

## ANALYSIS OF COST AND SOCIAL BENEFIT IN ECO PRINTING CRAFT PRODUCT TO INCREASE WOMEN ENTREPRENEUR WELFARE

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### ABSTRACT

The application of Eco-printing techniques to fashion and art materials adds to the economic value of the materials of these products because these products have very high functional and artistic value. The study objectives are to analyse the economic and social costs and benefits of eco-friendly eco-printing techniques. Eco-printing techniques that are environmentally friendly require more time and effort than the application of eco-printing techniques that use chemical substances. Therefore, the products resulting from eco-friendly eco-printing techniques are higher than those of non-environmentally friendly products. The cost and benefit analysis result is that Eco-printing production has vast and various benefits, even though Eco-printing products are more expensive than regular ones. Eco-printing crafters should grow together and support each- other. The competition among crafters is almost zero because of its unique pattern, which only one pattern in each product. Each crafter has her/his character and uniqueness, which others cannot imitate. Crafters should learn more about stitching, cutting, designing and developing their Eco-printing products. The conclusion is that eco-friendly products have significant economic and social benefits that can still be optimized.

**Keywords:** Cost and Benefit Analysis, Eco-Printing Product, Women Entrepreneurship

### 1. INTRODUCTION

Environmental issues are becoming popular among entrepreneurs and are the focus of the most excellent attention from governments globally. In Sustainable Development Goal No. 12, responsible production and consumption, environmental reserves should be implemented on every development side and all economic activities such as consuming, producing, and distributing. Because the output of development not only increases Gross Domestic Product but also increases the quality of life of human beings and their environment.

Environmental preservation also inspired two women entrepreneurs to apply eco-printing to their Craft products. Mrs. Anggreana Nila is one of dozens of people who have become crafters in the eco-printing industry in Malang. Mrs. Anggreana founded Aeleen Fashion and art, which applies eco-print techniques and produces goods in home decor, clothing bags, and shoes made of cloth and leather. The fabric used is rayon cloth, cotton cloth and linen cloth, while the leather material

used is sheepskin, goat skin and cowhide; of course, with these various basic materials, the prices for products from Aeleen fashion and art vary.

The application of Eco printing techniques to fashion and art materials adds more economic value to the materials of these products because these products have very high functional and artistic value. With eco-printing techniques, these products will have unique patterns that are different from one another so that they are second to none. The application of the Eco-printing technique must also be by the rules of environmental sustainability so that it uses environmentally friendly substances and the waste does not pollute the environment. In fact, with the eco-printing technique, entrepreneurs also preserve the environment by utilizing waste flower leaves and plant stems to be applied to products made from cloth and leather. Eco-printing techniques that are environmentally friendly require more time and effort than the application of eco-printing techniques that use chemical substances. Therefore, the products resulting from eco-friendly eco-printing techniques are more expensive than non-environmentally friendly products. So, it becomes a challenge for entrepreneurs to apply Eco printing techniques that are environmentally friendly and optimize their profits. Therefore, a cost and benefit analysis is needed to calculate the sacrifices and benefits generated by eco-friendly eco-printing techniques for fabrics and leather-based products.

Research objectives

1. Analyzes the costs and benefits of eco-friendly eco-printing techniques economically
2. Analyze the social costs and benefits of eco-friendly Eco printing techniques
3. Optimizing the social benefits of the surrounding community eco-friendly Eco printing technique entrepreneurs.

## 2. LITERATURE REVIEW

Eco print is a process of transferring colour and shape directly onto fabric. The eco-print technique is used to decorate the surface of a cloth with various shapes and colours from plants to produce colouring from natural materials (Flint, 2008). So, the Eco-print technique transmits the colour and shape of plants on fabric through direct contact. Eco-print colouring can be done by transferring shapes and colours from plant morphology to fabric, animal skin (generally using cowhide) and wood surfaces. In the implementation process, this can be done by attaching the cleaned plant to the surface of the cloth, animal skin or wood, which is then beaten/pressed with a wooden hammer so that the natural plant dye comes out and transmits colour and shape to the surface of the cloth, animal skin. Or wood. This process is the pounding technique.

The pounding technique begins by stretching the cloth on a flat surface and then directly attaching natural materials, such as leaves and flowers with striking colours, to the cloth. The leaves/flowers that are attached are beaten or pressed using a wooden mallet so that the natural

colour of the leaves/flowers The material comes out sticking to the fabric so that it will cause the appearance of the fabric surface to match the original shape and texture of the natural material to which it is attached. The plants (leaves/flowers) used in natural materials must be plants that have colour pigments and are sensitive to heat so that when the plants are exposed to heat, the colour pigments will transfer and penetrate the fabric, resulting in the process of colouring from natural materials that transfer to the fabric in the form of by the natural materials used.

The Eco print coloring process using the pounding technique is not the only technique, but in the manufacturing process there are also other coloring techniques, namely the steaming process and the boiling) technique. Then the plants for which natural colors will be used are generally plants that are sensitive to heat so they can transmit color well and long-lastingly penetrate fabric, animal skin or wood. The natural coloring process on Eco print fabric can also be obtained from the extraction of morphological parts of plants such as leaves, flowers, roots, bark of tree branches, stems, flowers, seeds, and even the sap.

This is because the extraction process from plants can produce a variety of different colors and can be used for natural textile coloring processes. Meanwhile, to generate color and lock color from natural materials, a natural fixation or color locking process can be used using the help of chemical solutions that are also natural, for example alum and tunjung solutions. The type of plant used for the process of making Eco prints must be a plant that has color pigments that are more concentrated than other types of leaves because in the process of transmitting color, this type of plant greatly influences the brightness and thickness of the resulting Eco print color.

The initial start of fabric production used textile dyeing using environmentally friendly natural dyes as raw materials. However, as time goes by, with the development of industry and increasingly rapid technological developments, synthetic dyes for textiles can be found which have many advantages, namely the type of color spectrum produced is very diverse, the availability of synthetic dyes is more guaranteed (not depending on the weather and certain types of plants). , dye liquids are more durable, dye liquids are easy to store, synthetic dye liquids are easy to obtain in many shops, the coloring process becomes more practical, when used the resulting color is stronger, the price is more economical, the resulting color does not fade easily and is very easy to use, and The coloring process takes a short time.

However, synthetic dyes produce dangerous waste that can pollute the environment, such as contaminating soil, sediment, surface water and is bad for the health of living creatures and the sustainability of the surrounding environment (Yasin and Kol 2018). Some dyes can be degraded into compounds that are carcinogenic or cause cancer and are toxic (kan 2012). The synthetic dyeing process for fabrics turns out to contain several chemical substances that are harmful to the health of living creatures and the environment. So the textile industry becomes a contributor to the amount of waste that can damage/pollute the environment.

The weakness of synthetic dyes has made entrepreneurs in the textile industry switch their interest to using natural dyes that do not damage the environment. This is in line with increasing public awareness of the dangerous impacts of synthetic dye waste. Textile entrepreneurs who are aware of the dangers of synthetic dyes ultimately choose to use natural dyes in order to protect the environment and the health of living creatures. Natural dyes are an alternative to primary dyes that are non-toxic, renewable and environmentally friendly. In Indonesia, the use of natural dyes is also considered an effort to preserve a variety of cultural riches inherited from our ancestors whose continuity must be maintained and is a cultural tradition, especially in the batik making process in the textile industry and clothing design in the fashion sector. In fact, the world of international trade also provides more incentives for textile products that use natural dyes to enter certain markets with high selling prices.

The Eco print coloring technique using natural dyes is one of the main alternatives that opens up very promising business opportunities in the fashion sector now and in the future.

The fashion business is basically a business that can be done by anyone, especially individuals who have creativity and innovation. Innovation in the textile industry is mainly in the creation of creative motifs and coloring. One of the innovations in the textile industry is being creative with Eco print techniques which produce distinctive motifs/patterns with natural dyes. Especially in the current digital era, which makes it very easy for creative people to do anything for innovation. One of them is creating or being creative using Eco print techniques and promoting these creations on social media. With the current development of internet technology, social media has become a very effective and efficient means of promotional and marketing media that reaches domestic and international markets. So social media will make it very easy for fashion business entrepreneurs to promote and market their products to international markets. Apart from that, surfing the digital world with the internet will help textile entrepreneurs to see trends that are popular with consumers at competitive prices. So the fashion business is also a business that demands creativity and innovation from textile business actors.

Business in the textile industry using Eco print techniques can be a fashion business choice that is creative, innovative, exclusive and different from others by utilizing natural resources in the surrounding environment. Eco print products are products that are worth selling and even have high selling prices and are environmentally friendly. The main advantage of the Eco print technique is that it is a natural dye that is environmentally friendly. So investment in the form of preserving the surrounding environment needs to be encouraged in all economic activities because if environmental damage occurs it will result in very expensive health care costs. The second advantage for applying the Eco print technique is that the natural dyes for the Eco print technique can come from dry leaves/plants that have fallen on the ground so that Eco print producers/craftsmen can save production costs. This technique will reduce environmental pollution significantly. The third advantage of applying the Eco print technique to fabric is that this technique produces exclusive and unique motifs and patterns. Even Eco print fabric motifs cannot be duplicated, the motifs produced are the only motifs that cannot be produced again

(cannot be duplicated). Fashion businesses that use fabric/leather with attractive and exclusive Eco print motifs can increase selling prices because these exclusive motifs are almost equivalent to works of art. The fashion business with Eco print patterned fabric/leather will be very profitable and can improve the welfare of the community and MSMEs who use Eco print techniques. So the fourth advantage of applying the Eco print technique is that it brings high financial benefits. The fifth advantage of applying the Eco print technique is that Eco print motifs can be applied to various fabric/cowskin based products, for example clothes, curtains, tablecloths, pillowcases, bed sheets, bags, leather belts, book covers, wallets, bags, shoes, hats, gloves, accessories, etc.

Eco print patterns and motifs are unique, exclusive and attractive due to the use of leaves, twigs, tree bark and certain brightly colored flowers which are attached to the surface of the fabric/leather in the Eco print technique coloring process. With the various morphological forms of the plants attached, they become distinctive patterns that cannot be the same from one product to another. The distinctive patterns produced by Eco print products will always be different and unique and difficult for other artisan competitors to duplicate.

Benefit and cost analysis begins by identifying the economic benefits of Eco printing production. The economic benefit is obtained from the selling price of Eco print products which already contain profit. The determination of the selling price is based on the cost of production which is carefully calculated by the producer assisted by accounting books. Benefit and cost analysis calculations are carried out every 1 time of production.

Economic benefits and costs are calculated using the value added (economic benefits) and the total cost of production. Total cost consists of fixed costs and variable costs. Fixed costs are costs for equipment/production machines which do not diminish in one period of production. Examples of fixed costs are the cost of buying stoves, large ovens, clean pipes, LPG gas, and temperature's measuring device, and others. Variable cost is the cost which is achieved in every product that results from the production process. Examples of variable costs are the purchase of plain rayon/linen/cotton fabrics, plastics, raw materials for solutions, and others.

### **3. METHOD**

The research used is a quantitative research method, so the research team of the service team will calculate the profit production costs and social benefits from the production of eco-friendly Eco printing. We get the data from interviews and analyze the financial reports of eco-printing entrepreneurs who are environmentally friendly so that the data is primary data; that is, it comes directly from respondents who are eco-printing entrepreneurs. An appropriate literature review with structured and in-depth analysis also supports identifying social benefits.

The scope of research in this analysis will examine the economic and social costs and benefits of eco-printing entrepreneurship in the Malang City area in 2023. 2023 is a specially selected year. In 2020, Indonesia and other countries globally experienced the covid-19 pandemic, which hit

most sectors of the economy, while 2021 and 2022 were years of economic revival after recovering from the Covid 19 pandemic. However, the economic recovery did not go well for specific sectors, such as the craft sector. The craft sector needs much support, time and workforce to recover to the pre-pandemic state—moreover, the craft sector has particular expertise, namely the application of eco-friendly Eco printing techniques.

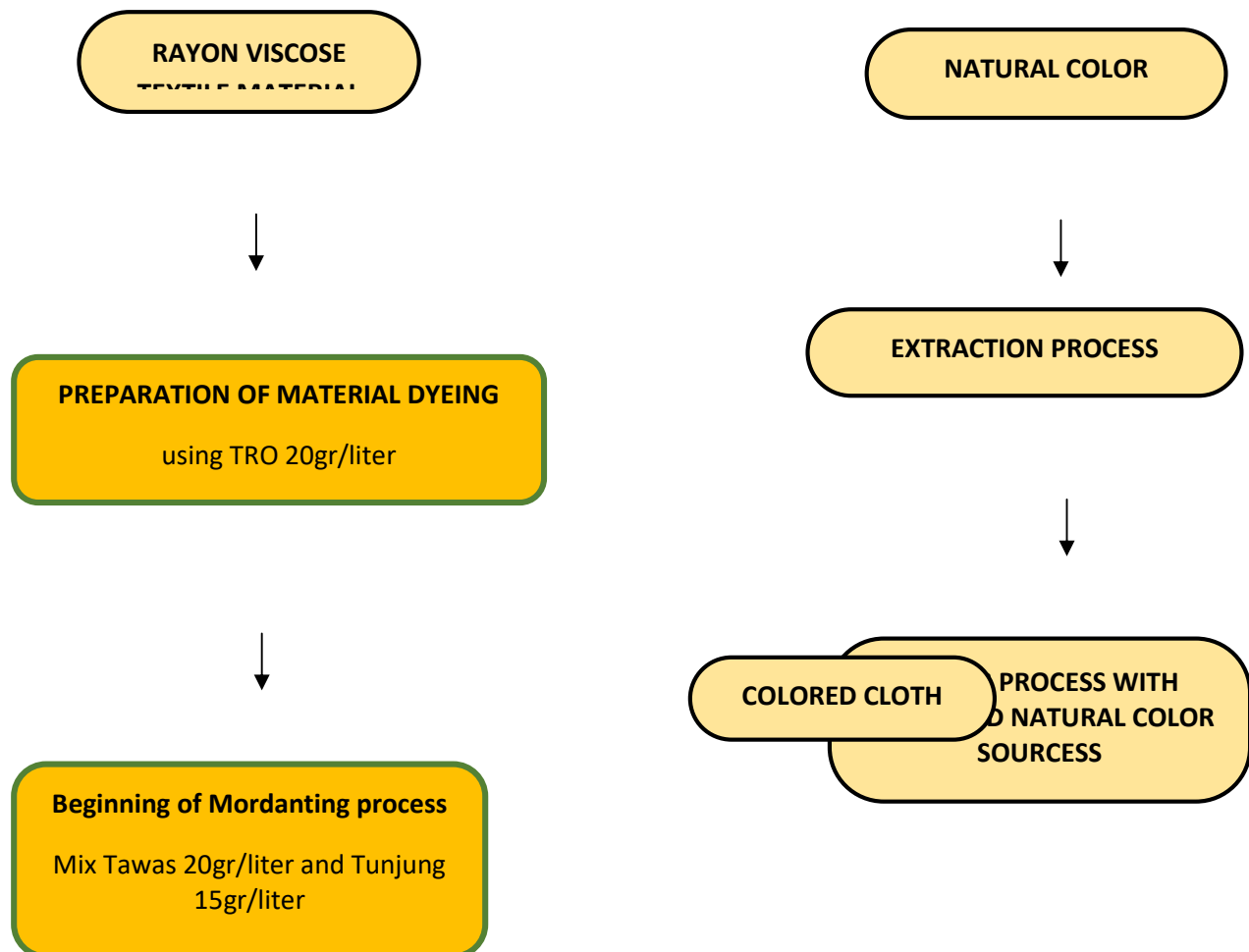
#### 4. RESULTS

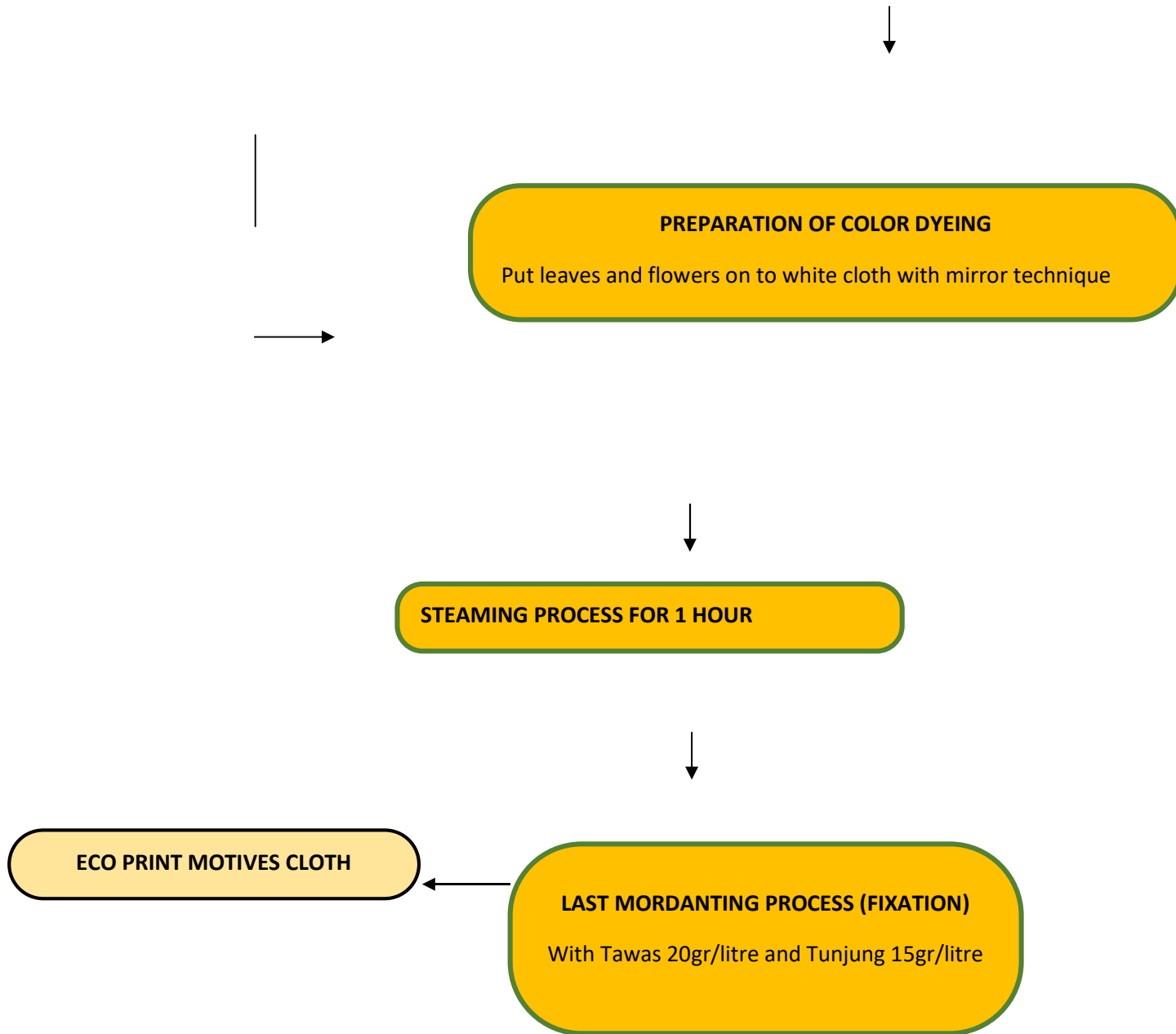
There are 2 coloring techniques in Eco printing

##### 4.1 Steaming technique

Steaming technique is done by arranging leaves or flowers on cloth, then rolling it up and then steaming it. The purpose of steaming is to bring out the patterns and colors of the leaves and flowers that have been arranged. Steaming technique has 6 steps from scouring until fixation result. The scheme of steaming technique is described below

##### 4.1.1 Eco print Production Process Scheme





Source: Interview Result, 2023.

#### 4.1.2 The initial stage of making Eco print fabric is scouring

##### a. Scouring

Scouring stage is the process of cleaning the fabric that we will use later from the chemicals used by textile factories in the previous fabric making process. The process or measurement that I will explain is composting for 2-2.5 meters of fabric.

- Prepare 1 tablespoon of soda ash with 4 liters of hot water in a bucket, then stir until it dissolves then put the cloth in for  $\pm$  30 minutes.
- Add 2 liters of room temperature water then let sit for  $\pm$  2 hours.
- After leaving it for  $\pm$  2 hours, rinse the cloth thoroughly until there is no sticky surface of the cloth and the rinse water is clear.

#### b. Mordant

Mordant is the process of dyeing fabric to be printed using a solution of chemical elements.

- Mordant for main fabric and materials that need to be prepared

Prepare 2 liters of room temperature water, 5 tablespoons table vinegar, 150 gr alum, baking soda 50 gr, and Tunjung 15 gr.

- After the scouring process, the dry cloth is placed in the mordant solution and left for 30 minutes.
- In another place, add 1 tablespoon of lime dissolved in 5 liters of water and settle until 4 liters are clear.
- After leaving it for 30 minutes, then dry it in the sun until it is dry and put it in a lime solution that has been made clear, then dip the cloth until all parts are exposed to lime sediment water, then rinse it clean and dry it in the sun half dry, then continue with the leaf printing process.

#### c. Printing Process

- If the first cloth has been mordanted, it is necessary to prepare a second cloth as a blanket which functions as color's lock for the leaves
- After the mordant process, fabric 1 is spread out and then laid out on leaves.
- Cloth 2 (Blanket) is put into the tunjung solution, squeezed and covered with the first cloth.
- After that, cover it with plastic, then roll it up and tie it, then steam it for  $\pm$  2 hours.

#### d. Drying Process

The final stage is to leave the cloth for  $\pm$ 7 days so that absorption is maxime

#### e. Fixation Process



The Fixation Process is a locking process at the final stage of Eco printing. Fixation using alum aims to strengthen or lock the color and texture so that they last longer. 5 grams of alum with 5 liters of water for 2.5 meter cloth.

f. After Fixation

After fixation, rinse using water without detergent and air dry.

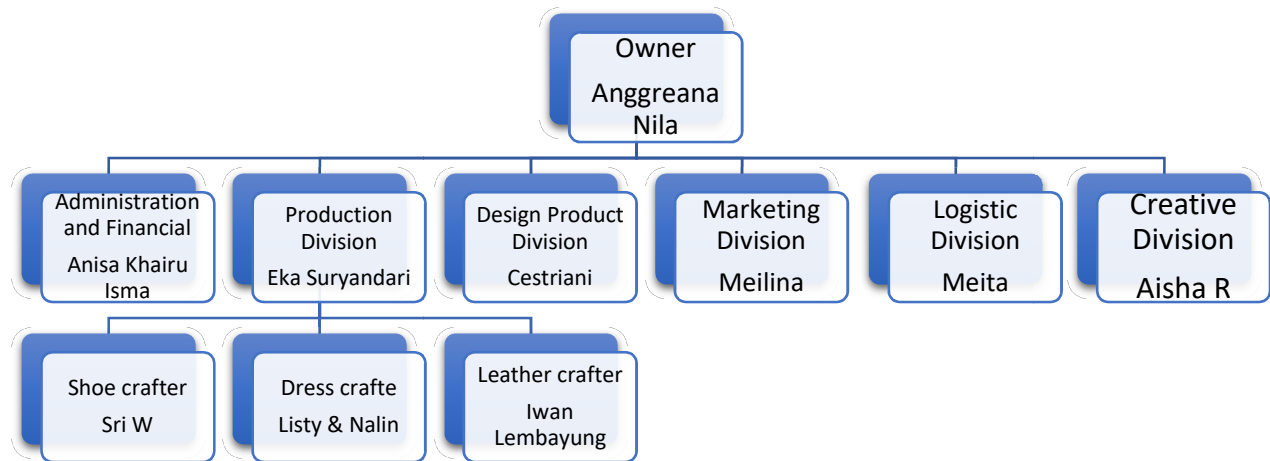
1. Pounding technique

The pounding technique is done by placing leaves or flowers on the cloth. Then the leaves or flowers are beaten using a hammer as one of the simplest ways that can be done using the Eco printing technique.

- Prepare the tools and materials that will be used.
- Prepare the fabric which has been previously mordanting, then spread the fabric.
- The next process is to place several leaves and flowers which are used as motifs on the fabric. The leaf patterns can be arranged spread out or shaped according to a certain motif design.
- Gently hit it using a wooden mallet until the motif is printed on both sides of the fabric.
- Next, lift the leaves slowly, then dry the cloth that was previously used as a base under the leaves until dry.
- Then dry the cloth that was previously soaked in the alum mixture until dry.
- Once dry, the Eco printed fabric is ready to be used.

Vision of Aeleen Eco print fashion and arts: Making Aeleen Eco Craft a company that produces unique and innovative and good quality craft fashion products qualitatively and quantitatively, synergizes and partners to improve the economy of the surrounding community and is able to dominate and achieve domestic and foreign market targets by prioritizing environmentally friendly products.

#### 4.1.2 Organizational structure of Eco printing entrepreneurs



#### 4.2 Eco printing production costs and benefit analysis

One production period is carried out within a period of 3 days. The first day the crafter had to look for leaves/plants for the printed motifs and mix the necessary natural solution materials. Crafters look for flowers, stems and leaves that will become “natural prints” for the Eco print motif. In the production process, natural solutions are also needed to make the natural colors of flowers seep into the fabric/sheep/cow leather base material. These natural solutions do not pollute the environment because they are made from natural ingredients. The second day the crafter and 2 assistants carry out the steaming process which can take 6-12 hours depending on the basic ingredients of Eco printing

The capital used by Aeleen is joint capital from the owner (Angreana Nila) and Anisa Khairu Isma. So far capital has not borrowed from banks. The cost and benefit analysis shows the break event point (BEP) time. In the short term, economic costs are divided into 2 types, namely fixed costs and variable costs. Fixed cost is the cost of production equipment that is not used up in 1 production process. While the variable cost is the cost of materials and equipment that runs out in 1 production. So the total cost is the sum of these two costs. In the long run, all costs are variable costs because production equipment and supplies eventually depreciate.

The benefit and cost analysis of Eco printing production is based on the following information

1. This production period is carried out within a period of 3 days. Means in one week ideally produce one time. Although in real conditions it is possible to carry out two production processes in one week if there are many orders or will attend exhibitions. In calculating this analysis it is assumed that one production process is carried out in one week.

2. Aeleen's Eco print business produces fabric and leather sheets with Eco print motifs. The types of fabric products produced are sheets of rayon, cotton, and linen with a size of 150 cm x 250 cm per sheet. The skin size uses 1 foot unit, which is 25 cm x 25 cm. One production process can only produce 1 sheet of cloth or 1 sheet of leather measuring 4 feet.

**Table 1. Eco Print Cost and Benefit Analysis to Variety Products**

Period	Product	Benefit	Cost		Benefit-Cost
			Fixed cost	Variable cost	
1	Rayon	350,000.00	2,546,500.00	210,000.00	(2,406,500.00)
2	Cotton	400,000.00	-	240,000.00	(2,246,500.00)
3	Linen	450,000.00	-	270,000.00	(2,066,500.00)
4	Sheepskin	240,000.00	-	144,000.00	(1,970,500.00)
5	Cow-hide	280,000.00	-	168,000.00	(1,858,500.00)
6	Rayon	350,000.00	-	210,000.00	(1,718,500.00)
7	Cotton	400,000.00	-	240,000.00	(1,558,500.00)
8	Linen	450,000.00	-	270,000.00	(1,378,500.00)
9	Sheepskin	240,000.00	-	144,000.00	(1,282,500.00)
10	Cow-hide	280,000.00	-	168,000.00	(1,170,500.00)
11	Rayon	350,000.00	-	210,000.00	(1,030,500.00)
12	Cotton	400,000.00	-	240,000.00	(870,500.00)
13	Linen	450,000.00	-	270,000.00	(690,500.00)
14	Sheepskin	240,000.00	-	144,000.00	(594,500.00)
15	Cow-hide	280,000.00	-	168,000.00	(482,500.00)
16	Rayon	350,000.00	-	210,000.00	(342,500.00)
17	Cotton	400,000.00	-	240,000.00	(182,500.00)
18	Linen	450,000.00	-	270,000.00	(2,500.00)

19	Sheepskin	240,000.00	-	144,000.00	93,500.00
20	Cow-hide	280,000.00	-	168,000.00	205,500.00

Source: Data analyzed, 2023.

An additional assumption for table 1 is that Eco printing produces products that vary regularly from rayon to cow hide products. Each of these products has different variable costs and benefits. So that the condition of the break event point (BEP) is achieved in the 19th production process (19th week). Week 19 (month 5, week 3) is what is called the Payback Period, which is the period for paying in full all costs that have been incurred. When the BEP (break-even point) means that the benefit equals the total cost, there is no profit. At the time of BEP, the product produced is

1. Linen fabric size 15 m2
2. Rayon fabric size 15 m2
3. Cotton cloth size 15 m2
4. Sheepskin size 16 feet
5. Cow leather size 12 feet

During the BEP, the economic value of the five types of products produced above was Rp. 6,600,000.

**Table 2. Eco Print Cost and Benefit Analysis to Linen Production**

Period	Product	Benefit	Cost		Benefit-Cost
			Fixed cost	Variable cost	
1	Linen	450,000.00	2,546,500.00	270,000.00	(2,366,500.00)
2	Linen	450,000.00	-	270,000.00	(2,186,500.00)
3	Linen	450,000.00	-	270,000.00	(2,006,500.00)
4	Linen	450,000.00	-	270,000.00	(1,826,500.00)
5	Linen	450,000.00	-	270,000.00	(1,646,500.00)
6	Linen	450,000.00	-	270,000.00	(1,466,500.00)
7	Linen	450,000.00	-	270,000.00	(1,286,500.00)

8	Linen	450,000.00	-	270,000.00	(1,106,500.00)
9	Linen	450,000.00	-	270,000.00	(926,500.00)
10	Linen	450,000.00	-	270,000.00	(746,500.00)
11	Linen	450,000.00	-	270,000.00	(566,500.00)
12	Linen	450,000.00	-	270,000.00	(386,500.00)
13	Linen	450,000.00	-	270,000.00	(206,500.00)
14	Linen	450,000.00	-	270,000.00	(26,500.00)
15	Linen	450,000.00	-	270,000.00	153,500.00
16	Linen	450,000.00	-	270,000.00	333,500.00
17	Linen	450,000.00	-	270,000.00	513,500.00
18	Linen	450,000.00	-	270,000.00	693,500.00
19	Linen	450,000.00	-	270,000.00	873,500.00
20	Linen	450,000.00	-	270,000.00	1,053,500.00

Source: Data analyzed, 2023.

An additional assumption for table 2 is that if the Eco print linen fabric production process is only then the BEP is achieved in the 15th production process (15 weeks), faster than the BEP in table 1 where the production process varies. Because linen products have the highest economic benefits when compared to other products, BEP is achieved more quickly if production only produces linen products. However, producers must of course meet market demand, which does not only demand linen products, so the production process varies.

**Table 3. Social benefit and cost analysis of Eco Print product**

Period	Product	Benefit		Cost		Soc Benefit-Cost
		Ec benefit	Soc Benefit	Fixed cost	Variable cost	
1	Rayon	350,000.00	50,000.00	2,546,500.00	210,000.00	(2,356,500.00)
2	Cotton	400,000.00	50,000.00	-	240,000.00	(2,146,500.00)

3	Linen	450,000.00	50,000.00	-	270,000.00	(1,916,500.00)
4	Sheepskin	240,000.00	50,000.00	-	144,000.00	(1,770,500.00)
5	Cow-hide	280,000.00	50,000.00	-	168,000.00	(1,608,500.00)
6	Rayon	350,000.00	50,000.00	-	210,000.00	(1,418,500.00)
7	Cotton	400,000.00	50,000.00	-	240,000.00	(1,208,500.00)
8	Linen	450,000.00	50,000.00	-	270,000.00	(978,500.00)
9	Sheepskin	240,000.00	50,000.00	-	144,000.00	(832,500.00)
10	Cow-hide	280,000.00	50,000.00	-	168,000.00	(670,500.00)
11	Rayon	350,000.00	50,000.00	-	210,000.00	(480,500.00)
12	Cotton	400,000.00	50,000.00	-	240,000.00	(270,500.00)
13	Linen	450,000.00	50,000.00	-	270,000.00	(40,500.00)
14	Sheepskin	240,000.00	50,000.00	-	144,000.00	105,500.00
15	Cow-hide	280,000.00	50,000.00	-	168,000.00	267,500.00
16	Rayon	350,000.00	50,000.00	-	210,000.00	457,500.00
17	Cotton	400,000.00	50,000.00	-	240,000.00	667,500.00
18	Linen	450,000.00	50,000.00	-	270,000.00	897,500.00
19	Sheepskin	240,000.00	50,000.00	-	144,000.00	1,043,500.00
20	Cow-hide	280,000.00	50,000.00	-	168,000.00	1,205,500.00
21	Cotton	400,000.00	50,000.00	-	240,000.00	1,415,500.00

Source: Data analysed, 2023.

In table 3 the results of the social benefit cost analysis show that social BEP is achieved more quickly because in carrying out this production process with labor-intensive methods that utilize a lot of manpower so that people's welfare also increases evenly depending on their participation in the production process to sales.

## 5. DISCUSSION

The BEP achieved in a matter of months is proof that the Eco print business is a business with great potential. BEP can be achieved in the short term which is less than one year. However, not all entrepreneurs can do this because it takes a high artistic taste to create Eco printing motifs. So that each Eco printing crafter will carve his own unique unique motif that cannot be imitated by other crafters. Therefore, this Eco printing product also contains artistic value.

### 5.1 Analysis of Costs and Benefits from Economic Perspective

In this cost and benefit analysis, fashion and art products with the Eco printing technique will still be very promising for big profits because these products provide two benefits, namely functional benefits that can be economically calculated in units and artistic benefits for the user. Functional benefits are obtained from the basic function. General products according to their use, for example bag products to carry the items needed so that they are safe and not scattered. In addition, functional benefits can also protect the wearer

### 5.2 Analysis of Costs and Benefits from Socio-Economic Perspective

The actual benefits of art are rather difficult to quantify in calculations using currency units because the benefits of art are actually felt more widely and according to the specific tastes of consumers. So that the benefits of art will have a different perception for each individual and if it is quantified in currency units, the value will also be different for each individual. However, in this discussion, the artistic benefits of applying eco-friendly eco-printing techniques are quantitatively attached to the functional benefits of the products produced, for example in bag products. Natural printing on the bag will increase its economic value of the bag will go up and provide a prestigious value for its users. So that the benefits of art produced are the benefits of art from products that function in everyday life, not just the benefits of art in the form of decoration or display.

The social benefits of Eco printing products in the case study of Aeleen's Eco printing business are women's empowerment. Most of the workforce involved in the production of Eco printing are women. That doesn't mean it doesn't involve male workers. The male workers involved are shoe crafter assistants who are not permanent workers but are daily workers.

The social benefits of applying eco-friendly eco-printing techniques are enormous. First, social benefit is the empowerment of women residents around entrepreneurial MSMEs. Mrs. Anggreana Nila is not alone in running her production, she is assisted by several female workers to make financial reports and in the production process. Second, social benefit of waste management which can be produced into something new with innovation and more value added. Third, preserve environment by using ecofriendly materials.

The social benefits of Eco printing production can be optimized if there are more workers who have the appropriate skills and high integrity. The skills expected of workers are basic skills in handicrafts. Therefore, simple training is needed so that workers are ready to participate in this Eco printing production process.

## 6. CONCLUSION

Fashion and art products with the Eco printing technique will still be up-and-coming for big profits because these products provide two benefits: functional benefits that can be economically calculated in units and artistic benefits for the user. Functional benefits are obtained from the primary function.

Social benefits of applying eco-friendly eco-printing techniques

First, the social benefit is empowering women residents around entrepreneurial MSMEs. Second, the social benefit of waste management can be produced into something new with innovation and more value added.

Third, preserve the environment by using eco-friendly materials.

Cost and benefit in the Economy are different from social cost and benefit analysis because we get a bigger perspective in social cost and benefit analysis. Social cost and benefit analysis not only counts cost and benefit in currency measure but also involves analysis of the social impact of the production for people and the environment surrounding it.

## LIMITATION

The analysis is limited to Eco-print production by Mrs. Anggeana enterprise only. Different kind of enterprise in Eco-print may will gain different analysis cost and benefit result.

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