



World dairy market

Challenges and opportunities

Main findings of the 23rd IFCN Dairy Conference 2022

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Summary

In this article, we summarise the main findings of the 23rd IFCN Dairy Conference 2022 – New Generation of Dairy Farming & Dairy Farmers – in which the Agroscope's research group, Managerial Economics in Agriculture, participated. All information and statistics in this article are based on data from the IFCN (Hemme et al., 2022; IFCN, 2022) (for more information about IFCN see the box below).

The IFCN in brief

The International Farm Comparison Network (IFCN) is a global network for dairy economic research and consultancy that provides data, analysis, and forecasts regarding milk production, milk prices, and related economic topics. The IFCN aims to create a better understanding of dairy production systems and markets worldwide.

<http://ifcndairy.org>

The world milk demand is growing faster than the supply

In 2021 global demand for dairy products increased by 3.2% compared to 2020, an amount far exceeding the average annual growth rate observed in the period from 2015 to 2020 (2.6%). This development was driven mainly by two factors. Firstly, in Asia, economic growth combined with a more positive, healthier image of dairy products led to an increased demand for these goods. Secondly, in the USA, government measures were introduced to support consumers during the COVID crisis, which contributed to a rising national demand for food. However, world milk production rose by only 2.9% in 2021. Milk producers faced adverse production conditions, especially in major exporting countries, due to stricter environmental regulations, unfavourable weather conditions, and rising inflation. The EU and Oceania witnessed a 1.3% and 0.5% decline in milk production, respectively. In particular, milk production decreased by 1–13% in Germany, France, the Netherlands, Poland, and Italy. The other important milk-producing countries were not able to compensate for these declines, which boosted the milk price development. Net-importing countries such as China and Russia increased their production more slowly than in the previous year. The strengthening of these negative trends in terms of production development in many regions of the world in the first half of 2022 seems to confirm what some experts fear: global milk production will not grow as fast as in the past.

All-time high milk prices do not offset the rising input costs

In the first four months of 2021, the World Milk Price Indicator¹ showed an increasing trend that reached the value of 47 USD/100 kg of solid-corrected milk (SCM)² in April. After declining during the summer – hitting 42 USD/100 kg of SCM in August 2021 – the value started to increase again, reaching the new record of 63 USD per 100 kg of SCM in April 2022 (see Figure 1). This jump in milk price can be explained by the supply constraint combined with the firm demand. The milk price growth was also induced by rising inflation in many countries. Prices for inputs – especially feed, fuel, and energy – increased greatly. In 2021, the World Feed Price Indicator³ increased by 39% compared to the previous year (see Figure 1). Consequently, the costs of milk production rose almost everywhere in the world (by 10% on average). The increase in costs was higher than the growth in revenue induced by the higher farm-gate milk prices, which results in decreased profitability in the end. According to the International Farm Comparison Network (IFCN) data on 170 typical farms, which represent 89% of the world's milk production, only half of the farms were able to cover their full costs in 2021. The war in Ukraine, which started with the Russian invasion on 24 February 2022, led to turbulence in the global dairy market. Among the major challenges that the market is facing are the unpredictable volumes of available feed at reasonable prices from Ukraine for the 2022/2023 season. The

¹ The IFCN Combined World Milk Price Indicator is based on the weighted average of three IFCN world milk price indicators (skimmed milk powder and butter, cheese and whey, and whole milk powder), which is based on quarterly updated shares of the related commodities traded on the world market.

² SCM is a standardisation for converting milk's natural contents into energy-corrected milk with 4% fat and 3.3% protein.

³ The IFCN World Feed Price Indicator represents the world market price level for feed. It is based on the prices for soybean meal and corn, weighted with their respective shares in a simplified compound feed ration. For more details, see <https://ifcndairy.org/about-us/ifcn-dairy-research-network-method/>.

unpredictability and possible feed shortages may cause a decrease in the global dairy herd and a drop in milk production.

In addition to price shocks and squeezed farm economics, today’s dairy industry faces rising uncertainty regarding the future effects of political instability, geopolitical conflicts, climate change, pandemics, and new environmental regulations. This highly uncertain context complicates predictions on future trends in the dairy world market (milk price, supply, demand, trade, etc.), which the IFCN has been providing since 2013. Until 2022, the outlook was produced via a supply/demand modelling process based on data from 65 countries that participate in the IFCN. The baseline scenario implied a positive consumer preference for milk, as well as political stability. It assumed that market development mechanisms observed in the past would also apply to the future; however, this assumption does not hold up under the new current circumstances, which are characterised by a very high degree of uncertainty. Therefore, the IFCN adapted its tools for forecasting dairy market developments. The data-based model is now complemented with qualitative expert knowledge that provides information on possible market developments in view of the latest macroeconomic and geopolitical developments.

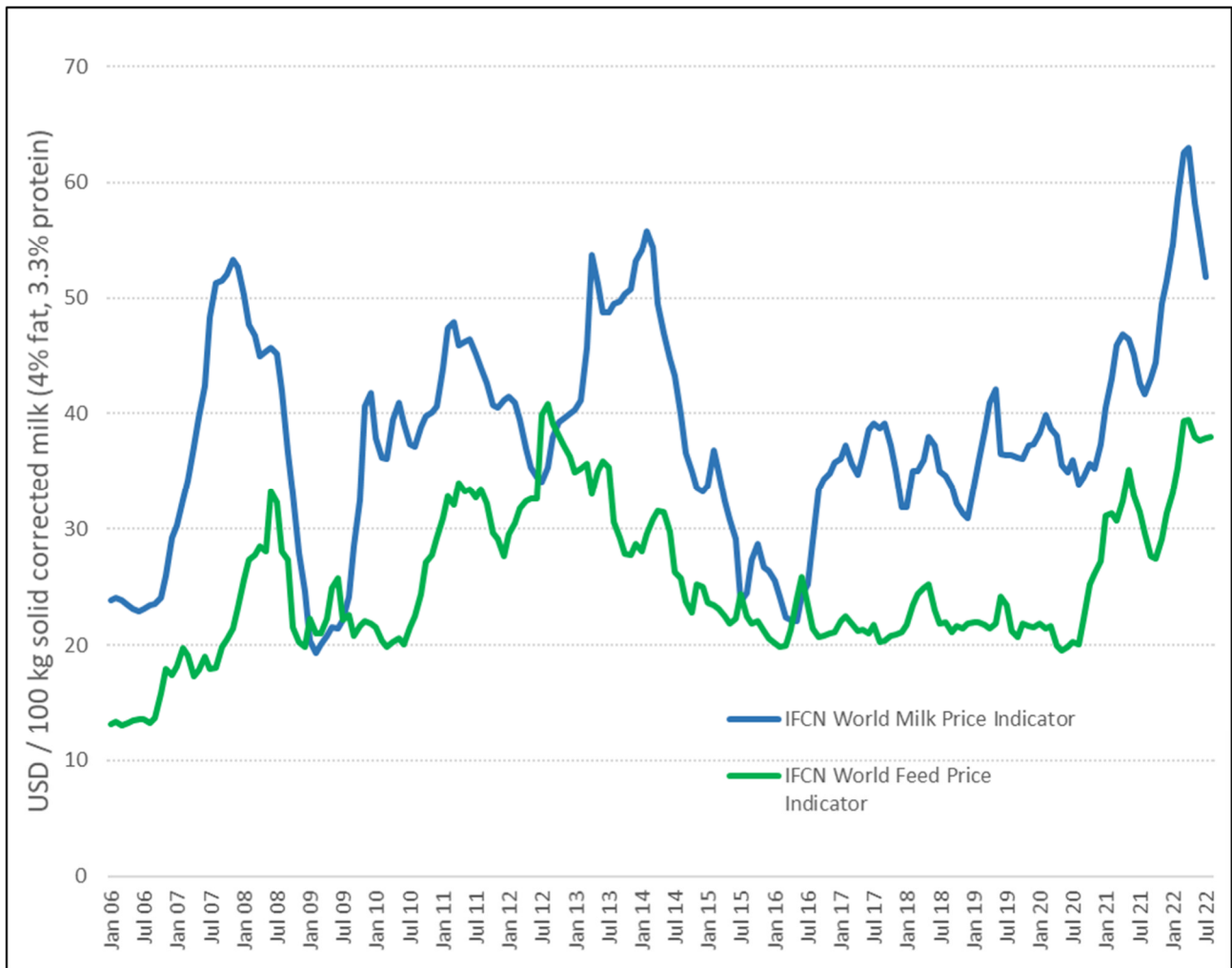


Figure 1: Development of the IFCN World Milk Price and Feed Price Indicators. Source: IFCN, <https://ifcndairy.org>.

The new generation of dairy farmers faces many obstacles

Currently, about 119 million dairy farmers worldwide – along with thousands of processors and organisations involved in the upstream and downstream supply chain, as well as national and local governments in various countries – are involved in providing milk and dairy products to more than 7 billion consumers. The dairy sector must not only meet rising demand but also respond to changing, more exacting societal expectations in terms of product quality and sustainability. Reducing carbon emissions, increasing nutrient-use efficiency, and improving animal welfare are now necessities on the agenda of dairy farmers if they want their business to persist. These farmers, confronted by new EU policies and environmental regulations (such as the Green Deal), trade policy changes, and uncertainties resulting from climate and geopolitical risks, must be more flexible and willing to adapt to changing conditions.

Another challenge for the dairy sector is the imbalanced age pyramid: the share of farmers older than 55 years is high and further increasing. Even if the global trend towards farm consolidation and concentration of milk production on larger farms is expected to continue, it is uncertain whether enough young successors will take over or buy farms from retiring farmers in the coming years. Although there are a variety of governmental programmes designed for young farmers in many countries, the succession decision involves many considerations. It is usually motivated by tradition and personal sentiment. However, the transfer of ownership is often accompanied by emotions and various social considerations (e.g., the involvement of retired parents living on the farm in production or farm management, negotiations with siblings).

The main obstacles to succession relate to economic factors (e.g., low income/profitability from dairy farming in comparison to the high investments required to start a new enterprise) and social factors (e.g., negative image of the profession, high workload). Additional critical factors that will affect whether the younger generation thrives in dairy farming include access to capital, land availability, and uncertainty regarding future policy developments.

Future dairy farmers will optimize the production systems

Depending on the social, economic, and environmental conditions, milk production systems may differ in many respects, one of the most important of which is cost structure. Under the current circumstances, increasing factor prices more strongly affect farming systems with a high share of feed and fertilizer in the total cost of production. To remain profitable, these systems must adjust their feeding rations, using fewer concentrates and more roughage. Mineral fertilizer use can be reduced through a more efficient use of manure and slurry or by creating new optimum between milk yield and feed intake. Farms with a grazing production system benefit from little concentrate feeding and are less dependent on the world grain market. However, these farms are more vulnerable to adverse weather conditions, which may result in limited dry matter intake and, thus, moderate milk yields. In addition, grazing farms with larger herds may face the constraint of scarce land availability.

According to the opinions of experts from 50 countries collected in the IFCN survey, dairy farms in 2030 – in most regions – will be a similar size to what they are now and will keep the existing farming system. Farmers of the future have to be flexible to find individual, profitable farming models to survive in volatile times. New-generation farmers will focus on farm-level improvements (new technologies, better genetics, knowledge transfer, etc.) to meet the demands of the new-generation of consumers.

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