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Marketing Distribution Strategy for Beef Cattle Through the Sea Toll Road in North Gorontalo Regency

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Abstract

This study aims to analyze strategic environmental factors and formulate a marketing distribution strategy for beef cattle through the Sea Toll Road in North Gorontalo Regency. The research method used is a survey method. Primary data were collected through interviews and questionnaires to respondents from technical agencies, academics, professional associations, and beef cattle marketing distribution business actors. Secondary data were obtained from agencies related to beef cattle marketing distribution. Data were processed and analyzed using a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats). The results show that the role of the Sea Toll Road as a marketing distribution channel is increasingly stable in meeting the demand for beef cattle in Kalimantan. Internal Factor Scores (IFAS = 3.21) and External (EFAS = 2.99) are positive, supported by the supply of beef cattle, policy support, and the homebase of the livestock transport ship KM Camara Nusantara 5. The diagram of the position of beef cattle marketing distribution through the Sea Toll Road in North Gorontalo Regency is in Quadrant I which supports an Aggressive Strategy. The optimal strategy formulation that can be implemented is an Aggressive Strategy, namely using all strengths to take advantage of all existing opportunities.

Keyword: Strategy, Marketing Distribution, Beef Cattle, Sea Toll, SWOT Analysis

INTRODUCTION

The development of maritime connectivity has been a national strategic agenda since the launch of the Sea Toll program in 2015. This program is designed to reduce price disparities, streamline logistics, and open market access to the outermost, frontier, remote, and border

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regions through fixed and scheduled routes. The number of routes has been expanded from the initial six routes and continues to be expanded in terms of fleet, cargo, and supporting port infrastructure. This initiative is managed by the Ministry of Transportation in collaboration with local governments and operators, and is positioned as a bridge for Indonesia's maritime economy. Gorontalo Province is one of the centers of beef cattle commodities in Eastern Indonesia. Official statistics show that the population and beef production in this province continue to support the livestock subsector. According to Central Bureau of Statistics data, Gorontalo Province in 2024 had 154,612 beef cattle. This indicates the availability of upstream supply to support the outflow of live cattle and meat.

The distribution of beef cattle through the Sea Toll Road in North Gorontalo Regency essentially represents an effort to transform the livestock logistics system from conventional patterns to a modern distribution system based on maritime connectivity. However, this transformation does not occur in a vacuum. It operates within the socio-economic structure of smallholder livestock farming, which is still dominated by small-scale businesses, traditional marketing patterns, and a high dependence on intermediaries. The effectiveness of the Sea Toll Road as a livestock distribution instrument is determined not only by the availability of ships and logistics subsidies, but also by the ability of local systems to adapt to modern distribution logic. Conceptually, the Sea Toll Road is designed to create structural efficiency through fixed routes, predictable schedules, and lower transportation costs. From the perspective of marketing distribution theory, schedule certainty and cost stability are the main foundations for building a responsive and sustainable distribution system (Chopra & Meindl, 2019).

In terms of existing conditions, the beef cattle distribution system in North Gorontalo still exhibits dualistic characteristics. On the one hand, strategic infrastructure such as Kwandang Port and a livestock ship homebase represent a regional comparative advantage. On the other hand, upstream and pre-shipment support systems remain relatively weak. Limited holding grounds, quarantine facilities, and suboptimal animal health services reflect that distribution development is not yet fully understood as an integrated system, but rather as a fragmented sectoral activity. In fact, the FAO (2021) emphasizes that inter-island live livestock distribution is a high-risk system that requires tight integration between logistics, animal health, and institutional aspects.

From an external perspective, the market opportunities available for beef cattle in North Gorontalo are indeed very strong and structural. High demand in East and North Kalimantan, coupled with the long-term needs of the Indonesian capital, create a relatively stable and sustainable market. North Gorontalo has the opportunity to position itself not simply as an episodic supplier, but as part of a planned regional supply system. However, this opportunity can

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only be realized if beef cattle distribution can guarantee continuity of supply, consistent quality, and certainty of delivery volume. External Threats, such as the risk of infectious animal diseases, fluctuating imported beef prices, and weather uncertainty, emphasize that beef cattle distribution via the Sea Toll Road is a highly vulnerable activity.

The problem of beef cattle marketing distribution in North Gorontalo Regency is not a single issue, but rather the cumulative interaction of internal and external factors. Internal Strengths without strategy will become untapped potential, while External Opportunities without system readiness will turn into risks. This is where the urgency of a SWOT analysis becomes highly relevant, as it allows for the identification of strategic positions for beef cattle distribution in an objective and measurable manner. This more in-depth discussion confirms that research on beef cattle marketing distribution strategies via the Sea Toll Road in North Gorontalo Regency has strong scientific and practical significance. This research not only seeks to capture existing conditions but also offers a strategic framework to bridge the gap between national policy design and the reality of livestock distribution at the regional level. The results of this discussion provide a solid foundation for formulating a strategy for developing an efficient, competitive, and sustainable beef cattle distribution system.

METHOD

Study Site

This research was conducted in Kwandang District, North Gorontalo Regency, focusing on the distribution of beef cattle marketing utilizing the Sea Toll Road. The research location was Kwandang Port, the homebase for the Camara Nusantara 5 livestock ship.

Population and Sample

The population in this study includes all beef cattle marketing distribution actors in North Gorontalo Regency, who are directly involved in livestock shipping activities via the Sea Toll Road. The research sample was determined using purposive sampling, taking into account stakeholders and business actors involved in beef cattle marketing distribution via the Sea Toll Road (Table 1).

Table 1. Expert Panelists by Institution

No.	Institution	Number of Experts
1	Animal Husbandry and Animal Health Division, Gorontalo Provincial Agriculture Office	3

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2	Livestock Breeding Center, Technical Implementation Unit of the Gorontalo Provincial Agriculture Office	1
3	Veterinary Laboratory, Gorontalo Provincial Agriculture Office	1
4	Veterinary Authority	1
5	Gorontalo Regency Animal Husbandry and Animal Health Office	1
6	North Gorontalo Regency Animal Husbandry and Animal Health Office	3
7	Gorontalo Provincial Transportation Office	2
8	UPP Class III Kwandang, Port Management Unit, Ministry of Transportation	2
9	PT ASDP (Persero) / Operator of KM Camara Nusantara 5	2
10	Gorontalo Animal Quarantine Office, Indonesian Quarantine Agency	2
11	Animal Husbandry Department/Study Program	2
12	ISPI Gorontalo, Indonesian Association of Animal Husbandry Engineers and Graduates	1
13	Persepsi Gorontalo, Indonesian Association of Animal Husbandry Socio-Economic Scientists	1
14	PDHI Gorontalo, Indonesian Veterinary Doctors Association	1
15	Business Entities or Distribution Companies Marketing Beef Cattle	2
Total		25

Source: Primary data (2025)

Data Collection

The data used in this study consisted of primary and secondary data. Primary data were collected through: 1) Field observations at ports and livestock holding grounds to understand the actual conditions of facilities and marketing distribution processes. 2) In-depth interviews to obtain information on existing livestock marketing distribution systems. 3) Questionnaires covering internal (Strengths and Weaknesses) and external (Opportunities and Threats) environmental aspects. Secondary data were collected from the library and from relevant agencies through a documentation process.

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Data Analysis

Data analysis was carried out in stages, including: 1) Data reduction, namely the process of selecting and simplifying important information obtained from the data collection process), 2) Data presentation, through tabulation and narrative description to describe the problems and formulation of marketing distribution strategies for beef cattle via the sea toll road using the SWOT analysis method (Strengths, Weaknesses, Opportunities, Threats).

RESULTS AND DISCUSSION

Strategic Environment for Distribution of Beef Cattle Marketing via Sea Toll Road

Internal Factors. The Internal Strategic Factor Analysis Summary (IFAS) aims to identify and evaluate internal conditions that influence the effectiveness of beef cattle distribution through the Sea Toll Road in North Gorontalo Regency. These internal factors include Strengths and Weaknesses within the distribution system, including those related to resources, policies, infrastructure, and institutions (Table 2).

Table 2. IFAS Matrix

Internal Factors		Weight	Rating	Score
Strengths (S)				
1	Beef cattle population and supply in Gorontalo Province and surrounding areas.	0.09	3	0.28
2	Performance and performance of European (Exotic) and Local Cattle commodities.	0.08	3	0.22
3	Local government programs supporting livestock development and marketing.	0.09	4	0.34
4	Cooperation Agreement between Gorontalo Province, East Kalimantan, and North Kalimantan.	0.09	3	0.31
5	Homebase of the livestock ship Camara Nusantara 5 at Kwandang Port.	0.10	4	0.36
6	Coordination of agencies related to transportation, animal husbandry and animal health, quarantine.	0.09	4	0.34
Sub-total		**0.54**		**1.85**
Weaknesses (W)				
1	Local government-owned livestock markets are still minimal.	0.08	3	0.23

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2	Livestock selling prices are still based on estimates, not weight.	0.08	3	0.26
3	Livestock marketing mechanisms remain traditional and do not require immediate payment.	0.08	3	0.24
4	Pre-shipment holding facilities are limited.	0.08	3	0.24
5	The short docking time of livestock vessels operating on the sea toll road at Kwandang Port.	0.07	3	0.17
6	The Gorontalo Provincial Animal Health Laboratory is not yet accredited.	0.08	3	0.23
Sub-total		**0.46**		**1.36**
Total		**1.00**		**3.21**

Source: Research Data (2025)

Table 2 shows that the total internal factor score is 3.21, indicating that the beef cattle marketing distribution system via the Sea Toll Road is in a strong internal condition. Internally, North Gorontalo Regency has sufficient capital to develop a beef cattle distribution system based on the Sea Toll Road. The results also show that the total Strengths Factor score (1.85) is higher than the Total Weaknesses factor score (1.36). This condition indicates that the internal elements supporting beef cattle marketing distribution are relatively more dominant than the inhibiting factors.

The dominance of these strength factors indicates that North Gorontalo Regency has relatively good internal structural and institutional readiness to support the distribution of beef cattle via the Sea Toll Road. This finding aligns with Rangkuti (2017) opinion, which states that strong internal strength is a key asset in formulating a growth-based development strategy.

Upon closer examination, the strength factor with the largest contribution remains the presence of the Camara Nusantara 5 livestock ship's homebase at Kwandang Port, with a score of 0.36. This factor is a key differentiator for North Gorontalo Regency compared to other regions, given that not all livestock-producing areas have direct access to dedicated livestock ships. Livestock ships allow for the transport of large quantities of live cattle at a relatively lower cost, while meeting better animal welfare standards than conventional cargo ships. Grandin (2020) emphasized that the use of dedicated livestock transportation can reduce stress levels and reduce livestock weight loss during the journey.

The beef cattle marketing distribution system via the Sea Toll Road in North Gorontalo Regency is considered strong internally. However, this dominant internal strength has not yet fully

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translated into optimal distribution performance due to persistent structural and technical weaknesses. Future development strategies need to be directed at leveraging key strengths, particularly livestock vessels, policy support, and institutional coordination, to address Internal Weaknesses in livestock marketing, port support facilities, and animal health services.

External Factors. An External Strategic Factor Analysis Summary (EFAS) was conducted to identify Opportunities and Threats external to the beef cattle marketing distribution system via the Sea Toll Road in North Gorontalo Regency. These external factors reflect market dynamics, national policies, environmental conditions, and risks that cannot be fully controlled by distribution actors at the regional level (Table 3).

Tabel 3. EFAS Matrix

External Factors		Weight	Rating	Score
Opportunities (O)				
1	High demand for beef cattle in East Kalimantan/North Kalimantan Province.	0.10	4	0.38
2	Potential beef supply to the Capital of Nusantara.	0.09	3	0.30
3	Marketing of European cattle with large body weights and high selling prices.	0.09	3	0.28
4	Traditional beef cattle distribution network between Gorontalo and Kalimantan.	0.09	3	0.29
5	The sea toll policy as a way to subsidize logistics costs, particularly transportation.	0.10	4	0.36
6	Potential beef cattle exports to eastern Malaysia via Kalimantan.	0.06	2	0.13
Sub-total		**0.54**		**1.74**
Treaths (T)				
1	Fluctuations in imported beef/beef prices can depress local cattle prices.	0.09	3	0.26
2	Penetration of the Palu market via the Central Sulawesi-Kalimantan shipping route.	0.08	3	0.24
3	The risk of livestock diseases, such as FMD and LSD, during the distribution process.	0.09	3	0.29
4	Extreme weather in the Sulawesi Sea and Makassar Strait can hamper distribution.	0.07	2	0.18

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External Factors		Weight	Rating	Score
5	Delays in sea toll ship schedules can impact livestock performance.	0.07	2	0.17
6	Fuel shortages during land transportation of livestock to Kwandang Port.	0.06	2	0.12
Sub-total		**0.46**		**1.26**
Total		**1.00**		**2.99**

Source: Research Data (2025)

Table 3 shows that the total external factor score is 2.99, above the average weighting. This indicates that externally, the beef cattle distribution system via the Sea Toll Road in North Gorontalo Regency faces relatively greater Opportunities (1.74) than Threats (1.26), although it is still accompanied by various risks that need to be anticipated.

The dominance of these opportunity factors confirms that the current external environment is highly conducive to the expansion of beef cattle distribution via the Sea Toll Road. This finding aligns with Mulyani et al. (2022), who stated that the Sea Toll Road can open new market access and reduce price disparities for livestock commodities in Eastern Indonesia.

The main identified Threats are livestock diseases such as Foot and Mouth Disease (FMD) and Lumpy Skin Disease (LSD), with a weight of 0.09 and a score of 0.29. This threat represents the greatest risk in inter-island live livestock distribution. Fluctuations in the prices of imported beef and beef, with a score of 0.26, can depress local beef prices and reduce the competitiveness of livestock farmers.

The main implication of the EFAS analysis is the need to capitalize on significant market opportunities, particularly in Kalimantan and the new capital city, by strengthening efficient and well-scheduled distribution systems. Furthermore, risk mitigation strategies should focus on livestock disease control, price stabilization, and improving shipping schedule reliability. According to Rangkuti (2017), a comprehensive understanding of External Opportunities and Threats is essential for formulating sustainable development strategies.

Direction of Beef Cattle Marketing Distribution Strategy via Sea Toll Road

A strategic position analysis was conducted to determine the distribution position of beef cattle marketing via the Sea Toll Road in North Gorontalo Regency based on an integration of internal and external factors. The method used in this stage was a SWOT diagram, which refers to the total IFAS and EFAS scores obtained in the previous subsection (Figure 1).

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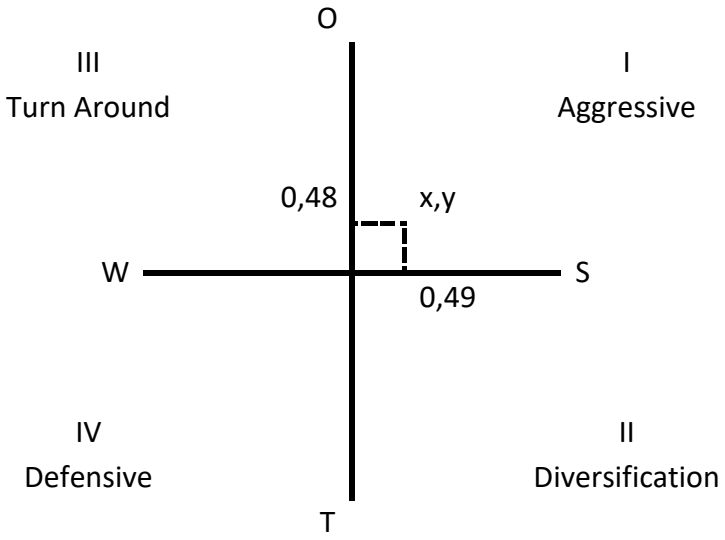


Figure 1. Position Chart

The analysis uses a SWOT diagram to calculate the difference between Strengths and Weaknesses (S–W) and Opportunities and Threats (O–T). Based on the IFAS results, the difference between Strengths and Weaknesses (1.85–1.36) is 0.49, indicating the dominance of Internal Strengths. Meanwhile, based on the EFAS results, the difference between Opportunities and Threats (1.74–1.26) is 0.48, indicating that External Opportunities outweigh threats. The calculation results indicate that the distribution strategy for beef cattle marketing via the sea toll road is positioned in Quadrant I.

Quadrant I indicates a highly favorable situation because the system possesses dominant Internal Strengths and significant External Opportunities. In this context, the recommended strategy is an aggressive growth strategy (growth-oriented strategy), which utilizes all Internal Strengths to seize and maximize available market opportunities. Aggressive growth strategies are generally directed at market expansion, increasing distribution capacity, and strengthening supporting institutions and infrastructure. According to David, et al (2017), organizations or systems in Quadrant I should focus their strategy on growth through integration, market penetration, and capacity development.

Quadrant I positions require consistency between regional development visions, livestock sector policies, and maritime transportation policies. Developing beef cattle distribution through the Sea Toll Road needs to be positioned as part of a regional economic development strategy

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based on superior commodities. This aligns with Porter's (2008) perspective, which emphasizes the importance of leveraging regional competitive advantages to drive sustainable economic growth.

While strategic positions demonstrate favorable conditions, potential risks must still be anticipated. Threats such as livestock disease, price fluctuations, and weather uncertainty can quickly degrade distribution performance if not properly managed. Therefore, the implemented growth strategy must be adaptive and accompanied by an adequate risk mitigation system. This approach aligns with the concept of strategic risk management, which emphasizes the balance between expansion and risk control (Hill, Jones, & Schilling, 2015).

CONCLUSION

Based on the results and discussion, it can be concluded that the distribution of beef cattle marketing through the Sea Toll route in North Gorontalo Regency has been running quite effectively and has strong development prospects. This confirms the role of the Sea Toll as an increasingly stable inter-island marketing channel in meeting the demand of Kalimantan as a beef cattle deficit area. The system is in a strong internal environmental condition (IFAS = 3.21) and a supportive external environment (EFAS = 2.99), driven by the availability of cattle supply, policy support, the presence of the KM Camara Nusantara 5 homebase, as well as the high demand of the Kalimantan market and the potential of the Capital of Nusantara. The optimal strategy formulated is an aggressive strategy through optimizing the utilization of the Sea Toll, increasing the volume and continuity of shipments, improving the livestock marketing system, and strengthening livestock breeder institutions so that distribution benefits can be more evenly distributed to the producer level.

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