Dairy Report 2021

Helping people in the dairy world to make better decisions

IFCN
The Dairy Research Network
Dear Friends,

The IFCN Dairy Report 2021 represents a comprehensive overview of our complex dairy world in a 224-page book based on IFCN research.

The IFCN Mission and Vision
IFCN Mission: We help people in the dairy world to make better decisions.

IFCN Content updates
Farm economics: Special attention was given to greenhouse gas emissions on dairy farms. Chapter 1 now includes IFCN’s special research on this topic and the methodology that was used (Page 50).

Outlook 2050: As the dairy business is changing very rapidly, IFCN has developed scenarios for the long-term outlook of the dairy world for over 200 countries until 2050, including a forecast of the development of greenhouse gas emissions.

IFCN Dairy Processor Report: To understand the dairy world better, in 2020 IFCN created the first dairy processor report analysing the performance of the top 20 global milk processors with regards to people, planet, and profit. Further details about the report can be found on Page 19.

Highlights – IFCN Events
IFCN Dairy Conference 2021
The Dairy Conference was held online for the second time and became one of the most visited events in IFCN history. Topic: Carbon neutral dairy farming in 2050 – will this be possible? (Pages 10 – 11).

IFCN Supporter Conference 2020
Also held online, supporter and research partners joined the event to discuss the topic: New Opportunities – The Dairy World after Covid-19 (Pages 12 – 13).

Emerging Dairy Regions Forum 2020
The Emerging Dairy Regions Forum took place for the first time in November 2020 and focused on the topic of “Self-sufficiency in dairy – sustainable solutions” (Page 14).

IFCN Data Analysis Workshop 2021
The third IFCN Data Analysis Workshop was held as a webinar. One hundred and thirteen dairy experts came together to discuss dairy real-time data, with a special focus on the farm economics of today’s dairy world (Page 15).

IFCN Market Intelligence Training
This tailor-made training “How to turn data into value: a masterclass” for IFCN Supporter Partners and dairy professionals took place for the third time in June 2021 (Page 16).

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Status of the IFCN Research Network in 2021
The dairy sector analysis covers over 200 countries. In the farm comparison, 170 typical dairy farms from 64 dairy regions and 52 countries are analysed. In 2020, the research network continued to grow via new research partners and countries.

IFCN Dairy Report 2021
Chapter 1: Cost comparison summarises results on costs, returns, profitability and productivity of dairy farms worldwide. Real-time cost estimates for 2021 were also included for some countries.

Chapter 2: Global monitoring of dairy economic indicators provides a broad overview on specific dairy issues such as milk prices, feed prices and milk:feed price ratio as well as monthly milk price transmission.

Chapter 3: Milk Production fact sheets, prepared for 124 countries + EU, representing 98% of the world milk production, with comparable information on:
• Regional milk production trends in countries
• Dairy farm numbers and farm size trends
• Dairy farm structure analysis and trends
• Price analysis for milk, beef, feed, and land

The key results are summarised at the beginning of the chapter via world maps.

Chapter 4: IFCN Methods: This chapter is dedicated to explain the methods used for the IFCN analyses. Moreover, it describes elevator stories to understand more clearly what a typical farm represents in a country.

Acknowledgement
A warm and special thank you message is directed to IFCN Research Partners and the colleagues working in the IFCN Dairy Research Center. Working with you is a pleasure and we are grateful for your contribution to strengthen the network in 2021. We are looking forward to our activities in 2022.

Anders Fagerberg
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Which countries are participating in the IFCN Dairy Report activities in 2021?

![Map showing countries participating in IFCN Dairy Report activities in 2021]

- **52 countries** analysed in the Farm Comparison
- **additional 72 countries** participated in the Country Pages

**Number of countries included in farm comparison**

- 2000: 10 countries
- 2021: 50 countries

**Number of countries included in country profile analysis**

- 2000: 20 countries
- 2021: 140 countries

**Number of farm types analysed**

- 2000: 10 farms
- 2021: 180 farms

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Regional maps and the typical farms

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About IFCN

The dairy world today
Today the dairy world serves over 7 billion consumers and provides livelihoods for approximately 1 billion people connected to dairy products. As complexity and speed of change are rising, dairy stakeholders are working and living in an increasingly complicated environment.

About IFCN
IFCN is a global dairy research network. By addressing challenges in the dairy world, IFCN contributes to a more resilient and more sustainable future for all of us.

What does IFCN do?
IFCN helps people in the dairy world make better decisions. IFCN provides globally comparable data, outstanding knowledge and inspiration. With our core competencies in the fields of milk production, milk prices and related economic topics, we bring market intelligence, data, knowledge and inspiration to all members in the network.

How does IFCN operate?
IFCN creates a better understanding of the global dairy world. The IFCN – International Farm Comparison Network – started in 2000 with basic analytics. Step by step the knowledge bases are deepened and widened every year.

The knowledge is created via a network of dairy researchers from over 90 countries. The data and knowledge are managed by the IFCN Dairy Research Center staff.

The IFCN Economic Models and standards ensure comparability between countries and provide a global picture.

More than 140 dairy related companies and organisations support the IFCN Dairy Research Network and use the knowledge to solve challenges in the dairy world more efficiently.

IFCN has innovative ways to share the knowledge with their partners and with the dairy world as a whole. The IFCN Events are a key element in developing the network spirit.

IFCN Values: Trust – Independence – Truth
Trust among the IFCN Partners is vital for open sharing, cooperation and a network that really works. The IFCN is independent from third parties and is committed to truth, science and reliability of results. Truth means that IFCN shows the dairy world as it is and as accurately as measurements allow. IFCN describes realities and reports without having any hidden agendas.

IFCN Vision
We are the leading, global knowledge organisation in milk production, milk prices and related dairy economic topics.

IFCN Mission
We help people in the dairy world with dairy data, knowledge and inspiration to make better decisions.

Dairy data: We provide globally comparable dairy economic data and forecasts.

Knowledge: We create knowledge out of our data, models and analysis. Our core competence is in the field of milk production, milk prices and related economic topics.

Inspiration: We inspire people in the dairy world to build a better future. We inspire passionate people to develop a successful career in the dairy world.

What does IFCN offer stakeholders in the dairy chain
1. Farmers: IFCN gives you a voice to reach other players in the dairy world. Updated global milk and feed price trends and helpful IFCN publications are presented on the IFCN Website. Farm comparison work allows you to judge the competitive position of milk production in your region.

2. Researchers and advisors: IFCN makes you part of the leading global dairy network. IFCN provides support to serve your dairy stakeholders better and to develop your professional career in the dairy world as well as strengthening the dairy economics profile in your country.

3. Companies: IFCN provides dairy related companies such as milk processors and farm input companies, a comprehensive and continuously updated picture of the dairy world. We help you develop your business.

4. Global and national organisations involved in policy-making for agriculture, environment and food supply: IFCN provides holistic dairy knowledge to be used for your policy decisions and conferences.

5. Consumers: IFCN illustrates milk-production, its fascinating diversity and value creation in rural areas.

6. Colleagues in the IFCN Centre: You are invited to build a lifetime career in the IFCN center, to operate globally and enjoy a stable local life. You are also welcome to use IFCN as the ideal stepping stone for further developments in the dairy world.

For further information please contact: info@ifcndairy.org

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IFCN is a company running the International Farm Comparison Network which is a global research network. IFCN has a Dairy Research Center (DRC) with 22 employees, coordinating the network process and running the dairy research activities.

The IFCN Board has the mandate to support the IFCN management in the strategic development and guarantee transparency in the operation to the members of the network.

The IFCN Board (status April 2021) is composed of the following members: Anders Fagerberg (chairman), Hans Jöhr (nominated by the supporters), Ernesto Reyes (nominated by the researchers), Uwe Latacz-Lohmann (Kiel University), Olaf Rosenbaum (legal and fiscal expertise) and Torsten Hemme (CEO).
The 22nd IFCN Dairy Conference 2021, online, brought together >100 dairy economists and experts representing more than 65 countries.

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<thead>
<tr>
<th>Tuesday, June 8</th>
<th>Wednesday, June 9</th>
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<td><strong>PRE-CONFERENCE</strong></td>
<td><strong>MAIN CONFERENCE</strong></td>
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<tr>
<td>Development: Network and Strategy session</td>
<td>Defining the Important Points</td>
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<td>Outlook Work – The Dairy World in the short term – what can we expect?</td>
<td>Organizations’ panel</td>
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<td>Workshop on carbon neutrality with research partners</td>
<td>• What are possible solutions &amp; opportunities?</td>
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<td>Workshop session</td>
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<td>• Carbon neutral dairy farming in 2050 – will this be possible?</td>
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Carbon neutral dairy farming in 2050 is possible
This is the promising result of the 22nd Online Dairy Conference of the International Farm Comparison Network (IFCN). The event connected over 1000 dairy experts from 81 countries.

Carbon dioxide levels in the air are at their highest level in 650,000 years and we have seen 19 of the warmest years since 2000. Livestock and thus dairy farming undeniably contribute to greenhouse gas emissions (GHG). Torsten Hemme, founder of IFCN, states: “The GHG emissions of dairy farming account for about 2.2% of global GHG emissions. IFCN research shows that emerging countries account for 75% of those missions and for approximately 100% of its growth over the past 20 years’. However, the dairy sector plays a vital role in providing high quality protein to billions of people and livelihoods to millions of farmers.

Plus 8% additional GHG emissions in dairy farming in the next 30 years
By focusing on climate neutrality, the IFCN wants to provide a basis for decision-making and discussion through well-founded data and facts. The IFCN Dairy Baseline 2050 shows that GHG emission per kilogram of milk globally will decline by 28% worldwide, driven by the observed trend towards higher milk yields. As a result, growing global milk demand of + 50% will only cause + 8% additional GHG emissions in dairy farming in the next 30 years. (Details about the methodology can be found on Page 50).

Poll results from participants on the question: Carbon neutral dairy farming in 2050 – will this be possible?

- Yes, this will be reached but only in developed countries: 21%
- Yes, this will be possible for milk production in all countries: 30%
- No, this will not be possible: 10%
- I do not know: 10%

Number of responses: 301

The path to reduce these GHG emissions in dairy farming
The Dairy Conference aimed to provide answers by inviting speakers from leading global institutions and companies, a.o. GDP and WWF. The panelists came to the conclusion that carbon neutral dairy farming will become possible with fitting farming systems, improved farm management, better access to financial resources in combination with new technologies and a common dairy initiative.

The good news is that the large majority of participants (81%) agrees that dairy farming can become carbon neutral by 2050. However, it is more likely that developed countries will get there first, so it is important to find a collaborative approach.

IFCN would like to thank all participants, panellists and sponsors for their contributions that will help dairy on its way into the future.


KEY CONCLUSIONS
Carbon neutral dairy farming will become possible with:
- Fitting farming systems
- Improved farm management
- Easier access to financial resources in combination with new technologies and a common dairy initiative

Summarized, it is more likely that developed countries will get to a carbon neutral level in dairy farming first, so it is important to find a collaborative approach.

Dairy GHG emissions by segments
25% of global dairy GHG emissions are from dairy farms in developed countries.
75% of global dairy GHG emissions are from dairy farms in emerging countries.

Source: IFCN database status 3/2021, TIPCAL LCA model applied in 52 countries and estimation.
Country classification: following UNSTATS: Simplified – Developed countries: Countries in Europe, North America, Oceania, Japan, Israel, etc.
Emerging dairy countries: = developing countries like all countries in Africa, Latin America and Asia excluding Japan, Israel, etc.
The 18th IFCN Supporter Conference 2020 took place as an online conference due to COVID-19 restrictions. Despite the circumstances, 505 participants from over 100 agribusiness companies joined the event, making it a great success.

**September 8th**

**THE DAIRY KNOWLEDGE DAY**

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<th>Time</th>
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<tr>
<td>14:00</td>
<td>Welcome and opening</td>
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<tr>
<td>14:20</td>
<td>Status of the Dairy World and Outlook 2021</td>
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<td>15:00</td>
<td>Dairy Outlook 2025 and 2050 – What will the Dairy world look like?</td>
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<tr>
<td>15:20</td>
<td>Reality Check 2025 - Knowledge of the Crowd</td>
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<tr>
<td>15:50</td>
<td>Summary and closing</td>
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**September 9th**

**NETWORKING WITH DAIRY LEADERS**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>Welcome and opening &amp; Summary of Day 1: Dairy Knowledge Day</td>
</tr>
<tr>
<td>14:15</td>
<td>Dairy Leaders’ Panel – Milk Processors: The Dairy World after COVID-19 – What is new, less and more important?</td>
</tr>
<tr>
<td>15:00</td>
<td>Dairy Leaders’ Views – Farm Input Companies: New Opportunities in the Dairy World after COVID-19</td>
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<tr>
<td>15:30</td>
<td>Knowledge of the Crowd</td>
</tr>
<tr>
<td>15:50</td>
<td>Summary and closing</td>
</tr>
</tbody>
</table>

**Dairy Leaders – Milk Processing**

- **Dr. RS Sodhi**, MD Amul (GCMMF Ltd) India
- **Frans Keurentjes**, Chairman Friesland Campina Netherlands
- **Hans Jöhr**, Head of Agriculture Nestlé Switzerland
- **Tim Leviny**, SVP Dairy Foods Land O’Lakes USA

*“During COVID-19 in India, the demand for a trusted and affordable brand has been growing and dairy will shift from an unorganized to organized market” (Dr. Sodhi)*

*“Milk is gold and its nutritional value is the biggest secret to many people and we need to bring it to them.” (Frans)*

*Dairy farming has to be positioned as being part of a solution for society.” (Hans)*

*“Processors had innovative way to help each other and keep milk flowing for the benefit of dairy farmers.” (Tim)*

**Get full version of the report: dairyreport.online**
The Dairy World after COVID-19.
Results from the IFCN Supporter Conference 2020

Leading question: The Dairy World after COVID-19, what’s new, what will be more and what will be less important?

During the interactive workshop session, the following answers were collected:

**From the processor’s perspective:**
- “Local for local” is strengthened as a concept, and resilient supply chains will be needed
- **Affordability:** Reduced purchasing power and more online access characterise the new consumer
- There is a growing focus on more collaboration in the dairy chain
- The awareness towards food safety and health will increase
- There is a need for food systems to demonstrate integrity and sustainability in production

**From the farm’s perspective:**
- New technologies, digitalisation and robotisation in a dairy chain
- Online connections within the dairy chain, on farm between workers, but also towards customers.
- There is a growing focus on more collaboration in the dairy chain, also real-time connectivity through apps

**Opportunities for the dairy sector until 2025**

During the discussion, the participants were asked about their opinions on the biggest opportunities for the dairy sector until 2025.

The key points for the whole dairy supply chain are:
- The golden triangle of SDGs: Science, Dairy and Government
- The reconnection of consumers and farmers
- A proactive approach to solve issues. Traceability is key.
- Acceleration of implementing innovation and new technologies to become more proactive rather than reactive
- The rising demands from society and government will come at a cost.
- Products should be marketed to reflect their value better
- Change is possible and we shall use the spirit of it.

**KEY TAKE AWAY MESSAGES:**
COVID-19 – new opportunities

2025: Technological progress and adaptation needed to manage the risk

1. **Vision of future scenarios:**
   - Status quo or new growth scenario most likely
   - 83% are in a positive mood looking to 2025
   - Innovation and technological progress will speed up

2. **Innovations ahead of us:**
   - Innovations mainly at the farm: IT farm management (53%) and robotisation (44%)
   - Initiation mainly by farm input companies

2. **Important topics of the future:**
   - Self-sufficiency / food security (50%)
   - Sustainability / environmental topics (23%)
   - Investments on farms and structural changes (11%)

“COVID-19 has re-awakened consumers and their need to get back to basics. And when you think of basics, what is more basic than milk?” (Doug)

“Doing things differently does not need to be more expensive.” (Almut)

“Real milk is cheaper with real innovation.” (Tom)

“Pandemics forced us to see opportunities where we hadn’t had them before.” (Aidan)

“What will be different about dairy industry post COVID-19, is more information, decision making and real-time connectivity through apps on dairy farms, leadership, worker and supplier level.” (Tim)
The first IFCN Emerging Dairy Regions Forum took place online on 12th of November 2020, when more than 800 dairy experts and interested people from six continents registered to discuss the vulnerability of global supply chains and the importance of dairy self-sufficiency. Considering that global dairy consumption has been increasing by over 60% in the last two decades, largely driven by emerging markets, sustainable milk production is needed to cover future demand.

Three main questions were therefore debated during presentations and a panel discussion:

- How has dairy self-sufficiency developed in emerging dairy countries?
- What strategies and policies have been developed?
- What are the long-term “sustainable solutions”?

Factors impacting self-sufficiency include natural resources, market issues and policies, as well as socio-economic and country-specific elements. Based on this concept, economic, social and environmental dimensions were defined within the dairy sector, in which the sustainable solutions must be found and implemented.

The importance lies in defining future farm types for emerging dairy regions and keeping in mind that no two farms are the same. Future tools and methodologies to measure sustainable solutions need to be tailored according to different farm systems.

**KEY CONCLUSIONS FROM EDRF 2020**

- Covid 19 crisis is expected to have a more impact on emerging dairy markets.
- Various factors impact self-sufficiency and sustainable solutions depend on the goal
- Ways to measure sustainable solutions are needed for dairy farms
The third IFCN Data Analysis Workshop was held online, as a webinar. 113 dairy experts came together to discuss Dairy Farm Economics, with a special focus on the farm economics of today’s dairy world.

**AGENDA**

**Introduction to Dairy Farm Economics**
- Introduction: workshop overview
- Big picture: get to know the dairy world today
- Data mining: from vision to data
- How to win the future: IFCN Real-time Data:
  - Discussion
  - Break
- How to win the future: IFCN Farm Economic Data
  - Discussion
- Big picture: the dairy world today and in the long-term
  - Discussion and workshop closing

The IFCN Data Analysis Workshop transmits profound knowledge of the background of monthly monitoring of dairy farm economics and typical farm economics. It helps IFCN data users to understand the data collection process and its methods, and obtain insights from the results of the farm economics database in order to create more value for your company.

**Feedback**

“I will certainly be able to make deeper analyses based on IFCN data in the future.”

“Good market research starts with IFCN!”
How to turn data into value: a masterclass
The IFCN Market Intelligence Training has a unique curriculum and is delivered by highly experienced specialists, specifically tailored to the needs of IFCN Supporter Partners and leading professionals in the world of dairy business. This training was organized in collaboration with Dr. Erik Elgersma, Director of Strategic Analysis Services BV and took place online. It was attended by 13 participants from different dairy related companies and institutions.

Monday, June 14th, 2021
SETTING UP MARKET INTELLIGENCE AS A CORPORATE FUNCTION
• The Market Intelligence Maturity Model
• Permanent Data Collection and Dissemination
• Organizing Market Intelligence for Success

Tuesday, June 15th, 2021
EXECUTING AN MI-PROJECT FROM BRIEF TO DEBRIEF
• The Market Intelligence Cycle
• Checklist for Data Collection, Analysis and Tools
• How to Turn Intelligence into Action

Feedback
“There was a good balance of group discussions, theory and tips.”

“There was neither time nor a chance to get bored.”

“I learned interesting metrics to organize and collect meaningful information.”
IFCN is on a mission to help people in the dairy world make better decisions. In today’s fast changing and complex dairy world we support our partners with market intelligence services, providing dairy data, knowledge and inspiration. We bridge the gap between academic advances and practical decision making for our supporter companies by using our unique advantage of bringing together dairy economic researchers from all over the world.

**Global holistic picture of the dairy world**

**Networking with your peers & companies**

**Learning and capacity building**

**Upgrade your market intelligence with better dairy economic data for strategic planning and operational management**

<table>
<thead>
<tr>
<th>IFCN Partnership Packages</th>
<th>Your benefit</th>
<th>Basic</th>
<th>Premium</th>
<th>Ultimate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFCN Dairy Report</td>
<td>Coverage of 124+ countries on macro and micro dairy economic indicators</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>IFCN Insight Slides</td>
<td>Annual holistic picture of the dairy world</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>IFCN Monthly Newsletter</td>
<td>The latest in the sector at your finger tips</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Logo positioning</td>
<td>Be visible on the IFCN Dairy Report, IFCN World Dairy Map and on the IFCN Website</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>IFCN Hotline</td>
<td>Remarks and first suggestions for urgent questions</td>
<td>E-Mail</td>
<td>E-Mail, Phone</td>
<td>E-Mail, Phone</td>
</tr>
<tr>
<td>IFCN Supporter Conference**</td>
<td>Be part of the annual IFCN Supporter Conference with more than 140 companies</td>
<td>One seat</td>
<td>Two seats</td>
<td>Three seats</td>
</tr>
<tr>
<td>IFCN World Milk Price Update Webinar</td>
<td>Join the monthly webinar for a top-level overview of the dairy markets</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>IFCN Milk Production Outlook Webinar</td>
<td>Join the quarterly webinar on the latest milk supply trends &amp; drivers</td>
<td>–</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>IFCN Workshops</td>
<td>Be part of the Data Analysis and other insightful workshops**</td>
<td>–</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Global Dairy Sector Database</td>
<td>Get Country Pages data from the IFCN Dairy Report (key variables)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Access to IFCN Data Products</td>
<td>Access to the Standard IFCN Data Delivery Package (.xlsx or .csv formats)</td>
<td>Data purchase possible</td>
<td>Data purchase possible</td>
<td>Access to all data services</td>
</tr>
</tbody>
</table>

* IFCN reserves the right to adjust the final partnership package and to define usage rights for the legal entities based on the IFCN terms and conditions.

** Due to the effects of the COVID-19 situation we are considering to change the format of the conference, location and seats availability.

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### IFCN Milk price Outlook Webinar

This webinar series is representative of our mission to help people in the dairy world make better decisions. The webinar includes updates on the world milk price and a comparison of major dairy future prices. This saves you time and enables you to always be one step ahead of the latest trends and drivers.

### Key Features

- The IFCN World Milk Price Indicator
- Trends and drivers of the world milk price
- Comparison of the main future price indicators for dairy products
- Maps & charts with key information

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Dairy Sector Data & Long-term Outlook

This comprehensive data product supports long-term strategic business decisions with comparable data at country level. It contains for all countries in the world: timeline data since 1996, regional data and the IFCN Long-term Dairy Outlook until 2050. Standardized and quality-checked country and regional data increase efficiency in business development by shortening the time for data mining.

Monthly Real Time Data

This real-time product provides data on milk production, milk & feed prices and describes the current situation and ongoing developments of dairy markets. Additionally, it contains farm economic data with easy-to-understand traffic light visualization. It enables to optimize short-term operational business processes on global and country level. The key market insights empower to interpret the up-to-date databases for decision making.

Annual Farm Structure Data

Farm structure data is important for your sales planning and expansion strategies. This data product offers the possibility to analyze comparable herd sizes with regard to animals and farms as it contains a standardized of the farm size classes on a global level. The timeline data and forecast up to 2030 provide a comprehensive overview of the historical and future farm developments.

Monthly Dairy Trade Data

The dairy trade product contains standardized monthly 27 dairy and 3 animal feed commodities trade data with the level of 6-digit HS codes. Updated quarterly, the product can provide your company with crucial animal feed commodities trade data with the level of 6-digit HS codes. The dairy trade product contains standardized monthly 27 dairy and 3 feed commodity groups.

Farm Economic Data

This comprehensive dataset facilitates strategic decision making by presenting a unique tool for benchmarking dairy farms world-wide. Short, but thorough, farm descriptions help you to find the farms/farming systems you are most interested in and compare these specific farms with regard to farm economics, cost competitiveness or feeding indicators. Also, key indicators for sustainability and resilience of dairy farms are included.

Key Variables

- Outlook for over 200 countries
- Milk supply & demand
- Dairy farm & cow numbers
- Total dairy trade & stocks
- Milk & feed prices
- Milk production by region

- Monthly milk & feed prices and milk supply for 65 countries
- Dairy farm margin
- EU-28 & US dairy stocks
- Fat & protein content of milk
- Market report & charts

- Farm numbers & average farm size for over 80 countries
- National farm structure data
- IFCN Standard Herd Size classes
- Farm structure forecasts
- >100 herd size classes forecast

- Traded dairy volume in ME (milk equivalents)
- Dairy imports and exports for over 90 countries
- 5 dairy commodity groups
- 27 dairy products + 3 feed items
- Monthly dairy trade balance

- Data for 170 typical farms/ farming systems in 52 countries
- Typical farm economic results
- Cost of milk production
- Sustainability & resilience indicators
- Feed ratio composition, feed costs, intake and efficiency
Top 20 Dairy Processors’ impact on the world is understated

IFCN observes various public reports with rather diverse opinions on the added value of dairy farming and processing worldwide. Rather than add another opinion, IFCN decided it would be useful first to list the facts of the world's largest dairy processors. These facts have already been made available to everyone but have never before been aggregated and analysed in a single overview. That is why IFCN has created the world's first dairy processor report: a fact book that makes dairy processing companies comparable.

The IFCN research approach

The IFCN Top 20 Milk Processors List provides validated, comparable data to better understand the largest dairy processors worldwide. In 2020, the research about these processors was extended and IFCN created the world's first dairy processor report: a fact book that makes dairy processing companies comparable. By analysing a wider set of sources and data, it illustrates the contributions of milk processors with a focus on people, planet and profits.

The Top 20 dairy companies in 2019

The Top 20 Milk Processors represent 25% of the milk produced globally by collecting 211 million tons milk. Their milk intake has increased annually by around 2.4% during the 2014 – 2019 period, which is broadly in line with global milk production growth.

IFCN Top 20 Dairy Processors list by milk intake in 2019

<table>
<thead>
<tr>
<th>Rank 2019</th>
<th>Company Name</th>
<th>Origin &amp; main operation countries</th>
<th>Milk intake in mill. t ME</th>
<th>Estimated turnover per kg milk, in USD</th>
<th>Market share in % of world milk production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dairy Farmers of America</td>
<td>USA</td>
<td>29.0</td>
<td>0.5</td>
<td>3.4%</td>
</tr>
<tr>
<td>2</td>
<td>Fonterra</td>
<td>New Zealand/ others</td>
<td>21.9</td>
<td>0.6</td>
<td>2.6%</td>
</tr>
<tr>
<td>3</td>
<td>Groupe Lactalis</td>
<td>France/others</td>
<td>20.0*</td>
<td>1.1*</td>
<td>2.4%</td>
</tr>
<tr>
<td>4</td>
<td>Arla Foods</td>
<td>Denmark/Sweden/others</td>
<td>13.7</td>
<td>0.9</td>
<td>1.6%</td>
</tr>
<tr>
<td>5</td>
<td>Nestlé</td>
<td>Switzerland/ others</td>
<td>13.7*</td>
<td>1.3*</td>
<td>1.6%</td>
</tr>
<tr>
<td>6</td>
<td>FrieslandCampina</td>
<td>Netherlands/ others</td>
<td>11.8*</td>
<td>1.1*</td>
<td>1.4%</td>
</tr>
<tr>
<td>7</td>
<td>Saputo</td>
<td>Canada/USA/others</td>
<td>10.5</td>
<td>1.1</td>
<td>1.2%</td>
</tr>
<tr>
<td>8</td>
<td>Amul</td>
<td>India</td>
<td>10.3</td>
<td>0.5</td>
<td>1.2%</td>
</tr>
<tr>
<td>9</td>
<td>Yili</td>
<td>China</td>
<td>9.4*</td>
<td>1.4*</td>
<td>1.1%</td>
</tr>
<tr>
<td>10</td>
<td>Mengniu</td>
<td>China</td>
<td>8.7*</td>
<td>1.3*</td>
<td>1.0%</td>
</tr>
<tr>
<td>11</td>
<td>California Dairies</td>
<td>USA</td>
<td>8.1</td>
<td>0.5</td>
<td>1.0%</td>
</tr>
<tr>
<td>12</td>
<td>Glanbia Plc</td>
<td>USA/other</td>
<td>8.0</td>
<td>0.5</td>
<td>0.9%</td>
</tr>
<tr>
<td>13</td>
<td>DMK</td>
<td>Germany/Netherlands</td>
<td>7.1*</td>
<td>0.9*</td>
<td>0.8%</td>
</tr>
<tr>
<td>14</td>
<td>Agropur</td>
<td>Canada/USA</td>
<td>6.5</td>
<td>0.8</td>
<td>0.8%</td>
</tr>
<tr>
<td>15</td>
<td>Leprino</td>
<td>USA</td>
<td>5.9*</td>
<td>0.6*</td>
<td>0.7%</td>
</tr>
<tr>
<td>16</td>
<td>Land’O’Lakes</td>
<td>USA</td>
<td>5.8</td>
<td>0.7</td>
<td>0.7%</td>
</tr>
<tr>
<td>17</td>
<td>Müller</td>
<td>Germany/UK/other</td>
<td>5.7*</td>
<td>0.9*</td>
<td>0.7%</td>
</tr>
<tr>
<td>18</td>
<td>Danone</td>
<td>France/other</td>
<td>5.7</td>
<td>2.8</td>
<td>0.7%</td>
</tr>
<tr>
<td>19</td>
<td>Sodiaal</td>
<td>France</td>
<td>4.6</td>
<td>1.2</td>
<td>0.5%</td>
</tr>
<tr>
<td>20</td>
<td>Savencia</td>
<td>France/other</td>
<td>4.2</td>
<td>1.3</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Source: IFCN data collection, analysis and estimates. The data represents in most cases the year 2019. * data are estimated by IFCN.

For more information contact: info@ifcndairy.org or visit www.dairyreport.online/dairy-processor-report/

Explanation of variables

Milk intake represents milk volume collected and dairy commodity purchases (in milk equivalent) for the main company and its subsidiaries. Milk intake figures in mill tons. In some cases recalculated from litre (1 litre = 1.033 kg). In the milk intake a double counting is possible if a processor sources milk from a collecting cooperative (e.g. DFA) or is sourcing milk in form of dairy products. This means that the total milk volume of the Top 20 processors may be overestimated. Content of milk intake (fat and protein level) may be underestimated in some countries such as New Zealand and The Netherlands. Turnover per kg milk: Dairy turnover divided by milk intake. This indicator gives an indication of the value creation per kg of milk processed. This figure shall be interpreted with care as the precise number is difficult to define and a direct comparability between companies is limited.

Comments on specific cases

DFA: Milk intake represents all milk collection from members and others. A large majority of collected milk is delivered to various dairy processors. Fonterra: These indicators include milk intake and turnover from dairy activities in New Zealand and around the world (like DFA) for the season 2018/19. Nestlé/Danone/Land’O’Lakes/Müller: Milk intake is based on energy corrected milk level for fresh milk and for all dairy derivatives. Turnover data is dairy sales only. FrieslandCampina: IFCN estimated milk intake figure based on import data for the following countries: Nigeria, Vietnam, Malaysia, Thailand, Indonesia & Philippines. Amul: Milk intake volume is adjusted to energy corrected milk with annual average 5.85% fat and 3.1% protein. Yili/Mengniu: Milk intake indicator is estimated based on dairy commodity production conversion to raw milk by IFCN due to no public data availability. Glanbia: Processed milk excluding Glanbia Ireland.
Germany

Top 10 regions - avg. annual milk production growth
2015 - 2020 - regions represent 69% of national milk production in 2020

- Niedersachsen: +7.2%
- Schleswig-Holstein: +5.0%
- Bayern: +6.5%
- Schwaben: +5.1%
- Sachsen: +8.7%
- Mecklenburg-Vorpommern: +1.7%
- Brandenburg: +2.8%
- Oberpfalz: +1.3%
- Tuebingen: +0.9%
- Sachsen-Anhalt: +1.1%

Status and key developments

Status 2020
- No. 5 (41) in the world milk production: 33.7 mill t SCM
- Number of dairy farms: 57,322
- Milk price: +4% to world market
- Feed price: +8% to world market

Key developments 2015 — 2020
- Milk production increased by +0.5% per year
- Farm number decreased by -4.8% per year
- Milk yield increased by +2.3% per year
- Top herd size class growth: ≥100 cows/farm: CAGR +0.6%

Key variables

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</tr>
</thead>
<tbody>
<tr>
<td>Production (mil liters SCM)</td>
<td>29.57</td>
<td>28.87</td>
<td>28.86</td>
<td>28.79</td>
<td>29.99</td>
<td>30.90</td>
<td>32.39</td>
<td>32.94</td>
<td>33.18</td>
<td>33.54</td>
<td>33.66</td>
<td>+1.8% +0.5%</td>
</tr>
<tr>
<td>Cows (1,000s)</td>
<td>5,195</td>
<td>4,564</td>
<td>4,287</td>
<td>4,087</td>
<td>4,182</td>
<td>4,190</td>
<td>4,296</td>
<td>4,218</td>
<td>4,101</td>
<td>4,012</td>
<td>3,921</td>
<td>+0.5% -1.8%</td>
</tr>
<tr>
<td>Milk yield (t SCM/cow)</td>
<td>5.69</td>
<td>6.33</td>
<td>6.73</td>
<td>7.04</td>
<td>7.17</td>
<td>7.37</td>
<td>7.54</td>
<td>7.81</td>
<td>8.09</td>
<td>8.36</td>
<td>8.58</td>
<td>+1.3% +2.3%</td>
</tr>
</tbody>
</table>

Farm structure
No. of dairy farms (1,000s): 185.97 138.50 113.50 99.00 91.55 82.86 76.47 69.17 62.81 59.93 57.32
Average farm size (cows/farm): 27.9 33.0 37.8 41.3 45.7 50.6 56.2 61.0 65.3 66.3 68.4

Prices in national currency
Milk: feed price ratio: 1.80 2.10 2.06 1.97 1.93 1.39 1.54 1.36 1.78 1.49 1.58
Cull cow (EUR/100 kg): 1.11 1.17 1.06 1.26 1.43 1.96 1.76 1.69 1.81 1.75 1.68
Land - buy (EUR/ha): 10,394 9,081 9,233 9,205 11,854 14,424 18,099 22,300 25,485 26,439 27,429
Devaluation of EUR vs USD: +17% +17% +12% +24% +19% +16% +19% +0% +6% +1% +3% -6.7% +3.0%

Farm structure
% of dairy farms and cows in size classes (2020)
- Farms per size class
- Cows per size class
- IFCN Typical Farms

Farm structure
% of cows per herd size
- 1-9
- 10-19
- 20-29
- 30-49
- 50-99
- ≥100

Milk and feed price
- EUR / 100 kg
- National farm gate milk price (SCM)
- National feed price
- IFCN World Feed Price Indicator
- IFCN Combined World Milk Price Indicator

Monthly farm gate milk price
- EUR / 100 kg SCM
- Distance net. price vs world price in EUR
- National farm gate milk price (SCM)
- IFCN Combined World Milk Price Indicator

Explanations


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Agribusiness Partners

Milk Processing

Feed and Feed Additives

Milking and Barn Equipment

Health and Hygiene

Farm Machinery

Genetics for Animals & Plants

Milk Testing, Measure, Transport

Financial Institutions

Milk Processing And Packaging Technologies

Agriculture Technology Companies

Dairy Farming Companies

Consulting and others