

Jurnal Scientia

Volume 13, Number 02, 2024, DOI 10.58471/ scientia.v13i02 ESSN 2723-7486 (Online)

https://infor.seaninstitute.org/index.php/pendidikan

Ecopreneurship in Growing Environmentally Friendly Businesses at the Tannery Industry Center of Star Fruit Village, Besuki District, Bondowoso Regency

¹Indria Dwi Hapsari, ²Stivaniyanti Atmanegara, ³Ismatul Hasanah, ⁴Khusnul Mawazin, ⁵Tri Bastian Subagio

University dr. Soebandi

Article Info **ABSTRACT** The Tannery Industry Center of Belimbing Village, located close to Keywords: Ecopreneurship, Situbondo City and adjacent to residential areas, has a significant impact Business Growth, on the lives of the surrounding community. According to locals, the Environmental Quality. tannery industry in their region is considered a boon for being the main source of livelihood. The majority of the workforce in the area works as employees in this industrial center. Second, residents also complain of significant pollution impacts on the quality of their living environment, such as air pollution levels that are very disturbing and result in respiratory system disorders. In addition, river 9water pollution has also become a serious issue as a result of ineffective waste management by the tannery industry. This study applies a qualitative research approach, where data are obtained through in-depth interview methods, observation, FGD, literature review, and secondary data analysis. The results show a unique situation in Belimbing Village, where residents depend on industry as a source of livelihood, but at the same time cause negative impacts on air and water quality that reduce their living environment. A number of studies focused on business growth without paying attention to environmental aspects. However, this study explores how an entrepreneur seeks to expand his business by taking into account environmental factors as a key element in managing a business, known as ecopreneurship. Expectations for sustainable business growth are in line with efforts to preserve environmental quality. The majority of business actors in Belimbing Village have not fully adopted the concept of ecopreneurship in their business operations because effective waste management requires significant financial investment. Nevertheless, the continuous increase in sales in the leather industry center of Belimbing Village shows a sustainable business growth. This is an open access article Corresponding Author: under the CC BY-NC license Stivaniyanti Atmanegara University dr. Soebandi Jl. DR. Soebandi No.99, Cangkring, Patrang vaniatmanegara99@uds.ac.id

INTRODUCTION

Situbondo Regency, located in East Java Province, is known to have attractive natural potential, such as the attraction of White Sand which is the main destination for tourists from within and outside the country. This condition brings potential that has a positive impact on a number of economic sectors in Situbondo Regency. Food and clothing products are



https://infor.seaninstitute.org/index.php/pendidikan

excellent in an effort to improve the local economy. One of the most famous clothing products from this area is a variety of items made from animal skins, such as bags, belts, watches, wallets, and the like. These products are not only sold in Situbondo but also exported to various countries.

Most of the craftsmen active in the leather industry sector are centered in the Star Fruit Tannery Industry Center, located in Besuki District, Situbondo Regency. This industrial center is adjacent to Situbondo City and interacts closely with the surrounding community. The impact of its existence gave rise to two significant effects in the lives of local residents. According to local residents, the existence of the tannery industry in their region is considered a boon because it provides the main employment. The majority of the local workforce is involved as employees in the industrial center. However, on the other hand, residents also voiced concerns regarding the impact of pollution that damages the quality of the environment where they live, including air pollution that stings and disrupts the respiratory system. In addition, river pollution due to poorly handled tanning industry waste is also a serious problem. This poses a dilemma for the residents of Belimbing Village, where they depend on industry as their main livelihood, but at the same time have to face its adverse effects on the quality of the environment, both air and water. Schaper (2002: 3) cites the opinion of Bennett, Berle and Blue who put forward the concept of ecopreneur as follows: "beginning to employ the terms 'environmental entrepreneur', 'green entrepreneur,' 'ecoentrepreneur' and its derivation 'ecopreneur.

The concept explains that ecopreneurship is a term formed from the combination of the words environmental and entrepreneur, which indicates entrepreneurship that focuses on the environment. In other words, ecopreneurship can be understood as a type of entrepreneur who pays attention to and prioritizes environmental aspects in their business operations. Traditionally, environmentally-oriented business management focuses on strategies to transform the company to be more environmentally friendly. This involves a significant investment of time and effort to steer the company's growth in a sustainable direction and pay attention to environmental responsibility. Schaper (2002:4) states how policies can motivate entrepreneurs to integrate sustainability principles into their company operations: "Legislation, government regulation and industri support agencies all have a role to play in shaping the way that business conducts its activities. 20ther stakeholders, such as lobby groups, non-governmental organisations (NGOs), venture capitalists, industri associations and local communities can also influence the context in which ecopreneurs operate. How can the activities of these bodies be encouraged to foster environmental entrepreneurs?"

The statement implies that the idea of a green entrepreneur involves the shared responsibility of all parties involved to implement it. Schaltegger (2002: 2) states that this concept emphasizes the need for participation of all stakeholders in efforts to realize environmentally sustainable entrepreneurs. Ecopreneurs differ from conventional entrepreneurs in that they also build bridges between environmental progress and market success."... To make sure that eco-efficiency gains are not counteracted by higher production, ecopreneurs must also focus on eco-efficacy. Eco-efficacy describes how well the reduction of environmental impacts is achieved in absolute terms."



https://infor.seaninstitute.org/index.php/pendidikan

Schaltegger's opinion shows that an ecopreneur is someone who can integrate business growth with environmental sustainability. An entrepreneur must have the ability to reduce or limit the negative impact of his business activities on a sustainable environment. Research on business development has been conducted by a number of researchers, as listed below:

Askiah Jamaluddin and Carolyn Dickie (2011:10) entitled "Decision-making Related to Business Growth: Malay Small Business in Selangor". This research is intended to broaden the understanding of family businesses, by focusing on the decision-making strategies used to develop the business. As for Johan Wiklund, Holger Patzelt, and Dean A. Shepherd (2009) with the title "Building an Integrative Model of Small Business Growth". The purpose of this study is to create a model that combines various aspects of small business into a single whole. Paul J. A. Robson and Robert J. Bennett (2000, 193-208) examined small and medium-sized enterprises under the Growth: The Relationship with Business Advice and External Collaboration".

Previous studies have focused more on business growth alone without regard to its impact on the environment. However, in this study, it will be analyzed how an entrepreneur can develop his business by taking into account environmental factors as one of the key aspects in his business operations. This research will explore the relationship between entrepreneurs and the natural environment which is the field of ecology. The purpose of this study is that business growth can take place sustainably in line with maintaining environmental quality.

METHODS

Object of Research

The object of this research is the practice of ecopreneurship in the tannery industry located at the Tannery Industry Center in Belimbing Village, Besuki District, Bondowoso Regency. This leather industry center is located in the area of Belimbing Village, Besuki District, Sitobondo Regency.

Research Design

The research will undergo a qualitative approach with the aim that the author can investigate in depth the actual conditions in the management of the tannery industry in connection with the growth of environmentally sound businesses. The data collection methods to be used are as follows:

- In-depth interview. The author conducted in-depth interviews with informants who
 were considered to have knowledge related to ecopreneurship and business growth
 focused on environmental sustainability. The data was collected from various parties,
 including entrepreneurs both in the field of craftsmen and tanners, local governments,
 and village communities around Belimbing Village, Besuki District, Situbondo
 Regency.
- 2. Field observation. Researchers will conduct direct observations to collect data and information related to the implementation of policies in the field, which is carried out in Belimbing Village, Besuki District, Bondowoso Regency.



Jurnal Scientia

Volume 13, Number 02, 2024, DOI 10.58471/ scientia.v13i02 ESSN 2723-7486 (Online)

https://infor.seaninstitute.org/index.php/pendidikan

- 3. Focussed Group Discussion. FGD There will be a focus group discussion involving all relevant parties, including residents of Belimbing Village, Situbondo Regency Government, community leaders, academic staff, and entrepreneurs in the tannery industry.
- 4. Literature study. The author will conduct an analysis by studying various theories about ecopreneurship and the environment.
- 5. Secondary data collection will be carried out from the relevant agencies in Situbondo Regency as well as from entrepreneurs involved in practices in Belimbing Village, Besuki District, Situbondo Regency.

The data obtained will be investigated through triangulation of all data sources relevant to the research problem and topic. Then, the information will be compiled systematically with a detailed and clear description according to the data obtained.

Data Analysis

Data analysis is the stage where data is organized and rearranged into patterns, cattegories and basic units so that themes can be identified and working hypotheses can be formulated. As an implementation step, researchers collect data relevant to the research problem through observation, interviews, and documentation.

RESULTS AND DISCUSSION

Evaluation of the Measurement Model (Outer Model)

Leather is an animal product that is currently a trade commodity that has a high value. The high export value of this product provides significant benefits for the leather industry in Indonesia, which is a driver for the emergence and development of the leather processing industry quickly and widely.

Sustainable Business Development in the Tannery Industry in Star Fruit Village. This study conducted an in-depth analysis of ecopreneurship applied by tannery business actors in the Sukaregang Industrial Center. Several important aspects related to ecopreneurship are the main focus in this study. First, this study evaluates the development conditions of the leather tanning industry in the industrial center of Star Fruit Village, including variations in product types, production quantities, and sales volumes achieved by entrepreneurs. Second, this study investigates whether the business growth is in line with environmental conservation efforts in the tannery industry center of Belimbing Village.

In the Belimbing area, there are two types of businesses that focus on leather processing. One of them is a tannery business that produces leather industry products from raw materials to semi- finished or quarter-finished stages. The tanning process is divided into two stages, namely the wet process and the dry process. Leather craftsmen in the front sector of star fruit make various products from semi-finished to finished materials, such as bags, jackets, shoes, belts, and others.

Tannery business is an activity that provides raw materials for clothing such as jackets, shoes, gloves, and other accessories made from animal skins such as cows, buffaloes, goats, and sheep. This tanning process is often referred to as the upstream industry, as it involves



https://infor.seaninstitute.org/index.php/pendidikan

the early stages in production. Meanwhile, the processing into finished goods is managed by the second type of business, which is also known as part of the downstream industry.

Craftsmen engaged in leather processing produce a variety of products, both consumable and non-consumable. Products that can be consumed, such as leather crackers, dorokdok crackers, dengkul crackers, kerecek, skin satay, and so on, are produced from animal skin. Meanwhile, non- food products derived from leather include a wide range of items such as clothing (jackets, shirts, skirts, pants, shoes, bags, belts, etc.), sports equipment (balls, golf gloves, etc.), automotive equipment (seat covers, car interiors, etc.), work equipment (safety jackets, safety shoes, chamois, belts, etc.), and so on.

This very promising business opportunity can continue to grow if entrepreneurs are able to boost the company's growth sustainably from time to time. Growth is the main key to the company's success in achieving sustainable development. Business improvement is an aspiration desired by every entrepreneur that reflects success in operating a business. "The stage of success of a company will be reflected by consistent improvements in financial performance, often accompanied by sustainable but not too fast sales growth" (Katz and Green II, 2011: 639).

As an illustration, PT ELCO which started its business in 1992 and continues to develop until now is a clear example of entrepreneurs who fall into this category. As companies are expanding, they develop information resources, skills, and other routine activities to increase the profitability of their business. These benefits do not always mean financial improvement alone. "Having the opportunity to take a break from work, go through a more relaxed work routine, and recruit additional employees to assist in carrying out the duties of entrepreneurs are some of the benefits that can improve the quality of life of business owners."

PT ELCO, a leather company that continues to grow, has 200 employees and earns a net profit of Rp 120 million per month. The company has also opened 12 sales outlets offering leather jackets, placing it in the category of sustainable growth.

Business growth is characterized by a tendency to increase the scale of business operations conspicuously. This is described by Peter Wilson and Sue Bates (2003:12) as: "Growth means a business that shows a tendency to expand operations significantly. Going through the process of starting a business is a specific challenge, which becomes more challenging when it starts to be run and developed. In the early days of its establishment, every slight sign of progress that signifies growth was eagerly awaited by entrepreneurs.

The desired growth is sustainable growth, not just in the early stages of starting a business. These are the difficult stages in the journey of an entrepreneur. Many entrepreneurs start and manage their businesses, but only experience growth in a short period of time, even just a matter of months.

We return to the example of PT ELCO, which in the early stages of its establishment, obtained loan capital from the Capital Institution PT Sarana Jabar Ventura, with an initial capital of hundreds of millions of rupiah. Currently, PT ELCO has experienced significant development, According to Barringer, et al (2010: 450), the success of an entrepreneur in starting and managing a business can be measured through sustainable business growth



https://infor.seaninstitute.org/index.php/pendidikan

within a certain period of time. They define sustainable business growth as growth in both revenue and profits over a sustained period of time.

A growth is considered sustainable if it occurs in a sustained period of time. Therefore, to evaluate sustainability, it is not enough just to consider one year, but must look at a certain period of time that shows sustainable growth. Measuring a company's growth is often a challenging task. Entrepreneurs often face difficulties in assessing how far growth has been achieved during the running of the business. Subjectivity in measuring business growth results in various approaches in its measurement.

PT ELCO has been around since 1992 and has been operating for about 21 years until now, becoming one of the growing companies in the Sukaregang area. This makes PT ELCO included in these criteria. Some entrepreneurs may judge the growth of their business by looking at the physical improvement of buildings, the addition of equipment, the increase in the number of employees, or the increase in the number of consumers and customers. For some entrepreneurs, business success and growth is achieved when they can delegate most of the responsibilities and work to their employees.

After conducting in-depth interviews in Belimbing Village, we gained an understanding that the conditions of entrepreneurs in the village continue to change from time to time. Some entrepreneurs continue to experience positive growth, while others choose to collaborate with external parties to maintain business continuity that has declined. However, the conclusion we have reached is that business activities in Belimbing Village continue to grow, both for newly established and established companies.

According to Baum, Locke, and Smith (2001: 296) conveyed "Three measures of venture growth: sales growth, employee growth and profit growth.", there are three indicators of business growth that can be measured, namely: first, increase in sales; secondly, an increase in the number of employees; and third, increased profits.

Sales growth in the leather industry center of Belimbing Village continues to increase and develop significantly, as evidenced by data from UPT which records around 323 companies operating there. The majority of these companies often take advantage of the facilities provided by UPT, this is due to the ongoing increase in sales. This is concrete evidence of the growth of the tannery business in Belimbing Village. The number of individuals receiving support or being employed by established companies or starting their own businesses has increased, indicating a growing workforce in the leather industry center area of Belimbing Village.

The increase in profits obtained by PT Elco as an example, indicates that the company's profitability is on the rise, so it fits the concept described in the theory of Baum and his colleagues. Premaratne (2001: 365) states that determining the limits of small business growth can be done by considering sales performance and profitability as other dimensions.

The growing individual businesses in Belimbing Village, together with the profits obtained that support the increase in production activities, indicate that Belimbing Village shows significant growth in this dimension. According to Wilson and Bates (2003: 12), there are criteria proposed for sustainable business growth.



https://infor.seaninstitute.org/index.php/pendidikan

First, it is demonstrated through repeat purchases, customer retention, positive opinions from satisfied customers and sustainable gross margin gain. The results of field observations show that according to entrepreneurs, it often happens that consumers return to transact again after their first purchase, because they are satisfied with the quality of work of craftsmen and tanners in Belimbing Village.

The second criterion emphasizes the effectiveness and efficiency of the company's internal operations, which can be seen from controlling unit costs and satisfactory net margins. This is evident from the efforts of the craftsmen and tanners in Belimbing Village who are able to survive in running their business. The third criterion is the achievement of achievements in achieving sustainable profits. PT Elco, with the previous explanation, became a benchmark for the success of one of the star fruit Village entrepreneurs in achieving satisfactory achievements.

The fourth criterion is to have sufficient credibility to raise funding from the necessary external sources. This is proven by the many outside investors who collaborate and inject additional capital to ensure business continuity in Sukaregang, which continues to increase from year to year. Based on information from one of the leather entrepreneurs in Belimbing Village who is also a member of the Indonesian Tanners Association, products from Belimbing Village have penetrated the national market, such as Bandung, Bekasi, Jakarta, Surabaya, Medan, and other regions. In addition, he also stated that some products have been successfully marketed to the international market through distributors and exporters.

Based on the results of interviews conducted by researchers, in terms of the number of entrepreneurs, according to information obtained from the Technical Implementation Unit (UPT) Situbondo, the number of entrepreneurs experienced fluctuations that rose and fell. Some have increased to achieve success before then experiencing a decline, then replaced by other business units that also experience similar cycles, constantly fluctuating alternately. The number of local tanners in Belimbing Village has also decreased over time. Local tanners have to compete with foreign entrepreneurs who have more capital.

The Coordinator of UPTD Industrial Development Center of the Situbondo Tannery IKM Development Sub-Unit explained that the industry in Belimbing Village covers the entire production chain, and Belimbing Village is considered the most complete in terms of industry. There are 334 small and medium industries (IKM) tanneries, 173 leather jacket manufacturing industries, 48 shoe manufacturing industries, as well as various accessories and other products. In addition, there are also culinary industries such as dorokdok and leather crackers that use leftover leather before the tanning process. As for the industry of making kerecek from the outer skin, there are around 90 industries operating in Belimbing Village.

The process in the tanning industry is intended to turn animal skins into leather sheets that are ready to be used as raw materials for various leather products such as shoes, bags, crafts, and others. In the early stages of its development, this business provides great profits for entrepreneurs because competition is still not too much. However, with the increase in the number of entrepreneurs, competition is considered increasingly unhealthy. Today, competition is no longer centered on product quality, but rather on pricing, so there is often a price race between entrepreneurs.



https://infor.seaninstitute.org/index.php/pendidikan

UPT Situbondo leaders, several entrepreneurs, and several employees who were successfully interviewed expressed similar views on the challenges faced by business actors. The obstacles they face include capital problems and market access. They hope that the government can provide support in opening market opportunities and facilitating access to capital. Previously, the market situation was relatively favorable because consumers directly visited their place of business. But after the economic crisis, arrivals have declined. If anyone visits, they tend to look for items at low prices without paying too much attention to quality. In addition to the challenge of improving product quality, production quantities, and finding new markets, there is one more thing that is also a challenge for leather entrepreneurs.

Furthermore, the main question in the study is whether these challenges hinder company growth or even lead to business failure? The author seeks to reveal the results of interviews with entrepreneurs and the Technical Implementation Unit (UPT) of Belimbing Village related to this matter. The interview results showed that in general no one went bankrupt, but there was a decline in sales which resulted in the scale of the business, both stores and existing factories, becoming smaller over time. Despite this, they are still able to survive today. When experiencing difficulties in business, they tend to look for partners with greater capital to cooperate so that the business can recover. However, according to information from UPT Situbondo, not all business actors can survive or continue to survive. Some of them choose to sell their businesses to other entrepreneurs.

As in many other small and medium enterprises, business actors in Belimbing Village also face classic challenges in terms of business capital. Starting this venture requires a significant capital investment. With an investment of around Rp 200 million, an entrepreneur can only afford four molen machines and will be considered a small businessman. However, in the tannery business, the number of machines does not have to be much. Entrepreneurs who do not have capital for adequate equipment can use machines belonging to large entrepreneurs by paying the appropriate rent.

According to information provided by UPT Situbondo, in addition to machines, entrepreneurs also have to buy various chemicals needed in the tanning process. Such materials have a high price because most of them are still imported from Europe. According to UPT Situbondo staff, the proportion of imports of these materials can reach more than half or around 60%. Although the market of this industry is still very large, including the international market as well as local and national markets, for small entrepreneurs, finding gaps in the market and obtaining additional capital to increase production capacity becomes a difficult challenge.

It implies a difference in conditions for large entrepreneurs, where the spirit of recovery has been seen. They are able to sell their products in almost all regions in Indonesia, and have even been successfully exported through exporter companies to various export destinations such as Australia, Singapore, Malaysia, and China.

Thus, if the local government is not serious in providing coaching and training to leather craftsmen, then there is concern that genuine leather products from the Belimbing Village area, Situbondo Regency, especially leather jackets that are trademarked, will be seized by other regions that also produce similar goods, which will ultimately harm Garut Regency itself.



https://infor.seaninstitute.org/index.php/pendidikan

Inadequate coaching and support resulted in indigenous entrepreneurs being unable to compete, as evidenced by the large number of foreign entrepreneurs arriving. The businessmen of Belimbing Village believe that they have the ability to compete with Thailand. In Thailand, the décor and layout of businesses are arranged and refined to create a comfortable environment for consumers, thereby increasing their satisfaction while shopping.

Based on information from the Technical Implementation Unit (UPT), there is a production equipment rental program that allows UPT to obtain retribution. The utilization of this levy fund is in collaboration and coordination with the Indonesian Tanners Association (APKI). The existence of this UPT provides assistance for small business units, In the private sector, the normal price is around Rp 1,700 per piece of leather, while in UPT, the cost ranges around Rp 1,100 per share. UPT also plays an active role in supporting the implementation of technical activities in the field by providing information, supporting promotions, providing consultations, and providing links for coaching, with the number of participants ranging from three to five per year.

From this picture, the Star Fruit Village Leather Industry Center experienced growth in various situations related to business size, capital, markets, and government support. Some small-scale businesses experience fluctuations in growth, while medium and large-scale businesses tend to be more robust in the face of competition. In the next stage, researchers explained how entrepreneurs in Belimbing Village manage their businesses by paying attention to and preserving the environment. This reflects the essence of ecopreneurship, where entrepreneurs are able to expand their businesses while paying attention to environmental sustainability.

Production Process and Environmental Quality at the Tannery Industry Center

Of the four business functions (marketing, production, human resources, and finance) carried out to manage and expand business in the Sukaregang tannery industry, the production function is a management aspect that is closely related to the quality of the environment around the industrial center.

The purpose of the process in the tanning industry is to turn animal skins into leather sheets that are ready to be used as raw materials for leather products such as shoes, bags, and other crafts. The process in the tanning industry can be grouped into three stages, namely the beamhouse process, the drying process, and the finishing process.

The process of tanning leather involves several stages of processing. The initial stage involves the use of Molen machines and Splitting machines. The Molen machine has the capability to process a number of raw hides at one time as a single unit (batch), where the batch size is limited by the capacity of the machine itself. Meanwhile, the splitting machine works by processing the skin individually, one sheet at a time. Therefore, in the process of tanning leather there are two different processing methods, namely batch processing carried out using a Molen machine, and job processing (sheet by sheet) carried out using a splitting machine. More specifically, the Molen machine can be considered as a batch processing machine, while the Splitting machine is a job processing machine.

Here are the steps taken in the leather processing process: Selection and weight measurement, this stage is the first step in the preparation of leather before entering the



https://infor.seaninstitute.org/index.php/pendidikan

tanning process. This stage is when the skin is sorted to determine which ones are suitable for the next process. After the sorting process is complete, the skin will be weighed.

Soaking process, soaking is done to relax the skin, especially the dry part of the skin. So that the skin becomes more similar to the condition of animal skin that has just been released from its body. The soaking process also aims to remove blood, dirt, soil, and other foreign substances that may remain after the preservation process. Common ingredients used for soaking include water, teepol, and soda ash. 3). The liming process, aimed at developing the skin, thereby facilitating the removal of feathers, epidermis, and other elements over a 24-hour period. Commonly used materials include water, sodium sulfide, and lime. 4). Fleshing is when the meat that is still attached to the skin is removed using a sharp knife manually or by using a special machine. 5). The relimming process is carried out with the aim of removing hair and remnants of substances that may still be present on the skin after the previous liming process. The materials used include water and lime. The process of removing lime (Delimming) aims to remove lime residues, both bound and unbound, from the skin. The ingredients used include water, ammonium sulfate (ZA), and sulfuric acid (H2SO4) which have been diluted in a ratio of 1:10 with water.7).

Protein scraping process (Bating), this process aims to break down skin substances with khemikalia containing protein. The bating material used is oropon. 8). The degreasing process is intended to remove the remaining fat residue after the curing process with acid solution as well as before the tanning stage. Chemicals used include iragol and/or DTC sandopan. 9). The acidification process (Pickling) has the aim of lowering the pH level of the skin to around 3-3.5. The pickle material used consists of weak organic acids such as formic and lactic acids, as well as using a mixture of water, salt, formic acid (HCOOH), and sulfuric acid (H2SO4). 10).

Tanning process is done to prevent stiffness and hardness of the skin, so that the skin remains flexible when dry and has good resistance. The materials used in this process include mimosa, chrome, formalin, and sodium carbonate (Na2CO3). After the tanning process, the skin will undergo the hanging stage (Aging), where the skin is hung on a wooden frame and allowed to dry naturally without direct exposure to sunlight. After that, the skin will be weighed and washed for 15 minutes. The neutralization process aims to balance the levels of free acids in the skin. The materials used in this process are alkaline. 13). The retanning process aims to improve the quality of leather by presenting superior properties that exceed previous tanning materials. In this process, tanning materials are used in the form of synthetic, natural materials from plants, or minerals.14).

The basic coloring process (Dyeing) aims to give initial color to tanned skin to improve skin aesthetics. The materials used include water, leveling agents, base paints, and formic acid. 15). The oiling process (Fat Liquoring) is intended to produce tanned leather to be stronger against tension or other mechanical stress, while ensuring that the skin fibers do not stick together, resulting in softer and more flexible skin. The ingredients used include water, lphonation oil, and antifungal additives. Top of Form 16). The fixation process aims to decompose the emulsion between oil and water so that the water easily evaporates during the drying process. The chemical used is formic acid (HCOOH) which has been diluted ten



https://infor.seaninstitute.org/index.php/pendidikan

times with water, as well as added tifungal ingredients. 17). The drying process aims to slowly reduce the moisture present in the skin without damaging the skin structure, tanning agents, and oils contained in it. This process is done by anging the bark on a wooden frame and leaving it exposed to the wind naturally. 18). In the finishing rocess, the skin is given a layer of materials such as binders, pigments, penetrators, fillers, waxes, thinners, or lack according to the needs and purposes of using the tanned skin. After the leather is painted and dried, then an ironing or embossing process is carried out to give a motif to the surface of the leather and improve the aesthetics of its appearance.

The production process described earlier involves the use of hazardous chemicals that require careful handling. As a result, protests began to emerge as many residents in areas along the watershed experienced skin health problems. This waste problem has sparked the emergence of ideas and plans to reduce the amount of waste discharged into rivers by taking preventive measures.

The tannery industry in Belimbing Village, Garut City, has a negative impact on the surrounding environment, especially in terms of river water pollution. According to information from an informant who is also a member of the Leather Craftsmen Association and the Indonesian Tanners Association, environmental problems in Belimbing Village have exceeded local and regional scales, and have even become a national concern. It is known that external parties, including organizations such as Unesco and various NGOs from outside, have criticized the situation. The residents of Belimbing Village realize that the responsibility for the Wastewater Treatment Plant (WWTP) must not only be borne by one party. In this village, there are four WWTPs that have been built, and the waste flow arrangements have been well arranged. However, the management of WWTP provided by the provincial government is less than optimal.

According to research conducted by Priyanto (2006: 217), liquid waste from the leather tanning process contains chromium (Cr(VI)) and total chromium, which are harmful substances. The chromium levels that exceeded this limit were caused by the suboptimal performance of four WWTPs used by the tannery industry in the region. According to information from the local Environmental Agency, the four WWTPs only act as storage ponds, without carrying out processing processes for metals and other hazardous compounds. This is due to the significant need for funds to operate the four WWTPs, reaching around 1.7 billion, which cannot be budgeted by the local government.

In an effort to overcome environmental problems faced by industry, the end-of-pipe treatment approach commonly used by industry and local government is considered no longer relevant. Instead, a more suitable and effective strategy for environmental management implemented by company owners today is pollution prevention, better known as Cleaner Production.

According to a resident, the quality of groundwater in Belimbing Village is still good if the depth is more than 6 meters or comes from a borewell. However, groundwater located shallower than 6 meters has been polluted. Residents also state that water from shallow wells is unfit for drinking, but is suitable only for washing and bathing purposes



https://infor.seaninstitute.org/index.php/pendidikan

Liquid waste from the tanning process in Belimbing Village is disposed of directly without going through the Wastewater Treatment Plant (WWTP), even though the waste is included in the B3 category which is harsh and harmful to human health. Liquid limba from the leather tanning industry in Belimbing Village is discharged directly into the environment without going through the treatment process through a Wastewater Treatment Plant (WWTP), even though the waste is included in the category of Hazardous and Toxic Materials (B3) which have a harmful impact on human health.

When the dry season comes, the river experiences drought so that waste is deposited and causes an unpleasant smell that disturbs the surrounding residents. As a result, many residents expressed their grievances. Occasionally, associations and community groups often gather and carry out mutual aid activities. There are rewards given by businessmen to the surrounding residents. Like the provision of sacrificial meat during the celebration of Eid al-Qurban, so too is the provision of a certain amount of cash, although not all make the contribution, but each individual. Some provide optimal compensation from an entrepreneur, but there are also those who provide sober.

By referring to Schaltegger's (2002: 2) view which suggests that an ecopreneur must have the ability to reduce or minimize the negative impact of his business activities on environmental sustainability, it can be concluded that overall, tanners in Belimbing Village have not fully succeeded in implementing this. Efforts to develop business that are continuously carried out by business actors have not been in line with the efforts needed to preserve the environment properly.

Tannery Industry Waste Management

The waste problem remains a significant issue for the tannery industry in Belimbing Village, Situbondo Regency, with challenges that have not been resolved to date. The tanning process that applies the Chrome Tanning method produces liquid waste containing chromium. The resulting chromium is chromium with a valence of 3+ (trivalent). This liquid waste or sludge containing trivalent chromium can pose a risk to the environment because trivalent chromium can turn into hexavalent chromium under alkaline conditions, which is a type of B3 waste that is potentially harmful to health.

According to the head of the Technical Implementation Unit of the Department (UPTD) responsible for environmental issues, this task should be the responsibility of the Garut Environment Agency. However, the handling has not been optimal. Therefore, through the Environmental Management Agency (BPLH) and also the Indonesian Leather Companies Association (APKI), it is planned to revitalize existing places. APKI will coordinate with the Environment in this regard.

However, the local government acknowledges that there are limitations in providing liquid waste management facilities through Wastewater Treatment Plants (WWTP), because some leather entrepreneurs in the region have not fully freed themselves from operational dependence on the government. In fact, some government assets that have been allocated for these purposes have been converted by many entrepreneurs, such as WWTP which was originally built by the government is now used as a fish pond.



https://infor.seaninstitute.org/index.php/pendidikan

In developing and honing the skills of entrepreneurs in the field of ecopreneurship, the role of government cannot be ignored. The government and entrepreneurs need to work together to protect the environment. As stated by Schaper (2002: 4), laws, government regulations, and industry supporting institutions have an important role in shaping the way businesses carry out their activities. By referring to this view, ecopreneurs in Belimbing Village will also begin to emerge if the legislature, government, and industry players can work together in an effort to protect the environment.

To deal with this problem, according to information from the heads of the Technical Implementation Unit of the Agency (UPTD) and the Environmental Management Agency (BPLH), the solution is to apply the concept of clean products. This clean product refers to products that are produced with environmental sustainability in mind. Such measures can be taken by reducing waste production and reducing the use of chemicals. In addition, chromium separation can also be done. Chromium can be separated from liquid waste by precipitating back as chromium hydroxide through a filtration process. Then, the resulting liquid can be recycled with the following steps: Wastewater from the chromium tanning process and washing water (as much as 2 times the volume of water) that has been free of solid-particles, will be treated with the addition of magnesium hydroxide solution, and then precipitated for approximately 10 hours. Liquids that have undergone separation are transferred to other containers using suction pipes, but need to be avoided so that deposits are not sucked in. The entrepreneurs in Belimbing Village continue to strive to find solutions to overcome the problem of waste treatment and environmental pollution in the most effective and efficient way, but they always face difficult obstacles and challenges. As a result, existing business management is unable to achieve environmentally focused sustainability goals, and aspirations to become environmentally friendly businesses are not achieved due to these barriers.

The statement shows that the concept of green entrepreneurship is a shared responsibility of all relevant parties in realizing it. From the local government to the provincial government, local entrepreneurs, and the people of Belimbing Village, represented by community leaders, have tried to jointly discuss the impact of environmental pollution and ways to run the waste production and treatment process more environmentally friendly in the village. However, these efforts are constrained by lack of optimality in management and problems related to limited funds that continue to arise.

An ecopreneur is an individual who can strike a balance between business growth and environmental sustainability. An entrepreneur must have the ability to reduce or minimize the negative impact of his operational activities on the environment. Most star fruit entrepreneurs are apply ecopreneurship in growing their businesses. This is because good and correct waste treatment requires large costs and support from all stakeholders. Sales growth that occurred in the leather industry center of Belimbing Village is increasing and continues to grow, which is indicated by data from UPTD that there are more than 300 existing companies, and the majority of them often borrow UPTD facilities, due to increasing sales. It is proof that the growth of the Sukaregang tannery business. This growth is also characterized by the breadth of both markets that are local, national and international.



https://infor.seaninstitute.org/index.php/pendidikan

However, the business growth achieved has not been accompanied by adequate environmental management. This is characterized by the content of hazardous waste that pollutes water and air in the Sukaregang area. Although there are several companies that have been able to handle well, small-scale businesses have not been able to carry out waste treatment properly. The support of the Garut Regency government in waste management is still limited.

REFERENCE

Askiah, Carolyn Dickie, J. (2011). Decision- making Related to Business Growth: Malay Small Business in Selangor. *International Journal of Business and Management*, 6 NO 10.

Bates, Sue, Peter, W. (2003). Small Business Growth. England: Jhon Wiley & Sons Ltd.

Budhi, P. (2006). Uji Toksisitas Limbah Penyamakan Kulit Menggunakan Metode Pengjambatan Pertumbuhan Lemna sp. *Jurnal Teknik Lingkungan*, *7*, 212–218.

Jerome, Green, Richard, K. (2008). *Entrepreneurial Small Business*. USA: McGraw-Hill International. Johan, Holger Patzelt, Dean, W. (n.d.). *Building an Integrative Model of Small Business Growth. Small*

Business Economy. 32 no 4, 351-374.

Jones, Neubaum, B. (2005). A quantitative content analysis of the characteristics of rapid-growth firms and their founders. *Journal of Business Venturing*, 663 – 687.

Michael, S. (2002). The Essence of Entrepreneurship. Australia: Greenleaf Publishing.

Paul, Robert, Bennett, R. (2000). SME Growth: The Relationship with Business Advice and External Collaboration. *Journal Small Business Economics*, 193–208.

Robert, Locke, Edwin, Smith Ken, B. (2001). Multidimentional Model of Venture Growth. *The Academy of Management Journal, 44*, no *2*, 292–303.

Sandaran, P. (2002). Entrepreneurial networks and small business development. Eindhoven: Technische Universiteit Eindhoven.

Stefan, S. (2002). Framework for Ecopreneurship. Australia::Greenleaf Publishing.

Data Sekunder, Disperindagkop Kab Situbondo

Data Sekunder, UPTD Instalasi Pengembangan IKMPenyamakan Kulit Situbondo