

Analysis of the Voerseri Business Feasibility Study (a Packaged Bird Feed from Singapore Cherry)

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Abstract: *Voerseri is a packaged bird feed made from singapore cherry. Voerseri is one of the developing businesses in the city of Medan. This is due to the large number of chirping bird lovers in the city of Medan. Analysis of the voerseri business feasibility study was conducted to see how the business feasibility of Voerseri was from the marketing aspects, technical and production aspects, organizational and management aspects, and financial aspects. Some things that are examined in the marketing aspects are competitors, market share, and marketing mix. As for those discussed in the technical and production aspects, namely production sites, raw materials and additional materials, as well as the production process. For organizational and management aspects discussed, namely the organizational structure, and the role of each part of the work. While the things studied in the financial aspects include variable costs, fixed costs, and business feasibility criteria which include Break Even Point (BEP), R/C ratio and B/C ratio. The result of the calculation of the feasibility of the financial aspects of the Voerseri Business is that it will reach BEP by selling 78 units of products or Rp. 1,319,357.26 every month. R/C ratio obtained is equal to 1.32, which means that this business is feasible to be cultivated while the B/C value obtained is equal to 0.32, which means this business does not provide benefits to business actors.*

Keywords: *Voerseri, Feasibility, Marketing, Technical and Production, Organizational and Management, Financial*

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I. Introduction

Nowadays more and more people have a hobby to care for birds, especially birds chirping because chirping birds have a sweet and beautiful voice that can make the listeners calm and happy, besides that the event of birds chirping with fantastic prizes makes people more excited to raise birds and began to form many community of bird lovers.

Urban communities, especially men, are considered to be more likely to care for birds than women, especially communities of bird lovers, which are mostly found in cities, especially in Medan, with male members and hobbies that are a lifestyle because if they have achievement birds who have achievements achieved in the race will raise the social status between bird lovers.

For this reason, Voerseri also serves as the main feed as well as an alternative feed for supporting the performance of birds, especially banana-eating birds because the habitat in the wild banana-eating birds also eat a number of available fruits, so we assume that the bird can improve its performance when using natural foods which we formulated.

Voerseri is a voer or main feed made from kersen fruit. Kersen fruit in the wild is freely available and is not utilized by the people/humans but on the contrary is very popular with birds chirping such as trucukan birds, green cucak or cucok ijo, then other types of prawns. This is what makes our voices sure that it can be accepted by the community because the price can be cheaper and later for fruit-eating birds, it is hoped that they will find their best performance when they consume this voerery.

This study aims to analyze the feasibility study of voerery business in Medan City.

II. Research Methodology

2.1 Types of Research

This research is a descriptive research. Descriptive research in this study contains business feasibility in terms of various specific aspects. Such as the Marketing Aspects, Technical and Production Aspects, Organizational and Management Aspects, and Financial Aspects.

2.2 Research Sites

This research is about the Analysis of The Voerseri Business Feasibility Study (a Packaged Bird Feed from Singapore Cherry) which is located at Jl. Gn. Pusuk Buhit No.11, Kec. Medan Timur.

2.3 Analysis Methods

The analytical method used in this study consists of several aspects, namely:

Marketing Aspect

- a. Analyze competitors
- b. Analyzing Market Share
- c. Analyzing the Marketing mix

Technical and Production Aspects

- a. Analyze production sites
- b. Analyzing raw materials, additional ingredients
- c. Analyze the production process

Organizational and management aspects

- a. Analyze organizational structure
- b. Analyze the role of each part of work

Financial aspects

- a. Analyze used variable costs
- b. Analyzing the costs remain in use
- c. Analyze the cost of the product
- d. Analyze income
- e. Analyze feasibility based on BEP units, BEP prices, B/C as well as R/C products.

$$TC = TVC + TFC$$

Where:

TC = Total cost

TVC = Total variable cost

TFC = Total fix cost

The calculation of the cost of the product is made for selling prices by first determining the number of production to be carried out in a month and the variable costs incurred per product can be seen by calculation:

$$HPP = \frac{TC}{Q}$$

$$AVC = \frac{TVC}{Q}$$

Where:

HPP = Harga pokok produksi or cost of goods sold

TC = Total cost

Q = Quantity

AVC = Avarage variable cost

TVC = total variable cost

Calculation of revenue, and calculation of benefits through equations:

$$TR = P \times Q$$

$$B = TR - TC$$

Where:

TR = Total revenue

P = Price

Q = Quantity

B = Benefit

TC = Total cost

Feasibility analysis is used to identify problems in the future, so as to minimize the possibility of missed results to be achieved in an investment. In other words, the feasibility analysis will calculate the things that will hinder or the opportunity of the investment that will be carried out.

Financial aspects use calculations:

BEP is a point of the amount of production or sales that must be done so that the costs incurred can be covered back or the value where the profit received by the small and medium business is zero.

$$BEP \text{ unit} = \frac{TFC}{P - AVC}$$

or

$$\text{BEP rupiah} = \frac{\text{TFC}}{1 - \text{AVC} / \text{P}}$$

Where:

TFC = Total fix cost

P = Price

TFC = Total fix cost

Calculation of R/C ratio is a comparison between total revenue and total costs, which shows the value of receipts obtained from each rupiah spent.

$$\text{R/C Rasio} = \frac{\text{TR}}{\text{TC}}$$

Where:

TR = Total revenue

TC = Total cost

Calculation of B/C ratio is a comparison between total income and costs, which shows the value of income obtained from each rupiah spent.

$$\text{B/C Rasio} = \frac{\text{B}}{\text{TC}}$$

Where:

B = Benefit

TC = Total cost

III. Research Results and Discussion

3.1 Feasibility Analysis of Marketing Aspects

a. Competitor

The competitors for the "Voerseri" business are concoction of bird feeds such as "Kiba Sari" and others which are both concoction of bird feed. "Kiba Sari" bird feed is bird feed made from a mixture of crickets, kroto, honey and so on which are sold for Rp. 30,000/pack.

b. Market share

The "Voerseri" market share is quite wide, namely by targeting the market throughout Indonesia to foreign countries with consumers from all circles of chirping lovers because the prices set by "Voerseri" are quite affordable.

c. Marketing Mix

Product

Voerseri produces concoction of bird feed made from series fruits and is the only Kersen/series Voer in Indonesia. Voerseri produces the product of coarse voer with smooth voer, where smooth voer is given for small birds, while rough voer is given for large birds such as the magpie of stone, cucak ijo, cucak beard and others. Voerseri products are produced with 200 gr product sizes for each package.

Price

The price set on Voerseri is determined by a certain calculation so that it can be determined that the Voerseri price for each package is sold at Rp. 20,000, while for resellers it is sold at Rp. 17,000, -.

Promotion

Voerseri's product promotion is dominated by online, this is due to the focus of sales based on online using my social media network and google business, while going through print media by distributing brochures, making banners and posters.

Distribution

Voerseri product distribution is still fairly simple, namely from producers to resellers to consumers, as well as from producers to consumers.

3.2 Feasibility Analysis of Technical and Production Aspects

a. Production Location

The Voerseri Production Location is a place that is used to produce Voerseri products in other words production houses which are located at Jl. Mr. PusuK Buhit No.11, Glugur Darat II, Kec. East Medan.

b. Raw Materials and Additional Materials

The raw materials used in Voerseri Products are Kersen/Seri, tapioca flour, corn flour, beef, catfish meat, egg yolk, kecepe shrimp, soy flour, peanut flour and amino acids. The additional materials used to support Voerseri's production are silica gel, standing pouch, and product packaging.

c. Production Equipment

Production equipment used in the Voerseri business includes pellets, tampah, basins, blenders, scales, sealers, cutters.

d. Production process

The production carried out in the Voerseri business is still done simply and manually due to the lack of financial constraints. Voerseri can produce 200 packets per month. The stages of production include the following:

- Purchasing raw materials
- Smoothing raw materials
- Mixing ingredients
- Product printing
- Drying the product
- Product packaging

3.3 Feasibility Analysis of Organizational and Management Aspects

a. Organizational structure

The Voerseri organizational structure is arranged in a simple manner, namely the team leader with four members, each of whom has different duties and responsibilities according to their respective expertise.

b. Role in the organization

Chairman

- Establish all forms of regulations that apply in the business
- Responsible for losses and profits achieved
- Plan and develop all forms of sources of income and expenditure
- As the highest representative in establishing relations with the world outside of business
- Establish and determine all strategies
- Helping the production process

Member I

- The task is to arrange all the schedule of deliberations between members
- Gather all elements related to business
- Record the results of the consensus agreement
- Running the production process

Member II

- Manage all activities that cover financial issues
- Inputting income and expenses in each period
- Develop a business budget per period
- Running the production process

Member III

- Carry out all promotional activities
- Running the production process

Member IV

- Interacting with local communities related to the cooperative relations that will be carried out to advance the business
- Running the production process

3.4 Feasibility Analysis of Financial Aspects

In this voerseri business, various costs will be incurred in Voerseri's business to produce 200 packets of products / month with a selling price of Rp. 17,000, - / pack. The costs that will be incurred consist of fixed costs and also variable costs. The fixed costs used in Voerseri's business are as follows:

Table 1. Equipment Depreciation Costs

No.	Costs	Total	Total Price	Depreciation
1	Pellet Printer	1 unit	390.000	4.875
2	Stainless Basin	3 unit	120.000	3.000
3	Big Scales	1 unit	175.000	1.313
4	Blender	1 unit	285.000	4.275
5	Plastic Waste	5 unit	50.000	1.875
6	Cutter Knife	2 unit	3.000	225
7	Sealer	1 unit	165.000	1.238
Total			1.188.000	16.800

Source: Research Result

In addition to the depreciation costs listed above, there are other costs that must be incurred in the fixed costs, namely building rent of Rp. 500,000 / month. So that you get a fixed cost of Rp. 516,800, - / month. In addition to the fixed costs above, there are also variable costs that must be spent in Voerseri's business follows:

Table 2. Raw Material Costs

No.	Costs	Total Price
1.	Cherry	100.000
2.	Tapioca Flour	250.000
3.	Cornstarch	90.000
4.	Kecepe Shrimp	240.000
5.	Egg Yolk	343.200
6.	Beef	360.000
7.	Catfish Meat	75.000
8.	Peanuts	80.000
9.	Soybeans	30.000
10.	Amino Acid	4.000
11.	Dye	2.000
Total		1.574.200

Source: Research Result

Table 3. Costs of Materials Consumed

No.	Costs	Total	Total Price
1.	Silica Gel	4 pack	40.000
2.	Plastic Standing Pouch	2 pack	54.000
3.	Envelope	20 pack	200.000
4.	Sticker	200 pack	200.000
Total			494.000

Source: Research Result

From table 2 and table 3 above we can know that the amount of variable costs in the Voerseri business is Rp. 2,068,200/month which consists of raw material costs of Rp. 1,574,200/month and the cost of consumables is Rp. 494,000, -/month.

As for the total costs incurred by this voiced business in a month that is equal to:

$$\begin{aligned}
 TC &= TFC + TVC \\
 &= 516.800 + 2.068.200 \\
 &= 2.585.000
 \end{aligned}$$

So that the total cost incurred by this voiced business in a month of production is Rp. 2,585,000/month.

The cost of the product from this voerseri product is equal to:

$$\begin{aligned}
 HPP &= \frac{TC}{Q} \\
 &= \frac{2.585.000}{200} \\
 &= 12.925,-
 \end{aligned}$$

So that the main price of this product is in the amount of Rp. 12,925, -/pack.

The variable costs incurred per product are equal to:

$$\begin{aligned}
 AVC &= \frac{TVC}{Q} \\
 &= \frac{2.068.200}{200} \\
 &= 10.341,-
 \end{aligned}$$

So that we get a variable cost per product of voipery that is equal to Rp. 10.341, -/pack.

The total revenue obtained by this voiced business in a month is equal to:

Table 4. Voerseri Sales

Sales	Total (pack)	Price (Rp/ pack)	Revenue (Rp)
Distributor	180	17.000	3.060.000
Konsumen	40	20.000	800.000
Total Revenue			3.860.000

Source: Research Result

So that the total revenue obtained by this voiced business in a month of production is Rp. 3,860,000/month.

As for the total net income obtained by this voiced business in a month that is equal to:

$$\begin{aligned}
 B &= TR - TC \\
 &= 3.860.000 - 2.585.000 \\
 &= 815.000
 \end{aligned}$$

So that it can be seen that the net income earned by this voiced business in a month of production is Rp. 815,000/month.

Table 5. Recapitulation of VC, FC, TC, and Determination of HPP

Description	Unit	Total
Production Capacity	Bks	200
Total FC	Rp/Month	516.800
Total VC	Rp/Month	2.068.200
Total Cost	Rp/Month	2.585.000
Variable Costs per Unit	Rp/pack	10.341
HPP	Rp/pack	12.925
Selling Price	Rp/pack	17.000-20.000
Margin	%	23,97
Revenue	Rp/ Month	3.400.000
Income	Rp/ Month	815.000

Source: Research Result

Determination of Break Even Point (BEP), R/C ratio, and B/C ratio is used to determine the feasibility of an agro-industry business in terms of financial feasibility.

3.5 Break Event Point (BEP)

BEP can be interpreted as a situation where in a company's operations, the company does not earn a profit and does not suffer a loss (income which is assessed using total costs). The BEP value of this voipery business is:

$$\begin{aligned}
 \text{BEP unit} &= \frac{FC}{P-AVC} \\
 &= \frac{516.800}{17.000-10.341} \\
 &= 77,61 \text{ unit}
 \end{aligned}$$

From the results obtained the BEP unit value obtained is equal to 77.61 units, it is said that the sales turnover is at the sale of 78 units.

$$\begin{aligned}
 \text{BEP rupiah} &= \frac{FC}{1-AVC/p} \\
 &= \frac{516.800}{1-10.341/17.000} \\
 &= 1.319.357,26
 \end{aligned}$$

BEP rupiah is used to determine the break-even point of capital seen from its receipt. From this project it is known that the sales turnover is at Rp. 1,319,357.26.

3.6 R/C rasio

$$\begin{aligned}
 \text{R/C rasio} &= \frac{TR}{TC} \\
 &= \frac{3.400.000}{2.585.000} \\
 &= 1,32
 \end{aligned}$$

The value of the R/C ratio is greater than 1 so the project is said to be economically feasible. Then the value of the R/C ratio is equal to 1 then it is said that the business is said to be break even economically and if the R/C value is smaller than one then the project is said to be less economically feasible. In this project the R/C value is 1.32, so it is said that the business is economically feasible for business actors.

$$\text{B/C rasio} = \frac{B}{TC}$$

$$\begin{aligned} &= \frac{815.000}{2.585.000} \\ &= 0,32 \end{aligned}$$

The value of the B/C ratio is greater than 1 so the project is said to have benefits for business actors. Then the value of the B/C ratio is equal to 1 then it is said that the business is sufficient to provide benefits to the business actor and if the value of B/C is less than 1 then the project is said to provide less benefit to the business actor. In this project, the value of B/C is 0.32 so it is said that the business does not provide benefits to the business actor.

IV. Conclusion

1. Feasibility analysis of marketing aspects there are competitors, namely Kibasari, market share by targeting the market throughout Indonesia and abroad, and the marketing mix, namely products in the form of smooth and crude voer, with prices of 17,000-20,000/pack, promotions through online media and print media, and simple distribution only through resellers.
2. Feasibility analysis of technical and production aspects, namely the production location at Jl. Gn. Pusuk Buhit No. 11, Glugur Darat II, Kec. Medan Timur, natural raw materials, production equipment that is quite helpful, and the production process starts from the purchase of raw materials, refinement, material mixing, then product printing, drying, and product packaging.
3. Feasibility analysis of aspects of organization and management where the chairman and team members have their respective duties and roles.
4. Feasibility analysis of financial aspects, namely unit BEP value of 78 units. BEP value of rupiah is Rp. 1,319,357.26. Then the R / C ratio of 1.32 which is said to be economically feasible business then and the B / C ratio is 0.32 which is said that the business does not provide benefits for business actors.

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