CHAPTER I
INTRODUCTION

1.1 Background

The population of Indonesia has reached 252,164,800 people as of 2014 according to Badan Pusat Statistik (BPS) Indonesia (2016). Additionally, income level per capita of the people has reached 45.18 million rupiah per capita in 2015 (BPS, 2016). In addition, there is projected economic growth of 7% in 2017. The economic condition of Indonesia enabled the people to meet their primary needs which propelled them to satisfy the secondary needs such as leisure or consumption of superior goods and services.

According to the World Bank (2016), food and beverage are the number one spending of the people in Indonesia contributing about 48.55%, followed by housing at 11.60%. Included in the food and beverage spending, dessert is highly sought by the people. One popular dessert is ice cream which has achieved consumption level of 0.6L per capita per year in Indonesia according to Campina’s Director, Samudera Prawirawidjaja (SWA, 2014). Although the number is small, considering the huge population, there is significant market for ice cream. In addition, Indonesia has tropical climate and temperature ranging from 22°C to 33°C the consumption of cold dessert such as ice cream is expected to be increasing overtime.

Ice cream industry in Indonesia is not only for the big companies, but also for smaller scale productions such as ice cream shops. The emergence of new
flavors accelerates the growth of the industry. The emerging market for the product demands for more innovative variants. Although ice cream is consumed for the flavor, there is a gap in the nutritional benefit which could increase the value of ice cream as a dessert. One nutritional benefit that can be added into ice cream is dietary fiber which can only be found on food of plants origin. Dietary fiber is essential for normal digestion process. Dietary fiber also helps in regulating blood sugar since it slows down sugar absorption into the body. The daily requirement of 25 grams of dietary fiber has not been met by the people on average and it is difficult to encourage the people to consume more dietary fiber as their palate seek more pleasure from carbohydrate and fats. This is especially true for children who value flavors above nutritional values. Banana blossom ice cream is expected to help in fulfilling the nutritional requirements while being enjoyable for consumption.

Banana blossom (Musa balbisiana) is a good source of dietary fiber that is readily available within reach of the people at affordable price. The fiber content is banana blossom is 20 grams per 100 grams of fresh blossom and 17 grams per 100 grams of the dehydrated blossom (Wickramarachchi and Ranamukhaarachchi, 2005). On top of that, fresh banana blossoms also contain 170 mg of Vitamin A, 0.05 mg of Vitamin B1, and 10 mg of Vitamin C per 100 grams (Direktorat Gizi Departement Kesehatan RI, 1992). Therefore, banana blossom is a good additional ingredient in developing ice cream to enhance the intake of dietary fiber in the population. Furthermore, coconut milk is an emulsion of coconut (Cocos nucifera) contains medium-chain triglyceride such as Lauric acid which is
easily converted into monolaurin which has antibacterial properties (Lieberman et al, 2006).

1.2 Research Problem

The popularity of ice cream in the domestic market compared to other types of sweet food is answered by the plethora of choices for the consumers. Today, the health awareness is equally high where people tend to choose their desserts according to their taste and health benefits. Developing banana blossom ice cream is expected to provide a healthy and tasty dessert for everyone. The formulation of ice cream requires various modification especially the fat content. Banana blossom contains high amount of fiber due to its plant origin, which improves the nutritional value of the ice cream. Coconut milk is utilized to increase the economic factor while keeping the fat content at targeted level. Therefore, this study aims to develop banana blossom ice cream using banana blossom and find the best combination of coconut milk and fiber concentration which helps in fulfilling dietary fiber requirement as well as the commercialization process of the resulting ice cream.

1.3 Objectives

The objectives of this experiment are comprised into general objective and specific objective.

1.3.1 General Objective

The general objective of this study is to develop ice cream using banana blossom (Musa balbisiana) and to observe the possibility for product commercializing.
1.3.2 Specific Objective

The specific objectives for this research include:

1. To determine the best combination of coconut milk and banana blossom for ice cream based on preferences test.

2. To determine dietary fiber content of the best formulation ice cream using banana blossom.

3. To create a business plan for the ice cream.