

# Milk, Vector of Development – Tunis 6-8 March 2023

The 4<sup>th</sup> international symposium on [Milk, vector of development](#) was held 6 to 8 March 2023 in Tunis following earlier editions held in Rennes in 2014, in Rabat in 2017 and in Dakar in 2019. Explore the symposium program and general report to learn more: <https://eng-lait2023.colloque.inrae.fr/>.

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## Take Home Message

### 1. Global dairy trends

- The dairy industry is bigger than Apple and Microsoft combined – in term of value paid by consumers (800 vs 585 billion US\$).
- Milk is produced by 120 million dairy farms with an average of 3 cows per farm.
- The dairy sector supports the livelihoods of 1 billion people.
- Milk prices are most likely the most volatile among agricultural products.
- **Steady growing demand for dairy products globally: +1.8%/year.** The trend is above most agricultural products. Important price volatility difficult to predict.
- 2000-2020: value of dairy export **tripled** (without intra-EU exchanges) reaching 60 Billion Euros with **3 lead exporters**: EU (38% of the total export in value), New Zealand and USA.
- In the past decade: massive import growth from China, New Zealand export reached a plateau, diversification of dairy products exported. Cheese, infant milk and powder are the main commodities exported by EU – fat filled milk powders are progressing rapidly in EU exports and also worldwide (10% of dairy products exchanged in value in 2020 globally).
- Foreseen trends: plateau of the exports due to a plateau of New Zealand. Furthermore, Europe might decrease its export capacity due to a reduction of the production (Netherlands, Ireland) and the Green Deal EU policy. As the demand continues to grow, the countries with weaker bargaining power will be mostly affected. To limit this "scissor effect", countries largely relying on dairy imports have to prepare for such trend and invest in domestic dairy production in consequence.

### 2. Dairy opportunities and challenges

- **Dairy sector mechanization** (milking machines, milking parlors...) **can be counterproductive**, raising milk quality issues, if not properly supported with a reliable and affordable service support – equipment, use, maintenance. In Tunisia, the milking equipment, relatively rare in the dairy farms, is in terrible conditions due to the lack of service availability and awareness of dairy farmers

regarding their maintenance. In those farms, milk quality is extremely degraded impairing also cows health, profitability of those farms and ultimately increasing the workload of farmers.

- **Camel dairy value chain is a promising market** with increasing demand and opportunities due to climate change, nutritional quality of the milk and growing demand. Can be seen as an opportunity for dry areas.
- Explore the **agronomic water productivity**: how much water is needed to produce a kg of milk and how much does it produce financially. By following such indicators, a farmer/project/policy makers can reflect on the opportunity cost and the evolution of the water use efficiency in the dairy sector.
- **Digital inequalities**: different dimensions to consider: Spatial (eg: rural urban); Resource inequalities (eg rich vs poor); Individual identity (eg: male vs female). Digitalisation in the dairy sector can widen the gaps and inequalities if not addressed properly (eg: young female living in secluded environment with limited resources). Dairy projects/policies should reflect on their ability to promote inclusive digital strategy using these three dimension.

### 3. Innovations in the dairy chain

Cooling systems: two cooling systems devices where introduced.

- Adapted freezer using power solar: piloted in several farms already, it can be an option to fasten the milk cooling at farm level
- Cooling batteries (balls) to be immerged in milk cans. This last technology is already used by a large Belgium company in its activity. It will be tested in Ethiopia with SNV.

### 4. Dairy sovereignty issues

**Dialogue between French and West African dairy stakeholders as a lever of change towards sustainable dairy export** – AFDI (farmer organization) is engaging various activities with dairy stakeholders from west Africa to raise awareness among its members on the impact of European dairy production and export strategy. A dedicated focus was given to fat filled milk products. Ultimate ambition is to influence French policy and farmers organization to adopt more responsible practices so farmers from Europe do not threaten the development of African farmers.

### 5. Opportunities

This conference gathered a dynamic community of dairy practitioners from North and West Africa. Better connecting the East African dairy community and the West/North African dairy communities could be an efficient learning process, giving the chance for the different players to learn from different contexts and approaches and possibly create new opportunities for all.

More info :

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