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CHALLENGES AND OPPORTUNITIES IN MONGOLIA'S ECONOMIC DIVERSIFICATION

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Abstract. Mongolia, rich in natural resources, faces a significant challenge in reducing its dependence on a single sector and diversifying its economy. This study, therefore, aims to evaluate the current state of economic diversification and develop targeted strategies. To this end, the value chain of the non-mining processing industry was mapped, key issues at each stage of the chain were identified, and recommendations for sector development were proposed. The development of the processing industry, particularly in non-mining sectors, is critical for economic diversification. Value chain mapping of non-mining production reveals numerous challenges across stages, which must be addressed to foster a competitive processing industry and a diversified economy. Prioritizing the resolution of issues within the livestock sector, as a primary source of raw materials for non-mining processing, is essential. At the same time, implementing strategies to boost competitiveness, such as adopting modern techniques and technologies, providing financial and investment support, and enhancing logistics and infrastructure, will play a vital role in advancing economic diversification.

Keywords: *diversification; mining sector; manufacturing sector; value chain; challenges; diversification strategies.*

JEL code: *F14; F41; L60; O11; O14; O19.*

Introduction

Economic diversification remains a key component of development strategies for numerous countries worldwide, particularly for those with resource-rich economies, including Mongolia. Although natural resources positively impact a country's economy and the livelihoods of local people, numerous studies have confirmed that heavy dependence on a single sector can create challenges, such as economic vulnerability due to commodity price fluctuations and reduced competitiveness in other traditional sectors. (Batsukh & Avralt-Od, 2012; Dagys *et al.*, 2019; Ge & Kinnucan, 2017; Khan & Van den Brink, 2012; Taguchi & Ganzorig, 2018)

Official statistics reveal that by the end of 2023, the mining sector's share of GDP reached 29%, an increase of 5% compared to 2020. However, the share of the agricultural sector dropped to 10% in 2023, down by 3% compared to 2020, while the manufacturing sector's share decreased to 7%, a decline of 2%. Additionally, mining products and raw materials accounted for 86% of total exports in 2023, while light manufacturing exports accounted for 5% and agricultural products made up 2% (NSO, 2024a, 2024b). These statistics indicate that Mongolia's economic dependence on a single sector is deepening, while the competitiveness of its traditional sectors remains weak, and their contribution to GDP continues to decline.

Therefore, diversifying the economy and export structure, including the development of value-added and final product processing industries for agri-based and mining raw materials, is essential to reducing dependence on raw material extraction and exports. This would also mitigate the risks and reducing vulnerabilities arising from fluctuations in raw material prices. For this reason, strategic objectives, including supporting the development of the processing industry, building and

operating value-adding factories for mineral products through mega mining projects, diversifying the economy, and increasing the variety, quantity, and monetary value of export-oriented products, have been reflected into Mongolia's policy documents, including the Long-term Development Policy “Vision – 2050”, the Medium-term “New Revival Policy”, the Five-year Development Guidelines for Mongolia in 2021-2025, and the Government Action Program 2024-2028 (Parliament of Mongolia, 2020, 2021a, 2021b, 2024).

This paper, therefore, aims to explore strategies to diversify the Mongolian economy by mapping the value chain for non-mining products sourced from livestock, which are crucial for economic diversification. We identify constraints at each stage of the value chain based on existing literature and propose strategies to develop the manufacturing sector.

Challenges Facing the Production of Export Products

Challenges in the production, processing, and export of non-mining products have been identified through value chain mapping. Since livestock is a dominant source of export-oriented non-mining products, we identified key challenges and constraints in the livestock sector at the primary production stage. Problems encountered at the production and other stages significantly impact the processing and sale of export products.

The factors influencing the production, processing, logistics, trade, and export of non-mining products are highlighted as follows.

- The most significant challenge is the non-compliance with good practices and standards at every stage of production, storage, transportation, and processing (Agipar *et al.*, 2023; Enkhmaa, 2020; JICA, 2024; MULS, 2018).
- The underdeveloped infrastructure poses risks to competitiveness in the international market; for instance, road development is limited, and transportation primarily relies on vehicles (Athukorala *et al.*, 2020; JICA, 2024; Morton *et al.*, 2024). There is also a lack of warehouses that meet standards and technology requirements for storing livestock products locally (Agipar *et al.*, 2023; Gonchigsumlaa *et al.*, 2018; JICA, 2024; Ringler *et al.*, 2023; Tserensonom, 2017). According to a study by the Asian Development Bank (2018), logistics costs account for 30% of the country's production expenses.
- A major issue in production, logistics, and processing is the significant amount of waste generated (Agipar *et al.*, 2023; Tserensonom, 2017). Middlemen play a crucial role in the value chain (Erdenechuluun *et al.*, 2017; FAO, 2023; Tsenguunjav & Munkhzul, 2015), which contributes to the waste of certain products and leads to underutilization of resources (MULS, 2018). For example, sheep wool and sheepskin are sold at very low prices—1 kg is MNT 1,000 (approximately USD 0.3)—and due to the limited number of processing plants, these products are frequently discarded. Since the government introduced a subsidy of MNT 1,000 per kilogram of wool supplied to domestic factories, wool waste has decreased. However, sheep skins are priced at only MNT 500-1,000 (about USD 0.1-0.3), which discourages herders from selling them. Consequently, middlemen do not collect these low-value raw materials, resulting in significant waste. While demand and prices for camel, horse, and cow hides are relatively strong, poor adherence to standards during animal slaughter leads to considerable damage, creating waste at the processing plant stage (JICA, 2024; Tsenguunjav & Munkhzul, 2015).
- Various studies have identified the outdated equipment and technological shortcomings of processing plants as a significant barrier to exporting non-mining products (Athukorala *et al.*, 2020; Dagys, Agipar, *et al.*, 2023; Gonchigsumlaa *et al.*, 2018; JICA, 2024; Morton *et al.*, 2024; MULS, 2018; Tsenguunjav & Munkhzul, 2015).
- The lack of skilled human resources in the manufacturing sector further undermines the competitiveness of the industrial sector (Athukorala *et al.*, 2020).
- Many studies have indicated that the rapid growth of the mining sector and wage disparities hinder the transfer of skilled labor from other sectors (Dagys *et al.*, 2019; Gonchigsumlaa *et al.*, 2018; JICA, 2024; MULS, 2018).

- One of the primary challenges hindering the export of animal products, particularly meat, is the high prevalence of highly infectious livestock diseases, along with the ongoing international trade bans related to diseases such as foot-and-mouth disease (FMD) and peste des petits ruminants (PPR) (Agipar *et al.*, 2023; Dagys, Byamba, *et al.*, 2023; FAO, 2023; MULS, 2018; Tserensonom, 2017).
- Tariff and non-tariff barriers imposed by certain importing countries create significant obstacles to exports (Gonchigsumlaa *et al.*, 2018; Tsetsegmaa, 2020). While Mongolia has made notable strides in establishing trade facilitation agreements with several partner countries, additional efforts will be essential for continued progress (Dagys, Byamba, *et al.*, 2023; JICA, 2024; Liu *et al.*, 2024; Tsetsegmaa, 2020, 2022).
- The lack of an adequate legal framework and policy, inconsistent government policies, and insufficient financial investment are also key concerns (EDP, 2020).
- The nature of nomadic livestock, which relies entirely on the environment and climate, makes it susceptible to the risks posed by climate change (Agipar *et al.*, 2019; Dagys, Agipar, *et al.*, 2023; Gros *et al.*, 2022; Oniki & Dagys, 2017). This vulnerability impacts production resources, as well as the quantity, yield, and quality of animal products, consequently affecting the sale and export of these goods (Agipar *et al.*, 2023; Agipar *et al.*, 2024; GoM *et al.*, 2021; JICA, 2024; Morton *et al.*, 2024; MULS, 2018; Ringler *et al.*, 2023).

Opportunities of economic diversification

A SWOT analysis of the processing industry was conducted at each stage of the value chain, incorporating additional resources. Based on the findings from the TOWS matrix, the following policy recommendations are proposed:

1. It is essential to develop and implement a holistic and comprehensive policy and strategy for the livestock sector. The situation analysis and other studies indicate that the execution of animal husbandry policies is currently under the Ministry of Food, Agriculture, and Light Industry. However, policies related to pasture protection, animal breeding, veterinary services, animal husbandry risks, herders' livelihoods, and raw material collection, storage, and trade are being implemented separately and without adequate coordination.
2. Developing a robust raw material collection and supply chain system is crucial, with particular emphasis on addressing issues related to raw material preparation, storage, and transportation. Currently, informal middlemen predominantly dominate the raw materials preparation system, while inadequate infrastructure exacerbates these challenges. Establishing a unified raw material supply system at the community level for producers or herders is essential for implementing standards and practices, as well as ensuring proper primary processing, storage, and transportation.
3. Introducing, implementing, and standardizing relevant standards and good practices across all stages of the value chain is essential. Non-compliance with these standards, practices, rules, and instructions can lead to numerous negative consequences, including significant waste generation, compromised quality of final products, increased costs, diminished competitiveness, failure to meet the requirements of importing partners, and exposure to non-tariff restrictions.
4. Given the weak financial capacity of processing plants and their outdated technology and equipment, it is crucial to provide financial and investment support to these facilities. Measures should be taken to upgrade technology and equipment, thereby enhancing competitiveness. Investment can be attracted by redirecting a portion of mining revenue into these investments, offering soft loans, subsidies, and long-term concessions, and collaborating with key importing partner countries.
5. Enhancing the processing level of raw materials and products derived from traditional livestock in Mongolia will play a crucial role in reducing the country's economic dependence on a single sector and fostering diversification.

6. The establishment of a one-stop service for trade, export, and marketing support for manufacturers of export-oriented products should align with the digital transition and advancements in information technology. Additionally, efforts should be made to reduce tariff and non-tariff barriers through trade facilitation agreements with trading partners and key importing countries.
7. Ultimately, developing and implementing a comprehensive long-term strategic plan for the advancement of Mongolia's industry, guided by the value chain map, will promote a holistic perspective. This approach ensures coordination between sectors, addresses challenges at various levels of the value chain, and optimizes the value addition process. Such a strategy will strengthen the capacity to compete in the global market with high-quality products at competitive prices, thereby positively impacting economic diversification in the long term.

Conclusions

The aim of this research was to identify strategies for diversifying Mongolia's economy. A value chain mapping for non-mining, export-oriented products sourced from livestock production was created, integrating the challenges encountered at each stage based on previous research findings. Following this, a SWOT analysis of the manufacturing sector was conducted, and potential strategies for ensuring the sector's development were formulated using the TOWS matrix approach.

In summary, a critical issue is the lack of appropriate practices and standards at all stages of value addition, leading to significant waste of raw materials and products. At the primary production stage, prevalent concerns include animal health, productivity, and the risks posed by natural and climatic factors to production stability. In the logistics stage, weak infrastructure complicates the efficient collection, storage, and transportation of raw materials, while challenges in raw material handling further hinder efficiency. At the processing stage, outdated techniques and technology lead to high operational costs and reduced competitiveness, aggravated by a shortage of skilled labor. Finally, at the export stage, Mongolia's landlocked position between two large countries introduces logistical challenges, further complicated by various tariff and non-tariff restrictions imposed by importing countries, which significantly impede trade.

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