

OPPORTUNITIES AND CHALLENGES IN EAST OF JAVA DAIRY INDUSTRY : A VALUE CHAIN APPROACH

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Abstract

The Indonesia dairy industry has been through an evolution right from the Dutch era until today. Indonesia still imports fresh raw milk for processing. Therefore, the supply of local raw materials reached 798 thousand tons from 3.8 million tons needs. Most of the total national milk production still came from Java with the highest production came from East Java region that is equal to 57.3%. The paper is an attempt to identify various prospects and challenges for East of Java Dairy industry value chain and identifying various opportunities for governmental organizations to provide critical standard infrastructure that will be improve value chain that supporting by efficiency of dairy supply chain. This paper also tries to finds out , what should be objective for East of Java dairy industry to overcome global crisis faced by the Indonesia especially East of Java Province and what should be the evolving strategies adopted by East of Java Dairy Industry to have competitive edge overcome on Indonesia and or in South East Asia Dairy Market. Dairy value chain development comprises extension, input supply (feed, bull services, and veterinary services) milk production, dairy processing and milk and milk products marketing. Through the development of large territorial producers' organizations capable of managing milk supply in volume and quality, they would be able to take part in the management of the supply chains. To do so, the present paper suggests that farmers' organizations need material and immaterial investments and assistance from regional public players to build new local collective capacities. The competition regime framework is an asset for the design of such public supports in accordance with the principle of subsidiarity, taking the regional specificity of the markets' institutions and collective capacities into account. The authors would offer some solutions to increase the value added in the dairy value chain and improvement in the income distribution in this value chain.

Keywords: East of Java Dairy Industry, Value Chain, Supply Chain Management, Infrastructure, National Dairy Development.

1. INTRODUCTION

Indonesia's Dairy Industry Needs to Scale Up to Meet Local Demand. The consumption of milk and dairy products continues to increase rapidly in Indonesia, creating an attractive market for local producers and foreign exporters. While inadequate road and rail links and a lack of cold storage facilities still pose logistical challenges for overland transportation of perishable goods, the expansion of modern retail across the island nation is giving ever more consumers access to fresh dairy products. Indonesians' growing appetite for milk and its derivatives bodes well for dairy consumption going forward. The country's large market potential and westernising diets in the fast-growing Southeast Asian region could make Indonesia an attractive hub for dairy manufacturing, provided that sufficient raw materials can be sourced from local dairy farms. The widening gap between national farm output and dairy consumption reflects poor agricultural productivity, but also points to upstream business prospects. As domestic output fails to meet the needs of the processing industry in terms of both quantity and quality, the bulk of milk used by local industries is shipped in from abroad.

(Madani , 2013)

Understanding the system of dairy production, milk marketing channel in which smallholder dairy farmers sell dairy products and to examine how the market is functioning; to identify the role of men and or women along the dairy value chain and constraints for their participation and to review challenges and opportunities for development of dairy value chain in East of Java. Change of competition regime and regional innovative capacities it can be considered for review. Market actors, and farmers in particular, mobilize collective coordination capacities to face global changes – market price or sectorial policies – within different regional contexts. A multi-scale conceptual framework is proposed to analyze market functioning and transformation over time and space. Notion of competition regime as a combination of four market institutions that legitimizes competition strategies. a competition regime relies on the creation and management of two systems of common-pool resources, namely innovation capacity and reputation-building.

The relevance of this framework through value chain may also combining the current restructuring of dairy supply chains in East Java Province. It shows that market liberalization strongly destabilizes

the regional competition regimes that were based on the appropriation of social rights inherent to the national public policies. In the hybrid and specific competition regimes, existing territorial coordination devices are not directly threatened and can support the development of new cooperative strategies.

In all cases, with the development of a contractual economy, farmers are incited to develop or to strengthen coordination devices to become effective market participants. Through the development of large territorial producers' organizations capable of managing milk supply in volume and quality, they would be able to take part in the management of the supply chains. To do so, the present paper suggests that farmers' organizations need material and immaterial investments and assistance from regional public players to build new local collective capacities.

The competition regime framework is an asset for the design of such public supports in accordance with the principle of subsidiarity, taking the regional specificity of the markets' institutions and collective capacities into account.

Indonesians' new love for all things milk (Madani,2013). Domestic milk consumption is rising at a rapid rate of 8% per year, according to AIPS, but it remains low in absolute terms. Indonesians consumed an average of 14.6 litres of milk in 2012 (BPS), which compares to more than 22 litres in neighbouring Malaysia and the Philippines and more than 33 litres in Thailand. Health aware Indonesians are turning to cow's milk as a source of protein and calcium, and the drink has long been recognized as the best substitute for breast milk with infants and babies.

Not only are Indonesians increasingly turning to milk as a beverage, but also all of its downstream products. Cheese is becoming more popular, especially among middle and higher-income consumers in urban areas, who are more receptive to western food, such as bread and pizza. Yoghurt and sour milk are likewise gaining in popularity, particularly for their propensity to aid digestion and weight loss. Demand for coffee whitener or creamer is increasing along with rising consumption of instant coffee (as opposed to the traditional Indonesian way of drinking black coffee) (See [Indonesia's Coffee Industry Needs Growth Capital](#)), and cream is benefiting from the growing popularity of cakes and puddings.

Investment opportunities lie in scaling up production, introducing modern technology and improving farming methods. Greater capacity in cold storage and transportation is also needed to transport dairy products across the archipelago (See [Indonesia's Logistics Sector](#)). Teaming up with local dairy cooperatives, which have established sourcing and distribution networks, will generally be the easiest way for foreign companies to enter the market and get access to farmers. As they need to boost their efficiency to compete with imported milk, local farmers should be interested in cooperation that can help them become more competitive.

Accordingly, based on market orientation, scale and production intensity, three major dairy production systems can be identified: traditional smallholder; privatized state; and urban and peri-urban farms. The Resource Base View (RBV) theory is a fundamental in determining internal resources. In the case of dairy industry in East Java province, Intangible resources are more important than external resources. Intangible resources that owned and controlled by the company (private and or communities) such as Dairy farmer, dairy cooperatives, private organisation of dairy farmer, related to Milk Processing Industry Association, are used as a basis of competitive strategy formulation and implementation to achieve optimal financial performance.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1 RESOURCE BASED VIEW

Strategic management literature shows that strategy compatibility with the resources owned are important beginning for company performance improvement. This is consistent with Wernerfelt (1984), and Grant (2010) views that strategic resources that owned and controlled by company are used as a base formulation and implementation of strategies to achieve optimal business performance. Barney (1991) asserts that the survival or corporate excellence depends on its resources, as well as what strategies are chosen to empower those resources so that they can respond to the opportunities and challenges of the external environment. (Husnah.,et al;2013)

Husnah,et. Al., (2013) noted according to: Purwohandoko (2009) focuses on company internal resources (tangible and intangible assets) and use competitive strategy as a mediating variable (low cost leadership, differentiation and focus). The analysis shows that the larger scale, the stronger the

internal resources portfolio owned, the better market orientation implementation, the higher performance achievement. Meanwhile, the competitive strategy is selected and implemented by enterprise differently, depending on its business scale. Large-scale enterprises tend to use low-cost leadership strategy and small-scale enterprises tend to use focus strategy. However, all sizes are not leaving the differentiation strategy as a differentiator and value for customers. In addition Muchtolifah research (2008) focuses on intangible assets (human capital and organizational capital) to explain the company's resource strategy derived from the human resources (human capital). Human resources, both in terms of formal education as well as knowledge and skills, affect the business management. Furthermore, Sampurno (2010) stated that the alignment of the Human Resources (HR) and business strategies have an influence on financial performance.

Concept of intangible asset according to Haanes and Lowendahl (1997) classify intangible assets into competence and relational resources. Competence consists of two levels, namely the individual (knowledge, skills, talent/intelligence) and organizational (databases, technology, procedures). Relational refers to the company's reputation and customer loyalty. Husnah et. Al., noted according to opinion was enhanced by the Roos & Roos (1997); Choo & Bontis (2002), and Daum (2005) states that the intangible asset consists of human, organizational and relational capital. Relational capital is not only dealing with customers, but also deals with the stakeholders (customers, suppliers, government, investors and relevant associations).

Although there are several versions the components of intangible assets, in the end there are only three schemes are often cited in the study, proposed scheme Sveiby (1997), Stewart (1997), and Edvinsson & Sullivan (1996). The term intangible assets and Intellectual capital is basically same. All three schemes have the same three elements, namely intellectual capital that lies in man, the intellectual capital inherent in the organization, and intellectual capital related to external relations (Purnomosidhi, 2006). All three schemes can be seen in Table 1.

Table 1. Intellectual Capital Scheme

Elemen/Author	Intellectual capital elements inherent in human	Intellectual capital inherent in organization	Intellectual capital inherent in the relationship
Edvinson	Human Capital	Organizational Capital	Customer Capital
Stewart	Human Capital	Structural Capital	Customer Capital
Sveiby	Employee Competence	Internal Structure	External Structure

Sources: Purnomosidhi (2006)

The first element in Table 1 illustrates human ability in entity that created from a mixture of several attributes, such as abilities, attitudes, and relationships. Human capital is located in the mind, body, and individual action, and will be lost if they left the company. The second element, Organizational capital, reflects the ability of the company from the systems, processes, structure, culture, strategy, policy, and ability to innovate. The third element, customer/relational capital is an ability gained from relationships with external parties in ways typical, such as connection, understanding, loyalty, and business activities (Demediuk, 2002). Opinion was improved that relational capital is the company relationship value with the customer, suppliers, government, investors and relevant associations. That is, company knowledge associated with external parties (stakeholders).

The analysis results of company internal and external environment is information needed to develop a strategic intent and strategic mission (Hitt et al. 1997:20-21).

Strategic intent is company's utilization of internal resources, capabilities and core potential to do what was previously regarded as a goal that can not be achieved in a competitive environment. Thus, business-level strategy is based on company specific core competencies and indicates how an organization intends to compete in a particular product market and gain a competitive advantage over its competitors.

Husnah, et al (2013) noted that according to (Wheelen & Hunger, 2001). `Implementing strategy as a means to achieve organizational goals will require management functions. Strategy implementation is part of management Strategy. Management strategy is a set of managerial decisions and actions that determine the performance of the company in the long run. Management strategies include environmental scanning, strategy formulation, strategic planning, and long-term planning, strategy

implementation and evaluation and control Management strategy emphasizes the observation and evaluation of environmental opportunities and threats by looking at company strengths and weaknesses.

2.2 VALUE CHAIN AND SUPPLY CHAIN

In the term of resource based views (RBV) perspective, the strategic resources that owned and controlled by company are used as a base formulation and implementation of strategies to achieve optimal business performance. Barney (1991) asserts that the survival or corporate excellence depends on its resources, as well as what strategies are chosen to empower those resources so that they can respond to the opportunities and challenges of the external environment.

What is the difference between a value chain and a supply chain?

Supply Chain is the interconnection of all the activities that starts from the manufacturing of raw material into the finished product and ends when the product reaches the final customer. *Value Chain*, on the other hand, is a set of activities that focuses on creating or adding value to the product. These two networks help to provide quality products to the customer at a reasonable price. Most of the time supply chain is juxtaposed with the value chain. In this article, we have compiled all the substantial differences between supply chain and value chain.

The difference between a *value chain* and a *supply chain* is that a supply chain is the process of all parties involved in fulfilling a customer request, while a value chain is a set of interrelated activities a company uses to create a *competitive advantage*.

The idea of value chain was pioneered by Michael Porter. Five steps in the value chain give a company the ability to create value that exceeds the cost of providing its good or service to customers. Maximizing the activities in any one of the five steps allows a company to have a competitive advantage over competitors in its industry. The five steps or activities are inbound *logistics*, operations, outbound logistics, marketing and sales, and service.

Inbound logistics include receiving, *warehousing* and inventory control. Operations include value-creating activities that transform inputs into products. Outbound logistics include activities required to

get a finished product to a customer. Marketing and sales are activities associated with getting a buyer to purchase a product. Service activities include those that maintain and enhance a product's value, such as customer support.

The supply chain comprises the flow of all information, products, materials and funds between the different stages of creating and selling a product. Every step in the process, from creating a good or service, manufacturing it, transporting it to a place of sale, and then selling it is a company's supply chain. The supply chain includes all functions involved in receiving and filling a customer request. These functions include product development, marketing, operations, distribution, finance and *customer service*.

Table 2: Comparison between Supply Chain and Value Chain

Basis for Comparison	Supply Chain	Value Chain
Meaning	The integration of all the activities involved in the procurement, conversion and logistics of the product is known as Supply Chain.	Value Chain is defined as the series of activities, that adds value to the product.
Originated from	Operation Management	Business Management
Concept	Conveyance	Value Addition
Sequence	Product Request - Supply Chain - Customer	Customer Request - Value Chain - Product
Objective	Customer Satisfaction	Gaining competitive advantage

Source: blog [Evan Tarver](#) | April 30, 2015 — 4:11 PM EDT

Supply Chain is described as a tool of business transformation, which minimizes costs and maximizes customer satisfaction by providing the right product at the right time at the right place and the right price. Conversely, Value Chain is a way of getting a competitive advantage, through which a company can beat its competitors along with fulfilling customer requirements.

A supply chain is what ensures that the products you value so much actually get to you. Some of the things we use are manufactured half way across the world from your local convenience store. A supply chain therefore involves bulk storage and transportation. The major difference between a supply chain and a value chain is the simple fact that *within a supply chain, there is no value added*. *In a supply chain*, all that is being done is conveyance. One product or material is taken from one company or from one end and transported to the other. Of course there are procedures involved such as proper storage and careful transportation but that is about it. *In value chains*, as much as there is

transportation and some storage involved, the main purpose of a value chain is to add value to the product so as to make it presentable to the client. This is often achieved via packaging, marketing and sales.

A supply chain is as important to the business world as a value chain. Without one or the other, we would simply be mired in a logistically impossible nightmare. Supply chains are the one thing that connects the world. A product produced or manufactured on a continent you have only heard of in your Geography lessons is essential for your daily consumption. The reason you always find this product on the shelves at your convenience store is because supply chains never rest. Otherwise you would have to wait months before you can get the product you need. That is a very simplistic way of looking at supply chains but it brings out the essence of the whole concept. That is how our world runs.

The two are difficult to separate in that most of their functions overlap. Both supply and value chains need transportation and storage. The major difference as mentioned earlier is that with a supply chain, there is no need for some functions like packaging or marketing the product. At least not directly to the customer. Supply chains only market themselves to other companies. It is more a B2B function as opposed to value chains which are absolutely customer/ end use oriented in order to give the business a better bottom line.

Our goal in working with supply chains is to find ways to increase efficiencies through accuracy and automation. This focus allows us to see a rapid ROI for our customers as well as increases the value to the end consumer in the form of excellent customer service.

The reason we tend to associate the supply chain with the value chain is because ultimately, supply chain activities, such as inbound logistics, manufacture/production, and outbound logistics, offer many direct opportunities to add value for customers/consumers.

Innovative enterprises have learned that if it's to be utilised for competitive advantage, the supply chain must be viewed not as a necessary cost of providing a product or service, but as a source of extra value and hence, profit. This shift toward value-chain thinking has led businesses to focus less on cost reduction in the supply chain and instead, to seek ways to leverage value-adding opportunities.

2.3 FROM VALUE CHAIN TO VALUE NETWORK

The concept of a value chain has assumed a dominant position in the strategic analysis of industries. However, the value chain is underpinned by a particular value creating logic and its application results in particular strategic postures. Adopting a network perspective provides an alternative perspective that is more suited to New Economy organisations, particularly for those where both the product and supply and demand chain is digitized. (Peppard, & Rylander,2006)

The use of information and communication technology (ITC) is a necessity for the business world. Various operators and internet providers offer various advantages and uses that are claimed as user friendly. The use of ITC is undoubtedly a challenge as well as an opportunity for strengthening the value chain in the dairy industry.

The value chain as both a concept and tool has been used for the last 30 years to understand and analyse industries. (Peppard, & Rylander,2006)¹⁹ It has proved a very useful mechanism for portraying the chained linkage of activities that exist in the physical world within traditional industries, particularly manufacturing. Furthermore, it has also framed our thinking about value and value creation. However, as products and services become dematerialised and the value chain itself no longer having a physical dimension, the value chain concept becomes in an inappropriate device with which to analyse many industries today and uncover sources of value. (Peppard, & Rylander,2006)²⁰.

This is particularly evident in sectors such as banking, insurance, telecommunications, news,entertainment, music, advertising, and certain areas of the public sector. (Peppard, &

Rylander,2006)²¹ In addition, many industries now exhibit strong co-operative behaviour(Peppard, & Rylander,2006)²² with inter-firm relationships playing a significant role in strategic performance.

(Peppard, & Rylander,2006)²³ The focal of the value chain is the end product and the chain is

designed around the activities required to produce it. The logic being that every company occupies a position in the chain; upstream suppliers provide inputs before passing them downstream to the next link in the chain, the customer. With the value network concept, value is co-created by a combination of players in the network.

The competitive realities of the “network economy” require that we rethink traditional methods for analysing competitive environments. The old linear models do not account for the nature of alliances, competitors, complementors and other members in business networks.

Mobile content and services is the future: a world where customers will, through a handheld device, transact banking services, make purchases, access news and stories, play games, view videos and TV, gamble, etc. However, it is unlikely that today’s mobile operator will be able to develop the types and range of content and services that consumers will increasingly demand. They may not even wish to. A host of different players in the mobile ecosystem are already jockeying for position, including infrastructure, content providers, content aggregators, software developers and device manufacturers. This ecosystem is a set of firms that co-create value. Those who understand the sources of value in the network and are able to exploit them will be the winners. (Peppard, & Rylander,2006)

The value network logic raises particular issues for the development of systems supporting inter-organisational relationships. Traditionally technologies like electronic data interchange (EDI) and more recently the Internet (via electronic marketplaces) have been used to facilitate connectivity and integration of data and information from partner organisations using agreed standards. While the content or service of the third-party can be embodied in an electronic form, other aspects of the relationship are still conducted on a personal basis.

Most software today is designed based on value chain logic. This means that even if two companies seek to collaborate, with both using software from the same vendor, it is still considered a major systems integration (SI) task to physically and logically connect up systems. In value networks, lengthy SI projects are not a viable option, or indeed appropriate. Furthermore, the focus of new inter-organizational systems should not just be on exchanging information but also for facilitating the establishment of different types of relationships as well as to manage the myriad of third party content

providers. For example, it is likely that operators will establish different service levels with different content providers. It is also possible that different business models will underpin each of these relationships. New software systems must facilitate all these tasks. Self-service portals to automate the process of collaboration are a likely way forward.

One way is to view the relationship between network parties at five levels: business model, management reporting and administration, business process, service level, and network. Each level defines a set of terms and conditions (or policy) relating to the different dimensions of a partnership. Technology can support, and often automate, all five levels.

The network level is perhaps best understood and developed and where the focus of attention has been in developing inter-organizational systems. In the mobile eco- system, this level is concerned with facilitating the transmission of content through the wireless network. New technologies like Internet-based web services⁵⁵ permit operators to leverage the key assets of their physical transmission network. They can expose network capabilities, such as SMS, MMS, presence and location, making them easily available to content and service creators. This helps developers to create content more easily and speedily that takes advantage of the full capability of the operator network.

The traditional “sign-up” process for prospective content providers can be long, complex and expensive. It typically entails initial meetings and presentations, followed by negotiations, perhaps due diligence, and ultimate agreements of business model and service levels. Given the large number of potential content providers an operator may work with this process can be resource intense. However, today, technology can automate most of the process involved in collaboration. One scenario might be that through an operator portal potential providers can register, outline the service they would like to provide to customers and the network resources they would need. After an assessment is made within the operator, a frame agreement can be generated and appropriate service levels established. Third-party providers might, for example, be assigned different levels of privileges. For example, Blue partners might be tightly constrained and permitted to avail of a very basic service level and access to particular network resources; Platinum partners might have more privileges and be given full access to the network and network assets. The brand of the Blue partner will typically be weaker and less

recognizable than that of the operator; poor content from providers within this category could seriously undermine the brand of the operator. The Blue partner may possibly not be permitted to release content onto the operator network unless it is first checked by the operator. For Platinum partners, their brand may be as strong as or stronger than that of the operator and within their service level they may have permission to launch products directly onto the market over the operator network. Indeed, the privileges granted to premium brands may position them closer to an MVNO than a mere content creator.

The service level agreement is essentially the framework within which the business model is operationalized. It defines, among other things, access to transmission network resources (such as SMS, MMS, or presence) and when network resources can be used. The service level essentially determines the extent of trust that exists between operator and third-party provider. The service level will govern such aspects of the service as subscription/provisioning model, billing models, service lifecycle, media and content type. Additionally, an operator may sign a deal with a mapping service or payment service, so rather than all content providers who require these services for their offerings signing separate deals, they can piggy-back on this resource. Technologies can also facilitate the day-to-day management and administration of the relationship. Speedily reporting customer take-up of services, categories of customer using service are valuable information for content creators. Service quality and usage.

3. RESEARCH METHOD

3.1 STRATEGIC MANAGEMENT DEVELOPMENT RBV APPROACH

Husnah, et al. (2013) noted that according to David (2011) RBV approach to get a competitive advantage believes that company internal resources is more important than external factors in order to achieve and sustain competitive advantage. The RBV view proponents believe that organizational performance will be determined by a various internal resources that can be grouped by three broad categories: physical, human, and organizational resources. RBV theory found a real resource help companies seize opportunities and neutralize threats.

In the RBV approach, primary focus of an organization is resources and capabilities. Although the RBV approach focuses on analyzing company internal organization, but it does not mean ignoring important external factors. This approach links company's internal capabilities with external environment (what is requested and what is offered by competitors). Capability becomes a core competency when companies meet four criteria sustainable competitive advantage (Valuable, Rare, Imperfectly imitable, Nonsubstitutable/VRIN). Relationships VRIN criteria with Sustained Competitive Advantage (SCA) refers to the Barney (1991) framework (Husnah, et.al,2013). Competitive advantages that based on intangible assets will affect the superior performance achievement. Performance achievement divided into two non-financial and financial performance RBV analysis implementation should focus on identifying resources, which contain all sources of value identified in VRIN criteria. The powerful resource is a basis for developing a competitive advantage and build successful strategies. According to Hitt et.al. (1997), intangible assets are resources that can not be seen, it is difficult to understand and imitated by competitors. As a source of sustainable competitive advantage, managers prefer to use bottom "Intangible" resources of company capabilities and core competencies. Hitt at el. (2011) asserts that VRIN is a core competences. Core competences are a source of competitive advantage. The four criteria are described below:

Table 4. Four Criteria of Sustained Competitive Advantage (SCA)

Valuable Capabilities	Help a firm neutralize threats or exploit opportunities
Rare Capabilities	Are not possessed by many other
Costly-to-Imitate Capabilities	Historical : a unique and a valuable organizational culture or brand nama
	Ambiguous cause : The cause and used of a competence are unclear
	Social complexity : Interpersonal relationship, trust, and friendship among managers, suppliers, and customers
Nonsubstituable Capabilities	Not strategic equivalent

Source: Hitt et al. (2011), Husnah et al. (2013)

Hitt et al. (2011) defines resources as inputs to production process, such as goods capital, employees ability, patents, finances and talented managers. Generally, corporate resources can be classified into three categories: physical resources, human resources, and organization. Only one resource may not produce sustainable competitive advantage so it takes a combination and integration of collection in order to achieve competitive advantage. Capability is ability of a set resources to integrally perform a task or activity. Capability is result of an integrated resource group.

3.2 IDENTIFY VARIOUS PROSPECTS AND CHALLENGES FOR DAIRY INDUSTRY VALUE CHAIN

The paper is an attempt to identify various prospects and challenges for East of Java Dairy industry value chain and identifying various opportunities for organizations to provide critical standard infrastructure that will be improve value chain that supporting by efficiency of dairy supply chain.

Table 3: Common constraints and opportunities in Dairy Sector Development

Constraints	Opportunities
Small farms and small volumes of raw milk	Strong market demand for milk:upscaling of farms
Underutilization of capacity of dairy plants	Start-up of professional processors
Inadequate transport facilities	Improve infrastructure: roads,transport and trade
Lack of testing facilities	Set up milk-testing laboratories
Insufficient cold-chain facilities	Investment in cold-chain equipment,storage and transportation
Food safety and milk quality regulation absent or not enforced	Set up legislation and enforcement on food safety Quality assurance and quality based paymentsystems
Weak cooperation within dairy chain	Set up institutions for collectiveimprovement of quality and efficiency
Moderate technical and entrepreneurial skills	Training and education, improve farmer entrepreneurship
Insufficient poor-quality fodder	Commercial feed and fodder suply with better inputs and services
Low reproduction rates	Improve yong stock rearing Improve animal feed and supplements

Poor access to finance(&other services)	Improve animal health and veterinnary services Improve finance facilities improve regulations around collateral
Research and extension not tailored to needs of chain actors	Ta i l of-m ade practica l train i ng an d extensi on Research and development Training of trainers

Source: van der Lee andWestenbrink, 2014

Key Driving Forces in the Dairy Transformation. Includes two things: Demand drivers and Supply Shifters. (Daryanto, 2014)

Key Driving Forces in Dairy Transformation: *Demand Drivers* consists of fives thing. 1) Increased demand for agricultural (food) products caused by Population growth, income growth, increasing middle class, urbanization, longer life span and ageing population; 2) Diversification toward higher valued food cuased by diet shift, changing consumer preferences (food quality, food safety and food attributes); 3) Food spending is shifting from grains and staples to vegetables, fruits, meat, dairy, fish and processed foods, 4) Demand for ready-to cook and ready-to-eat foods is also rising, particularly in urban areas, and 5) More emphasis on food security and improved nutrition.

Key Driving Forces in Dairy Transformation: *Supply Shifters*. Consists of 7 important things: 1) Investment in agricultural research; 2) Value chain development; 3) Increase in scale of production and processing; 4) More emphasis on food security and improved nutrition; 5) Water and land scarcity; 6) Climate change; and 7) Less market protection (WTO, FTAs)

Major dairy products in Indonesia.

In contrast to the small scale of dairy farming, the dairy processing industry comprises major local companies (Indomilk and Ultra Jaya) and multinational companies (Danone, Frisian Flag and Nestle). The Indonesian Association of Milk Processors (IPS) represents the milk processing sector and its five largest members (Frisian Flag, Nestle, Sari Husada / Danone, Ultra Jaya and Indolakto / Indomilk) absorb about 85 percent of Indonesia's milk production. The major dairy processors by type of dairy product manufactured are as follows: • Liquid – 13 companies e.g. Ultra Jaya, Indomilk, Frisian Flag, Nestle, Greenfield; • SCM – 4 companies e.g. Frisian Flag, Indolakto; • Powdered – 12 companies e.g. Nestle, Sari Husada, Indomilk and Frisian Flag; • Ice – Cream – 4 companies e.g. Unilever, Indomilk, Campina, Diamond; • Yoghurt – 6 companies e.g. Yakult, Yummy, Danone, Diamond, Cimory. (IFC,2011)

Table 3. Statistical Data of Population and Production of Dairy Cow East Java

No	Type of Livestock (Dairy cows)	Year				
		2011	2012	2013	2014	2015
1	Number (tail)	296.350	308.811	237.673	245.246	255.947
2	Milk production (Kg)	0	554.311.690	416.418.654	426.253.895	472.212.765

Source: disnak. Jatimprov.go.id/2016

Based on table 3 above, the population of livestock in East Java tends to decline since 2013, gradually increasing again in 2014 and 2015 but not yet able to reach the number as in 2013. Similarly for fresh milk production following fluctuations in the number of livestock population that exist, on the other hand There is an increase in the amount of milk consumption and its derivative production so that it is fulfilled by imported products from other countries.

Indonesia still imports raw milk, raw materials for preparations. Therefore, local raw material supply only reached 798 thousand tons from 3.8 million tons requirement. "The rest is still imported in the form of skim milk powder, anhydrous milk fat, and butter milk powder from various countries, such as Australia, New Zealand, USA and European Union, citing the Director General of Agro Industry Ministry of Industry Panggah Susanto via press release in Jakarta, (Monday, October 10, 2016 / Tempo.co.) This is an opportunity as well as a challenge for domestic dairy farms to increase the production and quality of fresh milk, so that gradually the needs of milk raw materials for industry can be met from within the country.

3.3 METHOD SUGGESTION MODEL IN EAST JAVA

Dairy industry development includes various activities and models that have been done in Indonesia, such as Cimory Model, Nestle Model, PisAgro Model, Gapoknak Sugih Mukti Mandiri Model (Daryanto, 2014). Based on the empirical reality that has been implemented in East Java, between dairy cooperatives and commercial farms there are various roles from the provincial government. In East Java method Suggestion Model, we can learn from Nestle Model.

Collaboration Nestle with Dairy cooperatives. Farmers organized in Dairy cooperatives. Nestle support to Cooperatives through either technical of financial assistance. Support to improve the milk supply chain (milk collection and procurement activities), and to strengthen farmers viability (milk quality, feed & fodder, animal health, biogas). (Daryanto 2014; Nestle 2013)

Nestlé Milk Sourcing. Third party fresh milk supply dairy farmers + dairy cooperatives + dairy factory. The dairy cooperatives providing and serving members of the cooperative loans & training & control payroll (milk procurement). Dairy farmers loans & training (dairy development).

Every day is done 2 times the collection of raw milk, according to the standard that has been determined. There are more than 510 collection points, more than 250 cooling centers, more than 375 cooling units, of which 85% are direct cooling.

The dairy cooperative has a transport truck that supplies fresh milk from the cooling center to the dairy factory, 20 -300 Km distance to factory.

The other hand Nestlé Milk Sourcing, Includes activities Milk Procurement Section and Dairy Development department with dual functions.

Milk Procurement Section in the *short term* related to Volumes, Quality control, Suppliers (Coops) operational set up, Standards, Commitments. Dairy Development Section in the *long term*. Sustainable growth, Dairy farmers, Productivity improvement, Development projects , Sustainability of dairy farming, Commitments. The purpose of Develop trust of Nestlé FM suppliers for a long-term sustainable business relationship

4. RESULTS

4.1. MANAGEMENT DEVELOPMENT

Based on the constraint on the value chain the RBV approach provides an alternative to constraint and opportunity combinations (see table 3 previously). Supply chain requires companies / dairy cooperatives produce raw milk dg efficient and effective namely Customer Satisfaction. While the customer value chain responds to customer requests as part of strategic management that achieves Gaining competitive advantage.

Dairy value chain development comprises extension, input supply (feed, bull services, and veterinary services) milk production, dairy processing and milk and milk products marketing. The rapid increase in demand means Indonesia will remain heavily dependent on milk imports in the foreseeable futures, which creates an attractive market for foreign-based exporters.

Investment opportunities lie in scaling up production, introducing modern technology and improving farming methods. Greater capacity in cold storage and transportation is also needed to transport dairy products across the archipelago. Teaming up with local dairy cooperatives, which have established sourcing and distribution networks, will generally be the easiest way for foreign companies to enter the market and get access to farmers. As they need to boost their efficiency to compete with imported milk, local farmers should be interested in cooperation that can help them become more competitive.

Financial performance is influenced by intangible assets, resource qualification and also mediated by right selection of competitive strategy. Integration of intangible assets, competitive strategy and company financial performance become one solution in globalization phenomenon, especially in SMEs sectors. This is expected to provide useful information to stakeholders. The integration is based on concept.

Conformity strategy with resources owned are important for company performance improvement. Internal Resource owned and controlled by the corporation is used as a base in formulation and implementation the strategies to achieve optimal business performance. Company's (dairy Cooperative) survival or advantage depend on internal resources, as well as what strategies are chosen to empower those resources so they can respond to opportunities and challenges of the external environment (may using market based view).

4.2 LEARN FROM DAIRY INDUSTRY INDONESIA AND FOREIGN COUNTRY

In the RBV approach, primary focus of an organization is resources and capabilities. Although the RBV approach focuses on analyzing company internal organization, but it does not mean ignoring important external factors. Identify various prospects and challenges for East of Java Dairy industry value chain and identifying various opportunities for governmental organizations to provide critical standard infrastructure that will be improve value chain that supporting by efficiency of dairy supply chain.

Model Nestle in East Java Province (Daryanto 2014; Nestle 2014): 3 major focus areas for long-term development. Technical support through a team of Field professionals with relevant operational

background: animal husbandry, veterinary sciences, agronomy Variety of improvement programs aiming at increasing long-term sustainability performance of dairy Cooperatives & dairy farmers.

The activities *Milk Procurement*, *Dairy Development*, and *Environment*. Keep a variety of short-term and long-term. *Milk Procurement* in these activities that Focus: milk collection operational set-up. Objective of Milk Procurement activities : *fresh milk quality*. consist of : Improving *operational standards* (Nestlé standards, SOPs); Quality based payment system (*TPC base*); Investment programs (*credits*); Regular supplier operation audits (*compliance* with Nestlé standards & requirements); Facilitate import of critical equipment (*cooling tanks*); Suppliers yearly *competition*; *Dairy Development* in these activities that Focus: sustainability of dairy farming. Objective: *cow productivity*. *Feed & fodder*: cultivation of improved fodder; silage; cattle feed formulation; *Animal health*: mastitis prevention; deworming; *Herd management*: recording (to keep track of performance of dairy cattle population); water availability; *Competitiveness*: establish a network of dairy farmers for monitoring of cost of production (supporting pricing decision making process); *Environment* in these activities that Focus: water protection & renewable energy. Objective: *biogas*. Promotion of *biogas*; Joint project with HIVOS, set-up of units in large scale; Improvement of *cattle sheds*; Investment programs

4.3 FROM VALUE CHAIN TO VALUE NETWORK

The concept of a value chain has assumed a dominant position in the strategic analysis of industries.

There is an inadequate understanding of value chains, value chains starting from Customer Request - Value Chain - Product. Supply chain from Product Request - Supply Chain - Customer. Adopting a network perspective provides an alternative perspective that is more suited to New Economy organisations, particularly for those where both the product and supply and demand chain is digitized. (Peppard, & Rylander,2006)

The competitive realities of the “network economy” require that we rethink traditional methods for analysing competitive environments. Adopting a network perspective provides an alternative perspective that is more suited to New Economy organisations, particularly for those where both the product and supply and demand chain is digitized. (Peppard, & Rylander,2006)

The use of information and communication technology (ITC) is a necessity for the business world. Various operators and internet providers offer various advantages and uses that are claimed as user friendly. The use of ITC is undoubtedly a challenge as well as an opportunity for strengthening the value chain in the dairy industry.

5. CONCLUSION, IMPLICATION AND LIMITATION

5.1. CONCLUSION

The authors would offer some solutions to increase the value added in the dairy value chain and improvement in the income distribution in this value chain. The integration of all the activities involved in the procurement, conversion and logistics so that in the short term achieved customer satisfaction and in the long run gaining competitive advantage.

Thus according to the results and learning from the Nestle model is to identify constraints, based on RBV perspective by implementing opportunities in dairy sector development so as to eliminate key sector constraints across the value chain.

5.2. IMPLICATION

The role of government East Java Province, governance through policies that support law and regulation including private companies can not play, strengthening dairy farmers both individually and dairy cooperatives that connect to financial benefit. Financial performance is influenced by intangible assets, resource qualification and also mediated by right selection of competitive strategy. Integration of intangible assets, competitive strategy and company financial performance become one solution in globalization phenomenon, especially in SMEs sector :dairy cooperatives.

In an effort to maintain long term business relationship. Then it can be used force coercive power and non coercive power

5.3. *LIMITATION*

Key sector constraints across the value chain. Input, production, collection, processing, and market and or consumer, Should be earmarked through key person to stake holders of value chains.

There is a growing need to strengthen national capacity to design and implement peoplecentred programmes and policies; to strengthen national capacity to ensure that countries benefit from globalization, while minimizing its costs; to enhance citizen participation at all levels of governance and to foster partnerships between the State, civil society and the private sector for development.

Suggested further research combined with the related theories of financial management and management strategy, and based on the results of empirical research. Relationship marketing in dairy industry, RBV perspective on non coercive power

Reference

- Armstrong, Michael, 2006, *A handbook of human resource management practice*; 10th ed.; Cambridge University Press
- Armstrong, Michael. 2000. *Strategic Human Resource Management: A Guide to Action*. 2nd edn. London: Kogan Page.
- Berger, Bruce; 2008, *Employee / Organizational Communications*, Research Library,
- Bertucci, Guido and Alberti, Adriana, 2001, , Globalization and the Role of the State: Challenges and Perspectives , This paper draws upon the United Nations World Public Sector Report 2001 on “Globalization and the State” to which the authors of the present paper were among the major contributors.
- Daryanto, Arief, 2014, *Dairy Industry in West Java: Challenges and Opportunities*, Second Workshop on Capacity Building for Research: Promoting Inclusive Development of Agricultural Value-Chains, Collaboration between the University of Adelaide and a Graduate Program of Management and Business-IPB, Bogor, 27-31 October 2014. Ppt.
- Disnak-Jatim.Jatimprov.go.id, 2016, *data statistik produksi_2016*, Surabaya
- Demediuk, P., 2002, *Intellectual capital reporting: New accounting for the new economy*. *Asian Academy of management Journal*, 7 (7), 57-74.
- Hitt, M.A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal*, 44 (1), 13-28.
- Hitt, M.A., R.D., Ireland & R.E., Hoskisson. (1997). *Strategic management: Competitiveness and globalization*. Armand Adiyanto (penerjemah) *Manajemen strategis: Menyongsong era persaingan dan globalisasi*. Jakarta: Erlangga.
- Hitt, M.A., R.D., Ireland & R.E., Hoskisson. (2011). *Strategic management: Competitiveness and globalization: Concepts*. Ninth Edition. USA: South-Western Cengage Learning
- Husnah, 2013, Competitive Strategy Role in Developing SMEs with RBV Perspective: A Literature Review, *International Journal of Business and Behavioral Sciences*, Vol.3;No3; Marh 2013
- Madani ,Manuel., 2013, *Driving food & agri industries Southeast Asia, Connecting opportunities & leading innovation*, Global Business Guide Indonesia - 2013
- Peppard, Joe., & Rylander, Anna., 2006, From Value Chain to Value Network: Insights for Mobile Operator, Published in *European Management Journal*, Vol. 24, Issue 2, 2006.
- _____.¹⁹ See M. Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Free Press, New York, 1980; and *Competitive Advantage: Creating and Sustaining Superior Performance*, Free Press, New York, 1985.
- _____.²⁰ R. Normann and R. Ramirez, *Designing Interactive Strategy: From the Value Chain to the Value Constellation*, John Wiley & Sons, Chichester, 1994; C. Stabell and Ø. Fjeldstad, ‘Configuring value for competitive advantage: on chains, shops, and networks’, *Strategic Management Journal*, Vol. 19, pp. 413-437; C. Parolini, *The Value Net: A Tool for Competitive Strategy*, John Wiley & Sons, Chichester, 1999; D. Tapscott, D. Ticoll and A. Lowy, *Digital Capital: Harnessing the Power of Business Webs*, Harvard Business School Press, Boston, 2000; H. Hakansson and I. Snehota, ‘No business is an island: the network concept of business strategy’, *Scandinavian Journal of Management*, Vol. 5, No. 3, 1989, pp. 187-200; A.J. Campbell and D.T. Wilson, ‘Managed networks: creating strategic advantage’, in D. Iacobucci, ed., *Networks in Marketing*, Sage Publishing, London, 1996, pp. 125-143.
- _____.²¹ See F. Li and J. Whalley, ‘Deconstruction of the telecommunications industry: from value chain to value networks’, *Telecommunications Policy*, 26, 2002, pp. 451-472; P. Evans and T.S. Wurster, *Blown to Bits: How the New Economics of Information Transforms Strategy*, Harvard Business School Press, Boston, 2000; J.E. Ricart-Costa, B. Subirana and J. Valor-Sabatier, *Sources of Information Value: Strategic Framing and the Transformation of Information Industries*, Palgrave Macmillan, Basingstoke, Hampshire, 2004; F. Li, ‘The Internet and the deconstruction of the integrated banking model’, *British Journal of Management*, Vol. 12, 2001, pp. 307-322; M. Weiner, N. Nohria, A. Hickman and H. Smith, ‘Value networks – the future of the US electric utility industry’, *Sloan Management Review*, Vol. 38, 1997, pp. 21-40; H.R. Varian, *Effect of the Internet on Financial Markets*, Working Paper, School of Information Management and Systems, University of California, Berkeley, September, 1998; Ø.D. Fjeldstad, M. Becerra and S. Narayanan, ‘Strategic action in network industries: an empirical analysis of the European mobile phone industry’, *Scandinavian Journal of Management*, Vol. 20, 2004, pp. 173-196.

- _____ ²² R. P. Nielsen 'Cooperative strategy', *Strategic Management Journal*, Vol. 9, 1988, pp. 475-492; and J. Bleek and D. Ernst, *Collaborating to Compete: Using Strategic Alliances and Acquisitions in the Global Marketplace*, Wiley, New York, 1993.
- _____ ²³ R. Madhavan, B. Koka and J. Prescott, 'Networks in transition: how industry events (re)shape interfirm relationships', *Strategic Management Journal*, Vol. 19, 1998, pp. 439-459.
- _____ ⁵⁵ See *Web Services Interfaces – An Engine of Innovation*, Nokia White Paper, Helsinki, Finland, 2002.
See also J. Hagel III and J.S. Brown, 'Your next IT strategy', *Harvard Business Review*, October, 2001.
- Purnomosidhi, B. , 2006 . *Praktik pengungkapan modal intelektual pada perusahaan publik di BEJ. Jurnal Riset Akuntansi Indonesia*, 9 (1), 1-20.
- Tempo.Co.id, 2016, *Dirjen Industri Agro Kementerian Perindustrian Panggah Susanto, siaran pers di Jakarta*, Senin, 10 Oktober 2016, Tempo.Co.,Jakarta.