

# Business Analysis of Pomade Rambutan Leaf Extract with Apple Aroma Anti-Gray Hair and Multipurpose as a Green Economy Alternative

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## Abstract.

Blitar is the city with the largest rambutan fruit commodity. The number of plants throughout the district was recorded at approximately 283,437 trees, with a productivity level of 115 kilograms per tree. Rambutan (*Nephelium lappaceum*) has benefits for the health of the human body in the form of cleansing kidney function, preventing heart disease. Not only in the fruit, rambutan trees also have many benefits in every part. Tjandra's research says that rambutan leaves and skin contain compounds of tannins, polyphenols and saponins that function as a prevention of gray hair. This pomade-shaped hair styling product "HYUNG HAIR" made from rambutan leaf extract has properties including reducing hair loss, nourishing the scalp, slowing the growth of gray hair and can change the color of the pigment in the hair. The activity of making rambutan leaf extract pomade was carried out for four months, starting from Maret 2025 to Mei 2025. Product testing activities and production processes were carried out at Balitar Islamic University, as well as at one of the production houses located in the Bendo Area, Ponggok, Blitar Regency, East Java. The price we offer on "Hyung hair" Pomade is RP. 24,000, -, with the calculation of business feasibility analysis calculated through the R / C Ratio showing the number 1.24. Where the value is more than one which shows the rambutan leaf extract pomade business is feasible to run.

**Keywords :** Rambutan Leaves; Multipurpose and Pomade.

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## I. INTRODUCTION

Rambutan is the largest annual fruit plant in the Blitar area. Rambutan is a people's plant that is planted in the yard or yard. Blitar residents who plant 50 to 100 trees, but are not cultivated like plantations. Seedlings are planted, cared for as needed, then left to the natural mechanism completely. In the eastern part of Blitar city there is the largest rambutan plant center in Blitar, which is located between Talun and Wlingi. The beginning of Blitar being dubbed as the largest rambutan plant center began in the 1950s when the fruit nursery in Kaweron, which is located between Talun and Wlingi. Furthermore, the nursery in that year began to introduce a new rambutan variety, namely the Aceh rambutan. According to data from the Blitar Regency Agriculture Service, at the end of 2001 the largest rambutan plants in that area were in Talun District (51,784 trees), followed by Selopuro District (30,200), and Kanigoro District (27,658). Five other sub-districts (Sanankulon, Srengat, Nglegok, Garum, and Gandusari) each have less than 20,000 trees. The total number of plants in the entire district is recorded at 283,437 trees, with a productivity level of 115 kilograms per tree.

Rambutan with the Latin name *Nephelium lappaceum* has various properties including a source of vitamin C, protein, low fat and minerals. This plant has various properties for human life, besides its delicious fruit, seeds, leaves, wood can also be utilized. Not many people know that rambutan leaves can be used for hair oil which has the properties of hair care to make it naturally black (Sativa, 2024). The content contained in rambutan leaves contains saponin, tannin compounds which can be useful for blackening hair. Furthermore, research by Tjandra, et.al. (2011) states that rambutan leaves and skin contain compounds of the tannin, polyphenol and saponin groups. Meanwhile, research by Maradona (2013) states that rambutan leaves (fresh) extracted with ethanol contain the chemical content of flavonoids, saponins, tannins and hydroquinine.

Raising the potential of rambutan parts, especially leaves, as a natural hair treatment combined with several mixed ingredients such as olive oil, VCO oil, beeswax, castor oil, and apple

aroma, can be produced in the form of pomade hair oil. This product is used for hair styling in salons, MUA, and especially for the hair of male and teenage consumers. This activity also collaborates with rambutan farmers to find out the innovations in rambutan.

## II. RESEARCH METHOD

The activity was carried out for four months, starting from March 2025 to May 2025. Product and production process trial activities were carried out at Balitar Islamic University, as well as at one of the production houses located in the Bendo Area, Ponggok, Blitar Regency, East Java. In January to February, a survey was conducted, literacy collection regarding raw materials, and procurement of equipment and materials that would later be used. Furthermore, in March to April, activities focused on material trials and production processes.

The main raw material used in making rambutan leaf extract pomade is rambutan leaf extraction obtained through the maceration process. This extraction is then mixed with other ingredients such as olive oil, VCO oil, beeswax, castor oil, and apple aroma. The tools used are Filter Paper, Handscon, Mask, Sticker, 50 gram packaging container, Glass Jar, Gas Stove, Glass Bowl, Spoon, Syringe, Washbasin.

In the process of making hair oil products with the addition of rambutan leaf extract (*Nephellium lappaceum*) with apple aroma, the production stage is divided into 2 parts, the first is the process of making rambutan leaf extract and the second is the process of making hair oil. In the rambutan leaf extraction process, the activities carried out include sorting, washing, drying, maceration process to evaporation process until thick rambutan leaf extract is formed. Furthermore, the process of making hair oil includes the process of measuring and weighing raw materials, melting raw materials, mixing raw materials until the desired hair oil is formed. The marketing planning of Hyung Hair pomade is carried out in stages starting from introducing the product to the community in the surrounding environment and conducting more organic marketing to the community, then expanding to a larger market, namely young people among gen z as the main market share. Marketing through simple partnerships with retail stores, salons, MUA is one strategy to make it easier for product distribution to reach consumers. In addition, digital marketing through social media needs to be done to expand market coverage. The applications used are Instagram, Facebook, and WhatsApps.

The feasibility analysis of the business used to analyze this activity is the calculation of the R/C Ratio. The comparison of total revenue and total costs is called the Revenue Cost Ratio, also known as the balance of revenue and business costs carried out.

## III. RESULTS AND DISCUSSION

This rambutan leaf product innovation is made in such a way that it becomes a product that is beneficial to the community. The product made is a hair styling product made from rambutan leaf extract which has extraordinary properties, including reducing the appearance of gray hair and also preventing hair loss. We made this hair styling product innovation in the form of pomade, a product like balsam but not sticky, with a fresh aroma called "HYUNG HAIR", presenting a new and different look from ordinary pomade, because Hyung hair is anti-gray hair, multipurpose, and economical. This product is packaged in a practical 50 gram circular container, and the product is also packaged with an attractive and modern design equipped with ingredients. So, it makes it easier for users to observe the existing content for their body's needs and health.

### *Product excellence*

Hyung Hair products have advantages, namely in addition to refreshing the appearance, they can be a new alternative to nourish the scalp and reduce the occurrence of gray hair by changing the color of the pigment from the content in the leaves. The price we set for this product is very affordable and economical because it uses natural ingredients from nature. Hair styling products with

a new look that is more efficient and contemporary. The fresh aroma of apples is a prominent advantage because most hair styling products have pungent aromas.

### ***Hyung Hair Pomade Business Analysis***

#### **1. Fixed Cost**

Fixed costs are costs with a fixed value that does not change even though there is an increase or decrease in the number of goods produced. In this case, the fixed costs of Hyung Hair production are:

Table 1. Hyung Hair Production Fixed Costs

Name of goods	Amount	Price/Unit(Rp)	Initial value (Rp)	Residual Value (Rp)	Age (months)	CostDepreciation/Month (Rp)
Gas stove	1	200,000	200,000	20,000	60	3,000
Blender	1	150,000	150,000	15,000	60	2,250
Basin	2	17,000	34,000	3,400	60	510
Spoon	2	3,000	6,000	600	36	150
Plastic Measuring Cup 500ml	1	9,000	9,000	900	12	675
Glass Measuring Cup 10 Ml	1	45,000	45,000	4,500	36	1.125
Scales	1	60,000	60,000	6,000	60	900
Pipette	1	3,000	3,000	300	12	225
Glass Jar	1	30,000	30,000	3,000	36	750
Glass Bowl	1	20,000	20,000	2,000	36	500
<b>Amount</b>						<b>10,085</b>

Source: Primary Data Analysis (2021)

Based on table 1, there are several items that are the production tools for rambutan leaf extract pomade included in the calculation of fixed costs. The use of several equipment is included in the costs that must be incurred by the company, the amount of which is not affected by the company's activities. The total amount of fixed costs incurred to produce Hyung Hair apple-scented rambutan leaf extract pomade is Rp. 10,085.

#### **2. Variable Cost (VC)**

Variable costs or non-fixed costs are a very influential part in the production process of Hyung Hair rambutan leaf extract pomade. Variable costs can go up or down depending on the busy or quiet production/sales of the company. Variable costs in the Hyung hair business analysis are recorded as follows

Table 2. Variable Costs (VC)

Name of goods	Need	Price / unit (Rp/unit)	Total price (Rp)
Wet rambutan leaves	250 gr	15	3,750
Olive oil	100 ml	225	22,500
VCO Oil	100 ml	140	14,000
Castor oil	100 ml	60	6,000
Apple perfume seeds	15 ml	300	4,500
Beeswax	100 gr	320	32,000
Alcohol 70%	300 ml	45	13,500
Filter paper	1 piece	1,000	1,000
Handscon	1 piece	1,000	1,000

Face mask	1 piece	1,000	1,000
Sticker	2 A3 papers	10,000	10,000
50gr packaging container	10 pieces	2.100	21,000
Gas usage			
Labor wages	1 person	30,000	30,000
Promotion		10,000	10,000
Electricity		2.100	2.100
Transportation		10,000	10,000
<b>AMOUNT</b>			<b>182,350</b>

Source: Primary Data Analysis (2021)

Based on table 2, variable costs (VC) incurred for one production of “Hyung hair” hair oil amounting to Rp. 182,350. These variable costs include all raw materials directly involved in the manufacturing process, labor costs, and fulfillment of production equipment needs.

### 3. Production cost

Production costs are all costs incurred from fixed costs and variable costs. The total production costs are:

$$\begin{aligned} \text{TC} &= \text{Total fixed cost} + \text{Total variable cost} \\ &= \text{Rp.10,085} + \text{Rp.182,350} = \text{Rp.192,435} \end{aligned}$$

### 4. Cost of goods sold

According to Sumilat (2013) HPP is a component of the profit and loss report, company management in this case is very concerned to control the company's operations. According to Pujiati (2015) HPP is part of a company's profit and loss in trade. If the selling price is greater than the cost of goods sold, a profit is obtained and if the selling price is lower than the cost of goods sold, a loss will be obtained.

#### Product Selling Price

The selling price of a product balances the desire to gain large benefits from high revenue gains and the decrease in sales volume if the selling price charged to consumers is too high.

$$\text{HJP} = \text{COGS} + \text{Profit}$$

$$\begin{aligned} \text{HJP} &= \text{Rp. 19,435.5} + \text{Rp. 4,564.5} \\ &= \text{Rp. 24,000} \end{aligned}$$

The selling price of the product to avoid losses to get a decent profit. The selling price of hair oil is Rp. 24,000 with a desired profit of Rp. 4,564.5.

### 5. Total Revenue (TR)

$$\text{TR} = \text{Price} \times \text{quantity of products}$$

$$\text{TR} = \text{Rp. 24,000} \times 10 \text{ containers}$$

$$\text{TR} = \text{Rp. 240,000.00}$$

Revenue is the amount received by the company from the sale of production output. The total revenue obtained and the sales results of “Hyung hair” as many as 10 containers is Rp. 240,000 in one production.

### 6. Profit

$$\text{Profit} = \text{TR} - \text{TC}$$

$$\text{Profit} = \text{Rp. 240,000} - \text{Rp. 192,435}$$

$$\text{Profit} = \text{Rp.47,565}$$

Profit is total revenue minus total production. The profit earned by “hyung hair” pomade is Rp. 47,565.

### ***Business Feasibility Analysis Using R/C Ratio Calculation***

The comparison of total revenue and total cost is called Revenue Cost Ratio, also known as the balance of revenue and business costs carried out. The criteria are the value of  $R/C > 1$  then it is

profitable, if  $R/C = 1$  then it is neither profitable nor loss, if  $R/C < 1$  then it is detrimental. The greater the R/c ratio the greater the level of efficiency of the business.

$$\begin{aligned} R/C \text{ ratio} &= \frac{\text{Total penerimaan}}{\text{Total biaya produksi}} \\ R/C \text{ ratio} &= \frac{\text{Rp.240.000}}{\text{Rp 192.435}} \end{aligned}$$

$$= \text{Rp. 1.24}$$

The R/C ratio of “Hyung hair” pomade sales is 1.24, which is a value of more than one, indicating that the pomade business is feasible to run.

#### IV. CONCLUSION AND SUGGESTIONS

##### *Conclusion*

In the utilization of rambutan, some innovators focus on the fruit alone which is often served or processed into several products. The dense rambutan leaves are left alone with the assumption that they cannot be utilized, but this activity helps people recognize the hidden benefits of rambutan leaves and utilize the existing opportunities into a business gap. The product that the team tried to make was a hair styling product made from rambutan leaf extract which has extraordinary properties, including reducing the appearance of gray hair and also preventing hair loss. We made this hair styling product innovation in the form of pomade, a product like balm but not sticky, with a fresh aroma called "HYUNG HAIR". This hair styling product comes with a new look that is more efficient and contemporary. The fresh aroma of apple fruit is a prominent advantage because most hair styling products have pungent aromas. The selling price of Hyung Hair pomade is also quite pocket-friendly compared to other products, which is sold for IDR 24,000 per piece. The price calculation is calculated more carefully by calculating production costs, cost of goods sold, and considering profit. Pomade with the addition of rambutan leaf extract has gone through a feasibility calculation using the R/C Ratio calculation method. The R/C ratio of “Hyung hair” pomade sales is 1.24, which is a value of more than one, indicating that the pomade business is feasible to run.

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