45. How Mongolian dairy enterprises are approaching the organic transition

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Abstract
The transition to organic model can be one of the most effective business solutions for agrifood enterprises to increase profitability, reduce resource consumption and environmental waste, and significantly increase market value. The organic sector is a strong advocate for the circular economy, as it mitigates environmental effects and solid waste. In recent years, a substantial number of Mongolians have been affected by cancer, cardiovascular disease, and digestive disease, resulting in higher mortality rates. The demand for organic food is on the rise, and consumers are becoming more cognizant of the significance of safe food. A systemic approach has been implemented in a program to transfer the products of a dairy company from the conventional to the organic business model, as summarized in this article.

Central questions
What defines an organic enterprise?
Why are organic agricultural enterprises key to future-fit food systems?
How does a conventional dairy enterprise convert into an organic business?
How can dairy enterprises ready themselves for the transformation process?

Elaboration of the argument
Mongolia adopted the Sustainable Development Goals (SDGs) Agenda 2030 in 2015, announcing its commitment to sustainable development. Since achieving the goals in less than 10 years, the Mongolian government is therefore stepping up its efforts to achieve food security, improve nutrition, and promote sustainable food production. Organic is part of the solution when it comes to achieving the SDGS. Organic enterprises are at the forefront of building sustainable, just, resilient food systems. They regenerate and improve soil, biodiversity, and climate and water cycles while creating local jobs, strengthening communities, and promoting healthy diets.
Mongolia had a combined area of 932.5 hectares of organic cultivation as of November 2024. In terms of national food and agricultural production, this accounted for less than 1%. Mongolia has established the goal of achieving a 5% share of all agricultural products certified as organic by 2030 (Willer et al., 2025). Mongolia's dairy industry is dependent on its extensive livestock management traditions, which encompass dairy cows, yaks, and goats. Approximately 1.19 million dairy cattle were raised in the country as of 2023, resulting in a total milk production volume of approximately 576 million litres per year. The annual processing volume of milk in Mongolia is approximately 200 million litres. Milk powder, cheese, and whey are among the dairy products manufactured in the nation. High nutritional value and minimal environmental impact are the primary reasons why organic dairy products are becoming increasingly popular. In 2023, Mongolia exported approximately 9 million liters of milk and dairy products, primarily to neighbouring countries such as PR China and Russia. In contrast, dairy products were imported in quantities of approximately 12 million litres, with the majority of those sources being New Zealand and the EU, where numerous organizations are instrumental in the development of the organic dairy industry (Dairy News Today, 2025).
In January 2024, the General Assembly of the State Parliament of Mongolia approved the Law on Organic Products. Conducting conformity assessments for organic food products is the responsibility of the 32 Participatory Guarantee Systems (PGS) and two third-party certification bodies. The Ministry of Food, Agriculture, and Light Industry (MOFALI) operates an online Organic Food Registry and Database to facilitate the efficient monitoring of the certification status of organic products.
The global organic market was estimated to be worth approximately USD27.19 billion in 2024 and expected to reach USD45.46 billion by 2033, with a compound annual growth rate (CAGR) of 5.8%. Europe holds the greatest market share at 34.3%. The organic dairy market in the Asia-Pacific (APAC) region is expanding due to changing food habits and increased health consciousness. By 2027, the Mongolian organic meat industry is expected to increase at a high growth rate of 12.10%, ranking among the top 5 in Asia (6Wresearch, 2025).
The Mongolian Productivity Organization (MPO) launched its organic consultancy service in 2016 jointly with MOFALI with the long-term goals of establishing a robust network of organic SME producers and achieving significant market penetration and the short-term goals of educating SMEs on organic practices and initiating pilot projects. Since the MPO also plans to offer specialized consultancy services to assist agricultural businesses in transitioning to organic production, it is expected to contribute to sustainability and market competitiveness by ensuring compliance with organic certification standards and supporting market integration. With this output, it is also expected that organic producers and enterprises will increase by up to 5% of the domestic total by 2030.
In February 2025 (phase 1), the first author initially met with three company staff members in Ulaanbaatar, Mongolia, as part of the Technical Expert Service (TES) Program of the Asian Productivity Organization (APO), an intergovernmental organization headquartered in Japan, with the support of the MPO. Two of the companies are involved in products other than livestock and dairy. Suun Zam Dairy LLC has seven years of experience in the production of cheese and has mastered European cheese and dairy processing technologies. The company exclusively offers products from fresh, pure cow's milk. It is in the process of establishing a mechanized 480-cow farm in Mongolia that meets international standards, thereby ensuring a consistent milk supply. Currently, the company operates 40 dairy farms (communities). The primary products include mozzarella cheese, gouda cheese, cream, ghee, curds with cream, and whey milk. The company's objectives, resources, plan, and aim were all shared.
In light of long-term advantages and sustainability, all of the companies expressed a desire to transition to organic operations. They also explained the fundamentals of organic certifications, standards, regulations, and requirements in Mongolia, as well as the transformation process. Focus was also on the IFOAM-Basic Standards and other key standards pertaining to dairy production and processing require-

ments. According to Suun Zam Dairy LLC, the immediate objective is to provide the Mongolian market with domestically produced cheeses that meet international health and safety standards, thereby entirely replacing imports. A checklist and the necessary steps to be followed during the transformation process were also provided.
During phase 1, training was conducted on the fundamental principles and practices of organic livestock operations, covering Innovations in Organic Agriculture, Organic Markets, and Development; Quality Assurance, Standards, Conformity Assessment, Certification, and Regulations in Organic Agriculture; Establishing a Certification Program and Accreditation; and Proper Planning during the Transition Period. Group work was conducted by three company employees to conduct strength, weakness, opportunity, and threat (SWOT) analyses to facilitate the transition of their respective organizations to organic business practices. The results of the discussions were subsequently shared by the groups. After conducting a SWOT analysis and consulting with the Suun Zam Dairy LLC staff, it was unanimously determined that the company would pursue organic certification through PGS. Subsequently, the company may transition to third-party certification after conducting competency and business feasibility studies to export internationally. The significance of improving the ability of factory workers and personnel to comprehend the needs of organic dairy products was underlined.
As part of the follow-up in the subsequent phase 2, the company's progress to date, challenges encountered in its transition to organic certification, internal audit process for organic certification, and staff's knowledge of basic standards for readiness checking were discussed. The company had been informed that six employees, two from the management office and four from the factory, had acquired the necessary information to understand the transformation process and were knowledgeable about the IFOAM Basic Standard. It was decided that the company should establish an ingredient checklist and identify pertinent information regarding sources (natural, organic, or unavailable organic sources), with a particular emphasis on sugar and rennet, as a further actionable task.
The production and requirements of organic livestock, including feeding, disease management, and animal welfare, as well as the process (equipment sterilization), were the subjects of detailed discussion. MOFALI has established a procedure for the requisition of PGS and the subsequent monitoring process. The company has decided to proceed with the registration of PGS in MOFALI and the attendant procedures for the establishment of a stakeholder committee. In addition, internal audit issues concentrated on organic business were discussed internally by the company, and skilled employees continue to acquire additional knowledge and insights regarding organic operations. The company plans to conduct the necessary training for herders (nomadic pastoralists) on organic farming requirements and compliance as the herders are willing participants in this transition.
In order to assess progress and provide appropriate support, a subsequent follow-up (phase 3) workshop was conducted in Mongolia, 10–13 June 2025, as part of the assignment. Site visits were hosted in Selenge province to engage in discussions with herder communities, supervise facilities (animal management and welfare), and consult with the PGS groups regarding PGS basic elements, record keeping, and the certification process. PGS groups have been formed with six members who signed the oath (pledge). To fulfil the criteria of the Mongolian Food Safety and Organic Products Laws, organic standards must be adhered to in addition to certain fundamental standards. The company was advised and given instructions on developing a documented system for the Organic Scheme/Organic Production Manual, PGS Manual, Internal Audit Procedure, and Good Agricultural Practices (GAP) Guidelines, as well as basic forms and documentation templates, based on the findings of the gap assessment. According to MOFAFI requirements, a company must guarantee a high degree of quality, safety, and control at every stage of production in addition to using "organic raw materials" as indicated by GMP (Good Manufacturing Practices) and GAP.

Conclusion

It is anticipated that Suun Zam Dairy LLC will adhere to the PGS guidelines of MOFALI and lead the production of organic dairy products through PGS in Mongolia. The successful transformation of companies involved in this project will likely attract others to transform their business models. Mongolia and other APO member economies could use the project concept to convert conventional items into organic offerings as an example of a value-added business model. This would encourage similar companies to transform their business models both domestically and internationally.

Declaration of interest

The authors declare no conflict of interest.

References

Dairy News Today, 2025. Mongolia's dairy industry: an analytical overview. Retrieved on 24 February 2026 from https://dairynews.today/milkypedia/country/mn/.
Willer, H., Trávníček, J., Schlatter, B. (Eds.)., 2025. The World of Organic Agriculture. Statistics and Emerging Trends 2025, 152. Research Institute of Organic Agriculture FiBL, Frick, Switzerland and IFOAM – Organics International, Bonn, Germany.
6Wresearch, 2025. Mongolia Organic Meat Market (2025–2031). Retrieved on 24 February 2026 from https://www.6wresearch.com/industry-report/mongolia-organic-meat-market.

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46. Bridging principles and practice: implementing organic-oriented ruminant production systems in Southwestern Nigeria

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Abstract

The global shift toward sustainable and ethical livestock production has renewed interest in organic principles, yet practical implementation in emerging economies remains limited and poorly documented. This paper presents field-based insights from the RPC Cattle Hub in