

# PATCHWORK FABRICS WASTE UTILIZATION BEING PRODUCTS BASED ON CREATIVE INDUSTRY

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**Abstract:** *The purpose of this study is to provide a briefing to the managers of small industries that produce patchwork fabrics waste through the utilization of residual waste apparel industry in order to be able to give the product added value which then can indirectly help improve the welfare of the community. The scope of the debriefing will include waste handling methods, design, and production. The research activities carried out in the village of Suka Mulya Soreang Bandung regency, with the object of study is the small industrial businesses and communities in the region.*

*The completion of this study using descriptive analytical approach. Data collection through literature studies, in-depth interviews, the Forum Group discussion (FGD), and workshops.*

*Given the debriefing, it aims to increase the ability of the imagination as well as improved technical skills, operations, thus being able to visualize various products of patchwork fabrics waste processed with good quality. In the long run this research is expected to help established that the bargaining position of employers and society, so that it does not directly impact the research will be able to open up wider job opportunities that helped to alleviate unemployment.*

**Keywords:** *Utilization Model, patchwork fabrics waste, Small Industries, Creative Industries*

## 1. Introduction

### 1.1 Background

One of the major industries in Indonesia are able to absorb quite a lot of manpower and also able to provide foreign exchange for Indonesia is a textile industries and industries producing processed products made from textiles. Of the activities undertaken by this industry, especially in the garment industry or home industry of textile products, course there will be a large processing activity and often that process raw materials ranging from fabric sheets made into a finished product, such as the patterns, cutting, sewing, and so on.

As a result of this process, it will generate a lot of leftover pieces of fabric are small size and in a variety of forms are often called waste cloth or waste fabric. Waste fabric often called patchwork. This patchwork fabrics sometimes just be a waste material that is not used, thrown away or sold by a textile company in the form of sacks are commonly bought by small traders, which is usually by small traders can only be used as rags, rugs, and other items that have a low sale value.

Sometimes these leftover fabrics that happens to have patterns and motifs are different so that will make it difficult if would be used again. But actually using a bit of skill, patchwork utilization can be optimized processing to be used as various types of goods or products that have a higher economic value than just being a doormat and wipe.

Making products from raw material waste fabric, it takes relatively little capital, but the more involved and needed in this industry is creativity. Although done with a simple sewing ability, when coupled with the touch of a slick design will produce refined products from patchwork high value.

Waste patchwork potential to be utilized as a wide range of products. In order to find and identify a variety of potential waste processed this fabric, required more extensive and in-depth exploration.

### 1.2 Waste fabrics

Waste fabric is one of the problems found in the city of Bandung. The waste can be easily found in various places such as suturing in the South London area, as well as in textile waste collection centers in the region such as Cigondewah. Various attempts have been made to reduce the volume of waste, one way to recycle. However, the resulting product is still not a lot of stuff, and therefore more serious treatment of waste fabrics that are not used as raw material for a unique or become more varied range of products that will be able to provide a broad usefulness to their communities .

The fabric waste processing can be done with a variety of techniques, namely the technique of "reka latar", and the technique of "reka rakit " to provide effects other than can usually be done in order to manipulate the fabric waste to create new textures and patterns that look different from the character cloth before.

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Making the technique of "reka latar" and the technique of "reka rakit" will produce a unique new material, meaning that the results will likely differ from one another even if the same type of fabric waste. Results of "reka latar" proficiency level can be used as an alternative raw material in the manufacture of products over the exclusive economic value.

### **1.3 Creative industries**

The concept of Creative Industries has gained a major concern in many countries because it can make a real contribution to the economy and is one of the pillars of the Indonesian economy is gaining attention in the future.

Creative industry products can be developed with the support of the local community in exploiting the potential of such utilization of waste fabric, which can create local products can grow with the needs of growing communities.

### **1.4 Products and Product Design**

Each product is anything that can be offered in the market to get attention, use, or consumption that can meet the needs. It includes physical objects, services, people, places, organizations, and ideas.

While product design is part of the design. Product design activity is to design a product includes a physical object that can be offered in the market to satisfy a want or need.

A process of goods to be bought and sold, beginning with the planning activities performed by a method that combines the activities of manufacturing, technology manufacture goods, and also items to be marketed. The last activity is set way into the market refers to a system or mechanism of management and development of the treatment of the goods to be traded.

## **2. Objectives and Benefits Research**

Exploration fabric waste utilization is expected to be able to produce a wide variety of alternative creative work, such as handling techniques, processes, and applications in products that have a high use value. The creative work of the fabric waste utilization is expected to make an inspiration and source of the idea for the community to be more motivated doing creative and innovative in the process waste fabrics into various products, based on the creative industries such as household products, souvenirs, fashion products, aesthetic elements, and so on.

Besides, with the fabric waste processing model, will trigger more people motivated to make creative work, resulting from the creativity of the community is expected to grow into a creative economy, which is capable of prospering communities.

Utilization of waste fabric well, in addition to having economic value to the community, also it is a form, the economic empowerment of urban communities, and the preservation of the environment, as well as providing new jobs from the creative industrial commodities, such as products, based on the creative industries in above .

## **3. Methods**

This study will be conducted in the village of Suka Mulya, Soreang, Bandung regency. At this location there were about 125 small industrial entrepreneurs specializing in small industries that manufacture apparel products, which generate a lot of waste fabrics, the majority headed by a person who has a high school education. The number of employees who are actively involved in the small business industry is usually about 10 to 20 people, aged between 18 to 30 years, with varying levels of education ranging from elementary school to High School.

### **3.1 Types, Sources and Data Collection Techniques**

The data will be collected in this study is primary data, which is collected by, interviews with entrepreneurs and filling the questionnaire sheet by relevant experts respondents who had been prepared in advance, taking into account the physical condition of the South Bandung Regency, which summarized the findings as a field, to explore the potential sources of waste fabrics, among other things, the number, type, and shape from fabric waste generated.

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**3.2 Indicators of success**

As the key to the successful implementation of the research, the design of indicators, in terms of management and design aspects, as follows:

**Table 1:** Indicators of Success

<b>Variable</b>	<b>Measured aspect</b>	<b>The level of success</b>
Management	Managerial capabilities	<ul style="list-style-type: none"> <li>- Able to develop an evaluation system, the performance of the company</li> <li>- Have the ability to capture and develop opportunities.</li> </ul>
Design	The ability of imagination through various experiments conducted	<ul style="list-style-type: none"> <li>- Able to create product design, from the processed waste fabric that has more value</li> <li>- Able to harmonize in mixing and matching the shape, style, size, and color of the fabric waste.</li> </ul>

**4. Research Findings**

**4.1 Regional overview**

Suka Mulya village is a village located in Bandung regency. Sukamulya village located about 30 km south of Bandung. The village has a population of approximately 8,000 people, of which more than half, or about 6211 persons of the population is located in the productive age. Nearly 75% of the total population in the region to pursue business-related field convection apparel. The rest 25% are living as rice farmers, farmers' fields, or as a sewing workers.

Typically, the work done by the villagers of Suka Mulya this is a business that is inherited from generation to generation, and is currently managed by the third and fourth generation of the founders. Their monthly income varies widely ranging Rp.1.300.000 up to Rp. 5.000.000, - per month.

**4.2 Production Produced**

There are various types of primary products which can be produced by the Suka Mulya village. This is a product that is associated with convection. Types of products produced by Suka Mulya village communities can be grouped into:

1) Muslim Clothes

Materials commonly used to produce this Muslim clothing, is jersey, cotton, cotton oil, rayon, Korean, and keli. There are about 37% of employers convection in the village "Suka Mulya" producing the kind of Muslim fashion.

2) jacket, and trousers Jean

Pants, jackets, and jeans are manufactured using raw materials straitching denim brands among others "Taifuntex, Bajatex, Medanjaya, and Gamatex. These types of products are made jacket, and jeans for men and women. Type of jean fabric used is composed of two types of soft and hard jean jean, which has straitching both large and small.

3 ) Polite Pants

These types of products are usually made pants for adult men and women. The materials used are usually from pure cotton, cotton tetoron, and kind of thin canvas. This polite pants products, usually used as a semi formal dress, such as the office, teaching, and so on. With 14% of entrepreneurs who pursue venture this product.

4 ) Sweater Jacket

Suiter jacket is usually made for children and adolescents, while the materials used, is a jersey material splis Kahatex brands. The jersey material thickness also varies, depending on the type and model of a sweater jacket, which is produced. Jersey material used in the form of plain or patterned material. To give some accent pattern on the surface of the sweater, plain jersey material, often in screen printing after the fabric is cut.

### 5 ) Casual Dress

Entrepreneur of this type of casual clothes, usually producing clothes for children, adolescents, and adults, both men and women. The raw materials used to produce highly variable, ranging from cotton, cotton oil, cotton paris, and not infrequently applied to other materials such as jersey, canvas, chiffon, soft jean, and so on. Model of casual dress is usually to be used at events are more casual, not too formal, for example to go to the mall, market, or used for everyday clothes.

### 6) Support Products

Employers who produce this type of product support is a businessman who does not have business as mentioned above.

Type of business support products is: 1. Embroidery business, embroidery is executed either manually or run with computerization; 2. Mounting studs, eyelets; 3. Screen printing; 4. Steam iron; 5. Equipment / supplies convection.

This kind of business support products, can be said to be very beneficial, because the raw materials can be imported directly from factories located close to the place of business rather than Majalaya area, so the price will be cheaper than if brought from Badung. In addition, this effort can be said to be the prospect, because the number of conducting business in this group, only about 9% of the entire business, but serving approximately 91% of other businesses.

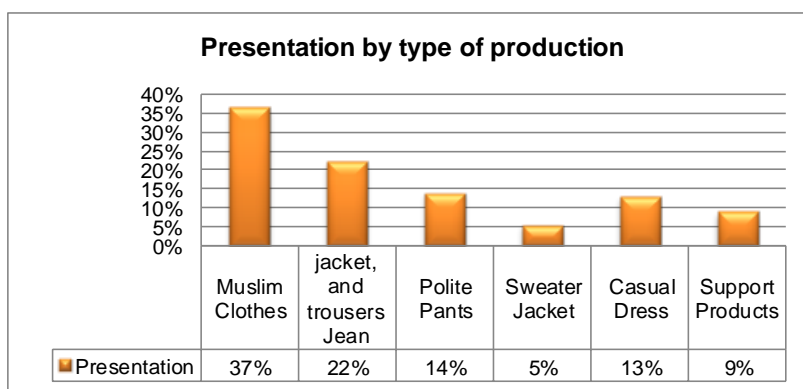


Figure 1: Classification of Employers, By Type of Business

### 4.3 Marketing areas

Marketing area of the five types of products (Muslim fashion, jean jacket and trousers, pants polite, Jackets suiter, and a casual shirt) mentioned above is covering an area of Bandung regency, around the city of Bandung, outside the city of Bandung, and even outside Java, is:

- Regency Bandung, Bandung and its surroundings: Batu Jajar, Padalarang, Cिलिन, Soreang, Sumedang, Ujung Berung Market, Dayeuh Kolot Market, Lembang, Pangalengan, Ciwidey, Pasar Baru, Cicaheum, Andir Market, Cicalengka Market, Majalaya, and Ciparay.
- In the town outside the city of Bandung: Cimahi, Garut, Tasikmalaya, Cirebon (Tegal Gubuk), Cikampek, Sukabumi, Subang, Cianjur, Garut, Jakarta, (Cipulir, Tanah Abang), Purwakarta, Central Java (Solo), and East Java (Surabaya).
- Beyond Java: Aceh and Makassar

### 4.4 Acquisition of raw materials, the Main and Supporting

The main raw materials required by the employer depends on the type of products they make, however, for the acquisition of raw materials, the entrepreneur acquired only from the area around the company. This is because the raw materials are purchased only in small amounts (purchases made in accordance with the production capacity), so the amount of costs incurred are not proportional to the amount of materials purchased. Therefore, for a little more production, the entrepreneurs get the materials from textile centers located around the company, among others: from Cigondewah and Tamim.

Types of raw materials include polyester, jersey material of various types, Tetoron Catoon, cotton, jean material, and so on. Needs support material such as resluting, buttons, buckles, spoon, sewing thread, rubber thread, hardware cloth, can be easily filled from the shops in the local region.

#### **4.5 Waste Generated**

Judging from the type of business apparel is occupied, and the type of product produced of course there will be differences in the use of raw materials of cloth, so that the remains of the resulting pieces are also different in terms of size, type, color, shape, and character.

For the production of the type , length Muslim clothes ( abaya ), tops, pants, and skirts, which includes a group of female Muslim clothing production, is the use of raw materials type of jersey, cotton, cotton oil, rayon, Korean, and keli. The size of the resulting pieces are extremely diverse. The size of the pieces are grouped into two types of pieces are rather wide (size A) about (30 x 20) cm, and the smaller pieces (size B) which according to them can not be used anymore. Size B usually with elongated shape, square, and irregular. The size is usually elongated shape with a width of not more than 6 cm and a length between two to five meters, while the square shape and irregular shapes, widths no longer than 10 cm. The selling price of the remaining pieces of fabric the size of A will be more expensive compared to the rest of the pieces of fabric to the size of B, because it can function more optimally.

Generally this type of waste pieces of cloth produced by jersey, cotton, cotton oil, rayon, korean, and keli, can be said to include the type of thin, pliable and easily shaped.

But the difference with the remaining pieces of the types of products produced jeans. The resulting material is thicker and stiffer with sizes also vary, but relatively smaller than the size of A and the size of B.

Waste of jean products with a size of about 10 cm can still be used to place a rope belt. That is why the size of the waste generated has smaller dimensions. Therefore, the waste is usually processed and used as material internit, or as a repellent.

#### **5. Conclusion**

Type of fabric waste, which is generated from a small industry in the village of Suka Mulya Soreang, waste fabric is chiffon, cotton, polyester, and other types of small sizes with a variety that can not be used as primary products. The resulting waste fabric, has a wide range of characters, shapes, sizes, thereby limiting further treatment is needed in the form of sorting out the type and characteristics of the waste to determine how to further treatment, so that future products from waste materials which made the fabric, would have more value .

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