

CHAPTER I

INTRODUCTION

A. Background of the Study

Fisheries and aquaculture are an important source of food and livelihoods for people along the coast and world's waterways (Smith et al., 2010a). The UN estimates that in 2050, global demand for protein will grow by approximately 40%, and knowing that resources for increasing land-based protein production will be scarce, the actual demand for sea-based protein is estimated to double. Aquaculture can be based on traditional, low technology farming systems or on highly industrialized, capital-intensive processes. In between there is a whole range of aquaculture systems with different efficiencies that can be adapted to local socioeconomic contexts. Advances in technologies for enhancing fish proliferation and multiplication, including synthetic fish feeds for large-scale production, manufacture and circulation of growth enhancers/ artificial growth promoters, use of chemicals for protection against pests and diseases, weed control, excessive and indiscriminate use of fertilizers causing acidity have hindered sustainability of fish (Jones, 2017).

An aquaculture is turning from the ocean to land-based agriculture to provide its protein feeds and oils. Those, a more sophisticated, planned and ecologically designed "aquaculture ecosystems" will become more widespread because they better fit the social-ecological context of both rich and poor countries. Currently, an eco-friendly aquaculture production takes place primarily in the world. Aquaculture is mostly done in extensive, semi-intensive, and intensive culture systems in ponds, pens, cages and coastal waters, especially for food and other useful purposes (Are *et al.*, 2010). The increasing demand for fish and other aquatic organisms for human consumption and exports has made aquaculture a very important sector in both developed and developing economies in South Korea. Fish is primarily a food source in the forms of protein, iron, zinc,

magnesium, phosphorus, calcium, vitamins A & C, while the marine fish is a good source of iodine (Asogwa, 2012). Standards and certification procedures are set by only a few certification agencies. Universal acceptance of any standard does not currently exist. The key to continued growth and development of organic aquaculture lies in resolving a number of issues that currently stand in the way of instituting internationally accepted certification standards.

According to Merriam (2018), eco-friendly is an adjective that literally mean not environmentally harmful or not harmful to the environment to the environment. The products and practices that contribute to green living and helps to conserve natural resource of air, water and energy (Lehoczky, 2009). In the view of Jones (2018), eco-friendly products help in preventing pollution or contamination of the air, water and land. This implies that eco-friendly is the practices that will lead to healthier living for inhabitants. Adoption of ecofriendly practices helps to eliminate the loss of freshwater in fish farm management. According to Guerrero (2000), through eco-friendly methods such as the use of reservoirs with “green water,” pro-biotic, sedimentation ponds with bio-filters, and recirculating water systems, the prevention of virulent bacterial outbreaks has been possible. In the submission of Jones (2018), the benefits of eco-friendly aquaculture practices are as follows: maintenance local water quality, freedom to operate or manage, waste is effectively managed, less emissions since fuel combustion may be totally avoided and customer demand for quality products are met. Others were more protein per unit area, reduced negative impact on wild fish thus population would increase, lower disease incidence and effective environmental resource management.

Worldwide Aquaculture (2018), referred to it as “innovative eco-friendly aquaculture system” called “Aqua pod System”. This is a new method of fish culture that uses of large cages made with wire and submerged under the water and allows rearing of the fish. The Aqua pod system is over the net or simple cage system that can withstand harsh weather conditions. It will hold up to a hurricane and protect fish from common predators. The Asia-Pacific region,

especially in the Asia sub-region, remains an important production area for aquaculture, showing steady growth in all cultural environments. Inland aquaculture production tripled from 10.8 million tonnes in 1994 to 43.3 million tonnes in 2014 and marine production increased by over 5.4 percent APR (7.6 million tonnes in 1994 to 21.9 million tonnes in 2014 over the same period). These increases far exceed the growth of aquaculture in the rest of the world. The rates of growth of aquaculture (animals only) between 2000 and 2014 in different environments (freshwater, brackish water and marine) are 6.3, 7.0 and 3.9 respectively (FAO, 2016b).

Furthermore, there are three Asia-Pacific regions (in particular the People's Republic of China, South Asia and South-east Asia sub-regions) have dominated global aquaculture production, both in quantity and value; the region contributed 65 186 257 tonnes of aquatic animals, amounting to 88 percent of the global total in 2014 (FAO, 2016b). South Korea is no exception and overfishing has left the nation with a severe depletion in its fishery resources. Hence, the paradigm shift from fisheries to aquaculture is necessary to meet the increasing demand for seafood. The Korean Peninsula is surrounded by water; seafood has long been consumed as a staple food for most Korean people. Statistical data indicates that aquaculture in 2013 has become the largest source of fish and seafood, with production reaching 1,535,344 Metric Tonnes (M/T). According to Euromonitor, Koreans' seafood consumption per capita was 56.1kg (fishery products and shellfish being 41.6kg and seaweed 14.5kg) in 2013. In the fishing industry production remains small in mountainous Korea, with production of just 25,413 M/T inland freshwater fisheries reported in 2013. The major fish species consumed by South Korean people are various frozen fish, Alaska pollock, shrimp and prawn, lobster and salmon.

South Korea has anticyclone zone with cold currents which is suitable for developing salmon farming with strong technological bases and fast experience in fisheries and marine research to fulfill salmon demand in Asia. In the case of Asia, salmon is mostly imported from distanced overseas production sites due to lack of production sites in Asia. Demand of salmon is quite high

domestically and internationally in fish markets and Korean restaurant because it can be accepted by most of the consumers. Donghae STF is a fast-growing salmon industry in Asia with a huge consumer market in the Asia Pacific region, and the company has successfully farms salmon all year round in Korea. The company created various of jobs for rural people, contributing to the local economy with a milestone to expand the salmon business under strong support of the government. With heightening awareness on the efficiency of food production and environmental pollution created by such production, salmon farming has received attention as a next generation growth industry with an efficient and eco-friendly nature. According to those brief background explanations, the researcher interested in conducting a research entitled “SWOT Analysis of Donghae STF Co., Ltd Offshore Salmon Farming from the depths of East Sea Goseong, South Korea”.

B. Research Problems

Based on the background of study, problem identification of this research is to analyze the SWOT Analysis of Donghae STF offshore salmon farming from South Korea. The problems that will be examined in this study are as follows:

- 1) What are the external factors may be importance for the competitive advantage of the Donghae STF?
- 2) What are the internal factors may be significant importance for the competitive advantage of the Donghae STF?
- 3) What is the best strategy for Donghae STF to gain and sustain a competitive advantage in the context of Asia salmon farming industry in the future?

C. Research Purposes

Based on the problems described above, the purpose of this study is to analyze the SWOT Analysis to generate strategic competitive advantage of Donghae STF. And it is will be arranged as follows:

- 1) To analyze the external factors that importance for competitive advantage of the Donghae STF company.

- 2) To analyze the internal factors that significant importance for competitive advantage of the Donghae STF company.
- 3) To identify the best strategy for Donghae STF to gain and sustain a competitive advantage in the context of Asia salmon farming industry in the future.

D. Research Benefits

This research is expected to yield following benefits:

1. Theoretically, the results of this research are expected to give more understanding about the SWOT analysis theories in the salmon farming industry to generate competitive advantages for future researchers who want to conduct research in same case.
2. Practically, it is expected to be a data evaluation for the company Donghae STF to improve the quality of their products by using SWOT analysis to sustain competitive advantage.

E. Systematics of Writing

This research's systematic of writing, arranged as follows:

CHAPTER I : INTRODUCTION

This chapter includes introduction which consists of background of study, research problems, purposes of the study, benefits of the research, and the explanation of writing systematics.

CHAPTER II : LITERATURE REVIEW

This chapter contains theoretical background of variables used in this study. They are summary of previous studies and theoretical framework.

CHAPTER III : RESEARCH METHODOLOGY

This chapter explains the methodologies of the research. It provides the information about research design, operational definition, source of data, data collecting technique, instrument analysis, data analysis, and hypothesis testing.

CHAPTER IV : DATA ANALYSIS AND DISCUSSION

In this chapter, there are results of data analysis and the discussion as the implication for this study.

CHAPTER V : CONCLUSION

In this last chapter covers summaries and results of the research. It deals conclusion, research limitation, implication of study and research suggestion.