



# SCALILA SURPRISE HAND SOAP: THE HERBAL SOAP CREATION OF BREADFRUIT LEAF SOLUTION FOR ROUTINE HAND WASHING FOR CHILDREN

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## ABSTRACT

The number of trees or breadfruit plants in West Sumatra increases every year. Currently the only part of the breadfruit tree that is widely used is the fruit, while the leaves are underutilized and only become waste. Breadfruit leaves contain flavonoids, alkaloids, saponins, and tannins which function as antibacterial. Based on these data, breadfruit leaves, which were originally only used as waste, can be innovated into a new breakthrough, namely the main ingredient for making soap. In addition, as we all know, it is very important to regularly wash our hands with soap, especially during a pandemic like today. However, getting children used to washing their hands regularly with soap is quite difficult for parents. It takes patience and a more serious and earnest effort for this to be achieved. One way is to make soap that attracts children's attention. Scalila Surprise Hand Soap is made by extracting breadfruit leaves and then mixing it with pour and melt soap base that has been melted. Then, it is given dye and essential oil as a soap fragrance and poured into the mold. This product has a unique and cute shape of fruits and animals. In this soap there is a surprise that attracts the attention of children to wash their hands with soap. There are 2 sizes of soap, namely mini size soap for single use and medium size soap for use 5-8 times. In addition, this product also has 3 variants of aroma and color. Red color with strawberry scent, orange color with citrus scent, and green color with green apple scent. This soap is packaged in transparent bottles and transparent plastic and with economical price.

**Keywords:** Antibacterial; Breadfruit Leaves; Hand Soap; Pandemic; Surprise.

## 1. INTRODUCTION

### 1.1 Market Survey

The target market for this "Scalila Surprise Hand Soap" product are all children (5-12 years) who can give their own impression of enjoying washing their hands with SCALILA soap which has a unique and cute shape and a fruity aroma[1]. fragrant, and contains antibacterial from breadfruit leaf

extract [2,4,9]. "Scalila Surprise Hand Soap" is expected not only to reach that market, but also to all children, even people outside West Sumatra. In market analysis, the STP method is used, namely Segmentation, Target, and Product Position in the market [3].

a. Segmentation [5]

The product "Scalila Surprise Hand Soap" has a unique and cute shape whose sales are offered in a 60 ml bottle packaging system and 7x10 cm transparent plastic. This bottle pack contains 30 mini SCALILA soaps at a price of Rp. 12,000. There are two variants of 7x10 cm transparent plastic packaging. The first contains 15 mini SCALILA soaps at a price of Rp. 5,000. The second one contains 5 larger pieces of soap which we sell for only Rp. 8,000.

b. Target [6]

Children West Sumatra in general and children outside West Sumatra and it does not rule out the possibility of adults in West Sumatra and outside West Sumatra [7].

c. Position

The product "Scalila Surprise Hand Soap" is positioned as a practical hand soap containing antibacterial which attracts children's attention to wash their hands regularly with soap because of its unique and cute shape [8].

## 1.2 Competitors

Our product is the first surprise soap, so the product "Scalila Surprise Hand Soap" has good prospects and the opportunity to compete in the market [10]. Competitors for this product are liquid hand soap and the like that have existed previously that are not made from breadfruit leaf extract [11]. However, with the innovation and uniqueness of the product form and the content and use of "Scalila Surprise Hand Soap", we can be optimistic to penetrate the market, plus direct and online sales services by way of delivery to address and sales in the form of more economical packaging, providing convenience for consumers to buy [12].

## 1.3 Commodity Advantage

The advantages of PKM commodities are:

- a. In terms of products that have innovation and uniqueness in form and use, namely helping children with routine hand washing habituation during this pandemic and basic ingredients that have the right antibacterial content used as hand soap.
- b. In terms of sales services, both in person and online that make it easier for buyers to buy products.
- c. In terms of affordable prices and in bulk purchases, a discount will be given (purchasing 3 bottled products will get a 10% discount) [13].

## 2. OVERVIEW OF BUSINESS PLAN

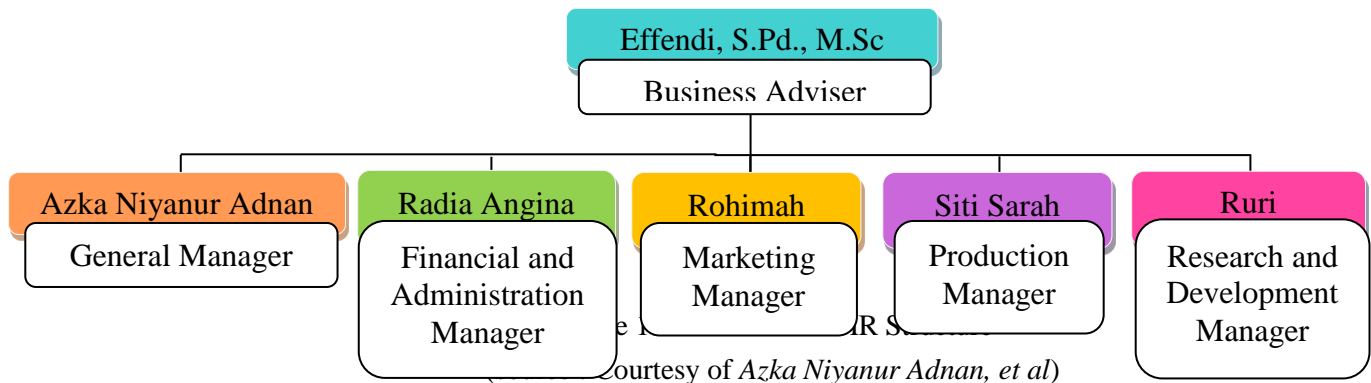
### 2.1 General Condition of Business Activities

This type of business in the field of antibacterial herbal soap that attracts the attention of children to wash their hands with soap has a very big opportunity because during this pandemic routine habituation of washing hands is very necessary [14,15,16]. This is because it takes more and more serious efforts so that children are diligent in washing their hands during this pandemic. Therefore, we made a new breakthrough by utilizing breadfruit leaves which are usually just wasted as hand soap to increase the habituation of routine hand washing in children [17].

At this time no one has used breadfruit leaves as a soap product, even though breadfruit leaves contain alkaloids, saponins, tannins, and flavonoids that have antibacterial activity that are appropriate for making hand soap [18,22,23]. Therefore, we created a new product based on breadfruit leaf extract into herbal hand washing soap.

## 2.2 Potential Resources and Market Opportunities

### 2.2.1 Organizational Structure and Business Personnel



With job descriptions are as follows:

1. General Manager: managing the running of the business, coordinating and consulting with the Business Adviser and all managers as well as verifying the planning and running of the business.
2. Financial and Administration Manager: prepares all financial and administrative needs, is responsible for purchasing materials and making financial reports.
3. Marketing Manager: conceptualizing and establishing appropriate promotional strategies, monitoring customer satisfaction and service effectiveness, and preparing promotional media.
4. Production Manager: responsible for all matters related to production, starting from progress, process, problem solving, quality, quantity and so on.
5. Research and Development Manager: as the person in charge of product development research, business development and other renewal activities.

### 2.2.2 Business Environment Analysis (SWOT)

Table 1. SWOT analysis [19]

STRENGTHS		
<b>Product:</b> Breadfruit leaves contain compounds such as flavonoids, tannins, and saponins which are effective as hand soap.	<b>Service:</b> Consumers can enjoy purchasing services directly or through social media.	<b>Selling price:</b> Consumers can make price offers when buying products in large quantities.
WEAKNESSES		
<b>Formal Legal:</b> It does not yet have a legal entity status from the government, making it difficult to market the product. However, it will be anticipated with legality and accountability on behalf of the business owner's institution, namely UNP.		<b>Marketing:</b> Many other hand washing soap products are sold in the market, so there are difficulties in marketing them.

OPPORTUNITIES		
<b>Market opportunity:</b> The SCALILA product that we made is a new innovation from the use of breadfruit leaves.	<b>Packaging:</b> The existence of information on SCALILA content contained in the packaging increases consumer curiosity about the properties it has.	<b>Network:</b> Many community groups will be invited to communicate and work together to improve promotional media.
THREATS		
<b>Capital:</b> Limited capital for the development of this business in the initial business activities so that it is difficult to develop the business in a professional direction.	<b>Competition:</b> Similar business competition may be an obstacle for this business. This obstacle will be overcome by improving and improving the quality of products and services.	<b>Promotion:</b> Ineffective promotions will cause product sales to not meet the predetermined targets.

(Source : Courtesy of Azka Niyanur Adnan, et al)

## 2.3 Business Feasibility Analysis

### 2.3.1 Business Economic Analysis

#### Variable Cost per Month:

- Breadfruit leaves 5 [kg @10,000](#) = Rp. 50,000
- Alcohol 70% 1 liter @48.000 = Rp. 48.000
- Soap base 1 kg @56.000 = Rp.56.000
- Soap dye = Rp. 6,000
- Polymer Clay Craft 1 box @19,000 = Rp. 19,000
- Soap deodorizer 1/2 bottle @28.000 =Rp.14,000
- Bottles of 30 pieces @1.00 = Rp. 30,000
- 100pc plastic packaging = Rp. 59,000
- Bottle packaging stickers = Rp.18.000
- Plastic packaging stickers = Rp.18.000

**Total** = **Rp. 318.000**

#### Fixed Cost per Month:

- Tray (economic life 3 years) 2 x @35.000 = Rp. 1,945
- Spoon (economic age 3 years) 1 x @17.00 = Rp. 472

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● Knife (2 years economical age) 1 x @20,000	= Rp. 833
● Napkin (economic life 2 years) 3 x @5.000	= Rp. 625
● Planel Fabric (2 years economic life) 2 x @15.000	= Rp. 1,250
● Filter cloth (economic life 2 years) 1 x @25.000	= Rp. 1.042
● Digital scale (3 years) 1 x @50.000	= Rp.1.389
● Gloves ( economical age 5 months) 10 x @1.250	= Rp.2,400
● Small soap mold (3 years) 2 x @ 35,000	= Rp. 1,944
● Large soap mold (3 years) 3 x @ 26.000	= Rp. 2.167
● Press machine (economic age 3 years) 1 x @190,000	= Rp.5,278
● X-banner (1 year economic life) 1 <a href="#">x @100,000</a>	= Rp. 8,333
<b>Total</b>	<b>= Rp. 27,678</b>

**1. Production cost (1 x Production)**

= Variable Cost + Fixed Cost  
 = Rp. 318.000 + Rp. 27,678  
 = **Rp. 345,678,-**

**2. Cost of goods sold**

= Production Cost / Production Amount  
 = Rp. 345,678 / 30  
 = Rp. 11.522.6,-

**3. Company results**

● **Bottle (contains 30 small pieces of soap)**

= Production Quantity x Price  
 = 15 bottles x Rp. 12,000  
 = **Rp. 180,000**

● **Medium Soap Filled Plastic**

= Production Quantity x Price  
 = 15 pcs x Rp. 8.000  
 = **Rp. 120,000**

● **Small Soap Filled Plastic**

= Production Quantity x Price  
 = 20 pcs x Rp. 5,000  
 = **Rp. 100,000**

**Total = Rp. 180,000 + Rp. 120,000 + Rp. 100,000**  
**= Rp. 400,000,-**

**4. Profit (1 x production)**

= Operating Results – Production Costs  
 = Rp. 400,000 – Rp. 345,678  
 = **Rp. 54,322**

**5. R/C**

= Operating Results / Production Costs  
 = Rp. 400,000 / Rp. 345,678  
 = 1.16

**This means that every one rupiah of costs incurred for production generate revenue of 1.16 rupiah.**

**6. Benefit Cost Ratio**

= Profit / Production Cost  
 = Rp.54,322 / Rp. 345,678  
 = 0.16

**This means that every rupiah of costs incurred for production generate a profit of 0.16 rupiah.**

**7. Break Event Points**

- **Bottle**

= Production Cost / Price  
 = Rp. 345,678 / Rp. 12,000  
 = **29 pcs**

**This means that this business does not lose or profit (break even) when 29 products are sold out of the total production.**

- **Medium Soap Filled Plastic**

= Production Cost / Price  
 = Rp. 345,678 / Rp. 8.000  
 = **43 pcs**

**This means that this business does not lose or profit (break even) when sold as many as 43 productions of the total production.**

- **Small Soap Filled Plastic**

= Production Cost / Price  
 = Rp. 345,678 / Rp. 5,000  
 = **69 pcs**

**This means that this business does not lose or profit (break even) when sold as many as 69 products from the total production.**

**2.3.2 Raw material**

The raw material for this SCALILA product (Soap *Artocarpus altilis* Leaf) is breadfruit leaf which is easily obtained in the Padang City area. Breadfruit leaves selected as raw materials are breadfruit leaves picked during the dry season because they produce very good quality leaves for production.

**2.3.3 Target Market**a. *Place*

At the beginning of the business, products were sold starting from the Padang State University campus, nearby residents' houses and TPQ in the vicinity, as well as being sold through social networks. Continued to areas in West Sumatra such as Padang-Pariaman and West Pasaman.

b. *Product*

SCALILA soap is a processing of breadfruit leaf extract which is converted into hand washing soap for children. The advantage of this product is that it comes from herbal ingredients, namely breadfruit leaf extract which is effective as a hand sanitizer

from various threats of bacteria, germs and viruses. The product “Scalila Surprise Hand Soap” has unique and cute shapes of fruits and animals. In this soap there is a surprise that attracts the attention of children to wash their hands with soap. There are 2 sizes of soap, namely mini soap for single use and medium or medium size soap for use 5-8 times. In addition, this product also has 3 variants of aroma and color. Red color with strawberry scent, orange color with citrus scent, and green color with green apple scent.

c. *Price*

The product is sold with a 60 ml bottle and transparent plastic packaging system with a size of 7x10 cm. This bottle pack contains 30 mini SCALILA soaps at a price of Rp. 12,000. There are two variants of 7x10 cm transparent plastic packaging. The first contains 15 mini SCALILA soaps at a price of Rp. 5,000. The second one contains 5 larger pieces of soap which we sell for only Rp. 8,000.

### 3. EXPERIMENTAL

#### 3.1 Production Aspect

##### 3.1.1 Product Manufacturing Process

The production process begins with washing and drying breadfruit leaves[20,26]. Once dry enough, the breadfruit leaves are cut into small pieces and macerated. Then, the maceration of breadfruit leaves was extracted by a distillation process[21,24,25]. Next prepare the tools and materials for soap making. Then, weigh the pour and melt soap base as much as 100 grams and heat it with spiritus until it melts. Followed by adding 40 drops of breadfruit leaf extract, 70 drops of essential oil, and 1 drop of dye into it while continuing to stir. After that it is removed and poured immediately into the mold that already has a surprise in it. Wait for it to harden and ready to pack.

##### 3.1.2 Production Time and Place

This business activity is carried out for 4 months and production activities have started from the 4th week (starting with drying breadfruit leaves) after the announcement of the funding pass. The place where we produce SCALILA products is at Jalan Cendrawasih Gang Pari No. 55, Freshwater West, Padang.

#### 3.2 Business Management

##### 3.2.1 Branding Product

Our product has the trademark "Scalila Surprise Hand Soap" where Scalila which stands for Artocarpus Altilis Leaf soap represents the basic ingredient of the product, namely breadfruit leaf (Artocarpus Altilis Leaf). Meanwhile, Surprise Hand Soap means a hand washing soap product that has a surprise in it. This breadfruit leaf extract has never been used and used as a hand soap product, so we took the initiative to increase its selling value by making it a unique hand soap. The following is a profile of our business:



*Figure 2. Product Logo*

*(Source : Courtesy of Azka Niyanur Adnan, et al)*



Company	Scala
Product name	Scalila Surprise Hand Soap
Business fields	Cosmetics
Type of business	Consignment
Address	Jalan Cendrawasih Gang Pari No. 55, Freshwater West, Padang.
Social media	IG : @scalila.id Shopee : scalila.id
CP	082284760146

### 3.2.2 Business Improvement Strategy

#### 1. Packaging

The initial product packaging used 60 ml transparent plastic bottles for small/mini-sized soap packaging with a total of 30 mini soaps in it. Then the newest one developed using transparent plastic measuring 7x10 cm with 15 mini soaps[28]. This is done so that consumers can buy products at a more economical price. Transparent packaging is chosen so that the product can be seen from the outside by consumers (especially children) so that it is more attractive. The larger soap packaging also uses transparent plastic measuring 7x10 cm with 5 pieces of soap inside. The product has been tried to be registered with BPOM but has not been accepted because this business is still included in small and medium scale and there are special requirements that require expensive costs. As for the simple patent itself,



Figure 3. Packaging Stickers

(Source : Courtesy of Azka Niyanur Adnan, et al)

#### 2. Promotion

Promotion is done in person or online. Our promotion strategy is to design various promotional media in an attractive way. Promotions that have been carried out are through social media, namely through Instagram, Shopee and WhatsApp of each member and the official WhatsApp of the product. In addition, we have also carried out promotions on one of the largest radio stations in the city of Padang, namely Arbes FM 101 and the Campus Online Newspaper called Ganto. Promotions are also carried out using x-banners that display product descriptions and images. Furthermore, promotions



will be carried out in collaboration with stalls and pharmacies, as well as kindergartens, elementary schools and so on when the PPKM period has ended.

## **4. RESULTS AND DISCUSSION**

### **4.1 The results achieved**

#### **4.1.1 Product**

The products produced so far have unique and cute shapes of fruits and animals. In this soap there is a surprise that attracts the attention of children to wash their hands with soap. There are 2 sizes of soap, namely mini soap for single use and medium or medium size soap for use 5-8 times. In addition, this product also has 3 color variants and a refreshing aroma. Red color with strawberry scent, orange color with citrus scent, and green color with green apple scent.

For BPOM licensing, BPOM itself has not been able to accept our product management because it is still on a small scale and this product is included in the cosmetic product category, so there are some special requirements that require expensive management compared to food products which are easier to meet [27].

*Scala Surprise Hand Soap* been produced in large quantities. Product sales have reached various regions in West Sumatra and will be expanded to other areas.

Based on the results of the economic analysis, *Scalila Surprise Hand Soap* has a BEP of 29 pieces for bottle packaging, 43 pieces for plastic packaging containing 5 medium soaps and 69 pieces for plastic packaging containing 15 mini soaps.

#### **4.1.2 Scientific articles**

The article has been made and in progress, it is only necessary to check the writing by the supervisor and make some improvements to fit the guidelines. It is planned that this article will be submitted to the Journal of Management and Entrepreneurship Studies from the Management Department, Faculty of Economics, Padang State University. This scientific article will be useful to improve the entrepreneurial spirit of students so that they can apply the knowledge gained to the entrepreneurial world.

#### **4.1.3 Simple patent**

The method of making "*Scalila Surprise Hand Soap*" is in the process of being registered with Intellectual Property Rights (IPR).

### **4.2 Business Development Potential**

#### **4.2.1 Business Product Benefits**

The content contained in breadfruit leaves is a compound of alkaloids, phenols, flavonoids, saponins and tannins. These compounds function as antibacterial. Herbal soap creations, such as hand soap from breadfruit leaf extract, are certainly appropriate for hand washing soap. This product is highlighted to help children habituate routine hand washing because it has a shape and aroma that children like. In addition, our products are safe for the skin of the hands because the raw materials we use do not contain chemicals that are harmful to the skin.

#### **4.2.2 Benefits of Scientific Articles**

Scientific articles to be published in the Journal of Management and Entrepreneurship Studies from the Management Department, Faculty of Economics, Padang State University. This scientific article will be useful for increasing the entrepreneurial spirit of students so as to motivate students to be able to apply their knowledge in the world of entrepreneurship.

#### **4.2.3 Simple Patent Benefits**

This herbal handwashing product has the potential and is currently being filed for a

simple patent, because this herbal handwashing soap creation product from breadfruit leaf extract has not been on the market before. With this simple patent, it is hoped that it can motivate fellow students to create their own patents as well. In addition, this patent is expected to trigger cooperation with large companies and investors for the further development of this business activity.

## 5. CONCLUSION

### 5.1 Conclusion

Scalila Surprise Hand Soap is a hand soap made from breadfruit leaf extract which has a surprise in it. This product has a unique and cute shape and also has 3 variants of aroma and color. Red color with strawberry scent, orange color with citrus scent, and green color with green apple scent. Scalila Surprise Hand Soap is packaged in 3 packages. The 60 ml bottle contains 30 mini soaps at a price of Rp. 12,000. Meanwhile, there are two variants of the 7x10 cm transparent plastic packaging[28]. The first contains 15 mini soaps at a price of Rp. 5,000. The second one contains 5 larger pieces of soap which we sell for only Rp. 8,000.

### 5.2 Suggestion

Product Scalila Surprise Hand Soap has promising business development prospects because in addition to utilizing breadfruit leaf waste into soap products so that it helps reduce pollution, it is also useful as an antibacterial[30]. This product has a variety of unique and cute shapes, colors and a refreshing fruity aroma. It is hoped that in the future this business can establish cooperation with companies and investors to grow bigger and faster.

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