

# CHAPTER I

## INTRODUCTION

### I.1 Research Background

Coffee is a beverage derived from the processing and extraction of seeds of the coffee plant. Coffee is known as a food commodity that has a high market. In the world, Indonesia is the fourth largest coffee producer after Brazil, Vietnam and Colombia. In ASEAN, Indonesia is the country with second largest coffee exporters and fourth-largest importers of coffee (Dr. Ir. Suwandi, 2016).

Table I.1 The Results of Consumption of Coffee Projections in Indonesia, 2016-2020 (Dr. Ir. Suwandi, 2016)

Year	Consumption (Kg/kap/year)	Population (000 people)	National Consumption (Ton)	Growth (%)
2016**)	1,168	258,705	302,176	
2017**)	1,162	261,891	304,231	0.68
2018**)	1,155	265,015	306,183	0.64
2019**)	1,149	267,974	307,915	0.57
2020**)	1,143	271,066	309,771	0.6
Average Growth				0.6225

Based on Table 1.1 it can be seen that the average growth of coffee consumption in Indonesia from 2016 for 5 years at 0.62%. According to this Ministry of Agriculture projections, each year the national consumption increased by 1899 tonnes. This can be caused by many reasons, such as changes in lifestyle of the people, the increasing number of coffee shops, café, and restaurant serving coffee as a beverage (Soenarto, 2016).

Increasing of public interest in the coffee does not only happen in Indonesia. Based on the projected availability of coffee in ASEAN countries conducted the Ministry of Agriculture (Dr. Ir. Suwandi, 2016), it can be seen that over the next

five years, the average growth in the availability of coffee increased by 7.44%. It can be a picture that the coffee export market in ASEAN level is very high.

Coffee consumption growth leads to increased demand on farmers and the production of coffee. This is supported by the results of Projection Coffee Production in Indonesia in 2016-2020 (Dr. Ir. Suwandi, 2016), which states that the average growth of coffee production by 2.25%, which means that in 2020 coffee production in Indonesia amounted to 692 906 tons or an increase of 9.21% compared to the production in 2016.

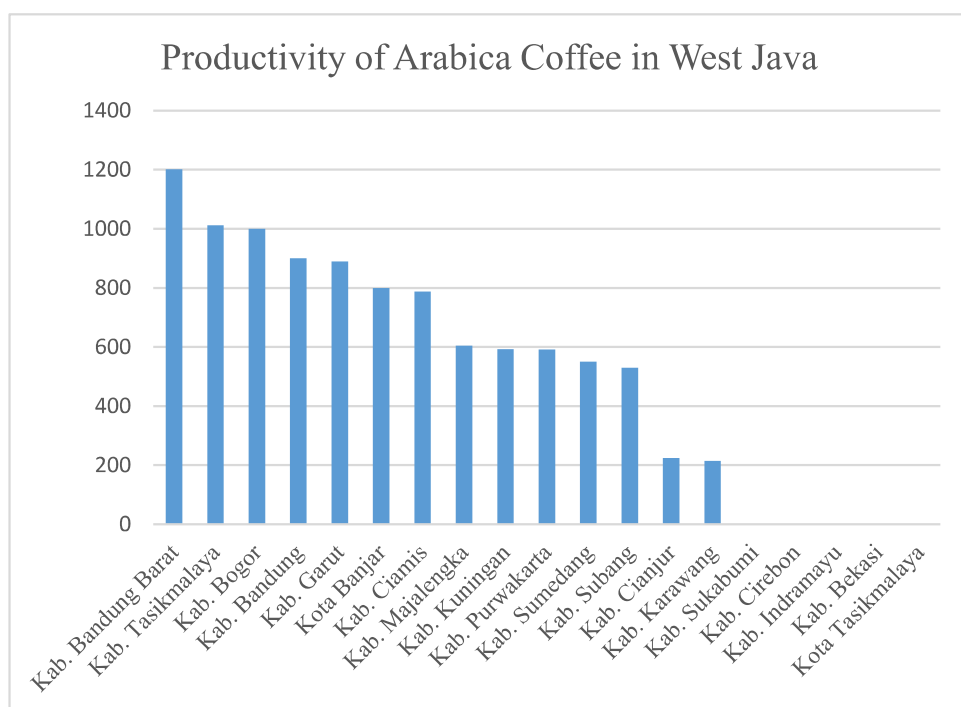


Figure I.1 Productivity in Arabica Coffee Plant in West Java 2015 (Ir. Gamal Nasir, 2015)

West Java is known as one of the coffee bean producing regions in Indonesia. By 2015, people's plantation in West Java has 10.134 hectares of arabica coffee area production with a production of 9894 tons (Ir. Gamal Nasir, 2015). Among the 19 cities / regencies in West Java which produces coffee, Kab. Bandung Barat has the highest productivity with a number of 1201 kg / ha followed by Kab. Tasikmalaya and Kab. Bogor (Ir. Gamal Nasir, 2015).

Lembang, one of the coffee-producing areas in the West Bandung famous with the Arabica coffee production. Arabica coffee known as the coffee can only be grown in the highlands, has a diverse flavor notes, and commercial value greater than robusta coffee. About 80% of the coffee grown in Lembang consist of Arabica, with Robusta in the rest (Tisna, 2016), this is because the maximum Arabica coffee will grow best at an altitude of 1000-2000 meters above sea level.

Arjuna Coffee is one of the coffee processing company located in Lembang, Bandung. In 2016, Arjuna Coffee collecting coffee from approximately 200 coffee farmers who are in Lembang, both robusta and arabica coffee types with a total harvest amounted to 93.61 tons. Buyers of Arjuna Coffee consists of various backgrounds and areas, such as coffee exporters, hotels, coffee shops in Bandung and Jakarta, as well as hand-carry buyers both within and outside the country.

Arjuna Coffee sells coffee in various forms, namely in the form of HS (horn skin), green bean, roast bean, powder as well as the form of various types of coffee drinks that processed in their own shop. Coffee fruit is still shaped in cherry can be processed in the form of roast bean or powder with a high selling price.

Table I.2 The sales of coffee in Arjuna Coffee in 2015-2016

No.	Type	Number of Sales (kg)	Percentage (%)
1	HS (Horn Skin)	70312.1	91.91
2	Green Bean	5361.25	7.01
3	Roast Bean	672,2	0.87
4	Powder	150	0.19
Total Sell		76495.55	100

(Source: owner)

In 2016, from total harvest 81 tons, sales of HS to exporters buyer amounted to 70 tons, while the rest is processed into green bean, roast bean, and powder. Arjuna Coffee has a quite small area to process their crops. The existing production area is done in the basement and only about  $2-3m^2$  while the drying area is  $10m^2$ . However, due to this, many crops just dried and sold directly in the form of dried cherry or green bean, which is less profitable because there is no value given on the product. Coffee harvest that occurs only 2-3 months per year make not all of the

coffee cherries can be processed into a powder and roast coffee bean in the existing area of Arjuna Coffee.

The high market demand, increased production of Arjuna Coffe, as well as the expansion of coffee plantations are being conducted in Lembang, make Arjuna Coffee need to expand a new facilities for the processing and storage of coffee.

Feasibility analysis study conducted to determine whether the established of new facilities Arjuna Coffee feasible if viewed from the aspect of the market, technical aspects, environmental aspects and financial aspects. In the analysis of aspects of the market, it will be measured how much waste and industrial waste harvest of coffee produced in the area of Lembang, West Bandung. In technical aspects, will be determined placement of new facilities, facility layout, equipment needs, transportation, and human resource needs. The feasibility analysis is reviewed based on the fourth aspect to provide information that can assist Arjuna Coffee in considering the decision to implement the establishing of new facilities.

## **I.2 Problem Formulation**

As for some aspects will be discussed in the analysis of the feasibility of established of new facilities Arjuna Coffee is as follows:

1. How does the feasibility aspect of the market in the establishment of new facility of Arjuna Coffee Making?
2. How do the technical aspects in the establishment of new facility of Arjuna Coffee Making?
3. How is the financial aspect in the establishment of new facility of Arjuna Coffee Making?
4. How is the sensitivity and risks rate in establishment of new facility of Arjuna Coffee Making?

## **I.3 Objectives**

The purpose of the analysis of the feasibility of establishment of new facility Arjuna Coffee is as follows:

1. Analyze the feasibility in establishment of new facility of Arjuna Coffee Making in term of market aspects.
2. Analyze the feasibility in establishment of new facility of Arjuna Coffee Making in term of technical aspects.
3. Analyze the feasibility in establishment of new facility of Arjuna Coffee Making in term of financial aspects.
4. Analyze the sensitivity and risks in establishment of new facility of Arjuna Coffee Making.

#### **I.4 Benefits of Research**

Benefits to be gained from this research are:

1. Help Shop owner Arjuna Coffee in determining the feasibility of establishment a new facility.
2. Increase public knowledge about coffee production in Lembang.

#### **I.5 Research Limitations**

Analysis of the feasibility study that examined the problems with ketebatasan that is not too broad and obtain results in accordance with its intended purpose. The boundary problem of the feasibility study is as follows:

1. Interest rate, inflation tax, and other economic conditions are considered constant during the research is conducted.
2. This research only calculate the feasibility of the new facility of Arjuna Coffee.

## **I.6 Writing Systematics**

The writing systematics of this research is described as follows:

### **Chapter I Introduction**

This chapter describes about the background of research, problem identification, the purpose of research, the benefit of research, the limitation of research, and writing systematics.

### **Chapter II Literature Review**

This chapter contains the detail description of literature study that examined from the existing researcher as supporting references in conduct this research. In addition, this chapter will discuss the related theory and method that will be used to solve the problem.

### **Chapter III Research Methodology**

This chapter contains detail steps explanation of the research that includes: problem identifications stage, hypotheses formulating and model developing stage, identifications and conduct variable operational, compile research questionnaires, design data collecting and processing, design data processing analysis.

### **Chapter IV Data Collection and Processing**

This chapter is part of the Final Project describing the process of collecting and processing the related data in this research.

### **Chapter V Analysis**

This chapter is part of the Final Project that describes the analysis performed on the data that has been obtained and the proposed improvement.

### **Chapter VI Conclusion**

This chapter is part of the Final Project that explains the conclusions of the research that has been done and the suggestions provided based on this research.