

# Marketing analysis and feasibility analysis of coffee (*Coffea sp*)

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**Abstract.** Coffee is a natural resource that has economic value and is also a mainstay commodity for most farmers and is increasingly promising as the market expands. The purpose of this research is to identify and analyse the marketing flow and to analyse the feasibility of a coffee business. This study uses data analysis to see the feasibility of a business by looking for total costs, total revenue and revenue cost ratio (R/C). The results obtained from this study indicate that the coffee marketing channel has 2 different channels involving farmers, small traders, level 1 collectors and consumers. The business feasibility of this study shows that the total fixed costs incurred are IDR 1,000,000/year and the total variable costs incurred is IDR 6,000,000/year, so that the total costs incurred are IDR 7,000,000/year. The revenue obtained is 9,600,000 IDR/year, the result is obtained from a total production of 480 kilos and a selling price of 20,000 IDR/kilos, per kg. The conclusion is that coffee deserves to be done development because the R/C obtained  $> 1$  is 1.37.

## 1. Introduction

Coffee is a natural resource that has economic value. If the results of the coffee commodity can be utilized by the industry properly, it will produce a resource-based industry that has the potential to increase foreign exchange reserves and provide employment [1]. Coffee-based beverage ingredients that are familiar. Its fragrant aroma, unique taste, and properties that can provide freshness to the body, make coffee quite familiar on the tongue and favoured by the community. Indonesia is the fourth largest producer of coffee in the world after Brazil, Vietnam and Columbia, with a large foreign exchange contribution [2].

The coffee business is increasingly promising with a wider market, but often farmers do not benefit from the added value of the coffee that has been processed. This is because the export of raw coffee (beans) is cheaper than coffee that has been processed. The demand for processed coffee has now begun to increase, and so that farmers remain getting added value from coffee is by processing the coffee beans into a ready-to-eat product [3]. Coffee is the second most important export commodity in global trade, after oil. Coffee is produced by more than 70 developing countries, of which 45 countries supply coffee up 97% that has spread throughout the world [4].

Coffee (*Coffea sp*) is a tree-shaped plant species belonging to the Rubiaceae family and the *Coffea* genus. Coffee (*Coffea sp*) is also a mainstay commodity for most farmers, because most of the time to meet their daily needs is obtained from coffee production [5]. Efficient marketing is needed in



marketing the coffee production of farmers. In efficient marketing, one of the factors that must receive main attention is the price level and price stability itself, because the level and stability of prices have a very strong influence on farmers [6]. The purpose of this research is to identify and analyse the marketing flow and to analyse the feasibility of a coffee business.

## 2. Methods

This research was carried out in April to June 2020. The place of this research is in Pakpak Bharat Regency, North Sumatra Province. Collecting data in this study using a questionnaire to collect primary and secondary data. The primary data collection was carried out through interviews and discussions with communities involved in the use and marketing of coffee. The secondary data covering include the public condition of the location or the general data available in government agencies.

### 2.1 Data analysis

To see the feasibility of a business includes calculating the total operational costs and revenues. In calculating the total cost, you can use the following formula.

$$TC = TFC + TVC \quad (1)$$

Information:

TC : Total Cost (IDR)  
 TVC : Total Variable Cost (IDR)  
 TFC : Total Fixed Cost (IDR)

Then to find out the total revenue, you can use the following formula.

$$TR = P + Q \quad (2)$$

Information:

TR : Total Revenue (IDR)  
 Q : Quantity/quantity of production (Kg)  
 P : Price/selling price (IDR)

Next, look for the revenue cost ratio (R/C) or as a comparison between revenue and costs. R/C is useful for knowing whether the coffee business generates a profit or not from the costs incurred. It can be formulated as follows. After getting the total cost and revenue value, an R/C is looked for to see the feasibility of the business whether it gets a profit or a loss. To find R/C, you can use the following formula.

$$R/C = TR/TC \quad (3)$$

Information:

R/C : Revenue cost ratio  
 TR : Total Revenue (IDR)  
 TC : Total Cost (IDR)

With the provisions if:

R/C > 1 = business is feasible (profit)  
 R/C < 1 = the business is not feasible to run (loss)  
 R/C = 1 = the business is not feasible to run (just break-even) [7]

### 3. Results and discussion

Marketing is a post-production component that needs more attention because marketing is one of the keys to business development. If marketing is not paid attention to, the business may suffer losses [8].

#### 3.1 Marketers

In this study, those involved in the marketing of coffee distribution consisted of farmers, small collectors, first-level collectors and consumers. For more details, it can be seen as follows:

##### 1. Farmers

Farmers are marketing actors who process raw materials (Farmers usually collect raw materials and then immediately process them into finished materials that can be marketed).

##### 2. Small collecting traders

Small collectors are marketers who buy coffee from farmers in small quantities which will later be sold to collectors in cities (markets). Small collecting traders are located in the village

##### 3. Collector level 1

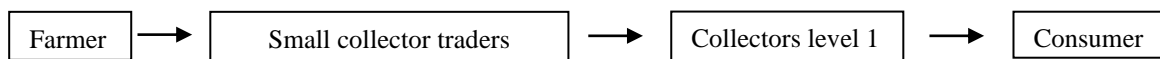
Level 1 collectors are marketers who deal directly with consumers. Level 1 collectors make purchases of small collectors which will later be sold to consumers.

##### 4. Consumers

Consumers are the last marketing actors, which are generally households who use coffee for their consumption.

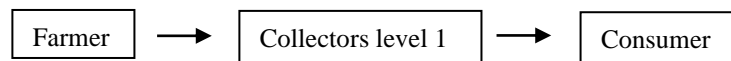
#### 3.2 Marketing flow

The marketing flow is a channel from agents that have activities to distribute goods from producers to consumers. The existence of this marketing channel will affect the size of the marketing costs and the size of the price paid by consumers. Coffee marketing channels can be identified by following the flow of coffee marketing from producers to consumers. The marketing channels found consisted of:



**Figure 1.** Marketing flow 1

In marketing flow 1, farmers sell their processed products to small collectors in the village, then small collectors sell them to retailers in the market and finally collectors' level 1 them to consumers.



**Figure 2.** Marketing flow 2

In the second marketing flow, the farmers sell their processed products to level 1 collectors in the market and finally market them to consumers.

#### 3.3 Feasibility analysis

Coffee processing is still done traditionally and using makeshift tools. The exploitation feasibility analysis carried out here is to use the assumption, if the tools used are investments from the community as business actors.

**3.3.1 Coffee fees, revenues, and business revenues.** The costs incurred by farmers for cultivating coffee are fixed costs which include investment costs for tools, the tools used are simple tools, assuming the farmers do not process coffee in the village, but only harvest and dry naturally. Variable costs include the operational costs of farmers in cultivating coffee beans.

**Table 1.** Cost of coffee business

No.	Cost	Total (IDR)
1.	Fixed Cost	1,000,000
2.	Variable Cost	6,000,000
		7,000,000

In Table 1, the total cost incurred is IDR 7,000,000. These results are obtained from the sum of fixed costs of IDR 1,000,000 and variable costs of IDR 6,000,000.

**Table 2.** Business receipts of coffee

No	Description	Value
1	Number of production (kilos)	480
2	Selling price	20,000 IDR
3	Total Revenue	9,600,000 IDR

Based on Table 2, the total revenue was IDR 9,600,000. These results are obtained from multiplying the amount of production by 480 kilos with a selling price of IDR 20,000 per kilos. From the two tables above, it is known that the revenue received is greater than the costs incurred. So that the business experiences profits, which means that the business is feasible to continue.

3.3.2 *Revenue cost ratio.* To see the feasibility of this coffee business can be seen in the following table.

**Table 3.** Calculation results of R/C for coffee business

No.	Description	Value/year
1.	Revenue	9,600,000
2.	Total Cost	7,000,000
	R/C (revenue/cost)	1.37

From Table 3 it can be seen that the R/C value obtained is 1.37. Thing it shows that the coffee business is feasible to run. This is in accordance with [9] stating that the value of  $R/C > 1$  means that the business experiences profit (feasible to run).

#### 4. Conclusions

Based on the research results it can be concluded that the coffee marketing channel has two marketing channels involving farmers, small collectors, collectors' level 1 and consumers. The total cost incurred was 7,000,000 IDR/year and the total revenue was 9,600,000 IDR/year, so that the coffee business was feasible to develop because the R/C obtained was  $> 1$ , which was 1.37.

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