



ANALYSIS OF ACTORS AND ACTIVITIES IN VALUE CHAIN BUSINESS SHEEP FAULTING

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ARTICLE INFO	ABSTRACT
Date received : 17 Oct 2022 Revision date : 15 Nov 2022 Date received : 23 Nov 2022	<i>Optimal overall processing of various company activities in a value chain, will create an advantage over stand-alone activities. This condition will eventually encourage to create a maximum profit margin. For the government, the results of this study are expected to be useful for the local government to be used as a reference in an effort to increase the competitiveness of sheep breeders. The purpose of this study was to analyze the actors involved and activities in the value chain of the sheep fattening business in the study area. This data collection technique is considered appropriate to investigate the value chain of the sheep fattening industry. The data analysis used in this study is in the form of qualitative and quantitative data analysis, with data analysis methods with value chain mapping. The results showed that the actors involved were sheep breeders, sheep processors, traders and consumers. The activities carried out by the actors/actors involved in the sheep commodity value chain have a mutually coordinating relationship and require one another. Therefore, value chain activities in the value chain commodity business do not only involve the main activity, but there are supporting activities that are involved either directly or indirectly. The actors involved include providers of production inputs, cultivators, fish processors, collector traders, consumer retailers and agencies/institutions related to the sheep commodity business in North Sumatra.</i>
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INTRODUCTION

Langkat Regency is one of the areas that has high sheep production. Most of the main livelihoods of the people in the area are livestock. The prospect of developing sheep production in this area is quite good. Langkat Regency has a good opportunity in running a sheep business, but it does not rule out that in carrying out activities there are several obstacles that hinder the business process. The obstacle is the sheep's performance in conducting business development in general which will affect the competitiveness of the business. If the sheep fattening business is not able to compete with its competitors, it will affect the business. Therefore, sheep fattening needs to increase competitiveness, resilience (resilience) and added value (added value) along the value chain (Giulio Buciuni et al., 2014).

According to Baihaqi, Hamid, and Yulianda (2014) The value chain is formed based on development carried out by counseling related parties and the availability of cooperative activities. Meanwhile, according to Sampit; Kindangen; wullur; (2016) which states that the sheep value chain is formed not only from development carried out by extension and cooperative activities, but from the development of inbound logistics, operations, outbound logistics, operations, and marketing, as well as supporting activities such as: production infrastructure, human resource development, development technology, and procurement. This research was also supported by Pongoh (2016); Suryatoga, (2009); Gabriel, Nurcahyo, Muslim, Sumaedi, (2014) who stated that the sheep value chain is formed from the main activities and supporting activities. If the activity is given a value in its business activities, it will produce added value.



Sheep farmers in Langkat Regency have managed livestock business well. However, in the implementation of production requires more intensive handling. More intensive handling of the production and marketing processes is often faced with obstacles. Among the obstacles faced in the production of fattening sheep, namely the level of risk in the production process to marketing. Risk is an uncertain situation faced by a person or company that can have an adverse impact (Kountur, 2004).

This research is important because the results of the research can be used as information for sheep breeders in improving their performance through the application of the designed value chain model. Value Chain is able to identify every part of the production process and identify which steps can be eliminated or improved so that it is known in which areas there are processes that provide the most value added to the performance of the sheep fattening company. Value Chain Analysis (VCA) can also assist companies in identifying areas that can be optimized for maximum efficiency and profitability. If the value chain measurement is carried out systematically, then it can be a guide to measure the strengths and weaknesses that exist within the company's internal. Optimal overall processing of various company activities in a value chain, will create an advantage over stand-alone activities. This condition will eventually encourage to create a maximum profit margin. For the government, the results of this study are expected to be useful for the local government to be used as a reference in an effort to increase the competitiveness of sheep breeders. The purpose of this study was to analyze the actors involved and activities in the value chain of the sheep fattening business in the study area.

LITERATURE REVIEW

Value Chain Concept

The value chain approach was first introduced by Michael Porter in the mid-1980s and has been widely recognized since then. According to Porter, Value Chain is a systematic approach to developing a company's competitive advantage and value. Value Chain identifies and connects various strategic activities in the company (Hansen and Mowen, 2000).

The value chain is an explanation of various scientific concepts, namely production science, marketing science, distribution, management science, value added science, agro-industry science, communication science and other supporting sciences that are applied to drive agriculture, animal husbandry, sheep fattening and forestry businesses in order to understand to better identify competitive advantage, to identify where customer value can be increased or cost reduced, and to better understand the company's relationships with suppliers (Supplier Linkages), and customer relationships (Consumer Linkages).

The nature of the Value Chain depends on the nature of the industry and varies. For manufacturing companies, service companies and non-profit organizations. For example, the manufacturing industry, where producers add value from raw materials that are not very useful to the final customer (eg pulp) and convert them into something of value that customers are willing to pay.

According to Fabienne et al., (2010), this concept is equally important for the service industry, where employees use inputs in the form of time, knowledge, equipment, and systems to create services that are truly of value to the people they want to serve, namely customers. It's also important to remember that the customer is not just outside the company. They can be leaders, co-workers, or anyone who depends on what you do.

Value chain analysis (VCA) is a powerful tool for creating the greatest value advantage for enterprise customers. The concept of Value Chain Analysis was first introduced by Prof. Michael Porter of Harvard Business University in his book "Competitive Advantage: Creating and Sustaining Superior Performance" (1985). In simple terms in business, companies buy raw materials, create added value by turning them into something of value to other people (customers).

According to Porter, the business of a company can best be described as a value chain, where the total revenue minus the total cost of all activities undertaken to develop and market a product or service generates value. Furthermore, Porter (1985) explains, Value-chain analysis is a strategic analysis tool used to better understand competitive advantage, to identify where customer value can be increased or decreased costs, and to better understand the company's relationship with suppliers (Supplier Linkages).), and relationships with consumers (Consumer Linkages). These activities are separate activities but are highly dependent on one another. (Porter, 2001). Figure 1 shows Porter's value chain consisting of primary activities and support activities (Porter, 1985).

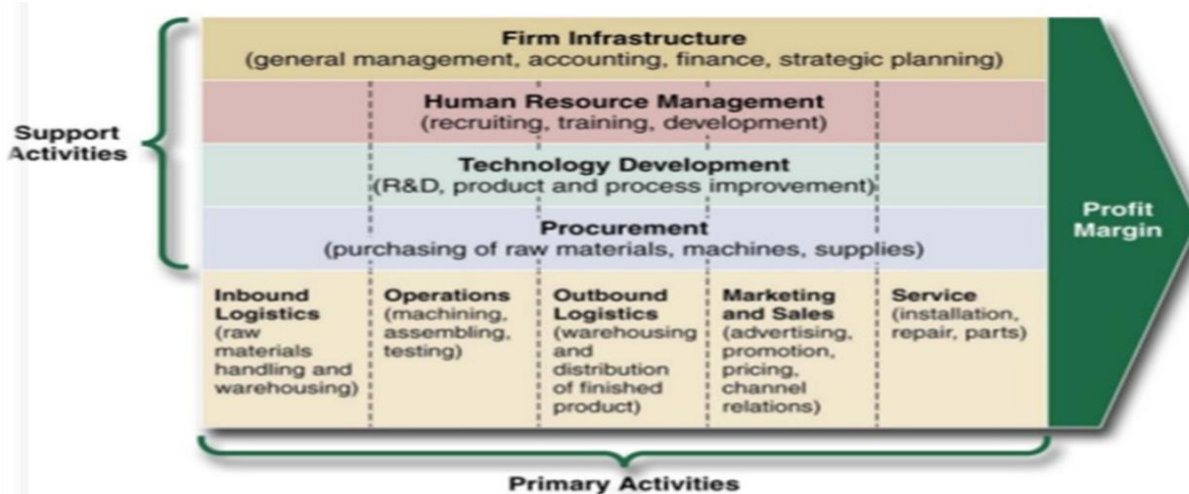


Figure 1. Value Chain Concept

Source: Porter (2001), *Competitive Advantage, Creating and Sustaining Superior Performance*.

Figure 2 explains that the value chain consists of main activities and supporting activities, which aim to generate profit margins. In assessing the main activities of a company, there are several factors that need to be considered, including: 1) Incoming logistics are activities, such as raw material handling, warehousing, and inventory control, used to receive, store, and distribute inputs to customers. product; 2) Operation activities: the activities required to convert inputs provided by logistics into the final product form, for example: machining, packaging, assembly, etc.; 3) Outbound logistics are activities that involve the collection, storage, and physical distribution of final products to customers; 4) Marketing and Sales are activities carried out in the marketing and sales process. 5) Services are activities designed to increase or maintain product value.

Supporting Activities are activities carried out to assist the main activity, which has the potential to increase efficiency and effectiveness even though they are not directly involved in it. The supporting activities consist of:

1. General administration is an effective plan related to excellent company and stakeholders; ability to combine and coordinate value chain activities, and Cultural and reputational effectiveness
2. Human resources (HRD) / Human Resources Management, consisting of: Effectiveness in recruitment, training, and retention; Relationship relationship (union); and Effectiveness of rewards and incentive programs.
3. Technology Development, activities consisting of: R&D effectiveness; Relationship between R&D and other departments; Creative and innovative culture; Personal skills
4. Procurement, which consists of: A mutually beneficial relationship with suppliers; Processes and procedures optimize quality, price, and speed of service; Lease versus purchase decision.

The purpose of value chain analysis is to identify the stages of the value chain where the company can increase value for customers or to reduce costs. A decrease in costs or an increase in value added can make a company more competitive (Akhmad et al., 2014).

Implementation of the VCA is carried out in a 3-step process:

1. Activity Analysis: is the identification of what activities are carried out to deliver products or services
2. Value Analysis: each activity, analyze what will be done to make the biggest plus for your customers
3. Evaluation and Planning (Evaluation & Planning): evaluate whether it is valuable enough to make changes, and then make an action plan.

Importance of Value Chain Analysis

According to Vela, et.al. (2013) Value Chain Analysis (VCA) is able to identify each part of the production process and identify where the steps can be eliminated or improved. Meanwhile, according to Dian, et.al. (2012) so that it is known in which areas there are processes that provide the most valued added for organizational performance. Adnan, et.al. (2016) also explained that Value Chain Analysis (VCA) can assist companies in identifying areas that can be optimized for maximum efficiency and profitability.



According to Porter in Adnan (2016), if the value chain measurement is carried out systematically, then it can be a guide to measure the internal strengths and weaknesses of the company. Even Porter (1985), states that if a company is able to compare its own value chain with its competitors' value chains, then the company can measure its competitive advantage which is useful in managing competition in an industry.

Optimal overall processing of various company activities in a value chain, will create an advantage over stand-alone activities. This condition will ultimately encourage the creation of a maximum profit margin (Jannah et al., 2015).

METHOD

Data collection technique

Data collection activities include several techniques, namely semi-structured interviews, document analysis, informal discussions, and direct observation. The interviews involved decision makers and experts in charge of the sheep fattening system in Langkat Regency. The interviewees were selected because of their direct involvement in the main activities of the sheep fattening industry value chain in designing, implementing and controlling several projects as well as evaluating business sustainability. This data collection technique is considered appropriate to investigate the value chain of the sheep fattening industry.

Population and Sample

The population in this study were all sheep breeders in Langkat Regency. In this study, sampling was carried out by census or as a whole. The census method is also known as the complete enumeration method, where all individuals in the population are investigated or interviewed as respondents (Wirartha, 2006).

Data Analysis

Value Chain Mapping

This study is limited to working sheep fatteners. Secondary data shows that there are four different companies in the chain. The four main groups of actors identified across the chain are farmers, traders (brokers, wholesalers and retailers) and fish processors. Four structured questionnaires were prepared for use in the study, one per each group of actors (cultivators, traders, processors and distributors). Before starting the fieldwork, the questionnaire was tested, and revised. The process involves mapping material and information flows and relationships within and between businesses, from inputs to consumption and disposal of products. Data is collected through surveys of chain participants at all levels, managerial and operational, and all chain actors; while the interviews focused on priorities identified through the survey (Bonney et al. 2009).

RESULTS AND DISCUSSION

Sheep Fattening Value Chain

Value Chain is a systematic approach to developing a company's competitive advantage and value. Value Chain identifies and connects various strategic activities in the company (Jannah, Subagja, and Rujito 2015). De Silva (2011) states that the value chain describes a high-level model of how a sheep fattening business processes raw materials as inputs, adds value to raw materials through various processes and sells finished products to customers. Moreover, the sheep fattening value chain can be defined as interrelated value-adding activities that convert inputs into outputs which, in turn, can help create competitive advantage. The value chain typically consists of inbound distribution or logistics, manufacturing operations, outbound distribution or logistics, marketing and sales, and after-sales services. These activities are supported by purchasing or procurement, research and development, human resource development and company infrastructure.

According to De Silva (2011) Value chain analysis in sheep fattening is a powerful tool used for all stakeholders, from farmers to sheep fattening business operators. Value chain analysis (VCA) is useful for identifying the main and supporting activities in the industry and VCA also has the potential for sustainable competitive advantage for industry development. The competitive advantage of sheep fattening lies in its ability to perform important activities along the value chain better than its competitors.

Value chain analysis starts from the relationship of input suppliers to the final consumer. The value chain analyzes the factors influencing industry performance, including market access; legal, regulatory and policy environment; coordination between companies within the industry; and the level and quality of support



services. Relationships between companies in an industry can facilitate production and marketing efficiency and allow the flow of information, knowledge, resources and benefits.

Value Chain Success Factors

From previous research related to the sheep fattening/aquaculture value chain, to date, there are 22 papers that identify the criteria in the sheep fattening value chain, namely: multi-polarity, diversity and scale, dynamics of transformation, performance and equity, and innovation. technical and institutional. This contradicts much of the research to date, as these papers only discuss the criteria that show how the expansion of fattening aquaculture sheep has resulted in very diverse production configurations for consumption in the South of the world. Meanwhile, according to (Bush et al. 2019a) that the sheep fattening value chain paper collectively must pay attention to 5 (five) criteria, namely: neglected value chain segment/management and actor categories, production, regulation, and innovation, and benefit access patterns.

To support success/success in the sheep fattening value chain, it is influenced by several factors. Based on the literature review, the success factors that affect the value chain of fattening sheep according to (Nielsen et al. 2017); (Rosales et al. 2017a) and (Garcia Rodrigues and Villasante 2016); (Lopes et al. 2017); and (Knútsson, Kristófersson, and Gestsson 2016) is optimal and sustainable management of sheep. According to (M. e. J. Khondker et al. 2018); (Nielsen et al. 2017); and (Rosales et al. 2017a) is to maximize profits across the value chain. According to (Rosales et al. 2017a) is to improve product quality and design to increase added value. This is also supported by research (Kaminski et al. 2018a) which states that investment in high value products can affect the value chain of sheep fattening. In addition, according to (Kaminski et al. 2018a) other factors that can affect the success of the value chain are improvements in more efficient operations and adopting upstream-downstream value chain functions. Meanwhile, according to (Kruijssen, McDougall, and van Asseldonk 2018); factors that can affect the success of the value chain are the contribution to the effectiveness of gender integration in the aquaculture value chain (gender involvement in the aquaculture value chain), and according to (Lim 2016a), efforts to increase companies in aquaculture operating in the upstream industry, institutional/institutional environment which is not too broad and conducive. For more details, see Appendix 2.

Actors and Institutions Involved in the Value Chain

The initial step taken is to identify which stakeholders are involved in the value chain of the sheep processing industry. Identification of perpetrators is done through direct observation, interviews, with relevant agencies, farmers, community leaders, experts, traders and sheep managers. The actors and institutions involved in the sheep value chain can be seen in Figure 2.

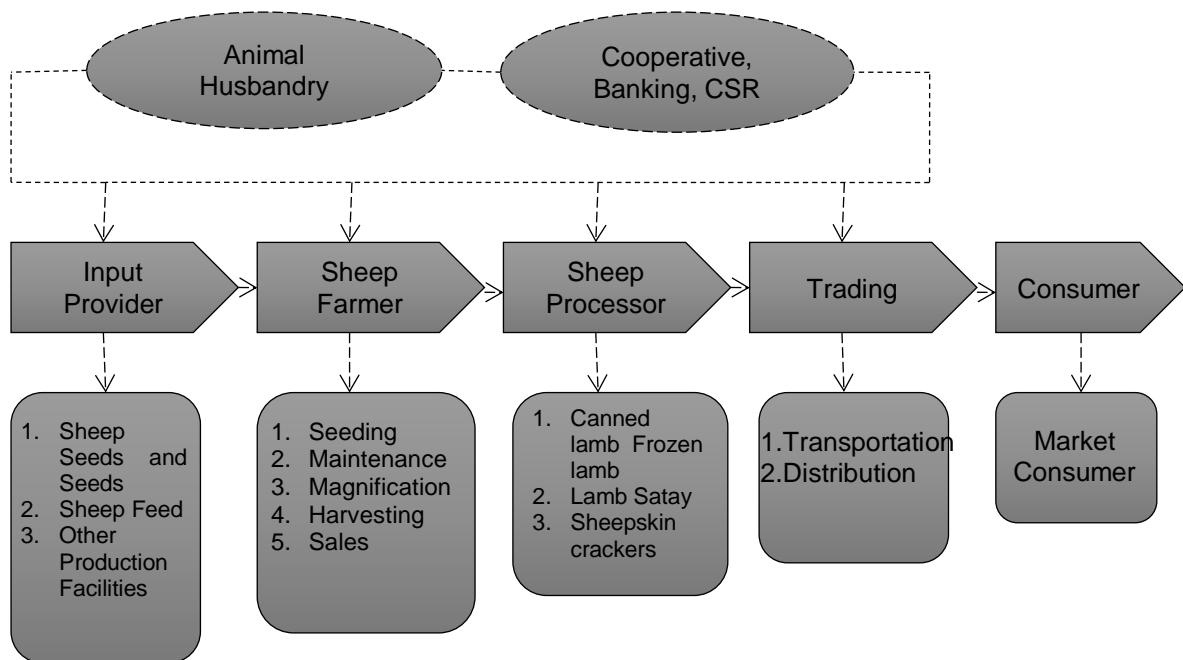


Figure 2. Actors and Institutions involved in the Sheep Value Chain in Langkat District



The activities carried out by the actors/actors involved in the sheep commodity value chain have a coordinating relationship and require one another. Therefore, value chain activities in the value chain commodity business do not only involve the main activity, but there are supporting activities that are involved either directly or indirectly. The actors involved include production input providers, cultivators, fish processors, collectors, consumer retailers and agencies/institutions related to the sheep commodity business in North Sumatra.

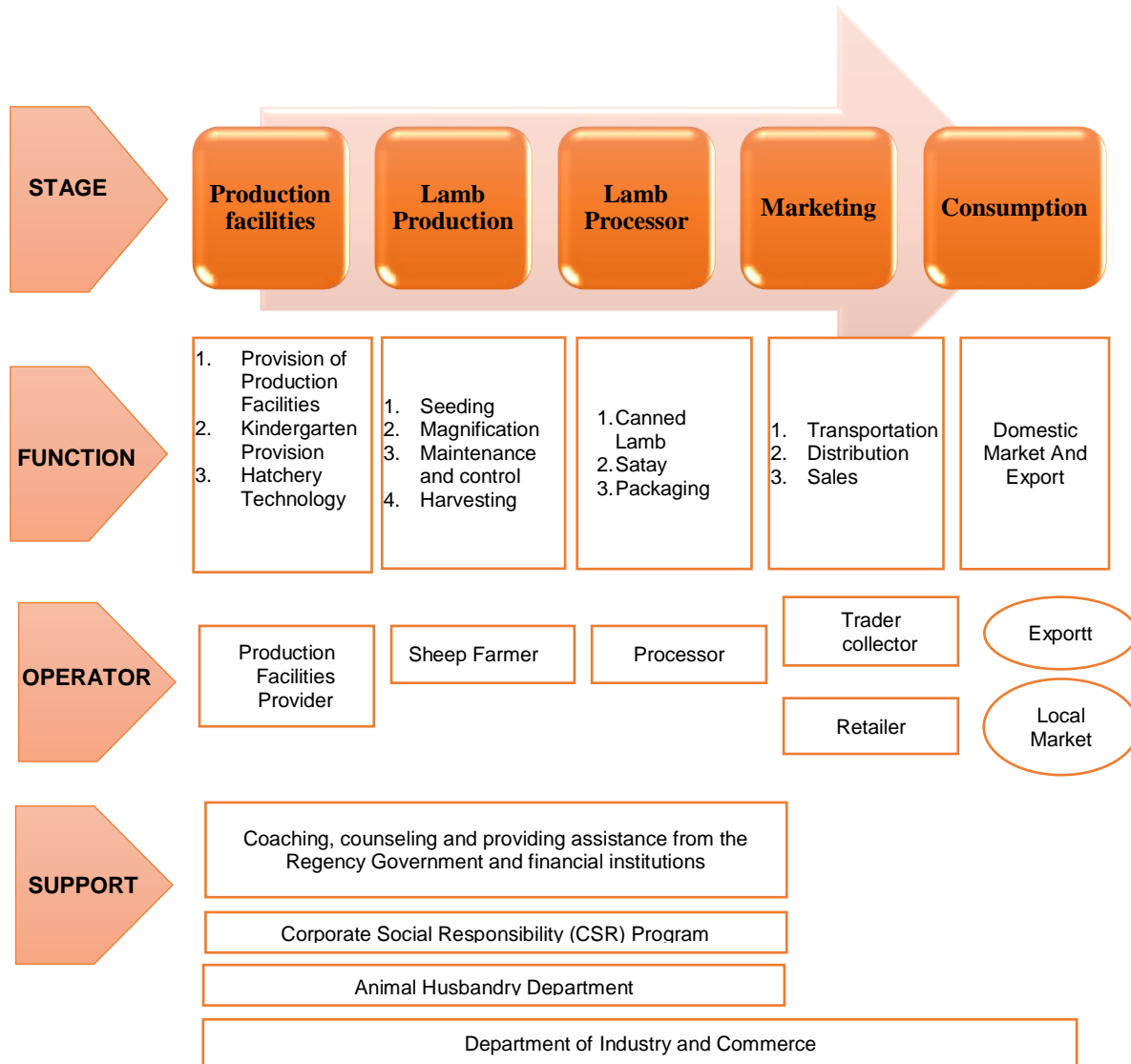


Figure. 3 Value Chain of Sheep Fattening Business in Langkat Regency

Figure 3 shows the stages of the value chain, the function of each stage, the actors involved in each stage, and the supporting or supporting institutions in the business, either directly or indirectly. The actors involved in the production facilities stage are production input providers who are supported by coaching, counseling, and providing assistance from the Langkat Regency government by the sheep fattening service. The actors involved in the sheep production stage are cultivators, the sheep processing stage is UPI, the actors involved in the marketing stage are collectors and retailers and the actors involved in the consumption stage are exports and local markets. The stages of production, processing, and marketing are supported by coaching, counseling, and providing assistance from the district government, DPM soft loans, and corporate Social Responsibility (CSR) programs. All these stages are indirectly supported by the Department of Cattle Fattening and the Department of Industry and Trade. For more details on the actors involved in the sheep processing value chain, see Table 2.



Table 1. Roles and Actors Involved in Sustainable Sheep Processing Value Chain

No.	Actors	Role in Sustainability
1.	Sheep Farmer	Play a role in producing sheep that is carried out in such a way that it can take place continuously at a reasonable level taking into account ecological health, minimizing side effects that disrupt the diversity, structure and function of ecosystems, as well as being managed and operated in a fair and responsible manner, in accordance with laws and regulations locally, nationally and internationally to meet the needs of present and future generations.
2.	Sheep Farmer Group	Serve as a forum for cooperation between sheep farmers and with other parties, so that they are able to face various challenges and problems and have a good bargaining position to achieve sustainable sheep fattening development.
4.	traders and exporters	Plays a role in continuous distribution (marketing) of sheep with export values that continue to increase and high selling prices.
5.	Supporting Actors	
	a. Financial institutions,	Serving as access to capital for the development of a sheep fattening business
	b. Sheep fattening department	Play a role in planning, implementing, evaluating and coordinating the development of policies in the development of sustainable sheep fattening.
	c. Agency for the Assessment and Application of Technology (BPPT)	Play a role in implementing sustainable sheep fattening resource management technology to help improve sheep fattening resource management
	d. Certification bodies both international and national.	Acting as a guarantor of aquacultured sheep fattening products to meet the aspects of food safety, fish health and welfare, socio-economic and environmental responsibility.

CONCLUSION

The activities carried out by the actors/actors involved in the sheep commodity value chain have a mutually coordinating relationship and require one another. Therefore, value chain activities in the value chain commodity business do not only involve the main activity, but there are supporting activities that are involved either directly or indirectly. The actors involved include providers of production inputs, cultivators, fish processors, collector traders, consumer retailers and agencies/institutions related to the sheep commodity business in North Sumatra.

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