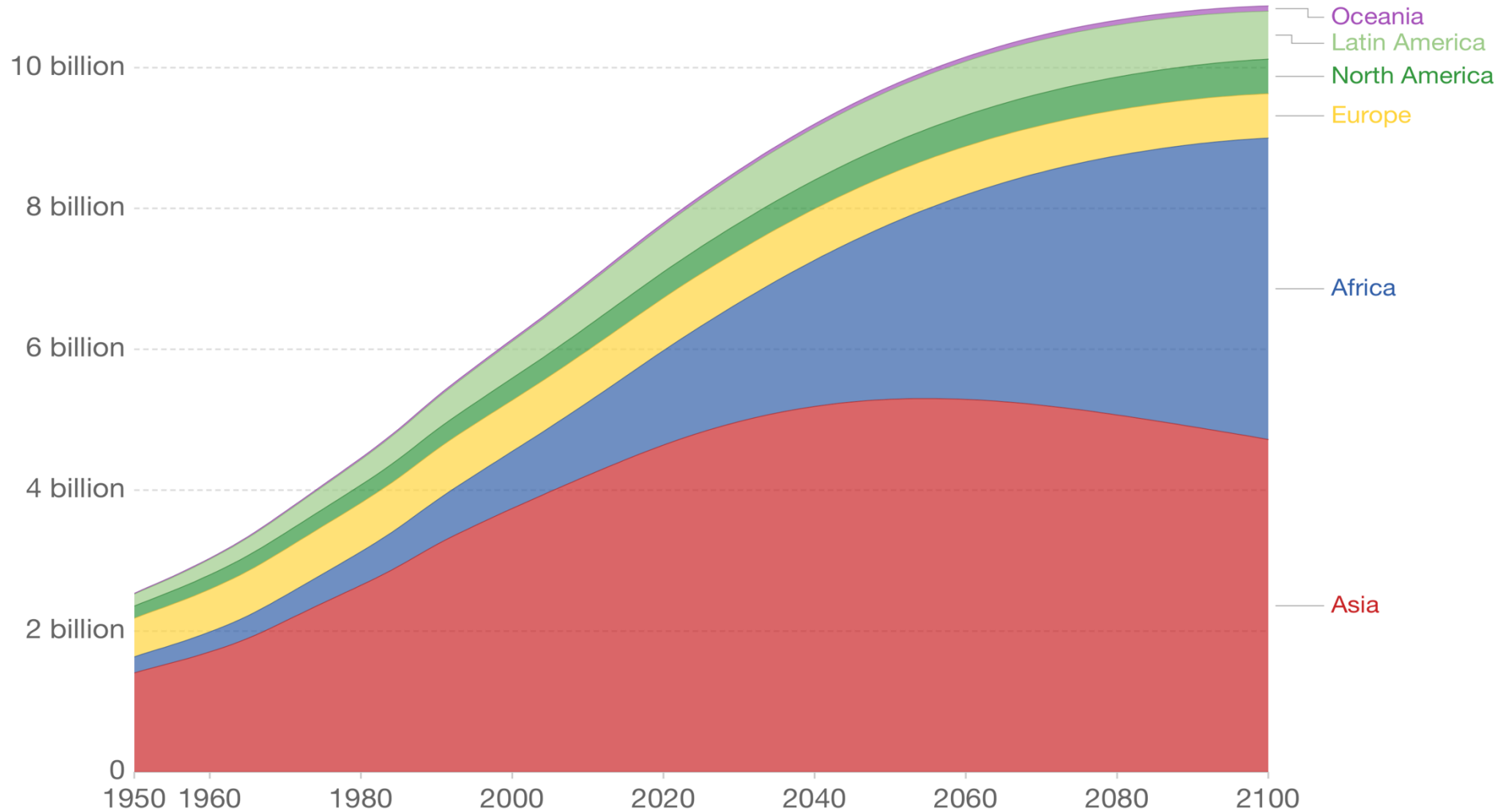


Dairy Sustainability Framework

dairysustainabilityframework.org

# World population by region projected to 2100, 1950 to 2100

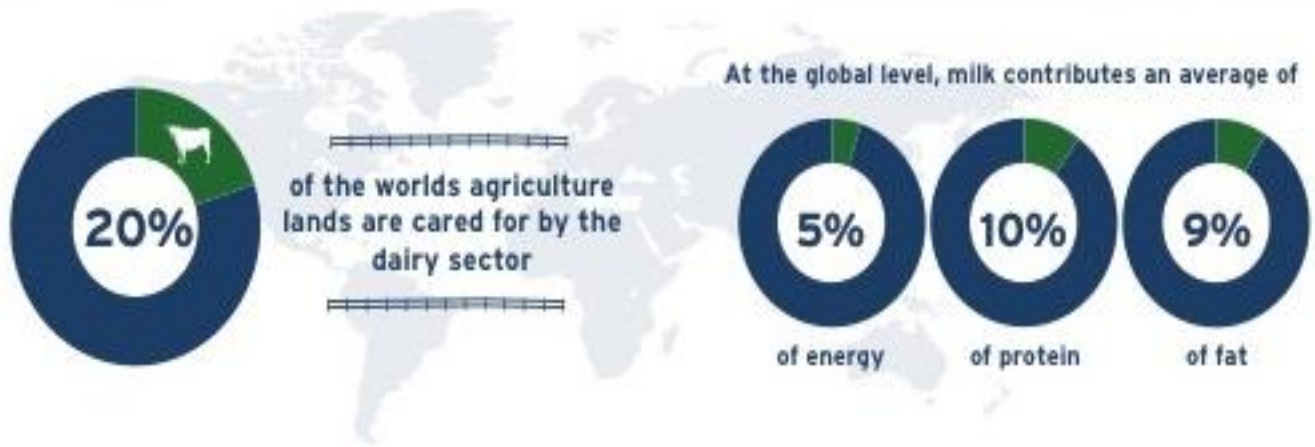
Projected population to 2100 is based on the UN's medium population scenario.



Source: HYDE (2016) & UN, WPP (2019)

OurWorldInData.org/world-population-growth • CC BY

# Retrato do setor de laticínios: **Quem somos**





# Retrato do setor de laticínios: **Fazendas de gado leiteiro**

**133 million**  
Dairy Farms

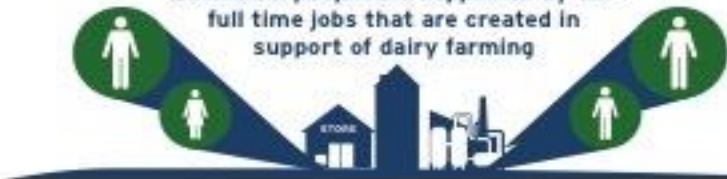


**600 million**  
people live on Dairy Farms



**400 million**

additional people are supported by the full time jobs that are created in support of dairy farming



**240 million**

people are directly or indirectly employed in the dairy sector



**37 million**

farms are female-headed with

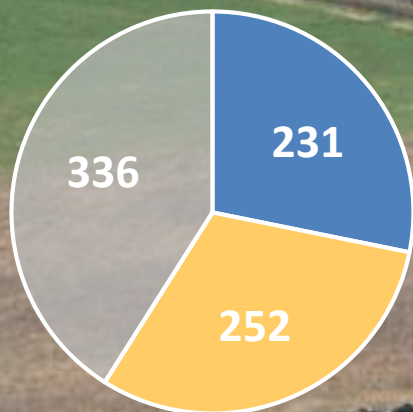
**80 million**

women engaged in dairy farming to some extent



# Comprovação do Impacto em Escala!

Produção de leite global  
(bilhões de litros)



■ DSF members milk volume

■ Milk formally processed but not in DSF membership


■ Milk informally processed or use on farms /households

30% da produção  
global de leite

48% do mercado  
formal de leite





- 
- Uma Estrutura em relação ao esquema de Padrões ou Certificação

- Programa de Melhoria Contínua Inclusiva em relação ao relatório *em momento específico*

- Uma Estrutura realizando um alinhamento global, conexão e progresso **quantificado** em toda a cadeia de valor.

- Um setor responsável produzindo nutrição acessível e valiosa.

# Uma Estrutura de Desenvolvimento Sustentável para fazendas de gado leiteiro

Alinhar

Conectar

Progredir

Greenhouse gases

Soil nutrients

Waste

Water

Soil

Biodiversity

Market development

Rural economies

Working conditions

Product safety and quality

Animal care



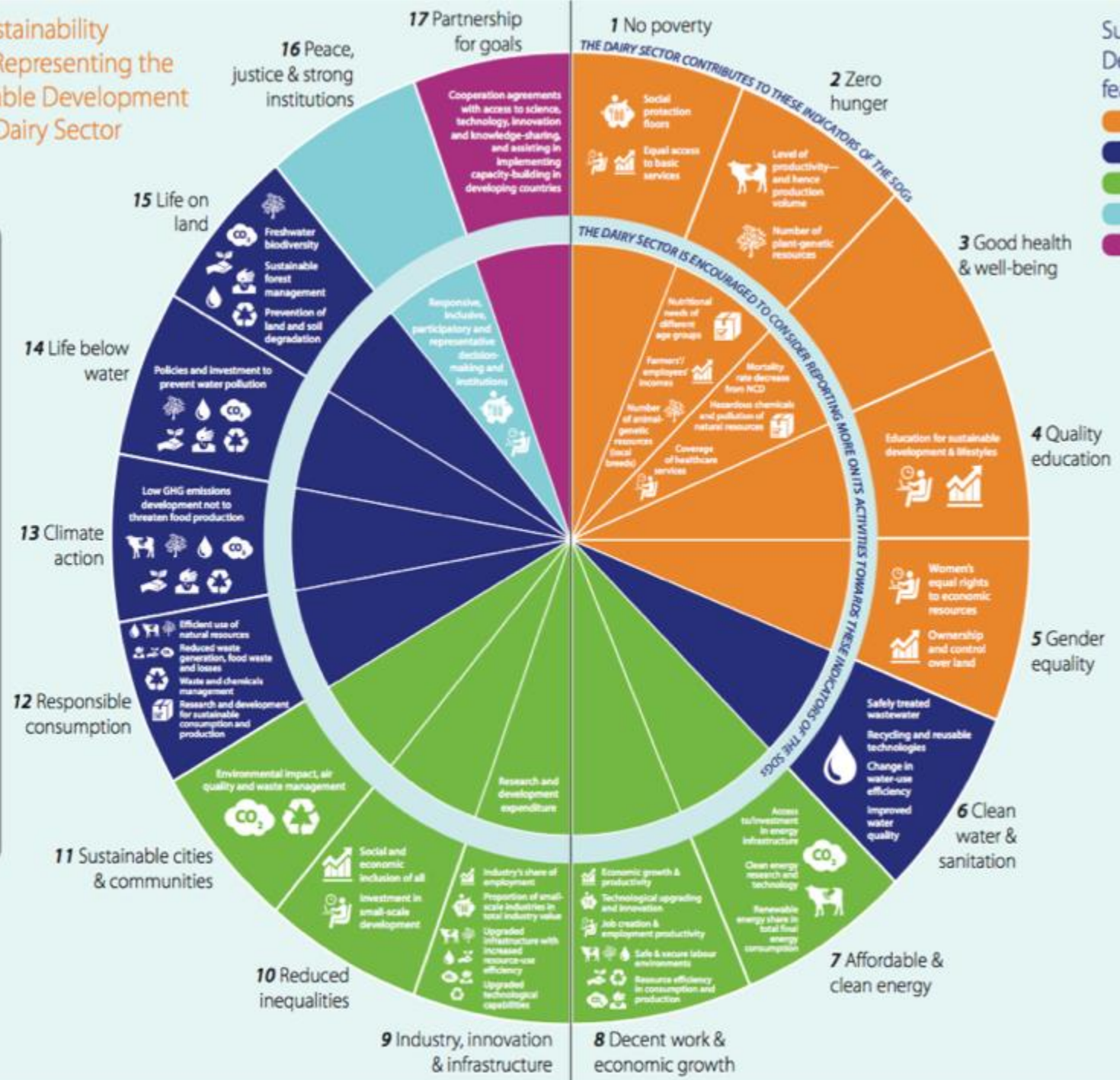


# The Dairy Sustainability Framework: Representing the UN's Sustainable Development Goals in the Dairy Sector

- Criteria**
- The DSF reports on the dairy industry's performance using the following 11 criteria:
- Economic**
    - Rural economies
    - Market development
  - Social**
    - Working conditions
    - Product safety and quality
    - Animal care
  - Environmental**
    - Biodiversity
    - Waste
    - Water
    - Greenhouse gas emissions
    - Soil
    - Soil nutrients

Sustainable Development Goals featured in 5 Ps

- People
- Planet
- Prosperity
- Peace
- Partnership



Rabobank

# 11 Critérios de Sustentabilidade



## Greenhouse Gas Emissions

GHG emissions across the full value chain are quantified and reduced through all economically viable mechanisms.



## Soil

Soil quality and retention is proactively managed and enhanced to ensure optimal productivity.



## Working Conditions

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



## Soil Nutrients

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



## Biodiversity

Direct and indirect biodiversity risks and opportunities are understood, and strategies to maintain or enhance it are established.



## Product Safety & Quality

The integrity and transparency of the dairy value chain is safeguarded, so as to ensure the optimal nutrition, quality, and safety of products.



## Waste

Waste generation is minimized and, where unavoidable, waste is reused and recycled.



## Market Development

Members along the dairy value chain are able to build economically viable businesses through the development of transparent and effective markets.



## Animal Care

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 animal behavior.



## Water

Water availability, as well as water quality, is managed responsibly throughout the dairy value chain.



## Rural Economies

The dairy sector contributes to the resilience and economic viability of farmers and rural communities.



# Uma abordagem holística

FAO:

*Ações sobre mudança climática NÃO  
devem acontecer às custas de acabar  
com a pobreza e atingir zero fome até  
2030*






# Percent of DSF production prioritising each DSF criteria on their reporting through 2018


 GHG Emissions **72%**


 Soil Nutrients **63%**

 Soil Quality **52%**

 Water Availability & Quality **65%**


 Biodiversity **79%**

 Working Conditions **57%**

 Animal Care **93%**

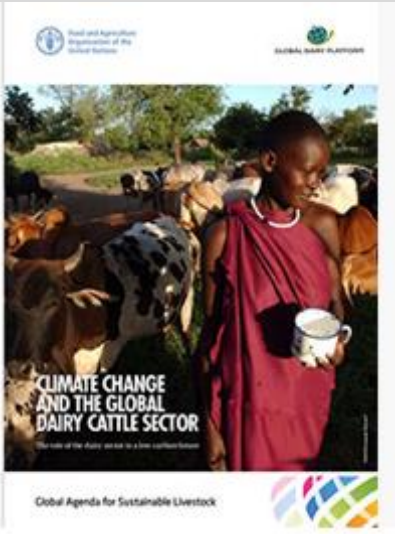
 Waste **12%**

 Market Development **12%**

 Rural Economies **13%**

 Product Safety & Quality **27%**

# Construindo a narrativa com comprovações



## Strong Action on Priorities

Compared to 2017 baselines, 2018 reporting shows considerable growth in members who are addressing priority criteria and implementing improvement plans to measure their progress.

- Key**
- Members report the number of farms they represent
  - Assumption: 1 plan per farm



**Soil Nutrients**  
30% of Farms have Nutrient Management Plans



**Soil Quality & Retention**  
20% of Farms have Soil Quality Management Plans



**Water Availability and Quantity-Farm**  
20% of Farms have Effluent Management Plans



**Biodiversity**  
3% of Farms have Biodiversity Plans



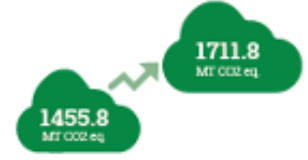
**Working Conditions-Farm**  
4.8% of Farms have Farm Safety Plans



**Working Conditions-Processing**  
82% of Plants have Facility Safety Plans



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

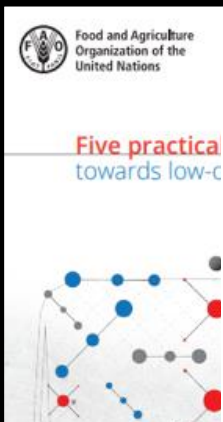


Due to increased demand for high quality nutrition, total GHG emissions from the dairy sector have increased by about 18%.



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

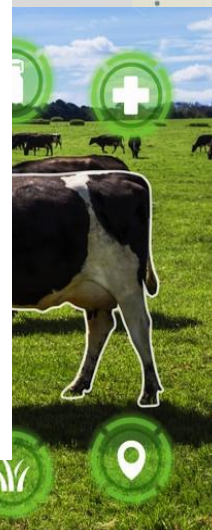
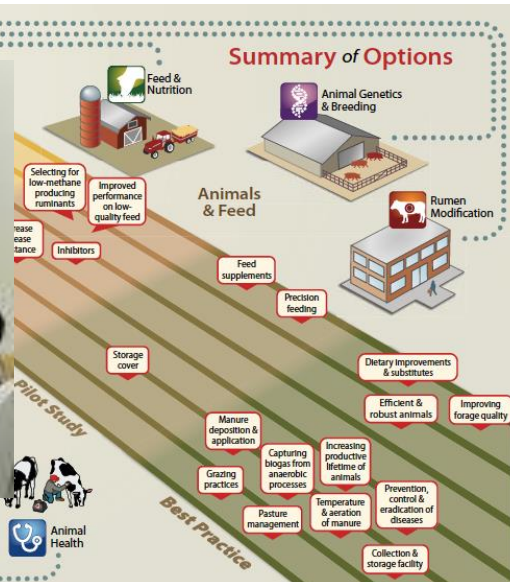
# Todo sistema tem a oportunidade de ser progressivamente sustentável



Farmers in developing countries usually keeping 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





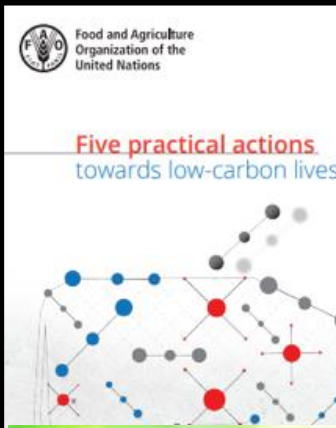
- A produção pecuária global está sendo questionada – independente de onde está sendo produzida.
- Precisamos trabalhar como uma indústria para combater isso.
- A demonstração de nossas ações e melhoria associada a elas, é fundamental para enfrentar o desafio.


## Projeto de Implementação DSF Ruanda, Quênia, Índia e Vietnã

- Implementação de estudos de casos em diferentes regiões
- Sustentabilidade significa melhoria do negócio.
- Compartilhando os resultados para que o setor de laticínios melhore de maneira eficiente.
- Demonstrar a importância do setor privado no cumprimento da mudança necessária.
- Propriedade compartilhada


**E a América do Sul?**

# Cada sistema tem a oportunidade de ser cada vez mais sustentável.

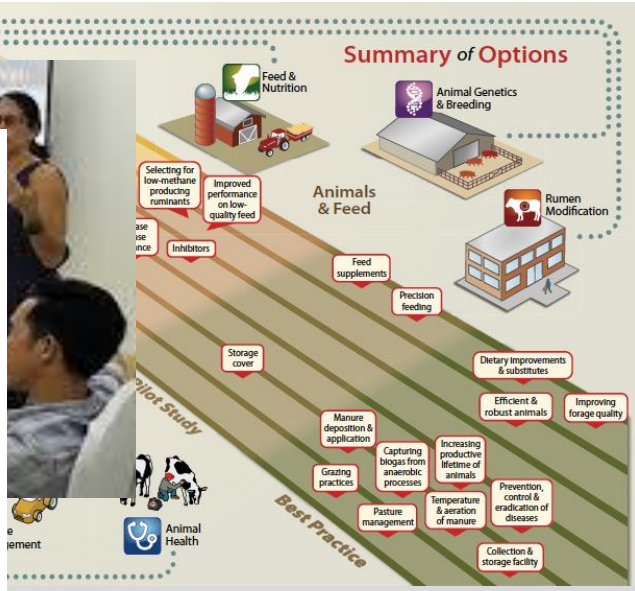




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[www.dairysustainabilityframework.org](http://www.dairysustainabilityframework.org)



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