Global Dairy Trends and Drivers 2019

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This article is based on the IFCN Dairy Report 2019.

This annual report summarises the work of IFCN Research Partners from over 100 countries.

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IFCN is a global network for dairy economic research and consultancy
In 2019, researchers from over 100 countries and more than 140 agribusiness companies are members of the network. IFCN has created a better understanding of the dairy world for 20 years.

The IFCN Dairy Report has been published annually since 2000 and has become a guideline publication for researchers and companies involved in the dairy chain. It enables to gain a global holistic view of the industry and serves as a solid fact base for discussions and strategic decisions.

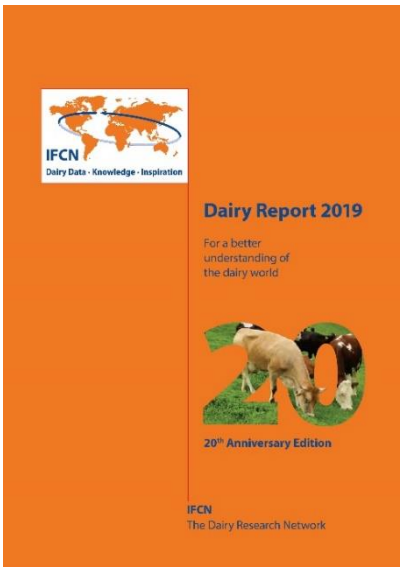
Key insights

2019 will be the year of lowest milk production growth since 2013. As this did not translate into milk price increases, IFCN identifies a structural drop in demand growth as one of the reasons.

Milk production trends by regions are highly diverse and dynamic. The 3-5% rule indicates that strong regions grow and weak ones decline by this rate every year.

Dairy farm structure dynamics drive milk supply and the speed of change is under-estimated. IFCN recommends using the annual growth of milk production per farm as an indicator. In the EU and the USA farms grew by 8% per year.

The key driver for farm structure developments lies in dairy farm economics and the current structure of economies of scale. The Dairy Report analyses this in over 50 countries.



Low growth in milk production in 2019

2018 was an average year of growth for milk production in the 120 countries covered in the IFCN Dairy Report with some regions being affected by negative events such as the drought in the EU. 2019 meanwhile points to low growth of +8.3 mill tons solid correct milk (SCM; based on 65 countries monitored on a monthly level; Fig. 1) for several reasons.

On the one hand, growth appears to slow down because of lower growth in Indian milk production in 2019, caused by stable milk prices and increasing feed prices resulting in poor farm economics.

On the other hand, the Southern hemisphere was hit by adverse weather events such as the drought in Australia, while Argentina was affected by internal economic issues, with the currency devaluation leading to higher costs for milk production.

IFCN monitors global milk production on an annual and monthly basis including real-time estimates to provide one of the fastest market updates available, which is crucial to understand the milk price development.

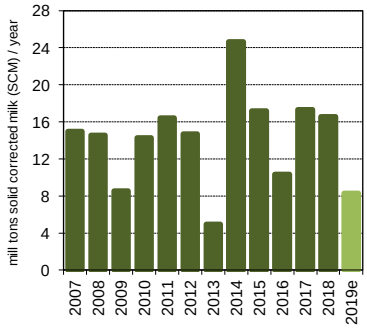
Global milk production and price trends

The IFCN World Milk Price Indicator (Fig. 2) represents the theoretical world farmgate milk price, which has stood at an average level of 35 USD/100 kg milk since 2017, an unusually long period of stabilisation. This points towards balanced supply and demand. Low growth in milk production usually causes a milk price increase. Still, current indicators point to ongoing stability (36 USD/100 kg milk), which means that a structural shift in demand could be a reason in addition to stable oil and low feed prices.

Two key moments for the world milk price

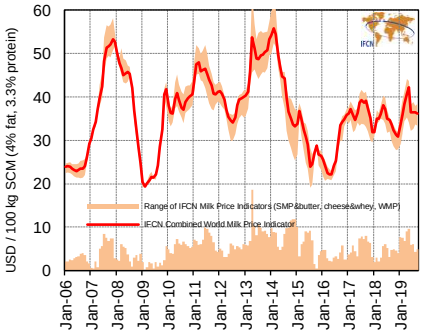
Looking back, the IFCN World Milk Price saw a significant shift in 2006, when the price level almost doubled because of the rise in underlying commodity prices (Fig. 3). The oil price for example increased by over 200%. This price level lasted until 2016 with an average world milk price of 40 USD/100 kg milk. Since then, the IFCN World Milk Price Indicator has come down to 35 USD/100 kg milk on average but this time, different dynamics are at play. Most notably, there has been a significant spread in the price level of fat and protein, driven by a rise in the global demand for butter fat.

Fig. 1: Global* milk production changes



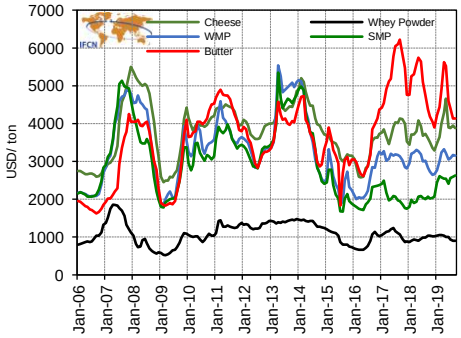
*for 65 countries on a monthly basis representing 93% of total world milk production

Fig. 2: IFCN World Milk Price Indicator**



**based on weighted average of three IFCN World Milk Price Indicators: 1. SMP&butter, 2. Cheese&whey, 3. WMP

Fig. 3: Commodity prices* for main dairy products**



***SMP/WMP/Butter/Cheese: monthly weighted average of biweekly Oceania export prices, Whey Powder: monthly average of weekly German Whey powder prices

Dairy world in a nutshell	Unit	2018	Change 2018 vs. 2017
Milk supply			
All milk production	mill t solid corrected milk (SCM)	887	2.5%
Milk supply drivers			
Farm number	mill	116	-0.7%
Average farm size	head / farm	3.2	1.2%
Average milk yield	t/ milk animal/ year	2.3	2.2%
Production per farm	t per farm	7.3	3.4%
Milk consumption			
All milk consumption	mill t milk equivalents (ME)	885	2.2%
Milk consumption drivers			
All milk consumption per capita	kg milk equivalents (ME) per capita	117	1.0%
Population	billion	7.54	1.2%
Price			
IFCN World Milk Price Indicator	USD/ 100kg solid corrected milk (SCM)	33.4	-5.9%

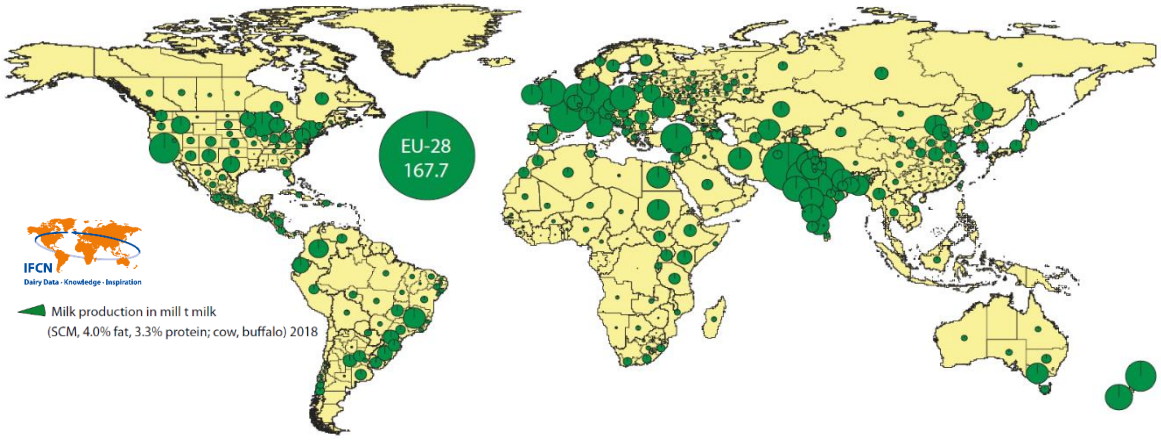
Explanations:
All milk production incl. milk from cow, buffalo, camel, goat, sheep. Data are calculated in SCM = Solid Corrected Milk (standardised to 4.0% fat and 3.3% protein).
Milk consumption mill t milk equivalents (ME). ME = Milk Equivalents, method "fat and protein" only.
Milk yield calculation based on cow and buffalo milk and animals. Number of farms representing dairy cow and buffalo farms.
Source: IFCN Database, Status of data: Oct 19

Regional developments in milk production

In order to track milk production on a global level, regional trends need to be monitored and understood. As can be seen in the map (Fig. 4), the regions with the highest production are South Asia with India and Pakistan, and Western Europe that together accounted for 47% of milk production in 2018. Dynamics differed widely by region and IFCN observed that strong regions grew and weak regions declined by 3-5% every year. Overall, milk production developments can be described by four different scenarios:

1) “Rockets” such as New Zealand South Island with annual growth rates of 5-10% thanks to investments, 2) “Step backs” such as Japan that are characterised by a steady decline caused by a generation shift, 3) “Mountains” with China – Inner Mongolia as an example that experience growth followed by a decline due to challenging farm economics, and 4) “Wake-ups” like Ireland with stable production followed by fast growth as a result of policy changes. Understanding these patterns is key to effectively plan policy design and dairy processing as well as farm investments and input.

Fig. 4: Regional milk production world-wide 2018



Farm structure

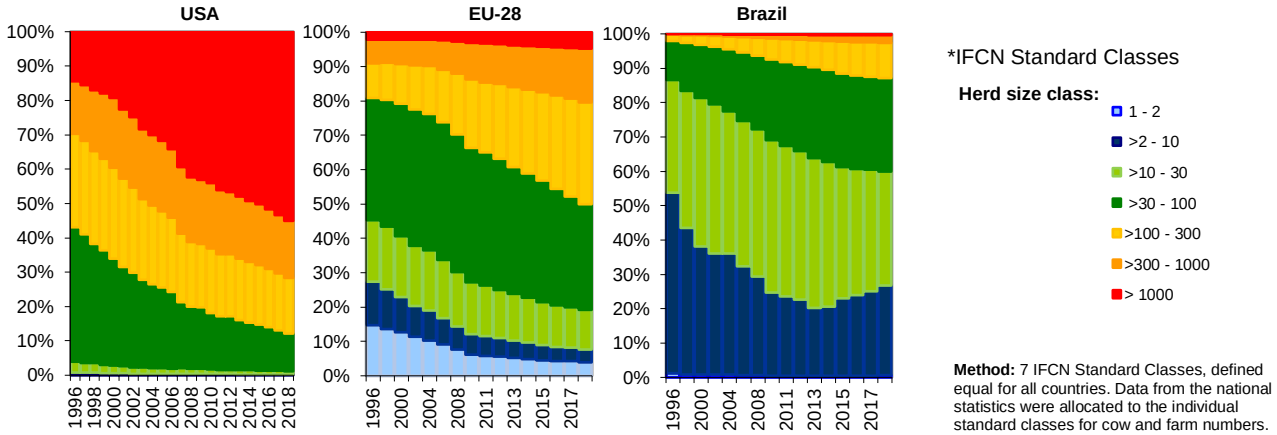
One of the key drivers for milk production are farm structural changes, which are in turn determined by farm economics and economies of scale. This is why IFCN collects detailed farm structure data in over 100 countries (Fig. 5). IFCN also models 176 typical farms in 67 regions in 54 countries to understand and analyse the cost of milk production and to allow actors in the dairy value chain to devise the right strategies.

Globally, there are 116 million farms with an average of 3.2 cows, but these are undergoing a deep structural change that is often underestimated in terms of its speed.

Emerging markets like Brazil still stand at the beginning of the transformation with 60% small-scale farms. The EU is one step ahead with almost equal numbers of medium and large farms and currently faces the question how to allocate CAP resources to support these farms. The USA have already seen more structural change: Large farms already account for the majority, which raises the issue of farm resilience during times of low milk prices.

In this context it should be noted that even though farms exit the market, the average farm in the EU and the USA saw an annual rise of 8% in milk production in 2013-18 thanks to increases in milk yield and herd size.

Fig. 5: Dairy Cows in % per herd size class (IFCN Standard Classes*)

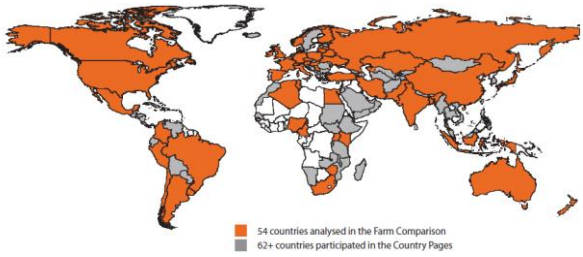


Method: 7 IFCN Standard Classes, defined equal for all countries. Data from the national statistics were allocated to the individual standard classes for cow and farm numbers.

Annex

IFCN is a global network for dairy economic research and consultancy.
In 2019, researchers from over 100 countries and more than 140 agribusiness companies are members of the network. IFCN serves its members with annual conferences, tools and helps them to make better decisions.

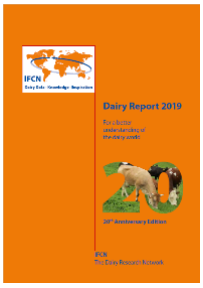
IFCN researchers' network and services



IFCN Dairy Sector Data cover 120 countries, depicting 98% of the world milk production. The Farm Analysis covers 54 countries with 176 typical farms in 67 dairy regions, thus 89% of the world milk production.

IFCN offers researchers global networking platforms via the annual IFCN Dairy Conference, capacity-building in dairy economic analysis on farm and sector level and IFCN Tools and Data to convey knowledge to dairy stakeholders.

IFCN Research Conference 2019



The comprehensive IFCN Dairy Report 2019 serves as tool to standardise dairy data world-wide and includes information on: Farm comparison and farm economics, sustainability of farms, monitoring of global dairy economic indicators, status, trends and drivers of milk production, maps, 120 Country Pages.

IFCN companies' network and services

IFCN offers 3 Partnership Packages:

Basic

A) Global holistic picture of the dairy world
B) Networking with your peers & companies
C) Learning and capacity building

Premium & Ultimate

D) World class dairy business intelligence
E) Data: comparable, global & real time
F) Better decisions based on full access

Which package fits you the best? – The current fast-changing and complex dairy world makes business intelligence vital for your organisation's success. IFCN's mission is to help you with dairy data, knowledge and inspiration to make better decisions.

IFCN supporting partners

Feedback welcome

The IFCN Dairy Situation Analysis 2019 is an ongoing research project. Therefore, IFCN appreciates any feedback to further improve the work. The IFCN Dairy Report is published annually in October. For any comments or questions, please contact us.

Interested in the Dairy Report 2019 or a partnership?

Contact prashant.tripathi@ifcndairy.org