Extract

Get your personal copy of the full Dairy Report 2022 on dairyreport.online

IFCN

Dairy Data · Knowledge · Inspiration

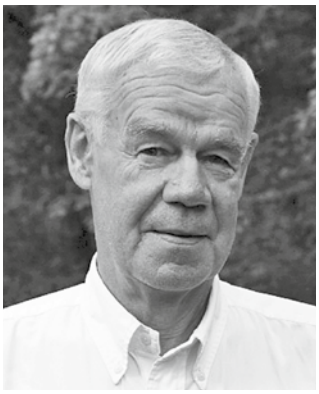
Dairy Report 2022

Helping people in
the dairy world to make
better decisions

IFCN
The Dairy Research Network

Dear Friends,

The IFCN Dairy Report 2022 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

Short term Outlook: As the dairy business is changing very rapidly, IFCN has improved its short-term outlook in order to understand the impact of farm economics on current milk production even better.

Methods: The details about the methodology used by IFCN to measure greenhouse gas emissions on dairy farms are now included in Methods. (page 210)

IFCN Dairy Processor Report: IFCN published its second dairy processor report analysing the performance of the top 20 global milk processors with regards to people, planet, and profit. Details about the report and the global list of the top processors can be found on page 19.

Highlights – IFCN Events

IFCN Dairy Conference 2022

After two years of online conferences, we could finally meet in person at the 23rd Dairy Conference in Kiel. Topic: "Next generation of dairy farming & dairy farmers". It was also IFCN's first hybrid conference, with part of the content streamed (pages 10 – 11).

IFCN Supporter Conference 2021

Held online, supporter and research partners joined the 19th Supporter Conference to discuss the topic: "Digital Dairy. How to design the dairy world of the future" (pages 12 – 13).

IFCN Dairy Forum 2021

The second IFCN Dairy Forum also took place online in November 2021 with the topic of "Greenhouse Gas Emissions from Dairy in Emerging Countries " (page 14).

IFCN Data Analysis Workshop 2022

Over 140 dairy experts from more than 80 dairy-related companies registered for the fourth IFCN Data Analysis Workshop to discuss the topic "Navigating the dairy industry in a disrupted market" (page 15).

IFCN & Eucolait joint Outlook Workshop

IFCN and Eucolait organised a first joint workshop on the future outlook for dairy markets in Brussels in March 2022 (page 16).

Status of the IFCN Research Network in 2022

The dairy sector analysis covers over 200 countries. In the farm comparison,178 typical dairy farms from 66 dairy regions and 54 countries are analysed. In 2021 the research network continued to grow via new research partners and countries.

IFCN Dairy Report 2022

Chapter 1: **Cost comparison** summarises results on costs, returns, profitability and productivity of dairy farms worldwide. Real-time cost estimates for 2022 were also included for some countries.

Chapter 2: **Global monitoring of dairy economic indicators** provides a broad overview of 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:

- 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. Working with you is a pleasure and we are grateful for your contribution to strengthen the network in 2022. We are looking forward to our activities in 2023.

Anders Fagerberg
Chairman of the IFCN Board

Torsten Hemme
CEO & Founder

Participating dairy economicsts / co-editors of the IFCN Dairy Report

Researchers participating in the farm data analysis

Dairy Expert

Djellali Abderrazak | Horizons Agro-alimentaires, Gouraya, **Algeria**

Hugo Quattrochi | Unión Productores de Leche Cuenca Mar y Sierras, Tandil, **Argentina**

Lusine Tadevosyan, Vardan Urutyan | ICARE, Yerevan, **Armenia**

Jon Hauser | Xcheque Pty Ltd, Glen Alvie, Victoria, **Australia**

Josef Hambrusch, Leopold Kirner | Federal Institute of Agricultural Economics, Rural and Mountain Research, Vienna, **Austria**

Mohammad Mohi Uddin | Bangladesh Agricultural University, Mymensingh, **Bangladesh**

Anatoli Takun, Sviatlana Takun | The Institute of System Research in Agroindustrial Complex of NAS, Minsk, **Belarus**

Joeri Deuninck | Department of Agriculture and Fisheries, Knowledge Quality and Fisheries Division, Brussel, **Belgium**

Lorildo A. Stock | Embrapa, Juiz de Fora, Minas Gerais, **Brazil**

Natália Grigol, Caio Monteiro | CEPEA, Sao Paulo, **Brazil**

Festus Kongyu Ali | University of Dschang, Bafoussam, **Cameroon**

Steve Couture | Dairy Farmers of Canada, Ottawa, **Canada**

Mario E. Olivares | Cooprinsem, Osorno, **Chile**

Dairy Consultant

Sam Shi | Dairy Consultant, Beijing, **China**

Dou Ming, Zhao Hengxin | Beijing Orient Dairy Consultants Ltd, Beijing, **China**

Liu Changquan | Sino-Dutch Dairy Development Center, Beijing, **China**

Enrique Ortega, René A. Pérez R. | Consejo Nacional de la Calidad de la Leche y Prevención de la Mastitis, Bogotá, **Colombia**

Iveta Bošková | ÚZEI, Prague, **Czech Republic**

Morten Nyland Christensen | SEGES, Aarhus, **Denmark**

Adel Khattab, Wael Nagy | Tanta University, Tanta, **Egypt**

Olli Niskanen | Natural Resources Institute Finland (LUKE), Helsinki, **Finland**

Benoît Rubin | Institut de l'Elevage, Derval, **France**

Hauke Tergast | Johann Heinrich von Thünen Institute, Braunschweig, **Germany**

Éva Vöneki, Dániel Mándi-Nagy | Research Institute of Agricultural Economics (AKI), Budapest, **Hungary**

Pankaj Navani | Binsar Farms Pvt. Ltd. Janti Khurd, Haryana, **India**

Gunjan Bhandari | National Dairy Research Institute, Karnal, **India**

Dairy Consultant

Rajesh Lele | Dairy Consultant, Mumbai, **India**

Marjuki | Brawijaya University, Malang, **Indonesia**

Ali Sadeghi-Sefidmazgi | Isfahan University of Technology, Isfahan, **Iran**

Farhad Mirzaei | Iranian Association for Animal Production Management, Karaj, **Iran**

Fiona Thorne | Teagasc, Dublin, **Ireland**

Liron Tamir | Israel Dairy Board, Rishon-Le'Zion, **Israel**

Alberto Menghi | Centro Ricerche Produzioni Animali, Reggio Emilia, **Italy**

Hironobu Takeshita | J-milk, Japan Milk Academic Alliance, Nagoya University, Tokyo, **Japan**

Dairy Consultant

Myron Pundor | Dairy Consultant, **Kazakhstan**

Francis Karin, Assah Ndambi | Dairy consultants, **Kenya**

Renars Sturmanis | Latvian Rural Advisory and Training Center, Ozolnieki, **Latvia**

Nicolas Lampach | Ministère de l'Agriculture, de la Viticulture et du Développement rural, Luxembourg, **Luxembourg**

José Luis Dávalos Flores | National Autonomous University of Mexico, Tequisquiapan, **Mexico**

Rigoberto Becerra | Establo Gibraltar, Gomez Palacio, Durango, **Mexico**

Jan van Beekhuizen | AERES University of Applied Sciences, Dronte, **Netherlands**

Participating dairy economicsts / co-editors of the IFCN Dairy Report

Matthew Newman | Ministry for Primary Industries, **New Zealand**

Olusegun Oloruntobi | Livestock For Social Good Foundation, Adamasingba, Ibadan, **Nigeria**

Haroon Lodhi | Solve Agri (Private) Limited, Lahore, **Pakistan**

Carlos A. Gomez | Universidad Nacional Agraria La Molina, Lima, **Peru**

Ewa Kołoszycz | West Pomeranian University of Technology, Szczecin, **Poland**

Stelian Petre | ROMVIT Animal Nutrition, Brăneşti, Ilfov, **Romania**

Nuno Gaspar, Bruno Moreira | Serbuvet, Santarém, **Portugal**

Vladimir Surovtsev, Mikhail Ponomarev, Julia Nikulina | Northwest Research Institute of Economics and Organization of Agriculture, St. Petersburg, **Russian Federation**

Rade Popovic | University of Novi Sad, Subotica, **Serbia**

Bertus van Heerden | Milk Producers' Organisation, Pretoria, **South Africa**

National Network Team (J. Llorente, C. García, A. García, P. García) | TRAGSATEC & Ministerio de Agricultura, Pesca y Alimentación, Madrid, **Spain**

Christian Gazzarin | Agroscope, Tänikon, **Switzerland**

Dhiaeddine M'Hamed | CMA Comptoir Multiservices Agricoles, Tunis, **Tunisia**

Muhittin Özder, Selçuk Akkaya | Turkish Milk Council, Ankara, **Turkey**

Steven Aikiriza | SNV, Kampala, **Uganda**

Olga Kozak | National Scientific Centre, Institute of Agrarian Economics, Kyiv, **Ukraine**

Mark Topliff, Kate Parkes | Agriculture & Horticulture Development Board, Kenilworth, Warwickshire, **United Kingdom**

Jorge Artagaveytia, Ana Pedemonte | Instituto Nacional de la Leche, Montevideo, **Uruguay**

Hernan Tejeda | University of Idaho, Idaho, **USA**

Jess May | Farm Credit East, Greenwich, New York, **USA**

Paidamoyo Patience Chadoka | Zimbabwe Association of Dairy Farmers, Harare, **Zimbabwe**

Researchers participating only in the country profile analysis or in specific country information:

Shakirullah Akhtar | Dairy Expert, **Afghanistan**

Ilir Kapaj, Pranvera Troka | Agricultural University, Tirana, **Albania**

Helen Quinn | Dairy Australia, Victoria, Southbank, **Australia**

Erwin Wauters | Institute for Agricultural, Fisheries and Food Research (ILVO), **Belgium**

Tashi Samdup, Dr. M. P. Timsina | Department of Livestock, Ministry of Agriculture & Forests, Thimphu, **Bhutan**

Ricardo Sasias | Dairy Expert, Mezza Sucre, **Bolivia**

Alen Mujcinovic | University of Sarajevo, Sarajevo, **Bosnia and Herzegovina**

Konstantin Stankov | Trakia University, Stara Zagora, **Bulgaria**

Francisco José Arias Cordero | Dos Pinos, Alajuela, **Costa Rica**

Rodrigo Gallegos | Centro de la Industria Láctea, Quito, **Ecuador**

Joaquín Castro Montoya | National University of El Salvador, Santa Ana, **El Salvador**

Bedilu Demissie Zeleke | Arsi University, Assela, **Ethiopia**

Marion Cassagnou | Institut de L'Elevage, Paris, **France**

Brianna Parsons | Gambia Goat Dairy, **Gambia**

Giorgi Khatiashvili | Caucasus Genetics ,Tbilisi, **Georgia**

Philipp Goetz | IFCN, Kiel, **Germany**

Irene Tzouramani | Agriculture Economics Research Institute (AGRERI), Hellenic Agriculture Organization – DEMETER, Athens, **Greece**

Ramiro Pérez | ASODEL, **Guatemala**

Carmen A. García | CAHLE, **Honduras**

Bjarni Ragnar Brynjólfsson | Icelandic Dairies Association, Reykjavík, **Iceland**

Othman Alqaisi | Dairy Expert, Oman, **Jordan**

Adelina Maksuti & Lavdije Sopi | Ministry of Agriculture Forestry and Rural Development, Pristina, **Kosovo**

Agnese Krievina | Institute of Agricultural Resources and Economics (AREI), independent researchers, Riga, **Latvia**

Ghassan Antoine Sayegh | Middle East Agrifood Publishers, **Lebanon**

Deiva Mikelionyte | LCSS Institute of Economics and Rural Development, Vilnius, **Lithuania**

Marina Dimova | Dairy Expert, **North Macedonia**

Mc Loyd Banda | Department of Agricultural Research Services Bunda College, Lilongwe, **Malawi**

Anjas Asmara Samsudin, Norhariani Mohd Nor | University Putra Malaysia, Selangor, **Malaysia**

Jennifer Provost | Dairy Expert, **Mali**

Anatolie Ignat, Eugenia Lucasenco | National Istitute for Economic Research, Chisinau, **Moldova**

Mohamed Taher Sraïri | Institut Agronomique et Vétérinaire Hassan II, Rabat, **Morocco**

Subas Chandra Dhakal | Nepal Environment Protection Centre (NEPC), Kathmandu, **Nepal**

Rein van der Hoek | International Center for Tropical Agriculture, Managua, **Nicaragua**

Marcello Portaluppi | FECOPROD, Asunción, **Paraguay**

Naomi K. Torreta, Maricar A. Briones | National Dairy Authority, Quezon City, **Philippines**

António Moitinho Rodrigues | School of Agriculture – Polytechic Institute of Castelo Branco, **Portugal**

Rodica Chetroiu | Institute for Agriculture Economy and Rural Development (ICEADR), Bucharest, **Romania**

Michael Mishchenko | Dairy Intelligence Agency, **Russian Federation**

John Musemakweli | Rwanda National Dairy Platform, Kigali, **Rwanda**

Christian Corniaux | CIRAD / PPZS, Dakar Etoile, **Senegal**

Luka Ložar | Agricultural Institute of Slovenia, Ljubljana, **Slovenia**

Seung Yong Park | Yonam College, Cheonon, **South Korea**

Hemali Kothalawala, Achala Samamdindara | Department of Animal Production and Health, Peradeniya, **Sri Lanka**

Nazar Omer Hassan Salih | Al-Neelain University, Khartoum, **Sudan**

Ashley Wu Liu | Forefront Enterprise Co. Ltd., Taipei, **Taiwan**

Valery Sonola | Livestock Training Agency, **Tanzania**

Adul Vangtal | Thai Holstein Friesian Association (T.H.A.), Rajburi, **Thailand**

Volodymyr Andriiets Muzychenko | Association of Milk Producers, Umam, **Ukraine**

Muzaffar Yunusov | IFCN, Kiel, **Uzbekistan**

Luis Alberto Rosendo | Fundación NADBIO, Yaracuy, **Venezuela**

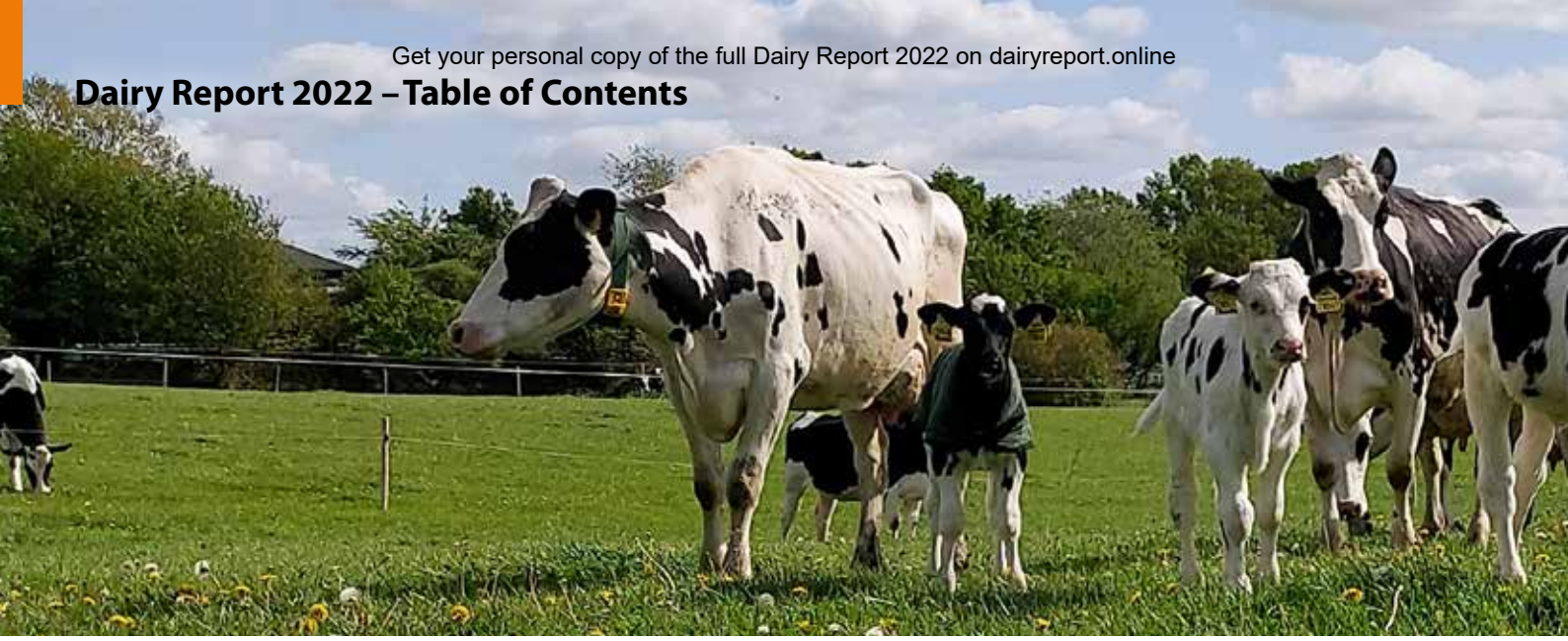
Tieu Duc Viet | Sfarming Vietnam Co., LTD, Hanoi, **Vietnam**

Abdulkarim Abdulmageed Amad | Thamar University, Dhamar, **Yemen**

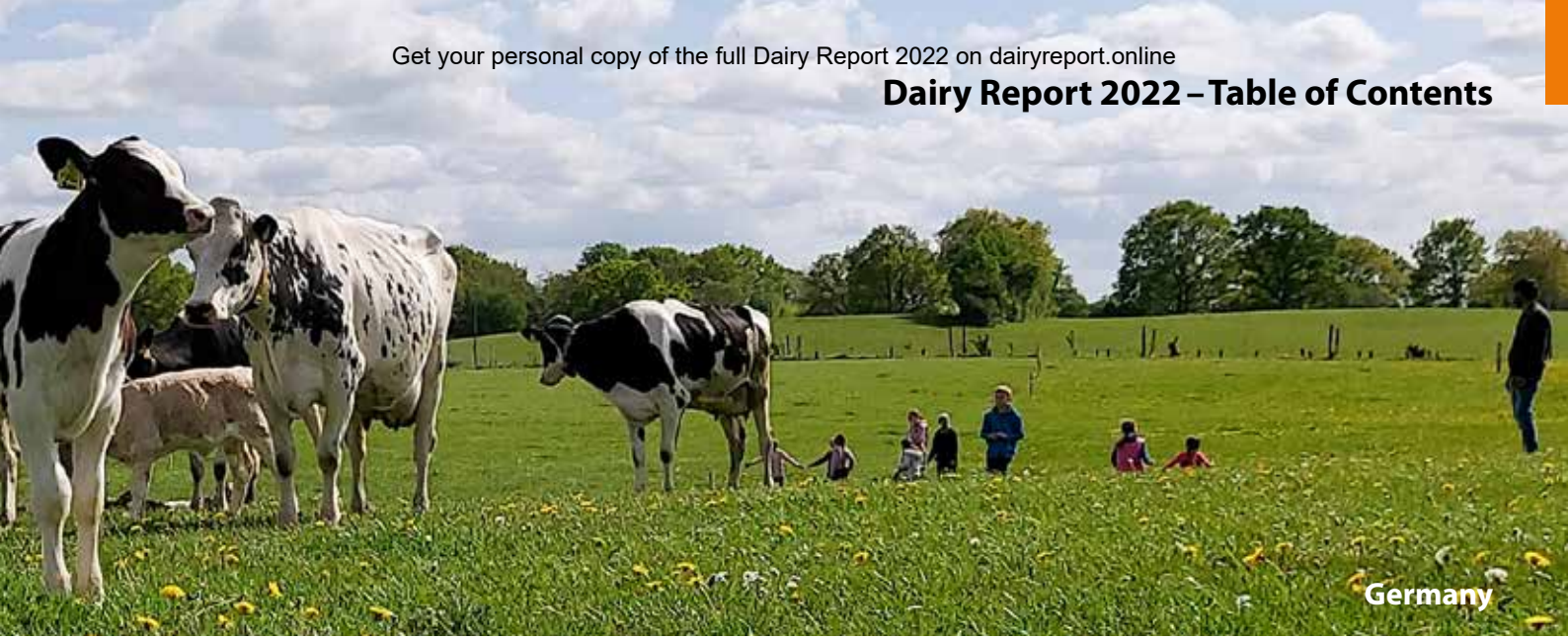
Bethel Mweemba | Ministry of Agriculture, Zimba, **Zambia**

Rob Jansen-van Vuuren, Addmore Waniwa | Livestock Consultant, Department of Livestock & Veterinary Services, **Zimbabwe**

Dairy Report 2022 – Table of Contents



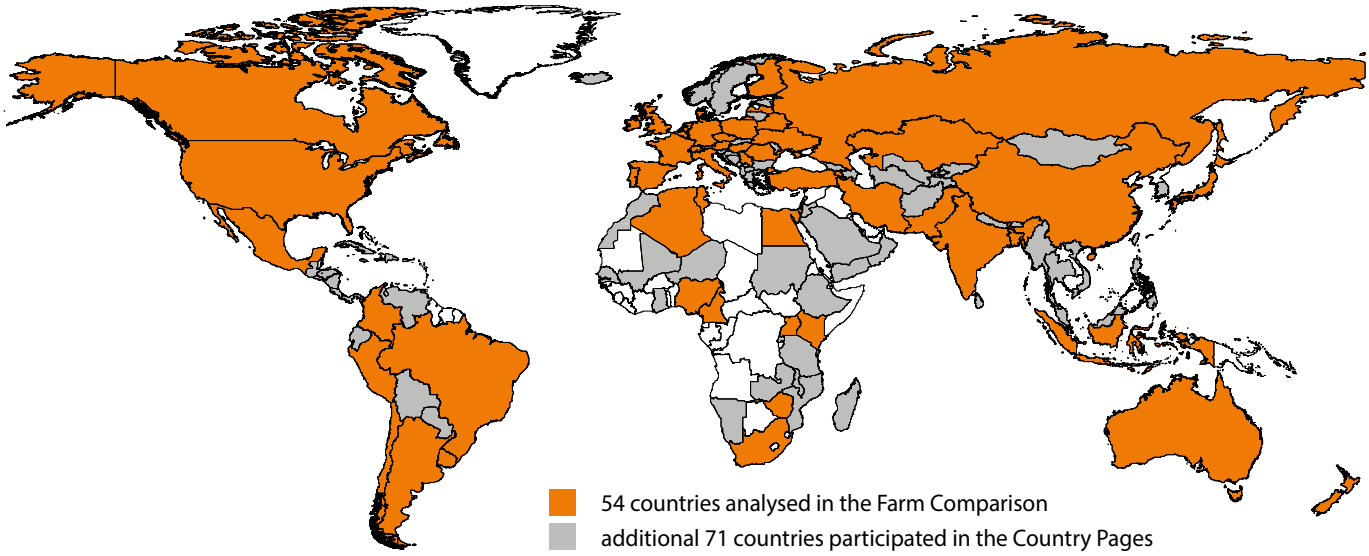
Dairy Report 2022 – Table of Contents


Germany

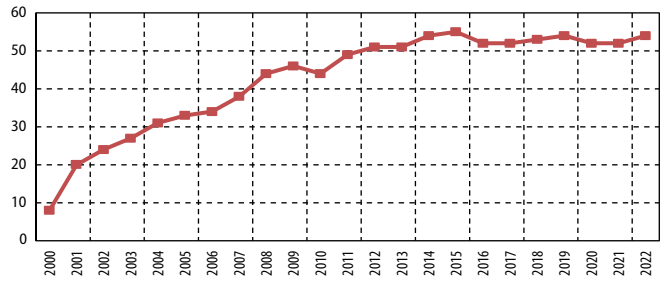

France

IFCN Dairy Report – Developments 2001 – 2022

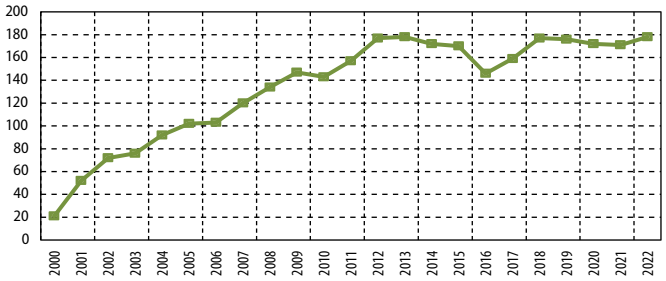
Which countries are participating in the IFCN Dairy Report activities in 2022?



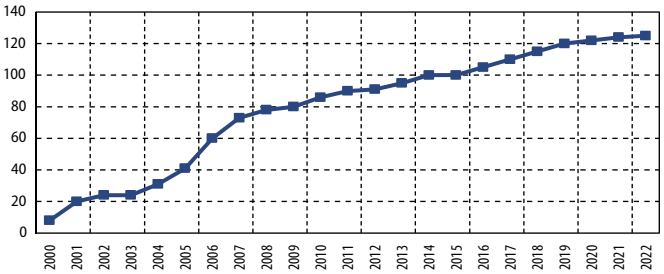
Number of countries included in farm comparison



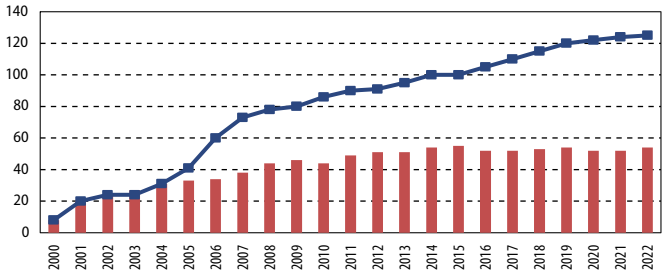
Number of farm types analysed



Number of countries included in country profile analysis



Number of countries in county profile and farm comparison analysis



Regional maps and the typical farms

Legend: Numbers indicate the number of cows in the typical farms.
++ = future farm, B = Buffalo, BE = Beijing, bio = Organic, C = Central, CF = Commercial Farm, CN = Central North, DP = Dual Purpose, E = East, JA = Jalisco, MC = Massif Central, MG=Malang, N = North, NW = North West, S = South, SE = South East, SW = South West, TO = Torréon, W = West

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.

IFCN
Dairy Data · Knowledge · Inspiration

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

Organisational setup

IFCN is a company running the **I**nternational **F**arm **C**omparison **N**etwork 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.

CEO

Torsten Hemme

Management

Łukasz Wyrzykowski

Finance & Office Management

Vanessa Haberer

Sales & Marketing

Muzaffar Yunusov

Ilkin Huseynov

Amelie Koelbl

Dafine Imeri

Shiyin Zhong

Dairy Data, Quality & Research

Philipp Goetz

Alice Diepenbrock

Dorothee Bölling

Milica Kocić

Gerta Karanxha

Andrea Lendewig

Katrin Reincke

Maria Schmeer

Karin Wesseling

Rita Paçarada

Zeena Ibrahim

Muhammad Abdullah Raffie

IT Development & Processes

Mateusz Węgrzynowski

Marieke Fischer

IFCN Dairy Research Center

IFCN Board

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 June 2022) 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) and Erik Elgersma.

Anders Fagerberg
Chairman

Ernesto Reyes

Hans Jöhr

Uwe Latacz-Lohmann

Erik Elgersma

23rd IFCN Dairy Conference, May 29th – 31st, 2022, Kiel

This year's IFCN Dairy Conference focused on the next generation of dairy farmers and dairy farming systems. IFCN's first hybrid event recorded over 500 registrations and brought people from the dairy sector together in Kiel, Germany.

Sponsors IFCN Dairy Conference 2022

Alltech® agolin®

Sunday 29th May
FIELD TRIP

Monday 30th May
MAIN CONFERENCE

Tuesday 31st May
MAIN CONFERENCE

Young farmers need profitability and acceptance from society

In 2050, the food industry will need to sustainably feed 10 billion people. The current 120 million dairy farmers stand to play a large part in this, as they provide a key source of protein intake and thus have a major impact on global food security. However, 427 thousand farms quit each year and the milk pool is shrinking, with farming rarely profitable. This raises the question: How can the next generation develop economically successful farms while meeting the demands of the new generation of consumers and the industry?

A closer look

From the data presented and during the discussions, different results emerge depending on the world region. In emerging markets, growing demand and suitable technological integration could offer great opportunities if the lack of capital, infrastructure and knowledge can be addressed.
Developed regions, on the other side, generally have access to capital, but investment is fragmented and the attractiveness of dairy work, and therefore the available skilled labor, is declining. What both regions have in common for dairy farming to thrive is the need for profitability, access to land, and stable politics.

In addition, there are external factors related to society's acceptance of dairy farming. The new generation of farmers is facing a new generation of consumers who are demanding solutions for, among other things, reducing carbon emissions, animal welfare and transparency in the value chain.

What does a farm of the future have to look like?

As always, there is no one solution for all - farms of the future will have to adapt their operations to the place where they are located, so flexibility is needed to find individual, profitable operating models to survive in volatile times. Young farmers will not continue or even start dairy farming if they do not have long-term profitability prospects. But without them, food security quickly becomes problematic.

What does this mean for the future?

To meet the challenges, young farmers need to focus on farm-level improvements, such as labor-saving technologies, better genetics and knowledge transfer, and build bridges to the new generation of consumers.
The result of a survey among all conference participants showed that farmers should take the lead in developing these future farming systems. This means even greater responsibility for them, so a suitable and reliable environment is essential. All players in the dairy value chain should feel encouraged to use the decision-making tools available to support this change.

What is important for future dairy farmers

Results from participants of a group workshop: What is important for future dairy farmers?

19th IFCN Supporter Conference, September 14th – 15th, 2021, Online

"Digital Dairy: How to design the future dairy world"

IFCN Supporter Conference 2021

The 19th IFCN Supporter Conference 2021 took place as an online conference due to COVID-19 restrictions. Despite the circumstances, 700 participants from over 200 agribusiness companies and institutions joined the event, making it a great success.

14. Sept. 14.00 –17.00 CET

DAIRY KNOWLEDGE AND OUTLOOK DAY

14:00 – 14:10	Welcome and opening poll
14:10 – 14:40	IFCN Dairy Outlook 2022 *(By IFCN)*
14:40 – 15:25	Panel discussion with dairy market experts *(Rabobank, StoneX, Eucolait)*
15:30 – 15:45	IFCN Dairy Outlook 2030 *(By IFCN)*
15:45 – 16:30	Panel on dairy future 2030 – discussion with agribusiness companies
16:30 – 17:00	Summarising poll and closing

15. Sept. 14.00 – 17.00 CET

DIGITAL & DAIRY – HOW TO DESIGN THE FUTURE DAIRY WORLD?

14:00 – 14:10	Welcome & Summary of Day 1
14:10 – 14:30	Defining the dairy problems of today *(by IFCN)*
14:30 – 14:55	Inspiration1: What can dairy learn from other "industries"? *Ryan Morris – Turntide Technologies*
15:00 – 15:20	Inspiration 2: Vyla – a vision on transformation of dairy *by data & technology Tim Taylor-Vyla*
15:20 – 16:00	Panel on: How to design a winning dairy sector *(Vyla, MADCAP, Cargill)*
16.00 – 16.25	Workshop session setting right priorities to win the future *(Poll session)*

"Profitability of the three major markets look different. In the past, NZ was more a "discount" market, but it now has price premiums in comparison with the US and EU" (Mary)

———

"China is the biggest driver at the moment and topic to talk about as everyone has a different opinion." (Nate)

———

"There will be a transformation of the dairy industry in the next 5-10 years – especially in the EU with sustainable production." (Jukka)

"Costs are rising fast, which is putting major pressure on farmers. Many are quitting the business. Will there be enough milk in the future?"(Tiina)

———

"Data integration and usage is key for improvements in the whole dairy value chain.How can the industry help with data to improve the sustainability and also farm acceptance? (Rodrigo)

———

"Affordability or availability problems …India and Pakistan: will the appear on the market until 2030. As net-importers or exporters?" (Hubertus)

Results from the IFCN Supporter Conference 2021

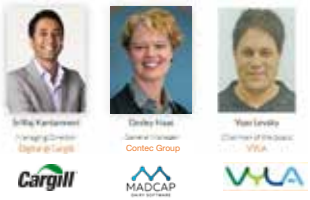
Leading question: The aim of this conference day is to explore how digitalization can solve the most important challenges the dairy industry is facing today.

The dairy sector is faced with a number of challenges, such as low profit margins for farmers and processors, an eroding image of dairy and a lack of trust in society, while the value chain overall is very complex. What it takes to develop the industry further became clear during the conference: Better connectivity and digitalization. Only when individual companies create synergies and focus on interaction throughout the milk supply chain can the growing population's demand for dairy products be met – and compliance with guidelines on the environment, animal welfare, and traceability can be guaranteed more easily.

What is the key problem of today's dairy world?

Fortunately, a stunning 93% of participants support the ideas and state that they want to be better connected within the dairy chain and they are convinced that their organisation will benefit from a collaborative approach (87%). The mandate for the future is clear and with the help of this common understanding, the dairy industry will be led into an efficient and digital future. The future will require more integration and that needs coordination. The industry is ready - "We have the knowledge and the capability to be in the driver seat in the dairy industry", as Rodrigo Arajuo de Souza from Phibro points out. IFCN will be happy to take on the challenge of continuing to work with the dairy community to connect people, reduce complexity and plan the next steps for the dairy sector to develop.

Our panellists



"A dairy digital ecosystem unlocks profitability for the industry. I think ultimately, a profitable industry spreads innovations, and so I think we need to think about this from a producer's point, make them successful and profitable and all will be very successful." (SriRaj)

———

"The dairy industry will deliver." (Desley)

———

Away from the "Silo approach", and towards shared data, transparency and IT solutions to create meaningful insights for the whole industry" (Yoav)

———

"We therefore need not only "a technological, but also a cultural transformation" to have a new approach to data security and information." (Tim)

KEY TAKE AWAY MESSAGES: Focus on connectivity in dairy

1. Biggest barrier to have digital dairy chain :

- Sharing data with competitors (20%) and data privacy issues with farmers (18%)
- Key challenges highlighted by 180 respondents: Technology infrastructure (16%) and high costs & investments (15%)

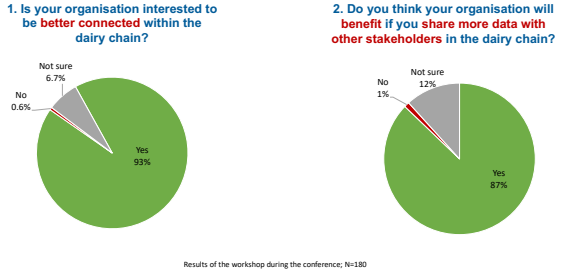
2. Biggest problem of today's dairy word:

- Low profit margins of farmers (50%)
- Eroding image of milk & lack of consumer trust (33%)
- Complexity in the dairy chain and lack of connectivity (15%)

3. Realistic dairy vision 2025:

- Improved digital connectivity in some areas of the dairy chain (71%)
- Accelerated digital progress: farmers and consumers are well connected (23%)
  Status quo: Digital connection as today; stagnating or declining dairy demand (6%)

Poll 1 Focus on Connectivity in Dairy



Results of the workshop during the conference; N=180

2nd IFCN Dairy Forum, November 18th, 2021, Online

Greenhouse Gas Emissions from Dairy in Emerging Countries

The second IFCN Dairy Forum took place online yet again. As one of the most important dairy events, it hosted experts and dairy enthusiasts from over 85 countries, all to address one key issue: GHG emissions from dairy with a special focus on emerging countries.

The dairy sector is responsible for 2.2% of global GHG emissions, major contributors to which are the emerging dairy countries, due to their low productivity. Given that emerging markets will be home to a growing population and in line with this, growing dairy demand and production, this trend will only intensify in the future. At the same time, emerging countries are often disproportionately affected by the consequences of climate change and face greater challenges in terms of investments and food security.

With this event we aimed to shed a light, and be part of a solution, to increase productivity and profitability to the farmers, and to contribute to lower emissions. Measuring the impact of these mitigation strategies at the farm level is critical for further progress. With its methodology, IFCN can provide this information considering all sustainability indicators.

IFCN Forum Agenda

14:00 Welcome and Opening

14:05 Interview: Game changers for dairy from 2021 events and initiatives

14:20 IFCN presentation
GHG emissions from dairy in emerging countries

14:40 Panel discussion:
Ways to reduce GHG emission in emerging dairy countries

15:30 Knowledge of the crowd

15:35 Summary and closing

Reducing GHG emissions in dairy

- **Adapt initiatives to the individual country and farming system**
- **Increase knowledge transfer & involve the whole dairy chain**
- **Measure the impact in terms of all sustainability indicators**

These arguments were also mirrored by the other participants of the event. The polls showed that around 53% of people believe that a more connected approach leads to greater success compared to individual initiatives and that training, and knowledge sharing, will be key in the future.

"Apart from the good that dairy does, the sector recognizes its responsibility to address the impact on the natural environment that we are operating in."

Interview with Donald Moore from Global Dairy Platform

Axelle Bodoy

Global Lead Regenerative Agriculture

Danone

İdil Yiğitbaşı

Vice Chairperson

Pinar

Jennifer Provost

Researcher, Animal Husbandry in the tropics and suptropics

University of Göttingen

Tom Lee Bauer

Principal Industry Specialist

IFC / World Bank

Prof. Paul Wood, AO FTSE

Chairman

GALVmed

The panelists agreed that it takes a holistic and tailored multi-stakeholder approach to engage with smallholders in order to increase their efficiency and their social welfare. One solution does not fit all.

4th IFCN Data Analysis Workshop, April 27th , 2022, Online

Dairy Farm Economics

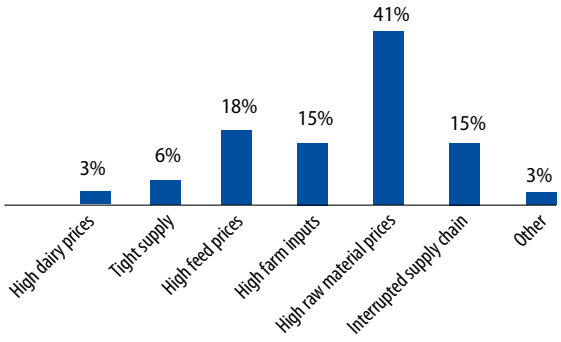
The 4th IFCN Data Analysis Workshop was held online, as a webinar. Over 140 dairy experts from more than 80 dairy-related companies registered to discuss the topic of "Navigating the dairy industry in a disrupted market".

IFCN experts were given an analysis tool to approach exemplary questions which often occur on internal business development meetings in the dairy industry in the same or similar form:

1. What may the dairy future look like in the short-term?
2. How to secure the milk flowing in the region/country?

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.

What has dirsupted your business so far in 2022



Results from the live poll during the workshop

IFCN & Eucolait joint Dairy Outlook Workshop, March 30th – 31st 2022, Brussels

The „New Normal" in dairy: What it looks like and what it means for your company

IFCN and Eucolait organised a joint workshop on the future outlook for dairy markets, to show and discuss with 52 participants from 39 different companies and institutions, what might happen in the future and how to navigate and prepare for the "New Normal" in the dairy industry.

As volatility increases, 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 findings from the workshops, in which the participants looked at various future market scenarios, also reflected these results 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:

- The world is changing, and what has been true in the past may not be true in the future
- Milk is no longer a fixed constant, but will remain a relevant product in the future
- Dairy processors must be a catalyst for change and dairy farming must evolve to meet environmental and consumer concerns

If you want to keep an eye on this development and are interested in dairy market forecasts or workshops, please feel free to contact us.

Wednesday, March 30

DAIRY MARKET INSIGHTS AND OPINIONS – OPERATIONAL / TACTICAL PART

- Environment of the dairy world
- Future perspective of the dairy world
- Panel discussions with different actors along the chain

Thursday, March 31

SCENARIO BUILDING AND GROUP WORK – STRATEGIC PART

- Scenario building analysis introduction
- Workshop on scenario building
- Conclusions on its importance for the industry

Feedback

"Excellent interactive sessions that helped to stimulate discussions within my company"

———

"Great food for new thoughts"

———

"A valuable assignment with the help of the main facilitators to bring together different actors along the dairy chain"

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 140 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 and PDF copies Coverage of 124+ countries key dairy economic indicators in Excel database	✔	✔	✔
IFCN Monthly Webinar & Newsletter The latest in the sector 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 IFCN Supporter Conference with more than 140 companies	One seat	Two seats	Three seats
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 selected database, Additional data service purchase possible	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.**

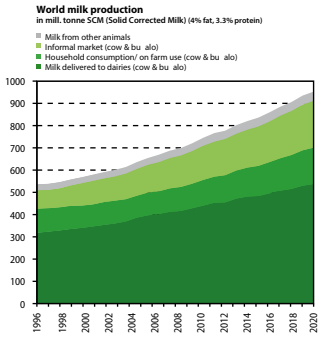
*** Due to the effects of the COVID-19 situation we are considering to change the format of the conference, location and seats availability.*

**** More information about the Standard IFCN Data Delivery Packages is provied on page 7.*

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.

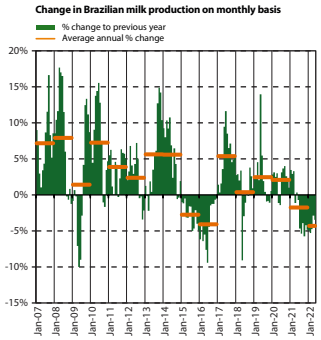


Key Variables

- Outlook for over 200 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 easy-to-understand traffic light visualization. It enables 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.

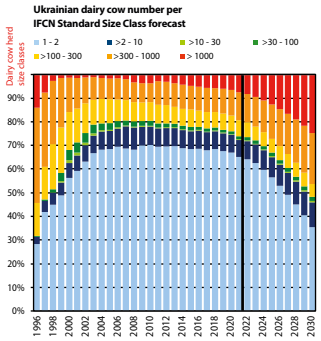


Key Variables

- Monthly milk & feed prices and milk supply for 65 countries
- Dairy farm margin
- EU-28 & 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.

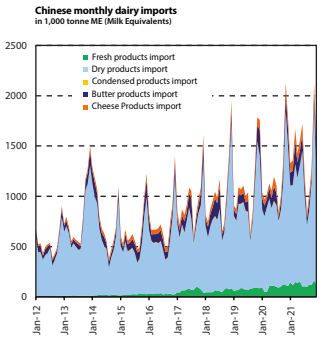


Key Variables

- 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 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 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.

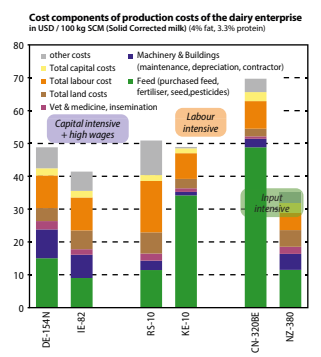


Key Variables

- 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 included.



Key Variables

- Data for178 typical 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

IFCN Dairy Processor Report 2021 – People, Planet, Profit

Importance of processors in dairy supply chain

Milk is a global commodity and the top 20 dairy processors in the world lead the market. Dairy processors are vital players in the dairy supply chain world which links dairy farms and consumers. Processors buy milk from farms and then process it into quality, safe and demanded dairy products for the consumer or they sell them as an ingredient for other producers.

The IFCN research approach

IFCN Dairy Processor Report provides validated, comparable data to better understand the largest dairy processors worldwide. IFCN has published the Top 20 list of milk processors since 2007. 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

The resilience of the Top 20 was a marked feature of the latest analysis. Despite the challenges that the dairy world is facing, they accounted for 24% of total milk processing worldwide, and produced the highest cash flow margins since 2014, driven by cost savings and reduced capital investment. Their milk intake in 2020 increased by around 0.6% compared to 2019. During the 2015-2019 period, milk intake increased in average by 1.3% annually.

The top 3 dairy companies by milk intake are: 1) DFA (Dairy Farmers of America), 2) Groupe Lactalis and 3) Fonterra. Dairy Farmers of America topped the list with 28.6 million tonnes milk intake holding 3.2% of the total market share of the world's total milk production. Lactalis in 2021 (2.4%) overtook Fonterra (2.1%) to the no.2 position. Three Asian dairies, Amul, Yili and Mengniu, also showed a big increase in the ranking.

People, planet, and profit of the Top 20 Dairy Companies

People: By collecting and processing 212 billion litres of milk, the Top 20 dairy processors not only serve the dairy needs of over one billion people, but they also contribute over USD 100 billion annually to society. Of these, USD 77 billion go to dairy farmers and USD 22 billion are paid to 460,000 employees.

Planet: In terms of sustainability goals, all Top 20 dairy processors report on climate and sustainability monitoring and 90% declared they will become carbon neutral by 2050. Additionally, 16 out of 17 SDGs are addressed, but with a wide range of 4-12 SDGs per company.

Profit: Covid has not greatly affected the profitability of the companies. The EBITDA margin for all processors over the years 2014 – 2020 was on average around 8%, even though the range between companies is much wider, between 1% and 27%. The increase compared to a year ago was 6% indicating an improvement to the operational efficiency.

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

IFCN Top 20 Dairy Processors list by milk intake in 2020

Rank 2020	Company name	Origin & main operation countries	"Milk intake in mill. t ME"	Estimated turnover per kg milk, in USD	"Market share in % of world milk production"
1	Dairy Farmers of America	USA	28.6	0.6	3.2%
2	Groupe Lactalis	France/others	21.7	1.1*	2.4%
3	Fonterra	New Zealand/ others	18.7*	0.7*	2.1%
4	Arla Foods	Denmark/Sweden/others	13.7	0.9	1.5%
5	Nestlé	Switzerland/others	13.6*	1.1*	1.5%
6	FrieslandCampina	Netherlands/others	11.8*	1.1*	1.3%
7	Saputo	Canada/USA/others	10.5*	1.0*	1.2%
8	Amul	India	10.3*	0.5*	1.2%
9	Yili	China	9.6*	1.5*	1.1%
10	Mengniu	China	9.0*	1.2*	1.0%
11	Glanbia Group	USA/others	8.4	0.5	0.9%
12	California Dairies	USA	7.7	0.5	0.9%
13	Danone	France/others	7.5	2.0*	0.8%
14	Agropur	Canada/USA	6.6	0.9	0.7%
15	DMK	Germany/Netherlands	6.6	1.0	0.7%
16	Müller	Germany/UK/others	6.5*	0.8*	0.7%
17	Leprino	USA	6.0	0.6	0.7%
18	Land O`Lakes	USA	5.7*	0.7*	0.6%
19	Savencia	France/others	4.8	1.2	0.5%
20	Sodiaal	France	4.5	1.2	0.5%
Sum of the top 20			**212**	**0.9**	**24%**

Remark: Due to continously omproving the methodology, the comparability between the IFCN Top 20 Processors published previously is not given.
For Example: Milk intake from Amul was not fat corrected for 2016. This has beed adjusted for data shown from 2018 onwards.

Explanation of variables

1. **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 (1litre = 1.033 kg). A double counting is possible once a processor sources milk from a collecting cooperative (e.g. DFA) or is sourcing milk in the form of already processed dairy products. This means that the total milk volume of the top 20 processors can be slightly overestimated. Content of milk intake (fat and protein level) can be underestimated in some countries such as New Zealand and The Netherlands.
2. **Turnover per kg milk:** Dairy turnover divided by milk intake. This indicator gives an indication of 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 amount 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 DPA) 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 being available. Glanbia: Processed milk excluding Glanbia Ireland.

IFCN
Dairy Data · Knowledge · Inspiration

Łukasz Wyrzykowski

Status and key developments

Status 2021

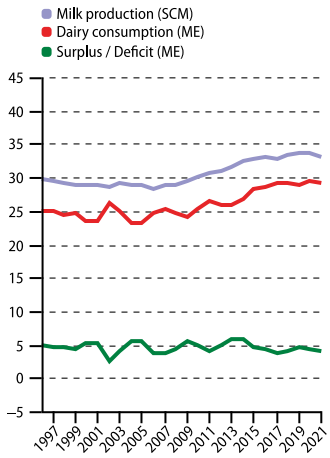
- No. **6** (↓ 1) in the world milk production: **33.1** mill t SCM
- Farm-gate milk price **-4% below** the world market price
- **113%** self-sufficiency in milk (ME)
- **3.9%** of cow's milk production is organic

Key developments 2016–2021

- Milk production **increased** by **+0.1%** per year
- Number of dairy farms **decreased** by **-4.6%** per year
- Average milk yield **increased** by **+2%** per year

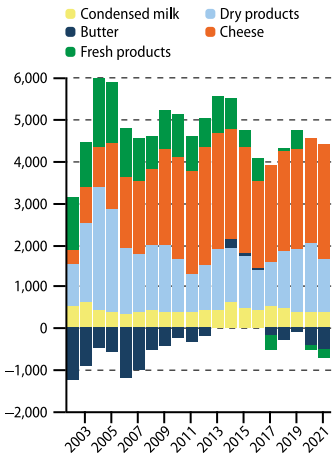
Milk balance

in mill t, from all dairy animals



Net trade balance

in 1,000 t ME, from all dairy animals

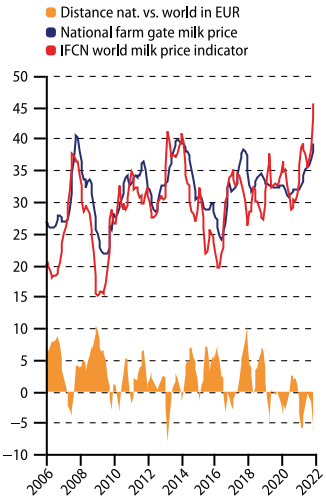


Key variables

	1996	2000	2003	2006	2009	2012	2015	2017	2019	2020	2021	Annual change '11-'16	Annual change '16-'21
Milk production (cow's)													
Production *(mill t SCM)*	29.57	28.87	29.04	28.26	29.52	30.90	32.77	32.78	33.54	33.67	33.07	+1.5%	+0.1%
Cows *(in 1,000's)*	5,195	4,564	4,338	4,054	4,169	4,190	4,285	4,205	4,012	3,921	3,833	+0.1%	-1.9%
Milk yield *(t SCM/cow)*	5.69	6.33	6.70	6.97	7.08	7.37	7.65	7.79	8.36	8.59	8.63	+1.4%	+2.0%
Dairy consumption (all)													
Country consumption *(mill t ME)*	24.83	23.57	25.00	24.60	24.19	25.96	28.13	29.23	28.89	29.45	29.23	+1.5%	+0.5%
Population *(mill people)*	81.47	81.46	81.55	81.17	80.48	80.43	81.69	82.66	83.09	83.16	83.29	+0.5%	+0.2%
Consumption *(kg ME/capita)*	304.7	289.4	306.5	303.0	300.6	322.8	344.4	353.7	347.7	354.2	351.0	+1.0%	+0.2%
The dairy chain													
Milk delivered (cow's)	93.8%	95.2%	95.7%	96.0%	96.7%	96.8%	96.4%	95.9%	96.0%	96.0%	95.8%	-0.2%	0.0%
Exports/nat. production	39.7%	46.4%	49.3%	48.6%	50.5%	56.0%	55.4%	56.9%	57.1%	57.0%	58.6%	+0.8%	+0.6%
Imports/nat. consumption	28.1%	34.3%	41.1%	40.9%	40.6%	47.5%	48.0%	51.5%	49.9%	50.8%	53.1%	+1.1%	+0.7%

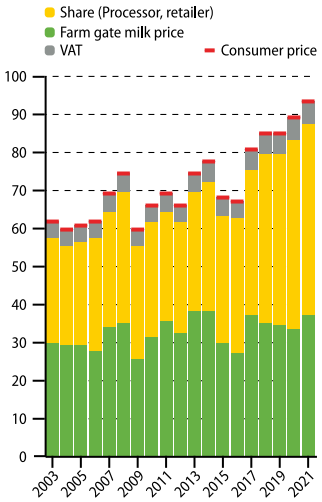
Farm-gate milk price

EUR/100 kg SCM



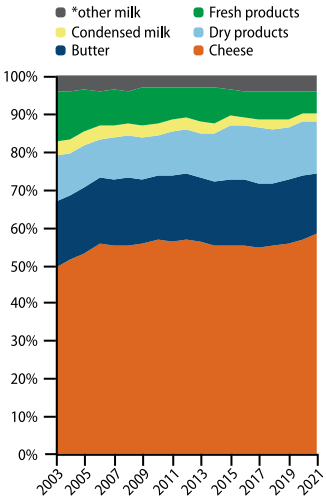
Milk price split

EUR/100 kg SCM



Processing profile

% of all milk produced



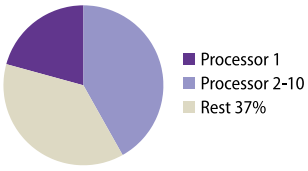
Milk processors

Milk intake in 1,000 t (nat. content) 2020

1. DMK Deutsches Milchkontor GmbH	6,600
2. Hochwald Foods GmbH	2,310
3. Unternehmensgruppe Theo Müller S.e.c.s	2,100
4. Molkerei Ammerland eG	2,025
5. Arla Foods GmbH	1,731
6. Meierei Barmstedt	1,458
7. frischli Milchwerke GmbH	996
8. Goldsteig Käsereien Bayerwald GmbH	950
9. Bayerische Milchindustrie eG	897
10. Rücker GmbH	850

Cooperatives: 42% of milk intake shown

Share on national milk delivery:



Explanations

Method: See Chapter 3.9 for details. **Sources:** National statistics supplemented by data from FAO, IMF, OANDA, GTT, Eurostat, BLE, BMELV, AMI. **Dairy consumption (disappearance):** Milk production (all dairy animals) + imports - exports +/- stock changes. **Data:** 2021 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. The reduced VAT rate from July 2020-July 2021 is not considered in the chart. **Remarks:** Organic Milk Production – Cow: milk delivered to processors. Processors: Theo Mueller, Frischli & Ruecker (2019). ***other milk:** Milk not delivered to dairies and milk from animals other than cow and buffalo. If applicable: Sheep, goat and camel.

Dairy researchers representing 125 countries

Institutional Partners

Agribusiness Partners

Milk Processing

Feed and Feed Additives

Milking and Barn Equipment

Health and Hygiene

Farm Machinery

Genetics for Animals & Plants

Agriculture Technology Companies

Financial Institutions

Milk Packaging

Milk Testing, Measure, Transport

Dairy Farming Companies

Consulting and others

ISSN 1610-434X