


STUDY OF THE PROCESS AND DEVELOPMENT OF ECONOMIC OPPORTUNITIES OF PINEAPPLE LEAF WOVEN FABRIC IN CIJAMBE REGENCY, SUBANG, WEST JAVA SEEN FROM THE INTERIOR PRODUCTS INDUSTRY

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Abstract: Indonesia is a tropical country that has abundant flora biodiversity. One of the plant that were able to grow well in Indonesia is Pineapple (*Ananas Comosus*). Indonesia also occupies the 6th position in the world based of the plantation area and the production of pineapples. Pineapple has many functions and uses. Most people only know pineapple plants as a food source, even though pineapple leaves also have considerable potential as fibre producing materials and can be used as an alternative processed. So far pineapple leaves have not been widely utilized commercially, especially in the interior field. In this research was conducted by observation methods, interviews and literature studies to obtain data on the fabric process and the development of economic opportunities for woven fabrics from pineapple leaves in order to be utilized as an eco interior product to the maximum and encourage innovation for interior products with certain markets. The result of the research process will be the design of concepts and product prototypes by utilizing pineapple leaf fibre material by sticking to the 17 Sustainable Development Goals, regarding sustainable cities and communities focusing on the use of local human resources as well as local materials.

1 INTRODUCTION

Indonesia is one of the tropical countries that have abundant flora biodiversity. One type of plant that could grow well in Indonesia is Pineapple (*Ananas Comosus*). Indonesia also occupies 6th place in the world based on the plantation area and the production capacity of pineapples. Pineapple production in Indonesia reached 1.84 million tons with a productivity speed of 117.5 tons per hectare. Along the Indonesian archipelago, pineapples can grow fairly easy but the largest pineapple production centres in Indonesia are in Lampung, Jambi, North Sumatra, East Java and West Java.

Pineapple has many functions and uses. Most people know pineapple plants as a food source, even though pineapple leaves are also had considerable potential as fibre producing materials and can be used as alternative produce. So far pineapple leaves fibres have not been widely utilized commercially, especially in the interior field. There is an abundant supply of pineapple leaves waste that has a favourable selling value if used as a composite material and is very profitable for producers.

Every 3 months the pineapple plant will be replaced with a new one. This resulted in an abundant waste of pineapple plants. Pineapple plants annually produce harvestable leaves up to 125 tons per hectare,

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consisting of 40% green leaves (50 tons) and 60% wet stems (75 tons). From wet stems, it would be able to produce .5% (2,625 tons) dry fibre and 16% (12 tons) waste (Ludhiantora S, 2009). The waste produced by the pineapple plant leaves is then processed into fibre and then used as a craft material. Pineapple fibre itself has a strong character & aesthetic because of its shiny look and has economic value potential because the selling price of fibre is quite expensive which is Rp 115,000.00 / kg.

Currently, the interior products industry has not used pineapple leaves as an alternative material in the manufacture of its products. It is considered very important to develop this pineapple leaf material in a more appropriate direction so that the utilization of this material can be done optimally, so it will be able to improve the public awareness of the potential that is available in the pineapple fibres. In addition, it is expected that this research will encourage the utilization of pineapple leaf waste to become a substitute product for fabric materials that are less environmentally friendly such as polyester to create a more sustainable environment.

Therefore, this study was done to explore the potential of pineapple fabric deeper. In addition, knowing the manufacturing process of woven fabric from pineapple leaves can increase the appreciation of the community for the products manufactured. In this particular research, the data was collected through observations, interviews and literature studies on the production of pineapple leaf fibre woven fabric and the development of economic opportunities for the object to be utilized as an eco-interior product to encourage innovation and utilization of fibre materials for a certain target market.

2 METHODS

Research on the study of processes and the development of economic opportunities of pineapple leaf woven fabric was carried out in Cijambe Regency, Bandung, West Java during the month of October in the year of 2021 using qualitative research methods. Qualitative research method is a research method used to describe and analyze phenomena, events, social activities, attitudes, beliefs, perceptions and people, both individually and in groups (Sukmadinata, 2009) This research is qualitative research that uses the Interview Literature Studies, and Observation Method. This method is used because this method can make it easier for the topic to be relevant to the needs of the user because it goes

through the stages of understanding directly. Through this method, data obtained about the process of manufacturing woven fabric from pineapple fabric which will then be analyzed for their potential in the economic market.

2.1 Literature Studies

The first stage of research is literature studies. The purpose of this stage is to understand the initial basis that must be understood by researchers to conduct further learning on the topic discussed to be written and analysed. Literature studies are carried out by reading books, journals or articles related to research.

2.2 Interview

The second stage of the research process is the interview. After processing the data obtained through literature studies, the interview process is carried out to deepen the knowledge of researchers on the topics carried out. Through interviews can help researchers to understand design needs through the user's perspective.

The interviewee chosen for this research is the MSMEs Alfiber owner and their workers. The interview will be overviewing the processing stages of the fibre, the community around the MSME, and the economic potential of the products produced.

2.3 Observation

Observation is an important part of data collection. Observation means collecting data directly from the field (Semiawan, 2010). In the observation stage is also a process that was done through observing the object and then going through systematic, logical, objective, and rational recording of various phenomena in actual situations, as well as artificial situations (Kristanto, 2018). The key to the success of observation as a data collection technique is very much determined by the observer himself, because the observer sees, hears, smells, or listens to a research onjek and then he concludes from what he observes. Observers are the key to the success and accuracy of research results (Yusuf, 2014).

The observation subject in this research is the SME Alfiber worker, and the community surrounding it. It is done to understand more about the impact and how the product that was manufactured able to help the surrounding community.

2.4 Documentation

Documentation comes from the word 'document', which means written goods. Documentation method means the procedure of collecting data by recording existing data. Documentation methods are data collection methods used to trace historical data. Documents about people or groups of people, events, or events in social situations that are particularly useful in qualitative research (Yusuf, 2014).

Engineering or documentation studies is a way of collecting data through archival relics and includes books on opinions, theories, propositions or laws and others related to research problems. In qualitative research, the main data collection is due to the proof of the hypothesis proposed logically and rationally through opinions, theories, or laws, either supporting or rejecting the hypothesis.

The subject of the documentation is the fibre processing stages and also the workers of the MSME Alfiber. This process resulted in several videos and photos that were able to capture the real-time situation in the MSME Alfiber.

3 RESULTS AND DISCUSSION

Through research methods conducted produce data that can be processed to answer the main questions of this study.

3.1 Field Data

This research is a case study that facilitates attention to a case in an intensive and detailed manner, or in this case, is the target of the research:



Figure 1: Location of Research Site. Source: Google Maps

The target of the research is SMEs (Small and Micro Enterprises) in Cijoged Village, RT 1 RW 1, Cikadu, Cijambe Subang District, West Java, namely SMEs Alfiber. SMEs Alfiber is a Small Industry managed by Alan Sahroni who is engaged in the production of pineapple leaf waste treatment into strands - fibre strands (pineapple leaf fibre). and now it has developed in the process of making pineapple leaf fibre fabric. Pineapple leaf fibre can be used for various raw materials such as textiles, fashion, and crafts. Starting from concern for the environment of the area around the residence, where there is a lot of pineapple plant waste (pineapple leaves) that have not been utilized properly, then came the idea to establish a business oriented to the utilization and treatment of pineapple leaf waste under the name of Alfiber.

VISION

Making Subang Regency as a producer area of Pineapple Leaf Fibre and various typical products made from Pineapple Leaf Fibre.

MISSION

- Establishing cooperation with pineapple farmers in Subang Regency
- Increase the *added value* of pineapple leaves by processing them into pineapple leaf fibre products and into the final product.
- Introducing pineapple leaf fibre as a raw material for various textile, fashion and craft industry products that are environmentally friendly
- Expanding the market share of pineapple leaf fibre to various regions in Indonesia
- Processing pineapple leaf fibre into various craft products or creative industries.
- Creating jobs for the surrounding communities

3.2 Literature Studies

3.2.1 Natural Fibre

There are two types of fibre used as industrial raw materials, natural fibre and synthetic fibre. Synthetic fibers are fibers made by humans. Meanwhile, natural fibre (natural fibre) is the types of fibre as raw materials of the textile industry or others, obtained directly from nature.

Based on its origin, natural fibers can be classified into several groups, namely fibre derived from animals (animal fibre), mining materials (mineral fibre) and plants (Kirby, 1963).

Natural fibers derived from animals, including wool, silk, cashmere, ilama and camel hair. Fibre

derived from mining raw materials, such as asbestos fibers. While fibre derived from plants can be grouped again according to the origin of the fibre taken. Fibre taken from seeds (seed fibres), such as cotton fibre and kapok. Fibre taken from the stem (bast fibres), such as fibre jute, flax, hemp, and ramie. Fibre taken from leaves (leaf fibres), such as abaca, henequen, sisal, pineapple leaves and sansevieria. Chemically, all the fibre derived from plant main elements present in the fibre is cellulose, although other elements that vary in number are also contained in it, such as hemicellulose, lignin, pectin, ash, waxes and other substances (Kirby, 1963).

3.2.2 Pineapple Leaf Fibre

Pineapple-leaf fibres are one type of fibre derived from plants (vegetable fibre) obtained from the leaves of pineapple plants. Pineapple plants that also have another name, namely *Ananas Cosmosus*, (included in the family Bromeliaceae), generally categorized as seasonal plant. Historically, this plant originated in Brazil and was brought to Indonesia by Spanish and Portuguese sailor around 1599. In Indonesia, the plant has been widely cultivated, especially on the islands of Java and Sumatra which among others are found in subang, Majalengka, Purwakarta, Purbalingga, Bengkulu, Lampung and Palembang, which is one of the potential natural resources.

3.2.3 Pineapple Leaf Shape

Pineapple leaves are sword-shaped, blackish green and on the edges of the leaves there are thorns that protrude. The size depends on the variety can reach 55-75 cm with a width of 3.1 - 5.4 cm. Each pineapple leaf has a bunch of fibers that can be utilized as a new material for sustainable products.

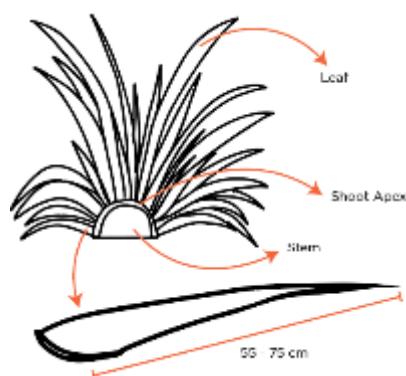


Figure 2: Pineapple Leaf Diagram. Source: Author,2021

Pineapple leaves have an outer layer consisting of the top and bottom layers, Between these layers there are many bonds in the form of fibers that are bound to each other by a type of adhesive substance contained in it.

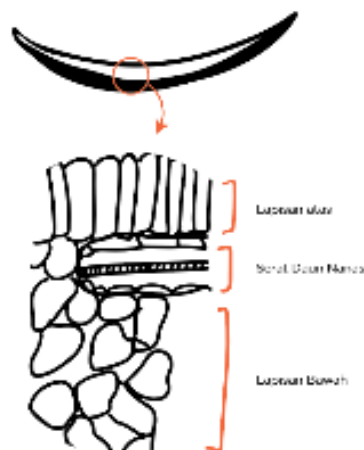


Figure 3: Pineapple Leaf Cut Diagram. Source: Author,2021

3.2.4 The processing stages of pineapple fibre

Pineapple leaf fibre produced by Alfiber, obtained from 4 groups of local farmers in the areas around the MSME area, namely the villages of Cijambe and Cikadu. Through MSMEs Alfiber local farmers were able to get extra income from selling unused pineapple leaves. From the 4 groups of farmers, MSMEs Alfiber can get approximately 400 kilograms of pineapple leaves.

The process of supply by farmers is done carefully by workers from MSMEs Alfiber. Pineapple leaves that are delivered must meet various standard criteria for export delivery that must be met. First, the pineapple leaves to be processed must meet the criteria. The leaf length size is should be more than 65 cm. According to the owner, in actuality all of the sizes of pineapple leaves can be processed into fibre, but because MSMEs must meet the standards of the exporter, they must follow these conditions. Second, pineapple leaves must be fresh; not rotten or dry. According to the workers, if the pineapple leaves have been rotten or dried, it will produce blackish-brown fibers that do not meet the standards provided by exporters. Exporters wants to get pineapple fibre that is white in color and clean. Third, the leaves that are delivered are leaves of pineapple from a certain type. Pineapple that is commonly used is the forest pineapple that is, *Quin Pineapple*. Although, the owner sometimes receives fibre supplies that came from the leaves of the garden pineapple. Garden

pineapple is quite long fibers but this is considered not ideal even though it is easier to process. According to the workers at MSMEs Alfiber, although garden pineapple fibers are easier to process than quin fibre, the quin pineapple fibers is not as fragile as the garden pineapple fibers. In addition, quin pineapple leaf fibre is able to maintain the white color it has for a longer time compared to the fibre of the garden pineapple leaves which are certainly preferred by the exporter because they went through a lengthy delivery process.



Figure 4: Fibre processing plant by Alfiber Source: Author, 2021

During this lengthy sorting process, 3-4 quintals of Pineapple leaves was sorted and then would be processed in the Alfiber’s factory and went through various long stages that was carried out by the workers from MSMEs itself; carefully and skillfully. MSMEs Alfiber has 8 workers who work in the fibers leaf processing stage who were trained to run the existing machines.



Figure 5: Fibre Scraping Process Source: Author, 2021

The processing stage requires workers who are resilient, fairly strong, and are meticulous in looking

for deficiencies of leaves. In the process, workers at Alfiber used decorticator machines. MSMEs Alfiber has 5 decorticator machines provided from companies that cooperate with Alfiber to supply pineapple leaf fibre. The process of processing the leaves is divided into 2 major stages, namely the stage of separation of leaf meat and the stage of fibre mashing. In the first stage, the separation of leaf meat is usually done by one worker who is then assigned to work on a batch of pineapple leaves using one decorticator tool who then take turns with other workers to use the machine.



Figure 6: Decorticating Process with Decorticator Machine. Source: Author, 2021

While waiting, the other workers will do the process of scraping and washing fibre to clean the flesh of pineapple leaves that are still attached to the fibre. The scraping process is done using a scraping tool; the leaf meat is scraped and then rinsed using a bucket of water.

The fibre that has been washed will then be reprocessed into the decorticator machine to be cleaned thoroughly. Fibre that has been processed at this stage is then dried for 1-2 days or until the fibre is completely dry. The drying stage is very important to keep the color of the fibre clean and not change color to brown.



Figure 7: Fibre Drying Process Source: Author, 2021

Fibre that has been dried, then reprocessed into the the decorticator machine. This stage aims to produce pineapple leaf fibre that is quite smooth and can then be processed into woven threads. If the fibre still feels too hard or rigid, then the process of mashing will be repeated until the fibre becomes smooth. At this stage, the mashed pineapple fibers will produce fine cotton like residue which will then be discarded. If done properly, the result of this process, is a strong, clean, smooth and glossy fibers.



Figure 8: The Rest of The 'Cotton' Processing of Pineapple Fibers on the Decorticator Machine Source: Author,2021



Figure 9: Comparison of Fibers Before and After Mashing Source: Author, 2021

The fibre that has been smoothed then goes into the combing stage. This stage is done manually by 6 housewives who come from the area around MSMEs. This stage is done to clean the residue of the processing from the pineapple fibre leaves and smooth the ends of the pineapple leaf fibre that has been processed. The process of cleaning takes maximum of 30 minutes for one fibre bunch. This process still uses a simple tool in the form of cloth scissors and iron combs. In this process, the quality control process is carried out in the form of checking the appearance of fibre. If there are fibers that change color, tangled or can not be combed; it will be cut and discarded. At this stage, only about 85% of the fibre produced can be exported because it does not meet the international shipping standards that have been set.



Figure 10: Combed and Uncombed Fibers and The Residue of the Combing Process. Source: Author, 2021



Figure 11: Fibre Combing Tools Source: Author, 2021

3.2.5 The process of fabric weaving

The process of fabric weaving in MSMEs Alfiber uses a modified Non-Machine Loom (ATBM) called ATBM Dogan where the process is crossing between lusi yarn with feed yarn. ATBM is a tool to perform human-driven woving activities. ATBM Dogan is a specially designed ATBM with several advantages to make fabric using human power (Alan, 2021). ATBM Dogan was created with the aim to improve the ability of gedogan looms and simplify the shape and function of ATBM Dogan. ATBM can be used while sitting (common in the small and traditional textile industry) and standing. In the large textile industry, ATBM is impossible to use. ATBM can accelerate and facilitate the manufacture of woven fabrics that previously only used traditional looms or gedokan looms.

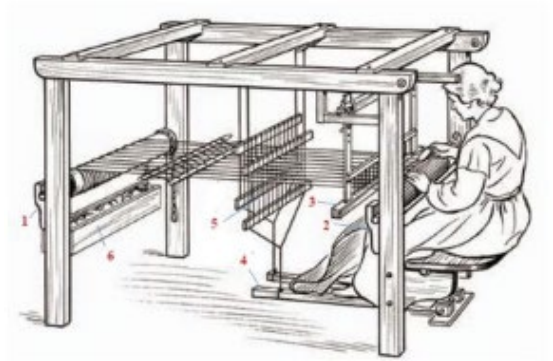


Figure 12: Illustration of Non-Machine Looms Source: Addyah, 2017

1. Boom lungsi:
which is used to roll the lungsi thread
2. Fabric boom:
used to roll up woven fabric
3. Guun:
used to control and move the lungsi thread so that the lifeboat can enter in between the lungsi thread
4. Stamp Guun:
used to set guun
5. Comb:
used to regulate the density of lungsi threads
6. Ballast rolls of lungsi thread:
it is used to keep the firmness of the threads stable.

The process of making Pineapple Leaf Fibre Cloth in MSMEs Alfiber is done by empowering the community, especially housewives in the MSME Alfiber community both in the spinning process and the weaving process. The process of spinning or

making yarn still uses manual methods. They spliced each strand of fibre using hands with special techniques (weaving link). Since the fibres is connected manually, the resulting thread has a knot from each connection, so that the manufactured fabric also has a uniqueness and characteristics that are the existence of small knots that appear on the fabric.



Figure 13: The Joining Process of the Fibre into A Thread. Source: Author,2021



Figure 14: ATBM Dogan at MSMEs Alfiber Source: Alan,2021

3.2.5 Economic Opportunity

Economically, the activities carried out by MSMEs Alfiber are one of the businesses that can increase family income because the products produced can have a fairly high selling value. Pineapple Leaf Fibre products that have not been utilized or usually discarded, can be processed into Pineapple Leaf Fibre by extraction, either by using a machine or manually, so it has added value that is different from ordinary products. Considering on the cycle of pineapple plants when the fruit is harvested, the leaves must be discarded so that the new buds able to grow properly. So far this pineapple leaf fibre has not been utilized properly. According to

the owner of MSME Alfiber currently, the usage of pineapple leaves limited as animal feed or natural fertilizer. The leaves were cut into pieces; the rest were left to rot, and not infrequently also thrown or burnt, of course this is very unfortunate considering that pineapple leaves can actually be processed into pineapple leaf fibre as raw materials for textiles and crafts and have high economic value.

Currently, MSMEs Alfiber have 5 Decorticator Machine, they were able to process pineapple leaves as much as approximately 500 kilograms every day and is able to produce Dry Pineapple Leaf Fibre; on average 8-11 kg / day. Although this current situation is still very limited, the potential of pineapple leaf processing business in Subang Regency is very wide open, with the potential of pineapple plantation land with an area of 3,253 hectares and in Cijambe 133 hectares with the potential of pineapple leaves produced from 1 hectare as much as 10-15 tons. With the increasing demand for pineapple leaf fibre and processed products, this produce is increasingly potential to be developed. The price of fabric sold can reach Rp. 250,000,00 and higher if processed properly.

Now Alfiber has began to improve the optimization of the utilization of pineapple leaves through the processing of pineapple leaf fibre into pineapple leaf fibre cloth, thus increasing the selling value and creating new business opportunities, namely the process of spinning fibre threads and woven fabric.

The benefits of this pineapple leaf processing business include the following:

1. Increasing Value

Pineapple Leaf Fibre Making Business is able to provide added value from pineapple leaves. Where pineapple leaves are usually only used as animal feed or discarded, after becoming fibre pineapple leaves can have a higher economic value because it can be used as textile raw materials such as yarn, cloth and raw materials of various types of crafts. This material can be used into various interior products, especially in decoration products, and chairs.

2 Creating a New Product

Economic opportunities from the existence of pineapple leaf fibre can be seen from its utilization or

function. This business is able to create other products in addition to the Pineapple Leaf Fibre that already being produced, namely animal feed and natural fertilizers that came from leaf meat extracts, that also can be used for natural dyes derived from fibre washing water. In other words, the business of Making Pineapple Leaf Fibre is able to provide benefits in the field of livestock, agriculture and textiles. In other words, the business of Making Pineapple Leaf Fibre is able to provide benefits in the field of livestock, agriculture and textiles.

Currently, pineapple leaf fibre is mostly used as a fashion textile product or as a ship rope material. The potential of this pineapple fabric bring a great opportunity for manufacturers to develop this material further. Currently, interior manufacturer have not made much use of pineapple fibre as a material although it has a great potential. The development of this pineapple fibre will certainly bring benefits for workers and MSMEs owners because fibre itself and woven fabric is very versatile. Thus, the survival of the livelihoods of the workers will be maintained. Their knowledge of the function of the fabric will also improve following innovations result. With the production of woven fabrics, the product's potential to be developed into interior products is also wide open.

3. Providing Additional Income of Pineapple Farmers

Pineapple Leaf utilization business is also able to provide additional income to pineapple farmers, where usually after harvesting the waste of leaves is discarded, it can now be sold to Alfiber. Now farmers can earn income from selling pineapples and pineapple leaves. Alfiber only able to cooperate with 4 Pineapple Farmers community in the procurement of raw materials, this is due to the limited capacity and machinery owned by Alfiber.

4. Absorbing Labor and Creating New Business Opportunities

The worker of MSME Alfiber admitted that Pineapple leaf waste utilization efforts are also able to absorb labor coming from the surrounding community, ranging from raw material procurement labor, production process (extraction and finishing), thread spinning to weaving of pineapple leaf fibre fabric. So that this business also creates new business opportunities in the process of processing Pineapple

Leaf Fibre into textile and craft products. Alfiber's hope is that their business is growing and thriving, so that Alfiber were able to absorb more labor and has a positive impact on the environment, especially in the economic sector of the community itself.

This especially shows in regards of the current events. Covid-19 has affected a lot of the part-time workers living in Cijambe, they are unable to enter the city to look for jobs and get any form of income. Through MSMEs Alfiber, they are able to work daily and able to be paid fairly every week. The worker said that they are able to fulfill their daily needs with ease and able to feed their family and also save some of their income for other needs. The workers were paid around Rp. 100.000,00 each day. This payment system was closely related to their sum of fibre that they collectively able to process together. Summed up, the workers were able to be paid as much as Subang's Regional Minimum Wage which was around Rp. 2,9 Million (CEO,2021). This proves that MSME Alfiber were able to support the community around their factory to thrive.

Handwritten weekly income calculations in MSME Alfiber. The document is divided into sections: 'EXTRAHS', 'Golopor', and 'Golopor Man Dibi'.

EXTRAHS:	
Selaku	: 367 kg → 6.460
Minggu	: 473 kg → 8.679
Selaku	: 357 kg → 6.636
Selaku	: 456 kg → 6.500
Rayu	: 281 kg → 45.200
Kamici	: 907 kg →
Total = 2.325 →	

Golopor	
Hari senin :	
Selaku	: 8100 - 7895 (8.41) = 11.000
Rayu	: 2.855 (= 4.000
Kamici	: 3.920 = 2.000
Total = 5.895	

Golopor Man Dibi	
Ago	: 170 (Merah)
	1709 (Merah) 1150 (Merah)
Ubi	: 1.500 (Merah)
Cucu	: 0.530 (Merah)

Figure 15: The Weekly Income Calculations in MSME Alfiber Source: Author, 2021

5. Harnessing the functionality and the aesthetics of the fibre

The economic opportunity of pineapple leaf fibre woven fabric can also be seen in terms of the uniqueness of the fabric's existing textures. Pineapple leaf fibre fabric products have a unique texture because the threads are connected by being tied together, this resulted in an unusual prominent

texture. In interior product design, visual stimulation is a very important factor (Song, 2010). The texture of this pineapple fibre fabric, will give a beautiful rustic impression on interior products that were designed using fabric made from this pineapple leaf fibre. The imperfections of the thread in the fabric of pineapple leaf fibers due to the bonding of the joint will catch the eye of the users, so it is a suitable material to be applied in product that requires subtle visual stimulus such as lampshades or room dividers.

According to the owner, they never thought of applying their product into interior products this proves that pineapple leaf fibre was not explored enough by interior designer as a material options. Although, the owner admitted they are optimistic that their fibre was strong enough to be applied into a lot of products. Although they needed extra support such as using thicker materials as an additional layer for some of interior products such as chairs or sofas.



Figure 16: The Small Knots that Appears on the Woven Fabric Source: Author,2021

4 CONCLUSION

The processing stages of pineapple leaf fibre woven fabric is a long and thorough process. Starting from the preparation of the pineapple leaves and processing of the material, and preparation of ATBM Dogen weaving equipment, every step was ensured to keep the quality of the fabric and fibre to be able to fulfil the needs of the exporter. Several criteria need to be fulfilled to produce high-quality fibres such as the length of the leaves, the freshness of the leaves, the type of pineapple plant that the leaves came from. There are 2 major stages of fibre leaf processing, leaf meat separation and fibre mashing both use the decorticator machine. The weaving process of the

fibre uses the modified Non-Machine Loom or called the ATBM Dogen.

The Economic opportunities of pineapple fibre leaves were shown in several sectors The effort to use pineapple leaf fibre woven fabric pineapple leaf waste pineapple leaves were able to absorb labour from the surrounding community, ranging from raw material procurement labour, production process (extraction and finishing), thread spinning to the weaving of pineapple leaf fibre fabric. Accumulatively, 14 workers worked in MSME Alfiber that came from the village where the MSME is. They do every stage and process together in a community to fulfil the demands and also to fulfil their economic needs. This especially shows in regards to the current events in the Covid-19 era that has affected a lot of the part-time workers living in Cijambe, they are unable to enter the city to look for jobs. Through this MSME they were able to earn enough income to feed their family and keep the community prosper. In addition, the potential of this pineapple fabric brings a great opportunity for manufacturers to develop this material further. Currently, the interior manufacturer has not made much use of pineapple fibre as a material although it has great potential The emerging economic potential can also be felt through the peculiarities of the texture of pineapple leaf fibre material. Pineapple leaf fibre fabric products have a unique texture that matches the design needs of interior products. Visual stimulation is a very important factor in designing an interior product. The fabric texture of this pineapple fibre will be able to give an attractive rustic impression which was suitable to be applied to interior products.

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