IFCN

Dairy Data · Knowledge · Inspiration
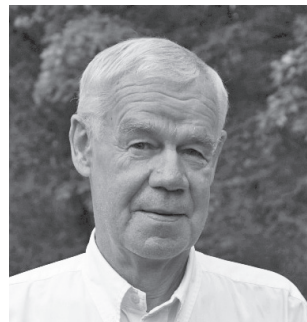
Dairy Report 2017

For a better
understanding of
the dairy world

IFCN
The Dairy Research Network

Dear friends,

This IFCN Dairy Report 2017 compiles in a most comprehensive overview, the status of the dairy world and gives insights into the IFCN Research.

The IFCN Mission and Vision

IFCN Mission: We create a better understanding of the dairy world by providing comparable data, knowledge and inspiration.

IFCN Content work 2017

Overall: The IFCN launched a new website and substantial steps have been achieved in better understanding the dairy development.

Farm economics: Special attention was given to the following areas: typical farm representativeness, milk standardisation, land productivity, milk supply response of farms, and the impact of VAT systems on dairy competitiveness and interest rates.

The dairy sector work: Focused mainly on analysing dairy farm structure and forecasting this for the first time. A second focus was related to monitoring the regional milk production development within countries.

Outlook: As dairy business is changing very rapidly, IFCN has developed scenarios for the long-term outlook of the dairy world for over 200 countries till 2026.

HIGHLIGHTS – IFCN EVENTS IN 2017

IFCN Dairy Conference 2017

The focus of this conference was 'Dairy development: Past, present and future'. GDP, DMK and Elanco hosted this event in Kiel, Germany, in June.

IFCN Supporter Conference 2017

This event was held in September in Lucerne, Switzerland. The topic covered the success factors in dairy regions. Emmi, Nestlé and Hochdorf were the main hosts.

IFCN Dairy Economic Workshop 2017

The workshop took place for the 3rd time to help people improve their skills in dairy economic analysis.

IFCN Regional Workshop 2017

The workshop takes place for the fourth time in India, focussing on sustainability of family dairy farms. The event will take place in Chennai. CavinKare and Elanco will act as sponsors.

Status of the IFCN Research Network in 2017

The dairy sector analysis covered over 200 countries. In the farm comparison,159 typical dairy farms from 62 dairy regions and 52 countries were analysed. In 2017 the research network grew substantially via new countries in farm and dairy sector analysis.

IFCN Dairy Report 2017

Chapter 1: Cost comparison summarises results on costs, returns, profitability and productivity of dairy farms worldwide. Real time cost estimates for 2017 have also been included for some countries.

Chapter 2: Global monitoring provides a broad overview on specific dairy issues such as milk prices, feed prices and milk: feed price ratio and monthly milk price transmission. New in this edition are the real time farm economics and the results of IFCN Long-term Outlook 2017, covering the years 2017 – 2026.

Chapter 3: Milk production fact sheets, prepared for 110 countries, representing 98% of world milk production with comparable information on:

- Milk density and milk movements within countries
- Dairy farm numbers and farm size trends
- Dairy farm structure analysis and trends
- Price analysis for milk, beef, feed and land

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

Chapter 4: IFCN Methods: IFCN Methods: This chapter is dedicated to explain the methods used for the IFCN Analyses. Moreover it highlights the following topics: a) farm supply reaction, b) status of the model TIPI-CAL, c) milk standardisation, d) land productivity method, and e) development of elevator stories to understand what a typical farm represents in a country more clearly.

Finally it includes an overview of IFCN Products and Data Services. Modules and a selection of typical farms are described.

Acknowledgement

Anders Fagerberg
Chairman of the IFCN Board

Torsten Hemme
Managing Director

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

Dairy Expert

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

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

Anna Yeritsyan, Vardan Urutyan | International Center for Agribusiness Research and Education (ICARE), Yerevan, **Armenia**

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

Josef Hambrusch, Leopold Kirner | Federal Institute of Agricultural Economics, Vienna, **Austria**

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

Anatoli Takun, Sviatlana Takun | Institute of System Research in Agro-industrial Complex, Minsk, **Belarus**

Erwin Wauters | Institute for Agricultural and Fisheries Research, Social Sciences Unit, Marelbeke, **Belgium**

Lorildo A. Stock | Embrapa Gado de Leite (Embrapa Dairy Cattle), Juiz de Fora, Minas Gerais, **Brazil**

Festus Kongyu Ali | Department of Rural Economics, Faculty of Agriculture and Agricultural Sciences, University of Dschang, Cameroon, 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, Hal Chin | Beijing Orient Dairy Consultants Ltd, Beijing, **China**

Liu Changquan | Rural Development Institute of Chinese Academy of Social Sciences, Beijing, **China**

Enrique Ortega, René Perez | C.N.L.M (Consejo Nacional de la Calidad de la Leche y Prevención de la Mastitis), Bogotá, **Colombia**

Iveta Bošková | ÚZEI – Research Institute of Agricultural Economics and Information, Prague, **Czech Republic**

Jannik Toft Andersen | SEGES, Aarhus, **Denmark**

Adel Khattab, Wael Nagy | Tanta University, Faculty of Agriculture, Animal production department, Tanta, **Egypt**

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

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

Dorothee Bölling | IFCN Dairy Research Center, Kiel, **Germany**

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

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

Inderpreet K. Kullar | College of Dairy Science & Technology, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab, **India**

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

Farhad Mirzaei | Animal Science Research Institute of Iran, Karaj, **Iran**

Fiona Thorne | Rural Economy Research Centre, Teagasc, Dublin, **Ireland**

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

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

Hironobu Takeshita | J-milk (Japan Dairy Association); Japan Milk Academic Alliance; Nagoya University, Aichi, Tokyo, **Japan**

Asaah Ndambi | WUR, Wageningen Livestock Research, Wageningen, The Netherlands, **Kenya**

Simone Adam | Ministère de l'Agriculture, Service d'Economie Rurale, Luxembourg, **Luxembourg**

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

José Luis Dávalos Flores | UNAM FMVZ CEIEPAA, Tequisquiapan, **Mexico**

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

Nicola Shadbolt | College of Sciences, Massey University, Palmerston North, **New Zealand**

Olusegun Oloruntobi | MoreMeat-MoreMilk Initiative for Development, Adamasingba, Ibadan, **Nigeria**

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

Ola Flaten, Bjørn Gunnar Hansen | NIBIO – Norwegian Institute of Bioeconomy Research, Ås, **Norway**

Waseem Shaukat | Solve Agri Pak (Private) Limited, Lahore, **Pakistan**

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

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

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, Faculty of Economics, Subotica, **Serbia**

Koos Coetzee | Milk Producers' Organisation, Pretoria, **South Africa**

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

Christian Gazzarin | Agroscope Research Station, Farm Management Group, Tänikon, **Switzerland**

Michel de Haan | WUR, Wageningen Livestock Research, Wageningen, **The Netherlands**

Dhiaeddine M'Hamed | Dairy Expert, Saliman, **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 | Agriculture & Horticulture Development Board, Market Intelligence, Kenilworth, Warwickshire, **United Kingdom**

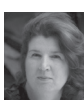**Jorge Artagaveytia, Gabriel Bagnato** | Instituto Nacional de la Leche, Montevideo, **Uruguay**

Mark Stephenson | University of Wisconsin - Center for Dairy Profitability (CDP), Wisconsin, **USA**

Bill Zweigbaum | Farm Credit East, Greenwich, New York , **USA**

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

Linda Nielsen | Zimbabwe Association of Dairy Farmers, Harare, **Zimbabwe**

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

Shakir Ullah Akhtar | Dairy Expert, **Afghanistan**

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

Neil Lane | Dairy Australia, Victoria, Southbank, **Australia**

Vugar Bayramov | CESD – Center for Economic and Social Development Baku, **Azerbaijan**

Tashi Samdup, Dr. N. B. Tamang | Department of Livestock, Ministry of Agriculture & Forests, Thimphu, **Bhutan**

Felix Menzel | Dairy Expert, Mezza Sucre, **Bolivia**

Konstantin Stankov | Trakia University, **Bulgaria**

Henri Bayemi | Institute of Agricultural Research for Development (IRAD), Yaoundé, **Cameroon**

Federico Pérez García | DMV U.N., CNLM, **Colombia**

Francisco José Arias Cordero | Cooperativa de Productores de Leche Dos Pinos R.L., **Costa Rica**

Rafael Vizcarra | Centro de la Industria Láctea, Quito, **Ecuador**

Katri Kall | Estonian University of Life Sciences, **Estonia**

Mélanie Richard - Lenfant | Institut de L'Elevage, Paris, **France**

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

Łukasz Wyrzykowski | IFCN Dairy Research Center, Kiel, **Germany**

Irene Tzouramani | Agricultural Economics Research Institute (AGRE-RI), Hellenic Agricultural Organization - DEMETER, Athens, **Greece**

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

R. R. B. Singh, Smita Sirohi | National Dairy Research Institute, Karnal, **India**

Marjuki | Department of Animal Nutrition, Brawijaya University, Malang, **Indonesia**

Othman Alqaisi | College of Agricultural & Marine Sciences, Sultan Qaboos University, Muscat, Oman, **Jordan**

Francis Karin | Tegemeo Institute of Agricultural Policy and Development, Egerton University, Nairobi, **Kenya**

Azat Mukaliev | Kyrgyz State Agricultural University, Bishkek, **Kyrgyzstan**

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

Deiva Mikelionyte | Lithuanian Institute of Agrarian Economics, Vilnius, **Lithuania**

Blagica Sekovska | Veterinary Faculty, Institute for Food, Skopje, **Macedonia**

Mira Rakotondrandria, Malagasy Dairy Board Antananarivo, **Madagascar**

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

Mohamed Taher Sraïri | Département des Productions et Biotechnologies Animales, Institut Agronomique et Vétérinaire Hassan II, Rabat, **Morocco**

Naomi K. Torreta, Maria Carmen 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 | The Center for the Study of Dairy Market „The DairyNews", **Russian Federation**

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

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

Margita Stefanikova | Slovak Association of Milk Producers (SZPM), Nitra, **Slovakia**

Ben Moljk | Agricultural Institute of Slovenia, Ljubljana, **Slovenia**

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

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

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

Juliane Liu | Forefront Enterprise Co., Ltd., Taipei, **Taiwan**

Jonas Kizima | Livestock Research Institute (TALIRI), Tanga, **Tanzania**

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

Yana Muzychenko | Association of Milk Producers, **Ukraine**

Muzaffar Yunusov | IFCN Dairy Research Center, Kiel, Germany, **Uzbekistan**

Vu Ngoc Quynh | Vietnam Dairy Association, Hanoi, **Vietnam**

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

Kapoche Mwale | Dairy Association of Zambia, **Zambia**

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

Preface

1. Comparison of the typical farms 2016

2. Global monitoring dairy economic indicators

3. Dairy sector and chain profiles

Country Pages – Dairy sector and chain profiles

4.   Methods applied in IFCN Analyses

Annex

Indonesia

IFCN Dairy Report – Developments 2000 – 2017

Which countries are participating in the IFCN Dairy Report activities in 2017?
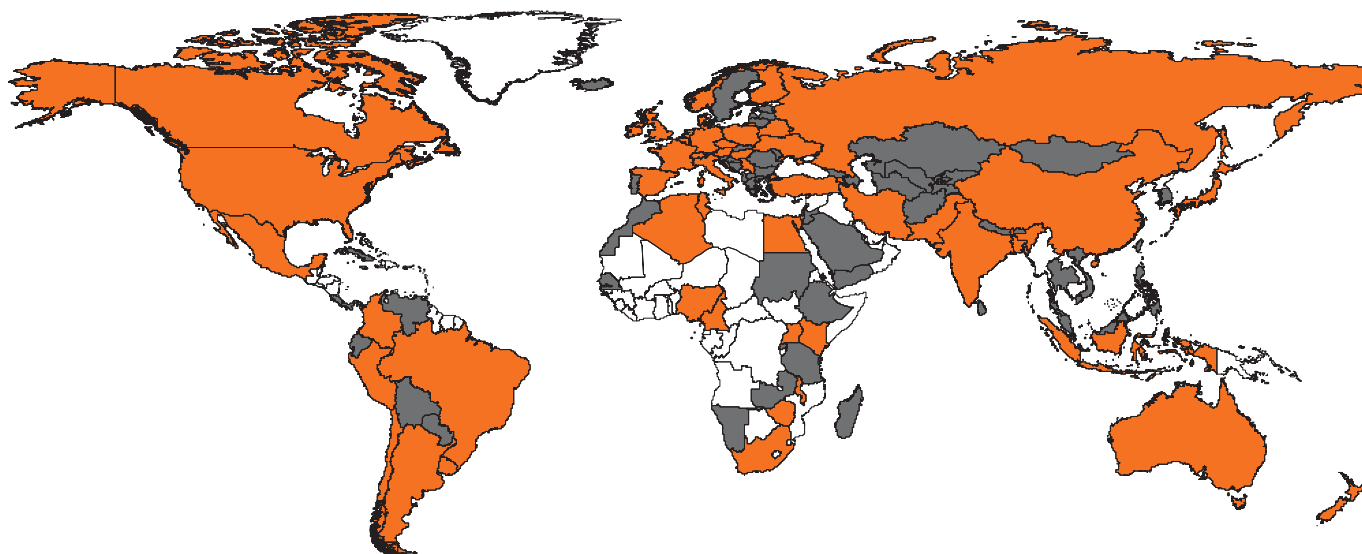
■ 52 countries analysed in the Farm Comparison
■ 58+ countries participated in the Country Pages

Year	Countries included in		No. of farm types analysed	Topic of Country Report	IFCN Dairy Conferences
	farm comparison	country profile analysis			
2000	8	8	21	Ex-post analysis 1996–2000	Sep-00
2001	20	20	52	Country reports on milk production	Jun-01
2002	24	24	72	Dairy production systems survey	May-02
2003	27	24	76	Farm structure analysis 1990–2001	May-03
2004	31	31	92	Dairy sector profile 1981–2001	Jun-04
2005	33	41	102	Milk production fact sheet 1996–2003	May-05
2006	34	60	103	Dairy sector & chain profile 1990–2004	May-06
2007	38	73	120	Milk production fact sheet 1996–2005	Jun-07
2008	44	78	134	Dairy sector & chain profile 1996–2007	Jun-08
2009	46	80	147	Milk production fact sheet 1996–2008	Jun-09
2010	44	86	143	Dairy sector & chain profile 1996–2009	Jun-10
2011	49	90	157	Milk production fact sheet 1996–2010	Jun-11
2012	51	91	177	Dairy sector & chain profile 1996–2011	Jun-12
2013	51	95	178	Milk production fact sheet 1996–2012	Jun-13
2014	54	100	172	Dairy sector & chain profile 1996–2013	Jun-14
2015	55	100	170	Milk production fact sheet 1996–2014	Jun-15
2016	52	105	146	Dairy sector & chain profile 1996–2015	Jun-16
2017	52	110	159	Milk production fact sheet: 1996–2016	Jun-17

Bangladesh

Regional maps and the typical farms

North America

Canada
65, 126

Idaho (ID)
1200, 2600

Wisconsin(WI)
80, 500

California (CA)
1100, 3000

Mexico
30JA, 44JA,
1000T, 2000T

New York (NY)
70, 500, 2000

Europe and Middle East

Germany
30S, 79S, 109S, 139N,
259N, 700E, 1200E

Norway
25, 41

Poland
16E, 25, 52N,
65S, 75, 221N

Finland
29, 75, 135

Denmark
170, 350

UK
160NW,
259SW

NL
99, 242

Russia
230W, 850NW,
850NW++, 850NW--

Ireland
72, 132

Belarus
995, 1458

Belgium
40N, 95N

Hungary
128, 842

Ukraine
200, 550

Armenia
4, 40

Luxembourg
67, 171

Serbia
2, 10, 84

Spain
65NW, 80CN,
93S, 150NW

Turkey
15, 100

Iran
90, 120,
276, 458

France
38MC,
66W, 84C

Switzerland
19, 23, 61

Italy
154,
229

Austria
17 bio,
30 bio,
68

**Czech
Republic**
85, 400, 794

Israel
105, 450

South America

Colombia
6, 100DP, 105

Peru
7, 17

Brazil
23S
60S
111S
180SE
320SE

Chile
59
112
408++
434

Argentina
170, 280,
400, 600

Uruguay
132, 419

South East Asia and Oceania

North
280N, 675N, 2650

Punjab
2N, 7N
20N, 60N

Inner Mongolia
90IM

Japan
40, 76

Haryana
300CF,
300CF++

China

Beijing
200BE
1450BE

India

Pakistan
6, 25, 100

Bangladesh
2, 14

Indonesia
3MG, 3MG++
10MG, 10MG++

Australia
274
350

New Zealand
369, 1052

Africa

Tunisia
2, 4, 5, 12, 290

Egypt
5B, 5, 10

Algeria
6, 18

Uganda
1, 3, 13

Nigeria
4A, 200

Kenya
2, 10

Cameroon
30, 55

Malawi
1, 6

Zimbabwe
55, 360

South Africa
230, 520, 630

Legend: *Numbers indicate the number of cows in the typical farms.*
++ = future farm, -- = farm with a low management level, B = Buffalo, BE = Beijing,
bio = Organic, C = Central, CA = California, CF = Commercial Farm, CN = Central North,
DP = Dual Purpose, E = East, IM = Inner Mongolia, ID = Idaho, JA = Jalisco,
MC = Massif Central, MG = Malang, N = North, NW = North West, NY = New York,
S = South, SE = South East, SW = South West, TO = Torréon, W = West, WI = Wisconsin

The dairy world today

Today the dairy world serves over 7 billion consumers and provides livelihoods for approximately 1 billion people living on dairy farms. The key challenges for the dairy stakeholders lie in its complexity and the high rate of change in a globalised world.

About IFCN

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

What does IFCN do?

IFCN provides globally comparable dairy data, outstanding knowledge and inspiration to stretch one's imagination. Its core competence lies in the field of milk production, milk prices and related economic topics.

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 being deepened and widened every year.

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

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

More than 100 dairy related companies and organisations support the IFCN and use the knowledge to solve challenges in the dairy world better.

IFCN has innovative ways to share this knowledge with its 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 organisation of worldwide data regarding milk production, milk prices and related dairy economic topics.

IFCN Mission

We create a better understanding of the dairy world by providing comparable data, knowledge and 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. Up to date 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 helps to serve your dairy stakeholders better and to develop your professional career in the dairy world while strengthening your 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 Centre 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**

Organisational setup

IFCN stands for International Farm Comparison Network and is a global dairy research network. The IFCN has a **Dairy Research Center** (DRC) with 21 people (full / part time) employees, coordinating the network process and running dairy research activities.

Managing Director

Torsten
Hemme

Network Management

Anke
Heyer

Prashant
Tripathi

Annika
Jarrens

Birte
Petersen

Office Management

Sandra
Bornhöft

Franziska
Rekow

Ufukhan
Hamurcuoğlu

Dairy Sector Analysis

Łukasz
Wyrzykowski

Hassan
Ajini

Katrin
Reincke

Muzaffar
Yunusov

Johanna
Scholz

Johnny
McHone

Qirui
Li

Mateusz
Węgrzynowski

Karin
Wesseling

Dairy Farm Analysis

Amit
Saha

Dorothee
Bölling

Maria
Schmeer

Elgin
Giffhorn

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** is composed of the following members: Anders Fagerberg (chairman), Luc Morelon (nominated by the supporters), Ernesto Reyes (nominated by the researchers), Uwe Latacz-Lohmann (Kiel University), Olaf Rosenbaum (legal and fiscal expertise) and Torsten Hemme (Managing Director IFCN).
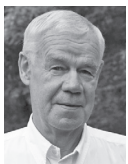
Anders
Fagerberg
Chairman

Ernesto
Reyes

Luc
Morelon

Uwe Latacz-
Lohmann

Olaf
Rosenbaum

Torsten
Hemme

18th IFCN Dairy Conference, June 10 – 14, 2017 in Kiel, Germany

Dairy development: Past, present and future

IFCN Dairy Conference 2017

The 18th IFCN Dairy Conference 2017 in Kiel, Germany, was attended by 99 participants representing 43 countries. The conference was proudly hosted by the Global Dairy Platform (GDP). The event was also sponsored by DMK and Elanco.

Monday, June12	Tuesday, June13	Wednesday, June14
DAIRY WORLD STATUS	**DAIRY DEVELOPMENT**	**DAIRY OUTLOOK**
IFCN Strategy and board report	**Dairy development**	**Dairy outlook**
	• Dairy for development – a joint effort *(E. Reyes, IFCN)*	• The dairy world in 10 years: GDP perspective *(D. Moore)*
The Dairy world today	• Global perspectives on dairy development *(FAO, GDP, IFCN)*	• IFCN Long-term Dairy Outlook 2016 – the dairy world in the next 10 years
• The dairy world after the crisis: key trends 1996 – 2016	• Case studies from Africa *(Send a Cow)*	• Panel discussion: Dairy world in 10 years *(GDP, FAO, Elanco)*
• Monthly dairy developments: What are the drivers of milk production in 2017?		• IFCN Short-term Dairy Outlook 2017/18
• Panel discussion: What are the drivers of milk production in your country?	**Workshop session 1**	• IFCN Strategy forward – The IFCN Dairy Research Network in 2017/18
	• Broadening the scope of dairy development	
Dairy farm economics and risk analysis		**Summing up and closing**
• Competitiveness of dairy farming worldwide	**Workshop session 2**	
	• Leadership and success in dairy development programmes	
Farm structure analysis		
• IFCN Farm Structure: trends and implications	**Farewell evening**	
Network evening		

What is the future of dairy farming systems?

IFCN Supporter Conference 2016

The 14th IFCN Supporter Conference was held in Wageningen, The Netherlands. More than 80 participants from 70 dairy related companies attended the conference which was hosted by FrieslandCampina and Trouw Nutrition.

Wednesday, September 14 **THE DAIRY WORLD IN 2016**	Thursday, September 15 **FUTURE DAIRY FARMING SYSTEMS**	Friday, September 16 **DAIRY OUTLOOK**
Pre Conference: Understanding industry needs towards IFCN • IFCN- The company and their products • IFCN Monthly Real Time Farm Economics **Official start of the conference** • Welcome to the 14th IFCN Supporter Conference **The dairy world today** • The dairy world in 2016 • IFCN Monthly Real Time Data – What are the latest developments? • IFCN Farm Economics – How are farms affected? **Network evening**	**Future dairy farms** • Farmers perspective – How to be a future farmer? • Farm structure – What are the trends & criteria that define future farms? **Workshop: Which strategies can the dairy industry develop to meet future constraints on the farm?** • Visit to FrieslandCampina research and development centre. **Dairy farm visit** **Networking evening**	**Global perspectives of milk production** • Researchers perspective – What can the dairy industry learn from other industries? • Agribusiness perspective – Collaborate to innovate – the future of our global industry • IFCN Long-term Dairy Outlook 2025 – How will the dairy world look like in 10 years? • IFCN Short-term Dairy Outlook 2016/2017 – How will the dairy world look like in 15 months? **Reporting session** **Summing up and closing**

5th IFCN Regional Workshop – November 28 – 29, 2016 in Anand, India

Global dairy crisis: Lessons to be learned for dairy development in India

IFCN Regional Workshop 2016

This IFCN Regional Workshop took place in Anand, Gujarat; more than 50 participants representing various aspects of the dairy value chain became part of the discussions and group working session.

The workshop focused on the topic: Global dairy crisis: Lessons to be learned for dairy development in India. These questions were intensively discussed among the participants – key people who represented various stakeholders in the dairy chain including farmers and government representatives.

The workshop provided a suitable frame and platform for participants to exchange experiences and discuss various different approaches for dairy development in India. Presentations by IFCN researchers and agribusiness-related companies introduced the topic. A panel of representatives of different aspects of dairy value chains was also very well received.

The workshop was proudly sponsored by Amul, Danone and Elanco.

Monday, November 28 **INDIAN DAIRY EXPERIENCE**	Tuesday, November 29 **INTERACTIVE SESSION**
Field trip • Visit to local dairy farm and chilling centre • Interaction with the dairy farmer • Visit to Amul milk processing plant. **Official start of the conference** • Welcome to the 5th IFCN Regional Workshop • What has worked for dairy development in India in the past. **Networking event**	**Global dairy crisis** • The dairy crisis 2015/16 – *T. Hemme, IFCN* • Panel: How has India perceived the global dairy crisis? **Outlook 2025** • How can the dairy world look like in 2025? – *T. Hemme, IFCN* • Dairy India in 2025: Processors perspective – *R.S. Sodhi, Amul* • Dairy in India 2025: Farm input perspective – *S. Jha, Elanco* **Dairy development in India** • Dairy farm competitiveness – *A. Saha, IFCN* • Working group: Dairy development in India present and future **Presentations of the results and conclusions (sum up) of the workshop**

3rd IFCN Dairy Economic Workshop–February 23 – 24, 2017 in Kiel, Germany

Dairy economics is more than just the price of milk

IFCN Dairy Economic Workshop 2017

This third IFCN Dairy Economic Workshop took place in Kiel, Germany. It was attended by 10 participants from different dairy related companies, institutions and institutes.

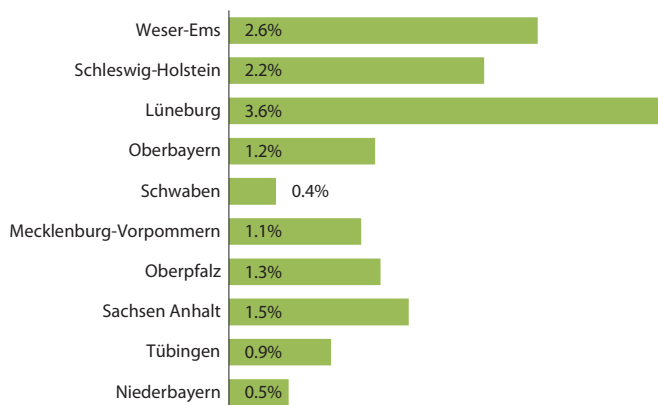| Thursday, February 23	Friday, April 15
INTRODUCTION TO DAIRY ECONOMICS	**CURRENT SITUATION AND ANALYSIS**
• Dairy farm analysis - Farm economics across the globe • Dairy sector analysis - How does the global dairy world look like? • Workshop session: Principles of the dairy market **Networking event**	• Farm structure – What's behind the segments? • Dairy farm economics – Current situation and how to predict the dairy future • Company case studies – Learn how to address strategic development questions **Presentation of the results and conclusions (sum up) of the workshop** **Optional IFCN Product Training**

Łukasz Wyrzykowski

IFCN
Dairy Data - Knowledge - Inspiration

Top 10 regions - avg. annual milk production growth
2011 - 2016 - regions represent 60% of national milk production in 2016

Region	Growth
Weser-Ems	2.6%
Schleswig-Holstein	2.2%
Lüneburg	3.6%
Oberbayern	1.2%
Schwaben	0.4%
Mecklenburg-Vorpommern	1.1%
Oberpfalz	1.3%
Sachsen Anhalt	1.5%
Tübingen	0.9%
Niederbayern	0.5%

Status and key developments

Status 2016
- No. 5 in world milk production: 33.5 mill t ECM
- No. of dairy farms: 69,174
- Milk price: +8% to world market
- Feed price: +1% to world market

Key developments over the past five years
- Milk production growth: +1.5% per year
- Farm number: -4.5% per year
- Top herd size growth: ≥100 cows/farm: CAGR 5.8%
- Devaluation of EUR vs USD: avg. -4.0% per year

Key variables

	1996	2000	2002	2004	2006	2008	2010	2012	2014	2015	2016	Annual change '06-'11	Annual change '11-'16
Milk production (cows')													
Production (mill t ECM)	30.00	29.36	28.80	29.28	28.76	29.42	30.49	31.45	32.98	33.35	33.48	1.6%	1.5%
Cows (in 1,000's)	5,195	4,564	4,373	4,287	4,054	4,229	4,182	4,190	4,296	4,285	4,218	0.7%	0.1%
Milk yield (t / cow / year)	5.8	6.4	6.6	6.8	7.1	7.0	7.3	7.5	7.7	7.8	7.9	0.9%	1.3%
Farm structure													
No. of dairy farms (in 1,000's)	186	138.5	125.1	113.5	102.2	99.4	91.6	82.9	76.5	73.3	69.2	-3.1%	-4.5%
Average farm size (cows / farm)	27.9	33.0	35.0	37.8	39.7	42.5	45.7	50.6	56.2	58.5	61.0	3.9%	4.9%
Prices in national currency													
Milk : feed price ratio	1.8	2.1	2.1	2.0	2.0	1.4	1.9	1.4	1.5	1.3	1.3	-5.0%	-3.5%
Cull cow (EUR / kg live weight)	1.11	1.17	0.94	1.06	1.28	1.40	1.43	2.05	1.73	1.82	1.66	6.0%	-0.6%
Land - buy (EUR / ha)	10,394	9,081	9,465	9,233	8,909	9,955	11,854	14,424	18,099	19,614	21,256	8.7%	9.5%
Devaluation of EUR vs USD	-7%	-34%	-32%	-11%	-10%	5%	-5%	-8%	-5%	-20%	-20%	2.0%	-4.0%

Farm structure
% of dairy farms and cows in size classes (2016)

- Cows per size class
- Farms per size class
- IFCN Typical Farms

DE-109S
139N
DE-259N
DE-700E
DE-1200E
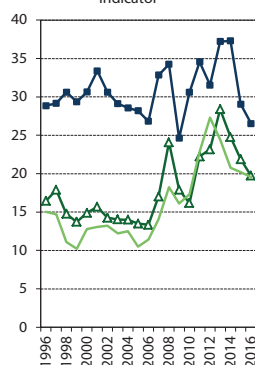DE-79S
DE-30S
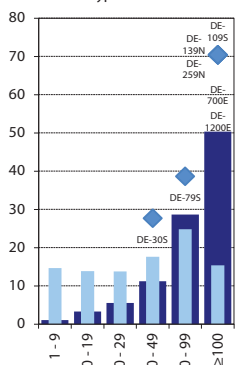
Farm structure
% of cows per herd size

- 1 - 9
- 10 - 19
- 20 - 29
- 30 - 49
- 50 - 99
- ≥100
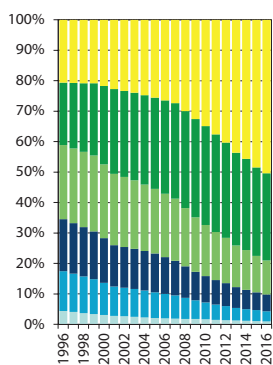
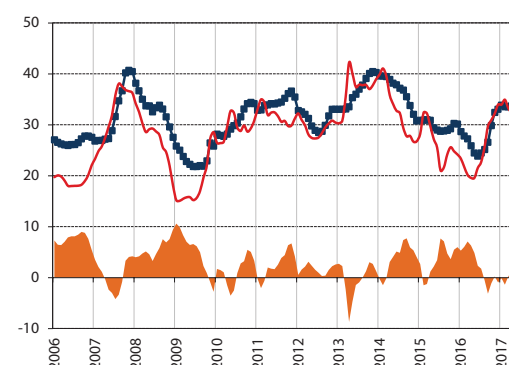## Milk and feed price
EUR / 100 kg

- National farm gate milk price (ECM)
- National feed price
- IFCN World Feed Price Indicator

Monthly farm gate milk price
EUR / 100 kg ECM

- Distance nat. price vs. world price in EUR
- National farm gate milk price (ECM)
- IFCN Combined World Milk Price Indicator

Explanations
Sources: *National statistics, FAO, IMF, Oanda, Eurostat, AMI. 2016 data preliminary and partly estimated.*
Estimates done for: *Cull cow price 2011-2015 based on growth rate for price of cows, 2016 following that trend.*
Devaluation: *Changes based on 2011 Exchange rate: EUR/USD= 0.72.*
Regional data: *Ranking according to year 2016 distribution. Milk production in natural fat and protein content.*

Partners of the IFCN

Dairy researchers representing 110 countries

Institutional partners

Agribusiness partners

Milk processing

Milking and barn equipment

Health and hygiene

Feed

Farm machinery

Genetics for animal & plants

Other branches of the dairy chain