



UNIVERSITY OF LIFE SCIENCES "KING MIHAI I" FROM
TIMISOARA
"YOUNG PEOPLE AND MULTIDISCIPLINARY RESEARCH
IN APPLIED LIFE SCIENCES"

13-14 November, 2025



"Young people and multidisciplinary
research in applied life sciences"

MILK-TO-KEFIR TRANSFORMATION: AN ENTREPRENEURIAL STRATEGY FOR
INCREASING ADDED VALUE AMIDST THE RAW MILK PRICE CRISIS

Eugen Cătălin ZOICAN, Beatrice Ana-Maria SÎRBU, Diana MARCU, Adrian-Dan RĂȘINAR, Maria Alexandra FERENCZ
University of Life Sciences "King Mihai I" from Timișoara, Faculty of Bioengineering of Animal Resources

Abstract: The Romanian dairy sector faces persistently low milk prices that threaten farm sustainability and rural livelihoods. This paper explores on-farm processing of raw milk into artisanal kefir as a way to add value and improve resilience. Based on economic data, market reports, and a successful case study, results show that converting milk into kefir can raise its value by 5–7 times. With accessible technology and growing demand for healthy local foods, artisanal kefir offers a practical path to support small farms and strengthen short supply chains.

• Introduction

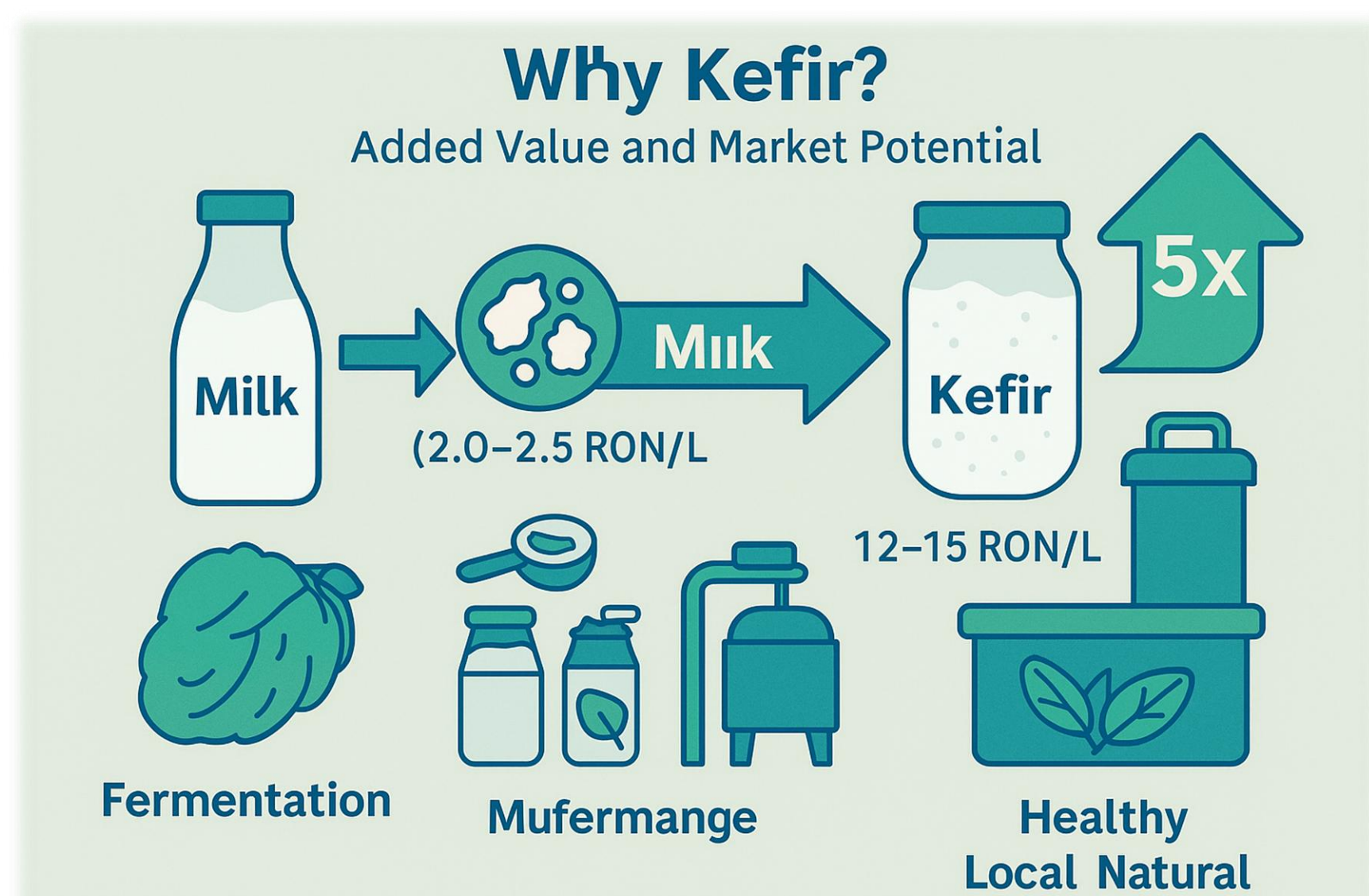
Romania's dairy sector faces one of the EU's most severe price crises. In August 2025, raw milk prices fell to 41.02 €/100 L, the lowest in the Union, while production costs remained around 2 RON/L, leaving many farms unprofitable. With over 80% of producers being small or medium-sized, the sector's sustainability is threatened by low productivity, weak associations, and dependence on bulk sales. To survive, farmers must shift from raw milk sales to value-added processing. On-farm production of artisanal kefir offers a practical path to profitability meeting consumer demand for healthy, local, and authentic foods.

• Results and discussions

3.1. Why Kefir?

Kefir offers a balance of accessible technology, high added value, and strong market appeal.

- Technology: Simple fermentation using kefir grains (SCOBY) allows small-scale implementation with low investment.
- Added value: Converting milk (≈2.0–2.5 RON/L) into artisanal kefir (≈12–15 RON/L) multiplies value 5–7×, generating farmer margins of ≈4–5 RON/L.



3.4. Challenges and Solutions

- Regulatory complexity: Use simplified small-producer guidelines and expert support.
- Short shelf life: Focus on local distribution.
- Batch variability: Reframe as a mark of authenticity.
- Competition: Compete on quality and story, not price.

On-Farm Kefir Production



Conclusions

The persistent crisis of low raw milk prices in Romania demands a strategic shift from commodity sales to value-added processing. On-farm transformation of milk into artisanal kefir proves to be a viable, scalable, and profitable model, multiplying raw milk's value by up to seven times and ensuring farm sustainability. Beyond financial benefits, this model promotes rural entrepreneurship, local job creation, and short supply chains, strengthening community-based food systems in line with European rural development goals. Future opportunities include product diversification (e.g., kefir-based cheese or yogurt), use of alternative milks (goat, sheep), and integration with agrotourism, enhancing both income and consumer engagement. On-farm kefir production thus emerges not only as a business solution but as a pathway toward a resilient, sustainable rural economy.



• Material and method

This study is based on a qualitative synthesis of diverse data sources to assess both the crisis in the dairy sector and the feasibility of on-farm kefir production. Data sources included:

- ✓ Economic statistics: Raw milk prices, production, and farm structures from Eurostat, INS, and MADR;
- ✓ Market analyses: Industry reports and media data on costs and consumer trends;
- ✓ Scientific literature: Peer-reviewed studies on kefir's probiotic properties and production biotechnology;
- ✓ Technical and legal references: Equipment specifications and ANSVSA regulations for small-scale processing;
- ✓ Case study: In-depth review of the Artesana model as a successful Romanian artisanal dairy producer.

This mixed-source approach enabled a comprehensive understanding of the sector's challenges and the entrepreneurial potential of value-added dairy production.

3.2. Scalable Business Model

A micro-dairy (100–200 L/batch) requires an estimated investment of ≈48,000 RON, including basic pasteurization, fermentation, and bottling equipment. Funding is accessible via AFIR DR-23 and other EU support programs (up to 65% cost coverage). Production flow is simple pasteurization, inoculation, fermentation, cooling, and bottling under flexible ANSVSA standards for small-scale units.

3.3. Marketing and Distribution

Effective channels include direct farm sales, farmers' markets, local shops, HoReCa, and online platforms (e.g., MallTaranesc, FabricatInRO). Branding should highlight authenticity, freshness, and traceability key factors differentiating artisanal kefir from industrial brands.

MARKETING AND DISTRIBUTION CHANNELS
FOR ARTISANAL KEFIR



Scalable Business Model
for On-Farm Kefir Production



3.5. Case Study – Artesana

Artesana exemplifies the model's viability. Founded with a quality-first philosophy, it overcame financing barriers to become a national leader distributed in 700+ stores, proving that authentic, artisanal dairy can evolve into a profitable and trusted brand.