

CHAPTER I

INTRODUCTION

This chapter explains the background of the topic, problem identification, research objective, scope of the research and organization of this final project.

1.1 Background

Logistic issues still become a serious matter for Indonesian society. According to World Bank (2016), Indonesia's Logistic Performance Index (LPI) is at the 63rd rank among 160 countries. The LPI published by World Bank uses six assessment components, which are customs, infrastructure, ease of arrange shipments, quality of logistic services, tracking and tracing, and timeliness. The ranking can be seen in Table 1.1.

Table 1.1 Logistic Performance Index Ranking, 2016

2016 LPI			% of highest performer
Economy	Rank	Score	
Germany	1	4.23	100
Luxemburg	2	4.22	99.8
Sweden	3	4.2	99.3
Netherlands	4	4.19	98.8
Singapore	5	4.14	97.4
Malaysia	32	3.43	75.2
Thailand	45	3.26	69.9
Rwanda	62	2.99	61.6
Indonesia	63	2.98	61.5
Vietnam	64	2.98	61.3

(Source: Arvis et al, 2016)

Compared to the other ASEAN countries, Indonesia is far below Singapore, Malaysia and Thailand that ranked at 5th, 32nd and 45th, respectively. Indonesia's LPI ranking was also declining from 53rd in 2012 and 59th in 2014.

Indonesia's logistic cost is even the highest one among the other ASEAN countries with the value against Gross Domestic Product (GDP) is 28,4% or 1.820 billion rupiahs, while ideally the value of logistic cost is should not be more than 15% (Kemenperin, 2016). This statistic shows clearly that the cost of logistic Indonesia is still very expensive, due to the inefficient of enterprise's logistic activities.

This problem should be seriously considered by Indonesia. Many sectors that support logistic growth should be managed properly in order to raise the value of logistic performance in Indonesia. In Table 1.2 below, it is shown the growth of business sector in Indonesia from 2014 to 2016, with 2010 as the base year.

Table 1.2 Business Sector Growth (in %)

Business Sectors	2014	2015	2016
Agriculture, Forestry, and Fishery	4.24	4.02	1.85
Mining and Digging	0.72	-5.08	-0.66
Manufacturing	4.61	4.25	4.59
Procurement Electricity and Gas	5.57	1.21	7.5
Water Supply, Waste Management, Recycling	5.87	7.17	4.84
Constructions	6.97	6.65	7.87
Wholesale and Retail Trade; Repair Cars and Motorcycles	5.16	2.47	4.04
Transportation and Warehousing	7.36	6.68	7.73
Provision Accommodation, Food and Beverages	5.77	4.36	5.62
Communication and Information	10.1	10.06	8.28
Finance and Insurance Service	4.68	8.53	9.1
Real Estate	5	4.82	4.87
Company services	9.81	7.69	8.14
Administration, Defense and Compulsory Social Security	2.38	4.75	4.94
Educational Services	7.96	7.1	8.52
Health Services and Social Activities	5.55	7.45	5.26
Others	8.93	8.08	7.92

(Source: Kemenperin, 2016)

Agriculture sector is one of the sector which has important role at the integration of national development. It is because about 37,75 million of Indonesia's society are working as farmers. Unfortunately, in 2016, the production growth for this sector is still relatively low if it's compared to some other sectors with value 1.85%.

One of the agricultural sub-sectors is palm oil plantations. Palm oil is one of the major vegetables-oil-producing commodity which play an important role in the Indonesia economy. Aside from being a source of income for millions farmer's families, country's foreign exchange source, provider of employment, and trigger of growth of new economic centers, palm also plays a role in encouraging the growth and development of downstream industries based on palm oil in Indonesia (Kemenperin, 2016). One derivative product of palm oil is called Crude Palm Oil (CPO).

Based on the Presidential Regulation No. 28 in 2008 about national industrial policy, palm oil processing industry (CPO derivative) is one of the priorities to be developed and has higher added value. Crude palm oil is used as raw material by other industries as derivative products, such as cooking oil. Based on Kemenperin data in 2012, about 37% of total production of CPO is used to produce cooking oil, 52% is exported and the rest is for margarine, soap, and oleo chemical industry.

Cooking oil is one of the staple foods consumed by all levels of Indonesian society (both rural and urban areas), that makes the demand of cooking oil increases continually. Domestically, the growth of household demand does not only source from population growth, but also from the consumption per capita, because Indonesia has relatively high rate of cooking oil consumption. Those things are indicated by the average amount of cooking oil in Indonesia which reach 5,5 million tons every year. The latest data by 2015, demand of national cooking oil is 5,2 million tons (Hadinata, 2015).

Currently, Indonesia allegedly is having problems on the distribution of cooking oil. This allegation is based on the price disparity between the producers and the consumers, especially in the cities. In Jakarta, the capital city of Indonesia, there is a different in price of cooking oil between consumers and producers. The average price of cooking oil at a market in Jakarta is Rp 12 384 per kg. This price is far above the factory price of Rp 10,050 per kilogram (kg). When cooking oil

reach the market, ideally with the calculation of the profit and the cost of transportation, the price should not be more than Rp 11,000 per kg based on Kementerian Perdagangan regulation (GIMNI, 2016). In one side, the production of palm oil is only existed in certain region, while the producing factory is spread across several regions in Indonesia (see Table 1.3).

Table 1.3 Palm Oil Plantation VS Cooking Oil Factory

Palm Oil Producers		Cooking Oil Factory	
Province	Production (thousand tons)	Province	Percentage
Riau	6.499,8	North Sumatera	30,46 %
North Sumatera	4.147,7	Riau	24,83 %
Central Kalimantan	3.055,1	DKI Jakarta	13,01 %
South Sumatera	2.552,4	East Java	9,62 %
West Kalimantan	1.942,1	South Sumatera	7,18 %
Jambi	1.760,4	North Sulawesi	5,28 %
East Kalimantan	1.393,4	West Java	3,38 %
South Kalimantan	1.279,7	West Sumatera	1,97 %
		Lampung	1,74 %
		Central Sulawesi	0,70 %
		West Kalimantan	0,64 %
		Jambi	0,59 %
		Central Java	0,59 %

(Source: BPS, 2014)

In West Sumatra region, there are price fluctuation and price disparity between consumer and producer from 2010 to 2014 that can be seen in Table 1.4 and Figure 1.1.

Table 1.4 Consumer and Producer Price in West Sumatera (in Rp)

Staple Food	Consumer Price					Producer Price				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Premium Rice	7,354	9,312	9,490	9,622	10,716	6,483	8,242	8,244	8,663	9,597
Medium Rice	6,879	8,351	8,446	8,639	9,475	5,854	7,349	7,233	7,718	8,517
Red Chili	26,660	27,608	26,903	35,502	34,854	18,936	20,961	19,596	31,286	30,502
Onion	13,557	14,892	12,813	27,787	17,834	8,089	12,043	9,334	24,615	14,483
Beef	64,437	71,208	78,164	91,683	102,184	45,597	64,411	56,661	80,846	90,234
Broiler Chicken Meat	20,732	22,118	22,070	21,942	22,979	14,761	18,491	18,537	18,875	20,237
Eggs	927	1,055	1,039	1,123	1,159	728	921	908	971	1,008
Freshwater Fish	20,395	24,329	24,199	24,431	27,031	15,597	20,379	20,748	20,801	23,666
Sugar	11,224	11,114	12,282	12,470	11,622	5,155	9,969	8,543	11,135	10,575
Cooking Oil	9,540	10,551	11,273	10,435	11,587	4,357	9,275	8,100	9,405	10,445

(Source: BPS, 2015)

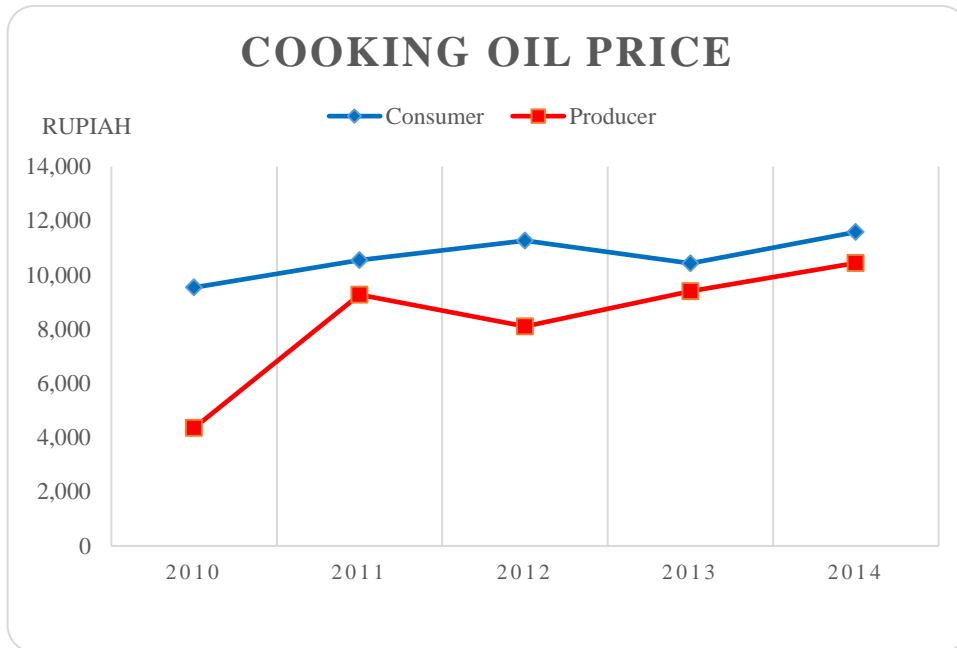


Figure 1.1 Cooking Oil Prices in West Sumatera (Source: BPS, 2015)

By these conditions, there are indications that the price fluctuation of cooking oil is due to the differences in cost of distribution. Gabungan Industri Minyak Nabati Indonesia (GIMNI) said that the distribution cost of cooking oil increases about 20%. It will affect the increasing of cooking oil's price (Amri, 2015). Cooking oil distribution margins are tending to increase, while margin is one of the efficiency indicators in distribution system. The increasing of distribution margin indicates that the distribution of the commodity is inefficient (BPS, 2015).

Thus, we need to improve efficiency and effectiveness in all logistic activities. The issue is, what the relevant indicators and metrics to manage the logistics of cooking oil in an effort to improve the efficiency and effectiveness. Indicator is a determinants of decision makers and information for planning and controlling logistic (Hadiguna, 2015). For enterprises, performance appraisal helps them to diagnose whether the adopted strategy and organizational structure will help them to achieve their goals. And the construction of performance appraisal indicators is also the first step for enterprises to conduct practical evaluations (Kuo, 2008). The performance indicators are used as the basis for assessing the performance in planning stage, implementation and thereafter. Determination of

logistic performance indicator needs to be investigated in order to fulfill the main objectives of logistic assessment which are cost reduction, capital reduction and service improvement (Krauth, 2005).

1.2 Problem Identification

Based on the background that has been described above, then issue that will be discussed is: what are the performance indicators of the logistics of cooking oil in Padang?

1.3 Research Objective

Objective of the study is to determine logistic performance indicators of cooking oil in Padang.

1.4 Limitation of Study

The scopes of this research are:

1. Research conducted for cooking oil logistic in Padang.
2. The observed products are cooking oil that is produced from palm oil.
3. Logistic concept used are Lean, Green, and Agile.

1.5 Outline of Report

Systematics of writings in this research proposal are as follows:

CHAPTER I INTRODUCTION

This chapter provides the background and underlying argument of the research. It also provides a brief discussion of the purpose of this research. Finally, a methodology and an overview of the organization of the final project are provided.

CHAPTER II LITERATURE REVIEW

This chapter provides a more in-depth review of the literature relevant to this research. Includes theories related to the concept of performance assessment, lean logistics, green logistics, agile logistics, Fuzzy method, Delphi method and Fuzzy-Delphi method.

CHAPTER III RESEARCH METODOLOGY

This chapter contains the steps to undertaken in the construction of this final project with a briefly explanation and completed with the flow diagram.

CHAPTER IV DATA AND ANALYSIS

This chapter provides the data that needed to perform the research. The data have been collected from literature and experts opinion and data-processing using Fuzzy Delphi method to get the set of performance indicators of cooking oil logistic.

CHAPTER V DISCUSSION

This chapter discusses the findings of the study by describing the descriptive findings. This chapter also examines the contributions made by this research. The results and implications of findings for knowledge and practices are discussed.

CHAPTER VI CONCLUDING REMARKS

The conclusions are drawn from the existing body of research, and limitations of the present study and directions for future research are highlighted.