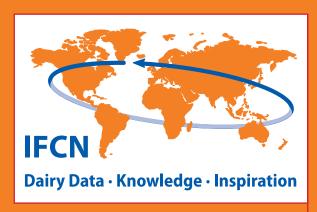
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Helping people in the dairy world to make better decisions



IFCNThe Dairy Research Network

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Dear Friends,

The IFCN Dairy Report 2020 represents the most comprehensive overview of our complex global 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 the following areas: typical farm representativeness, calculation of resilience and sustainability of dairy farms. This chapter now includes IFCN's special research about large farms (Page 50).

The dairy sector: To understand the dairy world better, it is important to observe the global dairy market and its short-term milk production outlook. By monitoring the market monthly and forecasting milk supply, price and farm economics for the global market, IFCN can draw conclusions on milk supply and milk price trends and drivers for the next 12 months. New research about organic milk is included on page 67.

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.

Highlights - IFCN Events

IFCN Dairy Conference 2020

The Dairy Conference was held online to become one of the most visited events in IFCN history. Topic: Status of the dairy world in times of Covid-19 (page 10).

IFCN Supporter Conference 2020

Also held online, for the first time in IFCN history, supporter and researcher partners joined the same event to break the records from the same year's dairy conference. Topic: New Opportunities -The Dairy World after Covid-19.

IFCN Data Analysis Workshop 2020

The second IFCN Data Analysis Workshop was held online, as a webinar. 78 dairy experts came together to discuss Dairy Farm Economics, with a special focus on the farm structure of today's dairy world (page 15).

IFCN Market Intelligence Training

This tailor-made training for IFCN Supporter Partners and dairy professionals was held in Hamburg for the first time and due to the participants' positive feedback, it will be repeated as an online version in November (page 16).

Status of the IFCN Research Network in 2020

The dairy sector analysis covered over 200 countries. In the farm comparison, 170 typical dairy farms from 64 dairy regions and 52 countries were analysed. In 2019 the research network grew substantially via new research partners and countries.

IFCN Dairy Report 2020

Chapter 1: Cost comparison summarises results on costs, returns, profitability and productivity of dairy farms worldwide. Real time cost estimates for 2020 have also been 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 123 countries, representing 98% of the world milk production, with comparable information on:

- Milk supply and demand developments
- Monthly farm gate and world milk price
- Consumer prices and margins in the chain
- · Milk processing profile per dairy product
- Major milk processors per country

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 during the last 20 years. Working with you is a pleasure and we are grateful for your contribution to strengthen the network in 2020. We are looking forward to our activities in 2021.

Anders Fagerberg Chairman of the IFCN Board Torsten Hemme CEO & Founder

Ator Helle he

Participating dairy economicsts / co-editors of the IFCN Dairy Report Get full version: dairyreport.online



Dairy Expert

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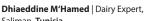




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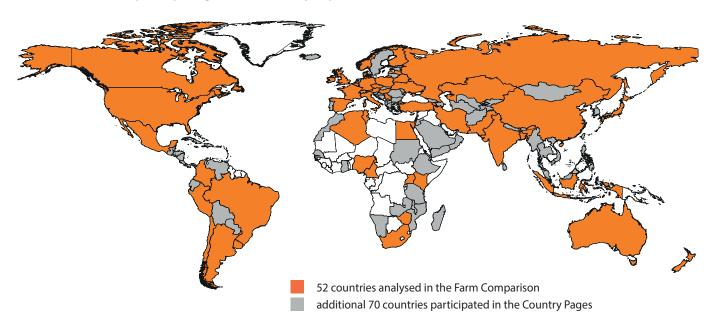
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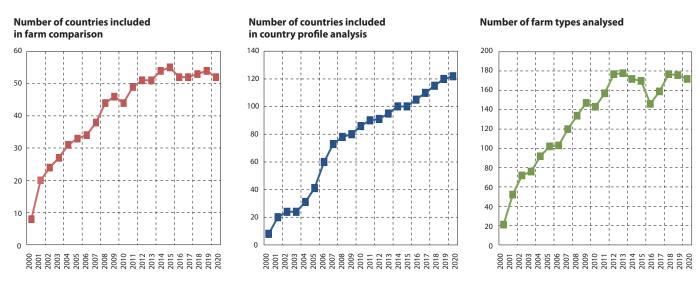
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IFCN Dairy Report - Developments 2000 - 2020

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Which countries are participating in the IFCN Dairy Report activities in 2020?

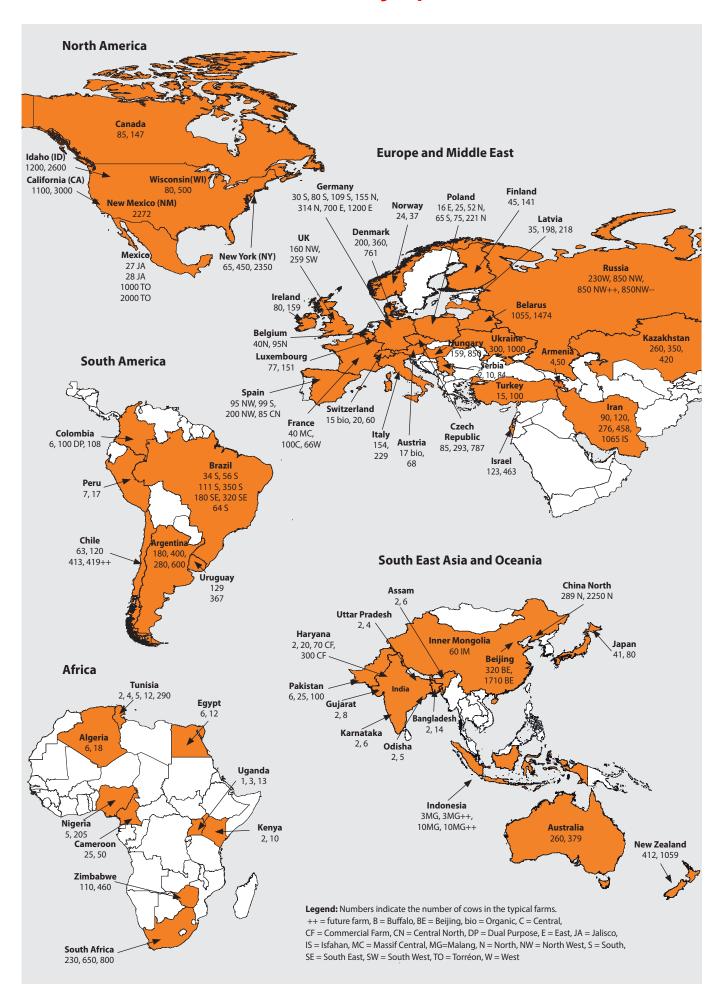






Regional maps and the typical farms

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About IFCN

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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 to 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

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 130 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 life time 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



IFCN Dairy Research Center and IFCN Board

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Organisational setup

IFCN is a company running the International Farm Comparison Network which is a global research network.

IFCN has a Dairy Research Center (DRC) with 21 employees, coordinating the network process and running the dairy research activities.

CEO



Torsten Hemme

Management



Łukasz Wyrzykowski



Sandra Bornhöft

Sales & Marketing



Veit Becker



Muzaffar Yunusov



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Data Quality & Product Development



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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** 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).



Anders Fagerberg *Chairman*

75

Ernesto Reyes



Hans Jöhr



Uwe Latacz-Lohmann



Olaf Rosenbaum



Torsten Hemme

21st IFCN Dairy Conference, Online Sessions, June 2nd and 3rd, 2020 Get full version: dairyreport.online

Status of the dairy world in times of COVID-19



The 21st IFCN Dairy Conference 2020, online for the first time, brought together 125 dairy economists and experts representing 70 countries.

Tuesday, June 2

PRE-CONFERENCE

Strategy session

Brainstorming Session – IFCN web portal

Extra sessions:

How to improve the value of the INP output?

Wednesday, June 3

MAIN CONFERENCE

Dairy Market 2020

 Update on the current world dairy situation including milk supply and price outlook in times of COVID-19

Global Situation of Dairy Farm Economics

- Current developments and their impact on dairy
- Presenting and including results of the weekly interactive webinars for IFCN partners

Summing up and closing

· Next steps of IFCN





Results from the IFCN Dairy Conference

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Status of the dairy world in times of COVID-19: Results from the 21st IFCN Dairy Conference 2020

Challenges and opportunities for the dairy sector during the corona pandemic

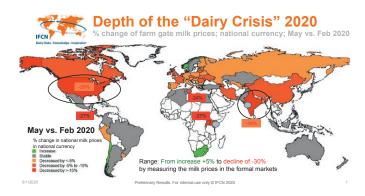
Covid-19 changed public and private life all around the world. The prevailing restrictions, aimed at minimizing the spread of the virus, have affected us on many different levels from February 2020 onwards. Therefore, the 21st IFCN Dairy Conference put a key focus on developments and impacts on the dairy sector. IFCN took advantage of the situation and hosted a big online event with more participants than ever before, including also several partners who normally do not manage to attend our conferences.

The year before the crisis

The IFCN experts consider that it is important to note that the milk production growth of 1.4% in 2019 was significantly below the long-term average (2.3%). This was driven mainly by India, Oceania, Africa and the Middle East. Meanwhile, the rising popularity of milk alternatives in rich countries and lower milk availability in emerging economies slowed down demand growth. Dairy farm economics appeared to be more positive as the world milk price increased by +9% to a level of USD 37.3/100 kg in 2019. Nevertheless, for many farmers, especially in the US and EU, this milk price is often "too little to live on and too much to die", to quote Dr Torsten Hemme.

The path into the crisis – developments until May 2020

The performance of the national farm gate milk price can be used as an indicator for a crisis. Nevertheless, there are two large countries that could be considered as the "epicentre of the dairy crisis": the US and India, with drops of -29% and -19% from February to May, respectively. The poll among the dairy experts revealed that one third considered their country to be only at the beginning of the crisis, while two thirds of the participants thought the bottom of the crisis has already been reached.



The path out of the crisis – milk price outlook until end of 2020

The outlook for the world milk price in 2020 remains complex, and future markets and the views of analysts are not aligned. As of early June, dairy future markets expect a fast milk price recovery to reach a level of USD 35/100 kg milk in July. This can be described as a "V" shaped price scenario. The majority of dairy experts at the conference expects a U-shaped recovery and thus a longer period of time until previous price levels will be reached once again. The reason is the solid milk supply growth in 2020, so far coupled with a high possibility of a declining per capita demand as a result of the economic crisis. Further research will be required on dairy

stocks and the potential shift of dairy demand in developing countries from informal to formal dairy products, which could have a positive impact on dairy imports. At the end of the conference it became very clear that a real time monitoring of dairy indicators is a key issue. IFCN will update its research in the coming months to help people in the dairy world to navigate this situation better.





KEY CONCLUSIONS

In the final Covid-19 workshop, all participants contributed to a great poll session giving their opinions on certain hypothesis: The majority of the IFCN Research Partners agreed that:

- Milk surplus vs. milk deficit: Both a higher milk surplus in net-exporting countries vs. a lower milk deficit in net-importing countries exist.
- Impact on dairy demand: Research partners experienced a mostly stable demand, although 37 % observed a decrease of 5 %.
- Stock building from February to May 2020: 32 % did not observe any change, stocks remained stable. Almost 30 % reported a small increase in stocks.
- A U-shaped recovery expected: The majority of dairy experts at the conference expects a U-shaped recovery and thus a longer period of time until previous price levels will be reached once again.

Source: HEMMET (2020): Covid-19 related dairy crisis – the fear is bigger than its impact – yet. https://ifcndairy.org/wp-content/uploads/2020/06/IFCN-Dairy-Conference-2020_

17th IFCN Supporter Conference in Brno, Czech Republic, September 17 – 19, 2019 Get full version: dairyreport.online

"Different types of milk: Complexities, Challenges and Opportunities"



The 17th IFCN Supporter Conference was held in Brno, Czech Republic. More than 120 participants from over 65 dairy related companies attended the conference which was hosted by Brazzale S.p.A. and Brazzale Moravia. VAS – Valley Agricultural Software also supported the event, which was a great success.







Tuesday, September 17 THE DAIRY WORLD IN 2019

Pre Conference:

Inner Circle – How to Reach Excellence in Business Intelligence

• Presentation & Precompetitive Discussion

Official start of the conference

 Welcome to the 17th IFCN Supporter Conference

The dairy world today

- 20 years of IFCN serving the Dairy Sector and Lessons Learned
- IFCN 2025 Greater Synergies & Roadmap for the Future
- The Dairy World today & Outlook 2020
- Milk Production and Farm Economics Status, Trends and Drivers
- Latest Trends in Big Data and Technologies in Dairy – Tim Taylor, VAS
- Inspirational Talk Humans Interacting with the Cow *Joep Driessen, CowSignals*

Network evening

Wednesday, September 18 Different Types of Milk

Different Types of Milk – Complexities, Challenges and Opportunties

- Different Types of Milk: Definitions, Complexities and Facts
- Host perspective What's Special About Milk – Roberto Brazzale, Brazzale S.p.A.

Panel Session: Different Types of Milk: Complexities, Challenges and Opportunities

Workshop Session: Opportunities to Better Promote Dairy and its Industries, using the Tool of "WAR GAMING"

Factory Visit: Experience Brazzale Gran Moravia Cheese Making in Litovel Visit 250 cow farm in rural Czech Republic

Networking evening

Thursday, September 19

VISION TALKS

Vision talks

- IFCN Global Dairy Outlook 2040 and World Region Perspective
- Business Strategy Design in a Challenging Dairy World – Hans Jöhr, Nestlé

Panel Session: Business Strategy Design in a Changing Dairy World

 Condensing complexity – What matters for your Company and Dairy Sector in 2020

Summing up and closing





Results from the IFCN Supporter Conference

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Different types of milk: Complexities, Challenges and Opportunities. Results from the IFCN Supporter **Conference 2019**

Over the last two decades, global dairy consumption increased by over 60% due to a growing number of cows and buffaloes, as well as improvement in productivity. Although dairy production and consumption continue in a positive direction, new challenges are arising for the sector. Milk alternatives have become more prevalent in many markets, driven by various trends, suggesting that traditional milk is facing a major battle.

The participants of the workshop "Opportunities to Better Promote Dairy and its Industries" took a different approach to determine opportunities and challenges in the dairy world. They focused on the perception of dairy, which is shifting more and more from developed countries to other parts of the world.



Conclusions of the workshop:

- · Milk consumption is increasing on a global level, but dairy is facing challenges on a regional level.
- So far, the impact of different types of milk and dairy alternatives on the dairy market is still limited.
- There was a common agreement that transparency and fact-based information will be necessary to address the challenges posed by different types of milk, as well as plant-based beverages.

Complexities and challenges of different types of milk:

There are many different types of milk, both dairy and non-dairy. Sheep milk is considered more environmentally friendly by many consumers, while goat milk is lower in lactose and camel milk is trendy.

There is a growing demand for non-dairy products, mainly in Western markets, where consumers are looking for different types of milk, be it for health-related or environmental reasons. Other complexities that arise are:

- Perceptions of dairy vary widely by region: conventionally produced milk is still globally the most popular product, although the demand for more value-added dairy products is growing.
- · Digitalisation and social media lead to different influences on consumer behaviour, specially from the non-dairy movement.
- Farming practices can have an impact on the image of dairy.
- · Policymakers and lobbies change regulations regarding production or
- · Animal welfare is still counted as a cost for farmers, instead of increasing profit.
- · Dairy farming is not attractive to young people.

Opportunities

Sustainable milk production is needed to cover future demand. IFCN predicts global milk production will increase by 1.7% annually until 2040 as a result of population growth and rising per capita consumption. New markets will act as game changers, and both supply conditions and demand patterns are evolving.

- More value may be created for milk by answering to current consumer trends, whether for good farming practices, a zero-carbon value chain, or better animal welfare.
- · New technologies can be used not only to better interact with the consumer but also to make dairy farming more attractive for young people.

KEY TAKE AWAY MESSAGES

- 1. The Dairy World is changing at a fast pace: Embrace the change and ride the wave.
- 2. Transparency is vital: Transparency will be key to building consumer trust, be it through education or social media. This also creates vulnerability, so it is important to be prepared.
- 3. Happy cow happy farmer happy planet: Good farming practices result in healthier and more productive animals.
- 4. Collaboration: Suppliers have to embrace coopetition as a critical value to the evolution of the dairy ecosystem, making the whole supply chain more competitive.
- 5. Milk production as part of social welfare: The dairy industry has a social responsibility to maintain the livelihoods of farmers and to bring families together.



QUOTES FROM THE WORKSHOP:

- "We must create transparency based on the coordination of the dairy sector and IT solutions."
- "The circularity of cow and milk production is misunderstood, and, as a sector, we need to better present the perspective."
- "Customer engagement and awareness are vital."

THE FACTS ON DIFFERENT TYPES OF MILK IN 2018:

- 5% of the total world milk production came from animals other than cows and buffaloes
- 4% of the total EU milk consumption was represented by plant-based alternatives
- 3% of the milk supply in 50 countries monitored by IFCN were produced organically
- Lab-based beverages fetched prices that were twice as high when compared to cow milk
- 1% was the equivalence of plant-based dairy alternatives to the total EU milk production

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8th IFCN Regional Workshop in Bengaluru, India, October 15th - 16th 2019 Get full version: dairyreport.online

Milk Quality and exports potential of India



The 8th IFCN Regional Workshop in Bengaluru, India, took place from October 15th to 16th. More than 100 dairy experts joined the event to discuss the future of Indian Dairy outside the policy-making area.

With Dairy 1.0, India became the largest milk producing country in the world. Today, India produces 23% of the world's milk, owns 36% of the world's dairy cows and buffaloes and 60% of the dairy farms. With Dairy 2.0, India has the potential to become the world's largest milk processing country. The slogan "Let's move from Shaktiman to Superman" was developed during the workshop to describe the step from 1.0 to 2.0.

Working in groups, the participants highlighted the main challenges for the dairy development in India:

- 1. Milk yields and productivity of cattle in India
- 2. Dairy farm profitability is not sufficient to make dairy farming attractive for the younger generation
- 3. Quality levels of milk and feed and the corresponding legislative frame
- 4. Free trade agreements currently being discussed for dairy products
- **5.** Increasing feed prices in 2019 (+ 40 50%)
- 6. Animal handling and cull cow policy, which is challenging for sustainable dairy farming
- 7. Milk production and collection levels in 2019 have decreased?
- 8. Distortions which do not create a level playing field for milk processors

In addition, the dairy experts defined what Indian Dairy 2.0 could mean and came up with ideas on how to implement changes. The different levels for changes are consumers, retailers, processors, dairy farms, farm input suppliers and service providers and policies.

KEY RECOMMENDATIONS FROM IFCN FOR DAIRY 2.0

- · Consumer: Increase consumer awareness through media campaigns and by transparency in dairy farms
- **Processors:** The processor must take the role of "agent of change" and implement a standard for quality and a corresponding payment system, where modern technology is considered.
- Farmer: the dairy farmer must produce quality milk in large volumes by adding more cows and focusing on forage, optimal feeding and better breeding for higher yields, in accordance with SOP for good farm operation.
- Farm inputs: New technologies like IT/IoT and modern farming technologies offer solutions to create a sustainable dairy farming
- **Ecosystem 2.0:** Farm input providers, processors and policymakers should create an ecosystem for a Dairy 2.0 farm to develop
- Consciousness: The total system- consciousness was recommended to provide strength among all the actors in the dairy chain. Once applied well, it will be beneficial for the prosperity of each sector in the chain and the development of the sector as a whole.













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2nd IFCN Data Analysis Workshop – April 22, 2020, Online Webinar **Get full version: dairyreport.online**

Dairy Farm Economics



The second IFCN Data Analysis Workshop was held online, as a webinar. Seventy dairy experts came together to discuss Dairy Farm Economics, with a special focus on the farm structure 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 create value out of farm economics: IFCN modules & tools
- · How to win the future: competitiveness, value creation and sustainability

Feedback

"I found the interaction between farm structure and milk prices really interesting"

"I will certainly be able to make deeper analyses based on IFCN data in the future" $\,$

"Good market research starts with IFCN!"

The IFCN Data Analysis Workshop

transmits profound knowledge of the background of dairy farm economics and structures. It helps IFCN data users to understand the data collection process and its methods, and to interpret the results of the farm structure database in order to create more value for their customers and markets.





1st IFCN Market Intelligence Training, in Hamburg, March 10th – 11th, 2020 Get full version: dairyreport.online



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 in Hamburg, Germany. It was attended by 12 participants from different dairy related companies and institutions.

Tuesday, March 10 SETTING UP MARKET INTELLIGENCE AS A CORPORATE FUNCTION

- The Market Intelligence Maturity Model
- Permanent Data Collection and Dissemination
- Organizing Market Intelligence for Success

Wednesday, March 11 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

"Excellent facilitation of break out groups and discussions."

"We learned a lot about new issues, we did not know existed"

 ${\it "It is interesting to learn, how each company applies market intelligence. It inspires us to apply this for ourselves"}$



IFCN Supporter Partnership and IFCN Data Products **Get full version: dairyreport.online**

P – IFCN Supporter Partnership Packages

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 and companies from the whole dairy supply chain. Based on 20 years of experience the IFCN Dairy Research Network keeps growing as more dairy stakeholders find value in supporting the network.

Main benefits of the partnership:

- The global holistic picture of the dairy world
- Networking with your peers and companies in the supply chain
- Upgrade your market intelligence with better dairy economic data and knowledge
- Join the leading global dairy think tank conference
- Reduce your costs for data mining and analysis
- Data for strategic planning and operational management

IFCN Partnership Packages Your benefit	Basic	Premium	Ultimate
IFCN Dairy Report Coverage of 120+ countries on macro and micro dairy economic indicators (5 hard & pdf copies)	~	~	~
IFCN Insight Slides Annual holistic picture of the dairy world	~	~	~
IFCN Monthly Newsletter Latest happening on the sector on your finger tips	~	~	~
Logo positioning Be visible on the IFCN Dairy Report, IFCN World Dairy Map and on the IFCN Website	~	~	~
IFCN Hotline Remarks and first suggestions for urgent questions	E-Mail	E-Mail, Phone	E-Mail, Phone
Global Dairy Think Tank Be part of annual IFCN Supporter Conference with more than 130 agribusiness companies	One seat	Two seats	Three seats
Annual 101 Exclusive IFCN Partner company feedback meeting on existing data usage and future needs	-	~	~
IFCN Milk Production Outlook Webinar Join quarterly webinar on latest milk supply trends & drivers	-	~	~
IFCN World Milk Price Outlook Webinar – NEW Join the monthley webinar for the top-level view on the dairy markets	~	~	•
IFCN Special Events Be part of such an event – more information to be shared – envisaged locations are in Europe & India*	-	~	~
Global Dairy Sector Database Get data from county pages in IFCN Dairy Report (key variables)	~	~	•
Access to IFCN Data Products Get access to the Standard IFCN Data Delivery Package (Excel formats)	Data purchase possible	Data purchase possible	Access to all data services
	6,000€	10,000€+	30,000€

^{*} Due to the effects of the Covid-19 situation we are considering to change the format of the conferences. Our goal is to combine the best of both worlds of a live event and an online conference.

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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. It was originally created to support our supporter partners during the outbreak of the COVID-19 pandemic with information - particularly regarding the volatility and uncertainties in the dairy market. The webinar includes updates on the world milk price and a comparison of major dairy futures prices. This saves you time and enables you to always be one step ahead of the latest trends and drivers. The content-rich events are complemented by a live Q&A session.

IFCN Webinars for Partners

- IFCN World Milk Production Outlook webinar: Quarterly Webinar on the latest trends and drivers of global milk supply
- IFCN Monthly Real Time Data Update webinar: The most comprehensive update covering all indicators connected to our special data service. More information below.
- IFCN World Milk Price Update webinar: Our special service to support our partners in the times of Covid-19
- Interactive webinar for researcher partners

Main befits of the product

- IFCN's special support for all partners dealing with change and complexity during Covid-19 times
- Keep the edge on the most important market developments with a top level update about current trends and drivers
- · Comparison of main dairy future price indications
- Send in your questions in advance, receive answers live during the webinar



Monthly Real Time Data incl. farm economics

This real time product delivers data on milk production, milk & feed prices and describes the current situation and ongoing development on dairy markets to optimise short-term operational business processes on a global and on a country level. In addition to the summary with the key message and IFCN Analysis, which are sent with this data product, we now offer you an additional webinar where you can get answers to any questions regarding the data and its implications. Having access to the real-time situation of the dairy market with comprehensive price analysis, it will make it easier to anticipate short-term shifts and changes. Sample Fig 1 highlights Germany's milk price and the implication on milk production and milk contents.

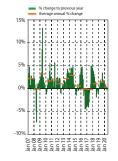
Dairy Sector Data & Long-term Outlook

The comprehensive IFCN product supports long-term strategic business decisions providing comparable country level data. It contains the following: time line data since 1996, regional data and IFCN Long-term Dairy Outlook 2050. The database reflects how the overall dairy situation is seen in the country of analysis, helping to assess the real market potentials. Standardised and quality approved country data increase your efficiency in business analysis and business development by reducing the data mining time. Sample Fig 2 shows milk production until 2020 and Outlook 2050 with regional milk production for Brazil.

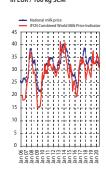
Dairy Farm Comparison Data

The farm sector data facilitates strategic decision-making by presenting a unique tool for benchmarking dairy farms world-wide. There are new key figures embedded in the product; cost components of the dairy enterprise and actual farm economics. These figures help to get an even better insight into actual farm economics in the analysed countries. The data will help you gain a deeper understanding of cost competitiveness and KPIs of dairy production such as efficiency, labour and land costs, capital, yield and prices. Fig 3 compares farms in Germany, USA and New Zealand on cost of milk production and return to labour.

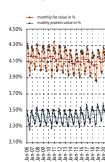
Change in German milk production



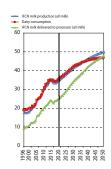
Milk prices in Ger in EUR / 100 kg SCM



Milk contents on monthly basis



Brazil milk suplly and demand



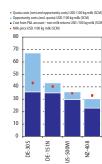
Brazil milk and feed prices



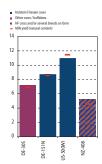
Brazil milk production in 2018



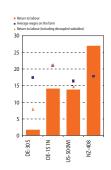
Cost of milk production only



Milk Yield



Return to labor



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NEW: IFCN Monthly Dairy Trade Data

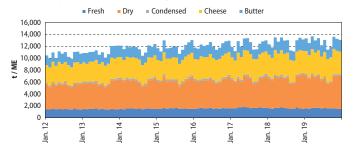
The dairy trade product contains standardized monthly data for 26 dairy commodities down to a level of 6-digit HS codes. Updated quarterly, the product can provide your company with crucial knowledge regarding the latest global developments in dairy trade. The export and import data are standardized to milk equivalents (ME, 4% fat, 3.3% protein) for better comparison: Volume (1000 t ME) and value (USD/t ME).

This data set can ideally be used in combination with the IFCN Monthly Real-time Data product to draw conclusions in relation to production and expected trade developments.

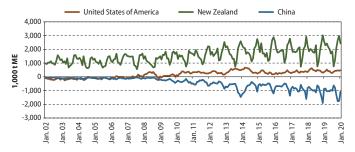
Main benefits:

- Obtain an overview of countries which are active in dairy trade and their self-sufficiency status
- · Position yourself favourably on the markets of net importers and exporters
- Calculate your company's own market share within a country's imports and exports

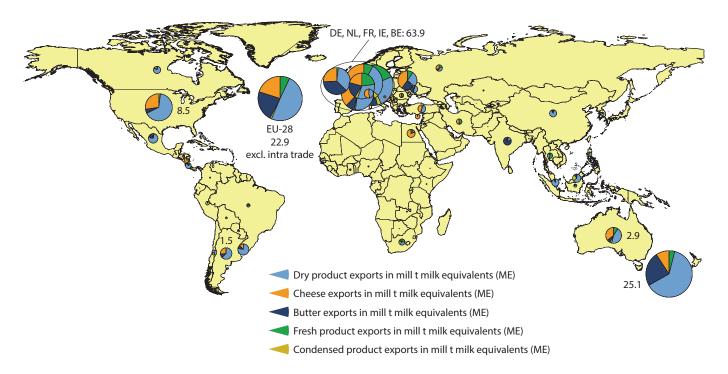
Total dairy export - commodity break-down



Total Dairy Trade Balance



Dairy exports by product group in mill t milk equivalents (ME) in 2019



Technical Details

- Format: Excel file
- · Delivery: Quarterly
- Coverage: over 90 countries, 95% of world milk supply
- Data Period: 2002 latest available data
- Price: 8,000 EUR/year

Key Variables

- Traded dairy volume in ME
- 5 dairy commodity groups
- 26 dairy products (6-digit HS Code)
- · Milk self-sufficiency indicator
- · Monthly dairy trade balance

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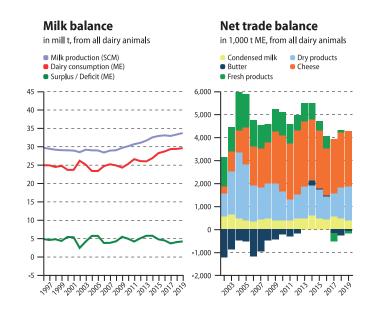
Status and key developments

Status 2019

- No. 4 († 1) in the world milk production: 33.6 mill t SCM
- Farm-gate milk price 3% above the world market price
- 114% self-sufficiency in milk (ME)
- 3.7% of cow's milk production is organic

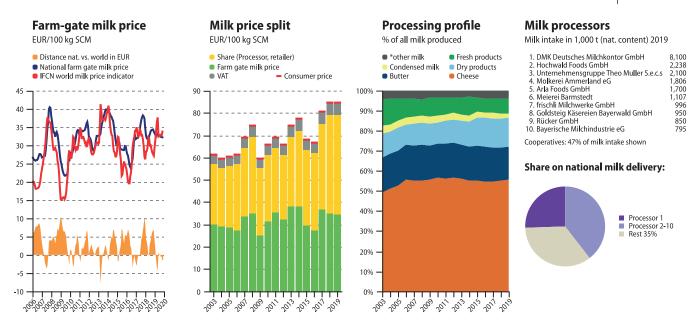
Key developments 2014–2019

- Milk production increased by 0.7% per year
- Number of dairy farms decreased by 4.8% per year
- · Average milk yield increased by 2.1% per year



Key variables

												Annual	change
	1996	2000	2003	2006	2009	2012	2014	2016	2017	2018	2019	'09-'14	'14-'19
Milk production (cow's)													
Production (mill t SCM)	29.57	28.87	29.04	28.26	29.52	30.90	32.39	32.94	32.78	33.18	33.57	1.9%	0.7%
Cows (in 1,000's)	5,194.7	4,563.6	4,337.5	4,054.4	4,169.4	4,190.5	4,295.7	4,217.7	4,199.0	4,100.9	4,011.7	0.6%	-1.4%
Milk yield (t SCM/cow)	5.69	6.33	6.70	6.97	7.08	7.37	7.54	7.81	7.81	8.09	8.37	1.3%	2.1%
Dairy consumption (all)													
Country consumption (mill t ME)	24.83	23.57	25.00	24.60	24.19	25.96	26.77	28.58	29.23	29.28	29.49	2.0%	2.0%
Population (mill people)	81.47	81.46	81.55	81.17	80.48	80.43	80.98	82.35	82.66	82.90	82.97	0.1%	0.5%
Consumption (kg ME/capita)	304.7	289.4	306.5	303.0	300.6	322.8	330.6	347.1	353.7	353.1	355.4	1.9%	1.5%
The dairy chain													
Milk delivered (cow's)	94%	95%	96%	96%	97%	97%	97%	96%	96%	96%	96%	0.0%	-0.2%
Exports/nat. production	39.7%	46.4%	49.3%	48.6%	50.5%	56.0%	56.8%	55.6%	56.9%	55.9%	56.9%	1.3%	0.0%
Imports/nat. consumption	28.1%	34.3%	41.1%	40.9%	40.6%	47.5%	47.7%	49.4%	51.5%	49.6%	50.6%	1.4%	0.6%



Explanations

Method: See Chapter 3.9 for details. Sources: National statistics supplemented by data from FAO, IMF, OANDA, GTT, Eurostat, AMI, BLE, BMELV. Dairy consumption (disappearance): Milk production (all dairy animals) + imports - exports +/- stock changes. Data: 2019 data preliminary and partly estimated. Cooperatives share on milk intake shown in the list is an IFCN estimate based on partner information. Consumer price (raw data) for: Fresh milk, 1 litre with 3.5% fat, 3.17% protein. Remarks: Milk processor list: Meierei Barmstedt, Theo Mueller & Ruecker (2018). *other milk: Milk not delivered to dairies and milk from animals other than cow and buffalo. If applicable: Sheep, goat and camel.

IFCN Partner Companies Along the Dairy Chain

Dairy researchers representing 122 countries

