

Dairy Report 2023

Helping people in the dairy world to make better decisions



IFCNThe Dairy Research Network

Introduction

Dear Friends,

The IFCN Dairy Report 2023 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

New margin: Up to 70% of the total dairy farm input costs are related to feed. However, in times of inflation it is crucial to consider other costs as well. Therefore, IFCN has developed a new methodology to improve its measurement of the farm economic situation by estimating a dairy farm margin including compound feed, fertilizer and energy costs (pages 60 – 61).

Projects: IFCN conducts numerous research projects worldwide. Many of these projects are carried out with the cooperation of our research partners. This guarantees the quality of our projects, since we have the knowledge and insights of dairy experts (page 17).

Highlights - IFCN Events

IFCN Dairy Conference 2023

This year's IFCN Dairy Conference focused on the energy crisis and the challenges and opportunities for dairy. It took place in Riga from June 10th to 13th, 2023 as a hybrid event bringing together more than 210 dairy experts from over 60 countries (Pages 10–11).

IFCN Supporter Conference 2022

Supporter and research partners joined the 20th Supporter Conference to discuss the topic: "Technology for a successful dairy future" (Pages 12-13).

IFCN Dairy Forum 2022

The third IFCN Dairy Forum also took place online in November 2022 with the topic of "The future of dairy farming in Emerging Countries " (Page 14).

IFCN Data Analysis Workshop 2023

Over 170 dairy experts from more than 75 dairy-related companies registered for the fifth IFCN Data Analysis Workshop to discuss the topic "Making decisions during times of increasing uncertainty" (Page 15).

IFCN & Eucolait joint Outlook Workshop 2023

IFCN and Eucolait organised the second joint workshop on the outlook for dairy markets in Brussels in March 2023. The purpose was to show and discuss with 72 participants from 51 different companies and institutions, what might happen in the future and what are the challenges and opportunities for the dairy industry (Page 16).

Status of the IFCN Research Network in 2023

The dairy sector analysis covers 125 countries. In the farm comparison,172 typical dairy farms from 66 dairy regions and 54 countries are analysed. In 2023 the research network continued to grow via new research partners and countries.

IFCN Dairy Report 2023

Chapter 1: Cost comparison summarises results on costs, returns, profitability and productivity of dairy farms worldwide. A description of sustainability and resilience indicators, and some examples, are also included.

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 125 countries + EU, representing 99% 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 2023. We are looking forward to our activities in 2024.

Torsten Hemme Chairman of the IFCN Board and founder of IFCN

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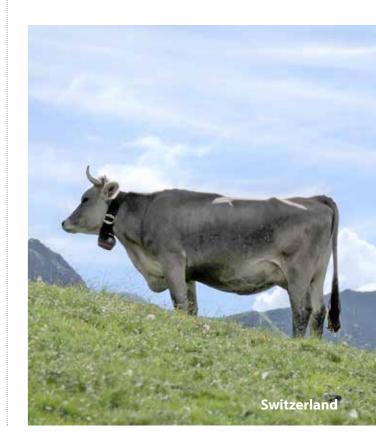
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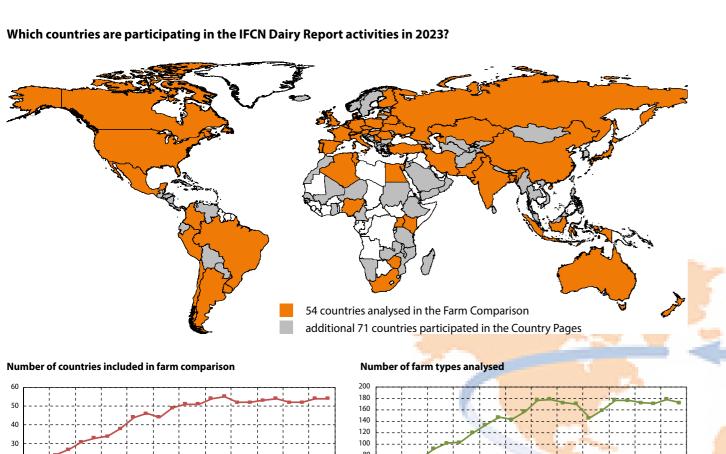
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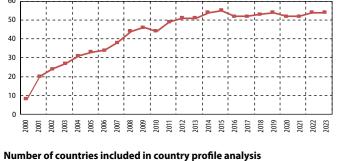
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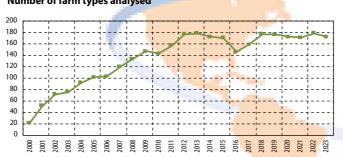


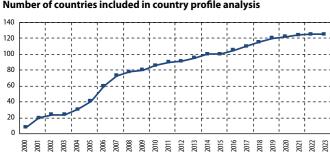
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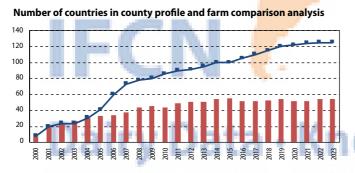
IFCN Dairy Report - Developments 2000 - 2023



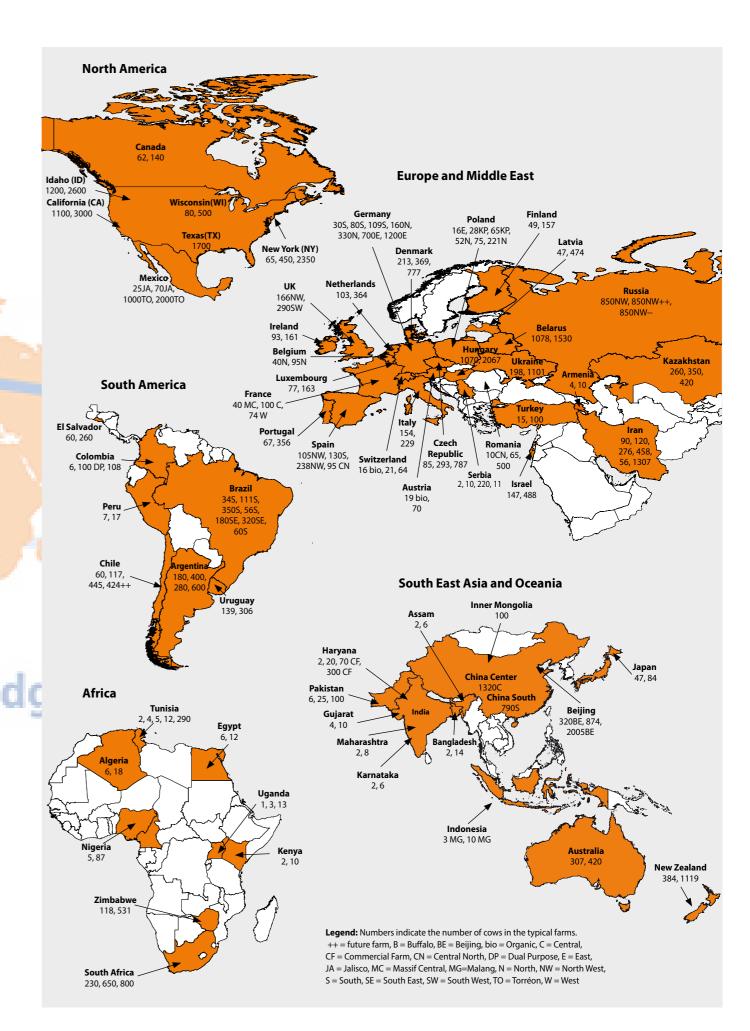












The dairy world today

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 Centre 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. 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.

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 organizations involved in policymaking 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 centre, to operate globally and enjoy a stable local life. You are also welcome to use IFCN as the ideal steppingstone for further developments in the dairy world.

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For further information please contact: info@ifcndairy.org

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 22 employees, coordinating the network process and running the dairy research activities.

Managing Director



Łukasz Wyrzykowski

Finance & Office Management



Vanessa Haberer



Sales & Marketing

Kölbl



Muzaffar Yunusov



Ilsabe Hemme



Shi



Zhong

Dairy Data, Quality & Research



Goetz



Marieke Fischer



Dorothee Böllina



Kocić

Gerta

Karanxha



Andrea Lendewig



Katrin Friedrichs



Hagemann



Iordanidou



Karin Wesseling



IT Development

Mateusz Węgrzynowski



Students

Abdullah Raffie





Saeed



Muhammad Harris



The IFCN Advisory Board has the mandate to support the IFCN management in the strategic development and is a tool to support the management of the two networks in IFCN.

The IFCN Board (status June 2023) is composed of the following members: Torsten Hemme (Chairman), Anders Fagerberg, Hans Jöhr (nominated by the supporters), Ernesto Reyes (nominated by the researchers), Uwe Latacz-Lohmann (Kiel University) and Erik Elgersma.



Torsten



Ernesto Reves



Hans Jöhr



Lohmann

Elgersma

Anders Fagerberg

This year's IFCN Dairy Conference focused on the energy crisis and the challenges and opportunities for dairy. It took place in Riga from June 10th to 13th, 2023 as a hybrid event bringing together more than 210 dairy experts from over 60 countries.

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Sunday 11th of June
FIELD TRIP

Monday 12th of June
MAIN CONFERENCE

Tuesday 13th of June
SPECIAL TOPIC DAY

THANK YOU

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The income of 1 billion people around the world is directly or indirectly linked to the dairy sector. Therefore, any global event that negatively impacts the dairy industry will affect the livelihood of many households around the world.

The invasion to Ukraine brought supply chain disruptions and many countries were forced to find other energy suppliers. The ensuing in-

creased energy prices, and lower availability of fertiliser, in turn pushed the fertiliser prices up. In addition, and despite having reached a record high level at the beginning of the year, the world milk price started showing a downward trend that put pressure on dairy farmers' profitability. Consequently, a very low increase in milk production was realised in 2022. This raises the question: How can the dairy sector be developed in different regions to ensure a sustainable future milk pool?

The Dairy Conference provided a platform by bringing together speakers and panelists from all around the world to talk about the dynamics between the energy and dairy markets and discuss how to convert challenges into opportunities.

There won't be a "one-fits-all" solution for the dairy world.

During the conference, different perspectives were presented and discussed addressing various regions in the world. In more developed countries, the challenges mostly came from the political side (such as animal welfare or environmental regulations), as well as the lack of labour, successors, and land. On the other hand, the less developed regions mainly faced uncertain economic and political conditions and were additionally short of an adequate infrastructure such as roads, energy

and water which should be provided by the respective governments. However, all participants agreed that adaptation and resilient production systems were needed, together with farm income diversification, the increase of home-grown feed, and more technology in order to tackle these issues.

What does this mean for the future of dairy?

The Member of Parliament in Latvia, Jānis Grasbergs, referred to the fact that Latvia had the lowest milk price in Europe (a quarter below the average in Europe). He also explained that the dairy industry was progressing while considering changes in the lifestyle of farmers, promoting advanced farming, as well as new forms of businesses and services.



We see many changes and new challenges coming at regional and national level. However, there are also many opportunities to develop the dairy sector. As lewa Leimane from AREI said: "The dairy sector has an incredible superpower: the ability to convert the solar energy accumulated in grassland into nutrient-rich food products". In addition, the participants highlighted the importance of sustainability, efficiency and affordability as essential aspects to consider when developing the dairy industry.

Data, networking and the correct strategies are needed to overcome upcoming challenges.

It was concluded that, in order to overcome challenges easily, the sector needed to remain open to changes, and to be flexible and adaptive. Dairy farmers will also have to prioritise and deal with issues one by one while thinking globally but acting locally, as different regions require different solutions. To achieve this, dairy relies on people, data and information while working together as demonstrated successfully by the IFCN Network.

IFCN would like to thank all participants, speakers, panelists, hosts and the sponsor for their contributions which will help the dairy sector as it moves into the future.

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20th IFCN Supporter Conference, Netanya, Israel, September 4th – 6th, 2022

Results – Technological Progress needs trust based collaboration

For the 20th time, the International Farm Comparison Network (IFCN) brought together the key players in the global dairy value chain to discuss the challenges and opportunities of forward-looking technologies. The participants of this year's conference confirmed that sector integration, and a focus on farmers and their animals, will be key to making the dairy sector technologically fit for the future. The hybrid event took place with more than 300 participants (live and online) from 4th – 6th September in Netanya, Israel.

On the economic side, the dairy industry today is driven by high input prices, low availability of raw materials and a steady demand due to the growing world population. Combined with megatrends such as farm consolidation, new policy regulations and lower profit margins, farmers' profitability is under threat. In addition, social and sustainability aspects, as well as the cows themselves and their welfare, are increasingly coming into focus. Farmers around the world need to adapt to the new conditions – technology can help close gaps and increase farm profitability.



What potential do technologies offer farms?

Technology means many things, but essential to any progress is data, which can serve as a powerful tool. Data helps analyse, measure and monitor, highlighting gaps and progress and enabling farmers to make decisions based on it. "Efficiency increases when we enable farmers to see things that are sometimes invisible to them. It helps to manage tasks instead of having to manage crises on a farm" explained Shlomi Dagan from MSD.

However, it is important for the industry to bear in mind that technology must always be designed from the customer's point of view. Only when farmers can see the relevance of the innovation, see its benefits for the animals and their own needs, and receive well-organised support, will they consider a change in strategy. Galit Saban from Allflex says: "It's about the customer experience", i.e. the journey you take with them, and "understanding the environment in which a company's technology is used", adds John McCurdy of Intellync. Similarly, Phibro's Rodrigo Souza says: "Only when we can prove value to the customer will we see progress".

Farming businesses are very diverse. When asked about the applicability of new technologies on smaller farms or farms in developing regions, the panellists agreed that farm size does not matter when it comes to whether the

use of technologies is beneficial. Evine van Riemsdijk from Nedap summarises, "You don't need automation, but everyone can use information", which means that there must be easy methods for farmers to receive information. Shlomi Dagan from MSD adds: "If you have a small farm, you need good data. This flexibility helps small farms to participate in the technology game". This, of course, requires a cooperative approach between all stakeholders, and trust becomes one of the most important aspects in decision-making. In addition, business solutions need to be adapted to farmers' individual needs and financial possibilities.



Results from the IFCN Supporter Conference

Looking to the future, the introduction of new technologies could have a positive side effect with regard to the challenge of farm succession. As the next generation of farmers has grown up with technology more than the generations before them, they are more likely to keep up with the pace of change and appreciate the benefits to their professional and personal lives. Nevertheless, and all panellists agree on this, there is a need to adapt farmer education and training so that the potential offered by new technologies can be truly exploited.

What is the best way forward?

Behind the smaller steps must be a broader understanding that sharing information and data is a form of collaboration that is beneficial and va-

luable to all stakeholders. Partnerships and trust between stakeholders are key. Ori Inbar from Mileutis is certain: "If we find a way to bring information together, we will overcome the silo mentality".

And there is an urgent need for action: the speed of change is much (higher) faster today in all sectors. So if the dairy industry (wants) wishes to defend its place in the future, it should speed up. In this sense, IFCN will continue to bring together people from the different networks and promote an intensive exchange about the changes.

The event was supported by the companies Allflex / MSD, Nedap, Phibro Animal Health, Mileutis, Intellync, Lely and Chr. Hansen.



















21st IFCN Supporter Conference, Chester, UK, September 25th – 28th, 2023

Together we can do it: The Transformation of Dairy

For the 21st time, the International Farm Comparison Network (IFCN) brought together the key players in the global dairy value chain to discuss issues regarding the changing world. A clear mandate to operate in the dairy industry is needed to fulfil expectations and requirements of future generations. The sustainability plans for your business will be the key to achieve it.

That's why IFCN decided together with Kite Consulting, as hosting sponsor, on this year's topic. The dairy world is meeting in UK to explore and discuss, how we could transform the dairy industry together and learn how other stakeholders in the dairy chain execute their strategy, facing market volatility and uncertainties.

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3rd IFCN Dairy Forum, November 29th, 2022, Online

The future of dairy farming in emerging markets

Many emerging economies see increasing demand for dairy products, while many exporting countries experience stalling milk production, so how will milk be produced in the future, and by whom? Participants from more than 80 countries attended IFCN's third annual public Dairy Forum to learn more about the drivers behind dairy development from different stakeholders. While the different initiatives have varying focuses, they all aim for an inclusive and sustainable approach.

Farming systems in emerging countries are often characterised by subsistence farming and have few standardised farm management processes. The challenges these countries face are therefore manifold. These include economic factors such as the increased cost of milk production, low productivity and the usage of technology. There are also social factors such as lack of education, an ageing generation of farmers and the limited attractiveness of the sector for young people. In addition, there are environmental aspects such as climatic changes and the requirements of reducing greenhouse gas emissions worldwide.



Kevin Muxlow Chief Operating Officer



In his presentation, Kevin Muxlow, mentioned four building blocks on how farms can improve both their business economics and become more sustainable: (animal) genetics, people, management, and data & technology.





Hosting partner

URUS

Event **Partner**







PATHWAYS TO DAIRY NET ZERO.

"Farm income is the number one indicator of sustainability in emerging markets and if you don't have an economic proposition, you don't have a farm longer term. In working on improving farm income, yield, productivity, reducing loss along the value chain, etc., we can also affect all these other indicators such as reducing GHG at the same time."



Donald Moore Global Dairy Platform Pathways to Dairy Net Zero Initiative



Donald Moore Executive Director





Maria Zampaglione Sr Advisor, Corporate Affairs





Marcel Petrutiu Director of Global Development



Ugo Pica Ciamarra Livestock Economist ASL 2050 Global Coordinator



The panel discussion proposed more ways of implementing solutions.

- · Creating the right environment.
- Farming systems and their management.
- · Synergy effects.

Young farmers need a perspective. The demand for milk is and will be there. How they can benefit from this will depend on how they set up their farms and what solutions they take up.

The IFCN Forum is a great opportunity to discuss with our dairy experts and the IFCN Team how to solve future problems that the dairy sector will face.

Dairy Farm Economics





registered to discuss the topic of "Making decisions during times of increasing uncertainty".



Presenters:

Philipp Goetz

Andrea Lendewic

Katrin Friedrichs Senior Dairy Economist

Marieke Fischer Lead Data & Quality

The 5th IFCN Data Analysis Workshop was held online, as a webinar. Over 170 dairy experts from more than 75 dairy-related companies

IFCN experts were given an analysis tool to approach exemplary questions:

- 1. How did recent events impact the regional dairy sector and what to expect?
- 2. Why are farm economics gaining importance in uncertain times?
- 3. How will mega trends impact the dairy world? opportunities and challenges.
- 4. Will farm consolidation speed up, given the increasing uncertainty?

IFCN data as basis for opportunity analysis

Without independent, standardized, reliable, timely, complete and periodically updated data... How to do business?



The aim of the workshop was to get an insight of successful practices from the dairy sector analysis with special focus on data-driven decision-making.

BENEFITS of joining the Data Analysis Workshop



Learn





Put to use

Learn about IFCN methods and how to create knowledge after the Workshop

Use the opportunity to ask questions before, during and

Interpret the information from the workshop and apply it to

Company workshops and consultancy

IFCN conducts numerous consultancy and workshop events, giving the opportunity to strengthen the capacity building in dairy knowledge and support the strategic planning. These workshops set the foundation for many board meetings, sales, and marketing strategies, as well as scenario building in different companies across the dairy value chain.







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2nd IFCN & Eucolait dairy outlook workshop, Brussels, March 28th – 29th 2023



Global Shortage of Dairy - The gap between supply and demand is increasing.

IFCN and Eucolait organised a joint workshop on the outlook for dairy markets, in order to show and discuss with 72 participants from 51 different companies and institutions, what might happen in the future and what are the challenges and opportunities for the dairy industry.

Under current dairy market conditions, the dairy farm profitability is under increasing pressure with milk and farm input prices at unprecedented levels. It became clear during the event that there are many uncertainties and market disruptors facing the dairy industry: there is a general shortage of food and difficulties in securing global food production. Participants even went so far as to speak of a "fight" for milk in the future. At the same time, price elasticity may not be as important as it has been in the past as consumers are willing to pay more for dairy products. However, it is not clear who will cover this supply in the future, as the major dairy producing regions are facing an increasing number of problems e.g. climate change, environmental regulations, water scarcity, lack of labour or lower margins.

Sustainability and the transformation of dairy will add extra costs and more uncertainties to the already volatile dairy market. That is why it is critical to anticipate future developments, mitigate risk and understand the new rules governing dairy farming, processing, distribution and sales of dairy products. Only those market players who are willing to act have a chance to succeed in the future. The participants considered various challenges and opportunities for the European dairy industry until 2030 during this workshop, which reflected the conclusions and, moreover, highlighted the importance of taking an in-depth look at the requirements of the changing dairy world.



Key conclusions from the outlook workshop:

- Global shortage of dairy is leading to higher price levels in the future.
- Energy prices will remain at a high level compared to previous years and will directly impact the commodity market due to higher milk processing costs.
- Dairy is in the middle of a "trilemma" how to secure a needed raw milk pool to ensure the availability of dairy products at affordable levels and, in addition, producing it in sustainable way.

Finally, the main conclusion was that there are many reasons to feel opti-

mistic for the future and that everyone should take the current and upcoming challenges as an opportunity to show the society that the dairy industry is willing and able to act in time. The activation of entrepreneurial thinking within the dairy sector was, and is, innovative and has been able to overcome all previously faced challenges successfully, therefore there is a bright future ahead of us. In this sense, let us keep the milk moving. If you want to keep updated on the happenings and are interested in getting insights on dairy market forecasts and network with dairy industry peers or doing workshops, please feel free to contact us.

Tuesday, March 28

DAIRY MARKET INSIGHTS AND OPINIONS - OPERATIONAL/TACTICAL PART

- · Status and latest developments of the dairy world
- Future perspective of the dairy world
- Panel discussions with different actors along the chain

Wednesday, March 29

GROUP WORK: CHALLENGES AND OPPORTUNITIES – STRATEGIC PART

- Reflection of the dairy demand and supply in 2030
- Workshop of impacts on different actors in the chain
- Conclusions on its importance for the industry

IFCN Projects and Research Activities

IFCN conducts numerous research projects worldwide throughout the year. Many of these projects are carried out with the cooperation of our research partners who are located in 125 countries. This guarantees the quality of our projects, since we have the knowledge and insights of dairy experts also at a country level.

DIM - Vietnam pilot

To enable stakeholders to assess the social benefits that the dairy sector provides to society, the Food and Agriculture Organization (FAO) and the International Farm Comparison Network (IFCN) have collaborated with the Global Dairy Platform (GDP) and the International Fund for Agricultural Development (IFAD) to develop the "Dairy Impact Methodology" (DIM). A workshop was then held in Vietnam in order to measure the impact of the dairy sector and production systems on the social development in this country. Dairy sector and socio-economic data at national level was gathered and validated there by the IFCN Team and country experts.



Modelling dairy investments in Nigeria

The Bill & Melinda Gates foundation seeks to identify dairy farming systems that will be economically sustainable in the future, in order to ensure both domestic food security and livelihoods of dairy farmers in Nigeria. In this sense, the IFCN Team, together with country dairy experts, developed a comprehensive economic analysis of farms, as well as scenario analyses covering the most important aspects, while focusing on the most common farm types. This provided a better understanding of the dairy sector and farm systems in Nigeria.

Dairy Nourishes Africa (DNA): Tanzania

DNA's ambition is to transform African dairy industries by creating vibrant ecosystems of farmer-allied and environmentally sustainable enterprises that improve nutrition, enhance livelihoods, and stimulate economic growth. To achieve this, DNA builds a public-private partnership leveraging the collective strength of GDP, as well as industry, community and government stakeholders. In this sense, the IFCN Team, in cooperation with dairy expert partners, provided a status quo analysis of the dairy farm economics in Tanzania, as well as an analysis on farm efficiency, management potential and future farm types.



Other research projects:

- Assess the impact of a medical treatment of dairy cattle on the farm economics and GHG emissions.
- Monitor dairy farmers' wages, as the interest for enterprises in social responsibility as a company value has been increasing.
- Explore the future evolution of dairy sustainability and its impact on the availability of dairy commodities.

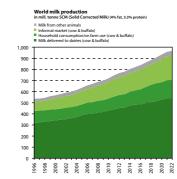
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IFCN Supporter Partnership and IFCN Data Products

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. Standardised and quality-checked country and regional data increase efficiency in business development by shortening the time for data mining.

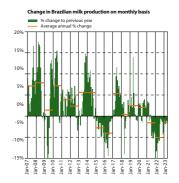


Key Variables

- Outlook for 125 countries
- Milk supply & demand
- Dairy farm & cow numbers
- Total dairy trade & stocks
- Milk & feed prices
- · Milk production by region

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 easyto-understand traffic light visualization. It makes it possible to optimise short-term operational business processes on global and country level. The key market insights permit the interpretation of the up-to-date data bases for decision making.

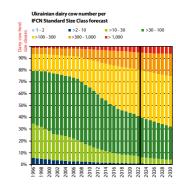


Key Variables

- · Monthly milk & feed prices and milk supply for 65 countries
- Dairy farm margin
- EU-27 & US dairy stocks
- Fat & protein content of milk
- Market report & charts

Annual Farm Structure Data

Farm structure data is important for your sales planning and expansion strategies. This data product offers the possibility to analyse comparable herd sizes with regard to animals and farms as it contains a standardisation 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.

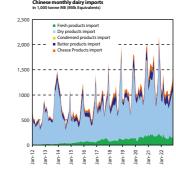


Key Variables

- 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

Monthly Dairy Trade Data

The dairy trade product contains standardised monthly trade data with the level of 6-digit HS codes of 27 dairy and 3 animal feed commodities. Updated quarterly, the product can provide your company with crucial knowledge about the latest global developments in dairy trade. The export and import data are standardised to milk equivalents (ME, 4% fat, 3.3% protein) for better comparison.

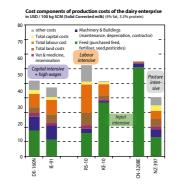


Key Variables

- 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

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



Key Variables

- Data for 172 farms / farming systems in 54 countries
- Typical farm economic results
- Cost of milk production
- Sustainability & resilience indicators
- Feed ratio composition, feed costs, intake and efficiency

Extract from the full report | Get your own copy of the report on www.dairyreport.online

IFCN Supporter Partnership Packages



Today, the dairy world serves over 7 billion consumers and provides livelihood for about 1 billion people who live on dairy farms. The key challenges for dairy stakeholders lie in the complexity of the sector and the high rate of change in a globalized world. More than 130 dairy related companies are collaborating with IFCN, a global dairy research network that helps customers to improve decision-making. Globally comparable economic data for dairy products and forecasts have been used for over 20 years to better understand the dairy world.

Partnership benefits

- Global holistic picture of the dairy world
- Networking with your peers & companies
- Learning and capacity building

Data benefits

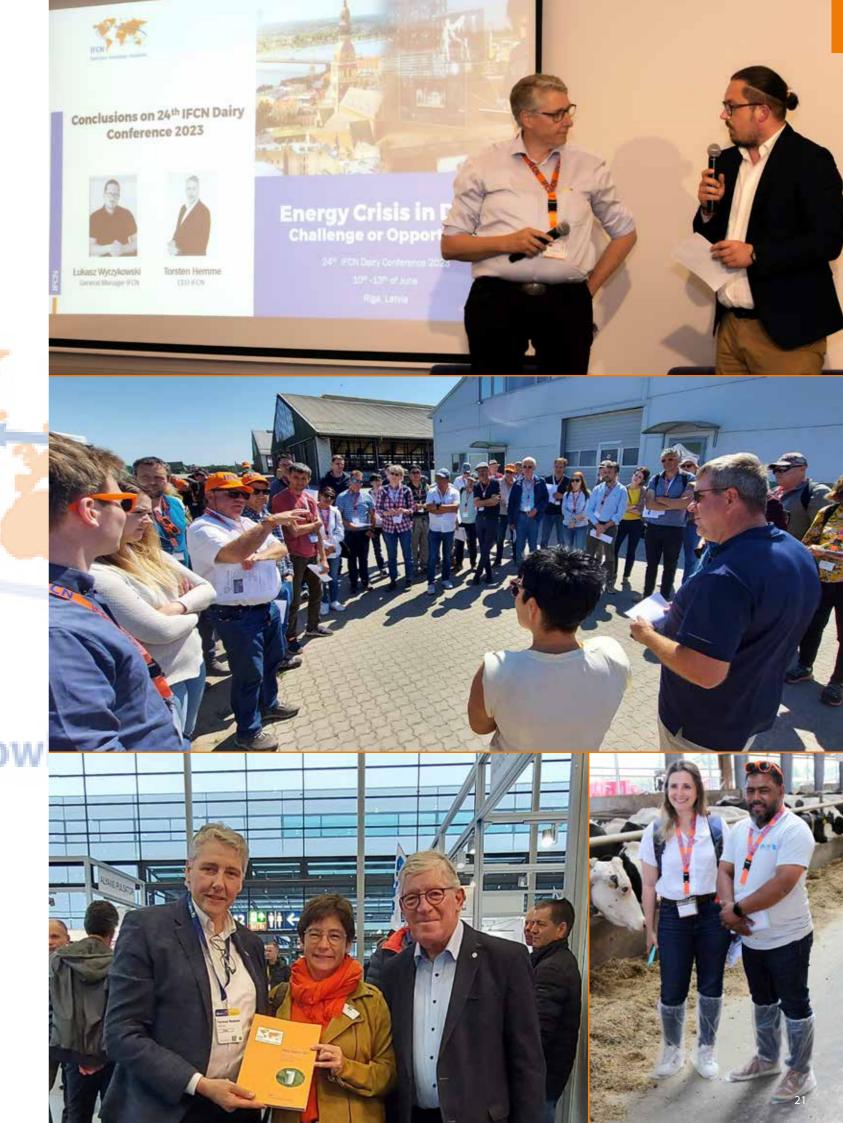
- World class dairy business intelligence
- Better decisions based on better analysis
- Better data: comparable, global & real time

IFCN Partnership Packages Your benefit	Basic	Premium	Ultimate*
IFCN Dairy Report, hard copies and as pdf file Coverage of 125 countries key dairy economic indicators in Excel database	~	~	~
IFCN Monthly Webinar & Newsletter The latest sector news at your finger tips including presentations and recordings	~	~	~
Logo positioning & IFCN Hotline Be visible on the IFCN Publications and Website; Remarks for urgent questions	~	~	~
IFCN Supporter Conference Be part of the annual conference and receive the content presentations	One invitation	Two invitations	Three invitations
IFCN Workshop & other events Be part of the Data Analysis Workshop and other insightful events**	_	~	~
Access to IFCN Data Services Access to the Standard IFCN Data Delivery Package (.xlsx or .csv formats)	Data service purchase possible	Access to 1 or more selected data services	Access to all data services





^{*} 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.



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^{**} Besides the Data Analysis Workshop which is free of charge for all partners, some events are paid and Premium and Ultimate partners are getting a discount for those events.





Łukasz Wyrzykowski

Status and key developments

Status 2022

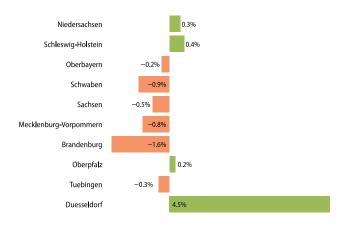
- No. 6 in the world milk production: 32.5 mill t SCM
- Dairy farm number: No. 69 in the world with 52,895 farms
- Milk price: +6% to world market
- Feed price: -2% to world market

Key developments 2017–2022

- Milk production decreased by -0.2% per year
- Farm number decreased by -4.3% per year
- Milk yield increased by +1.8% per year
- Top herd size class growth: ≥100 cows/farm: CAGR -0.4%

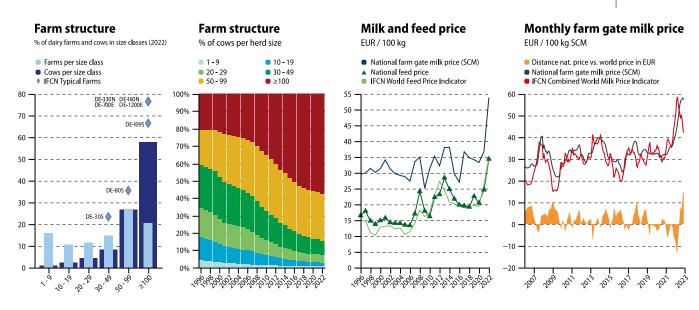
Top 10 regions - avg. annual milk production growth

2017 - 2022 - regions represent 69% of national milk production in 2022



Key variables

												Annual change
	1996	2000	2004	2007	2010	2013	2016	2018	2020	2021	2022	'12-'17 '17-'22
Milk production (cows')												
Production (mill t SCM)	29.57	28.87	28.86	28.79	29.99	31.51	32.94	33.18	33.67	33.04	32.50	+1.2% -0.2%
Cows (in 1,000's)	5,195	4,564	4,287	4,087	4,182	4,268	4,218	4,101	3,921	3,833	3,810	+0.1% -2.0%
Milk yield (t/cow/year)	5.69	6.33	6.73	7.04	7.17	7.38	7.81	8.09	8.59	8.62	8.53	+1.1% +1.8%
Farm structure												
No. of dairy farms (in 1,000's)	186.0	138.5	113.5	99.0	91.6	79.5	69.2	62.8	57.3	54.8	52.9	-4.5% -4.3%
Average farm size (cows / farm)	27.9	33.0	37.8	41.3	45.7	53.7	61.0	65.3	68.4	70.0	72.0	+4.8% +2.4%
Prices in national currency												
Milk: feed price ratio	1.80	2.10	2.08	1.97	1.93	1.34	1.36	1.82	1.63	1.49	1.57	+6.1% -3.5%
Cull cow (EUR / kg live weight)	1.1	1.2	1.1	1.3	1.4	1.9	1.7	1.8	1.7	2.0	2.7	-0.7% +7.6%
Land - buy (EUR/ha)	10,394	9,081	9,233	9,205	11,854	16,381	22,300	25,485	26,777	29,545	32,599	+10.8% +6.3%
Devaluation of EUR vs. USD	+15%	-18%	+10%	+22%	+18%	+18%	-2%	+5%	+1%	+5%	-7%	-2.8% -1.3%



Explanations

Sources: National statistics, FAO, IMF, Oanda, Eurostat, BLE, BMELV, AMI. 2022 data preliminary and partly estimated. **Estimates done for:** Land purchase price: 2022, based on growth rates from various regions. Cull cow price: 2022, based on growth rates for several slaughtering houses. **Devaluation:** Changes based on 2017 Exchange rate: EUR/USD= 0,89. **Remarks:** Organic Cows' milk production: milk delivered to processors. **Regional data:** Milk production in natural fat and protein content.

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	P IFCN Partnership Package	Basic	Premium	Ultimate*
P5	IFCN Supporter Partnership Dairy Report, Supporter Conference, Newsletter, Hotline, Logo positioning and World Milk Price Update Webinar	7,000	10,000+	31,000

	D IFCN Dairy Data										
D3	Dairy Sector										
D3.2	IFCN Annual Dairy Sector - with IFCN Long-term Dairy Outlook - ENHANCED	16,000	16,000	Free							
D3.4.0	IFCN Monthly Real Time Data - on production, prices and milk feed price ratio - ENHANCED	8,000	8,000	Free							
D3.4.1	IFCN Monthly Real Time Farm Economics - available extension to D3.4.0 - ENHANCED	2,000	2,000	Free							
D3.4.2	IFCN Dairy World in 10 minutes - Latin American focus*****	on request	on request	on request							
D3.5	IFCN Short-term Dairy Outlook*****	on request	on request	on request							
D3.7	IFCN Annual Farm Structure Data - with time series and forecast*** - ENHANCED	12,000	12,000	Free							
D3.8	IFCN Top Milk Processor Data	4,000	4,000	Free							
D3.9	IFCN Monthly Dairy Trade Data	8,000	8,000	Free							
D5	Farm Comparison										
D5.1	IFCN Farm Economic Data - with time series & Farm Feeding System Data	10,000	10,000	Free							

	K IFCN Knowledge									
K1	Reports									
K1.2	IFCN Dairy Report - hard copy****	Free	Free	Free						
K1.3	IFCN Dairy Report - PDF version	Free	Free	Free						
K1.5	IFCN Dairy Processor Report - PDF version*****	4,400	4,400	4,400						
K4	IFCN Presentations and Workshops									
K4.1	IFCN Presentation	On request	On request	On request						
K4.2	IFCN Company Workshop**	On request	On request	On request						
K4.5	IFCN World Milk Price Update Webinar	Free	Free	Free						
K4.6	IFCN Dairy Outlook Workshop - NEW	On request	On request	On request						

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I1	Networking and Conferences									
I1.6	IFCN Supporter Conference**	1 invitation	2 invitations	3 invitations						
I1.8	IFCN Workshops**	On request	On request	On request						
l1.9	IFCN Market Intelligence Workshop*****	On request	On request	On request						
I1.10	IFCN Emerging Dairy Regions Forum**	Free	Free	Free						
l1.11	IFCN Scenario Building Workshop	On request	On request	On request						
12	Hosting and Sponsporship of IFCN Events									
12.5	IFCN Hosting and Sponsor Package for IFCN Events 3,000 - 40,000									
13	Research and Consulting Projects									
I3.1	IFCN Research and Consulting - on specific topics	On request	On request	On request						

Status: July 29, 2023

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^{**}We are considering to change the format of the conference from only live participation to hybrid event with selected hours of online streaming.

^{***}Product can be bought as an extension to the IFCN Annual Dairy Sector Data D3.2 with a 75% discount (price in EUR - 3,000).

^{****}The shipping of IFCN Dairy Reports incurs additional costs. Additional copies cost 200 EUR.

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Consulting and others





