

"Diversification of Ship's Mooring Rope Waste Recycling Products as an Effort to Increase the Economic Welfare of the Rope Processing Business Group "Samboyang" Polewali Mandar

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Abstract

The Samboyang Rope Processing Business Group in Babarura Village is the main partner in this activity. Carrying out pelpangang activities in the traditional way using a manual rolling tool. This has implications for the quality of the rope, the time it takes to make anchor ropes. Apart from that, Tinambung sub-district is the only business The largest anchor rope spinner in West Sulawesi. Apart from that, there has been no innovation in diversifying the forms of products produced from processing anchor ship mooring ropes, until now they have only been used as fishing aids or ship ties, and in the economic marketing and digital bookkeeping sectors. needs to be implemented. Then through a community service program carried out according to the needs of the Samboyang Rope Processing Business Group to increase group productivity. In addition, product diversification from ship mooring rope processing provides new opportunities for the group to increase the added value of their products, marketing training and digital bookkeeping, opening up opportunities for the Samboyang rope processing business group to be competitive in a wider market.

Keywords: *Product Diversification, Rope Spinners*

INTRODUCTION

Babarura Hamlet is one of three hamlets in Tangnga-tangnga Village, Tinambung District, which is located in a coastal area about 35 km from the capital of Polewali Mandar Regency and 236 km from the capital of West Sulawesi Province. The majority of people in Babarura Hamlet fulfill their living needs by utilizing marine products, (Manaf CY., 2021) where the head of the family works as a fisherman and the housewife helps earn a living by weaving (Sahabuddin C. Panette', 2021) and spinning rope (pangulang). The "Samboyang" rope processing business group is located in Babarura Hamlet, Tangnga-tangnga Village, which is the target group for Community Service and is generally active as a rope spinning group made from recycled ship mooring rope waste since 2020.

Improving the production quality of the "Samboyang" rope processing business group in Babarura Hamlet requires maximum effort and collaboration from various parties, especially the "Samboyang" rope processing business group and the regional government of Polewali Mandar Regency so as to provide maximum results for the business group as the target partner.

Panggulang is a local term in the Mandar language, meaning rope spinner, which is a

household industry that has been carried out for generations since 1969 in Tinambung District, especially in Tangnga-tangnga Village and Karama Village (Asriani N., 2023). Craftsmen who spin anchor ropes or pelpangang in Tinambung District are the only largest anchor rope spinning business in West Sulawesi. The results of the production of anchor ropes are used by fishermen as fishing ropes or for fastening ships and have been sold to the islands of Kalimantan, Sumatra and Java. Ship mooring ropes that have reached their useful life are re-processed into new rolls of rope which were previously made from natural fibers and switched to synthetic materials which are stronger and more flexible in terms of function (Azis A, Fatmawati F., 2021). The materials used for ship mooring ropes are usually made from natural materials, synthetic materials or combined materials (Adinegoro A, Studi P, Diploma N, 2020). The use of the main raw material for this rope product has undergone several changes, starting from coconut belt, rattan, palm fiber, and until now nylon which comes from waste from ship mooring ropes outside the region. The productivity of anchor rope spinning craftsmen in Tinambung District, especially in Babarura Hamlet, Tangnga-tangnga

Village, is very promising and is the largest business carried out by the local community as in Figure 1. Currently there are 10 Punggawa (Chairmen/Capital Owners) of Pelgang and around 30 Pelgang groups. which is spread across Babarura Hamlet, Tangnga-tangnga Village.

Analysis of the situation based on observations from partners, namely the "Samboyang" Rope Processing Business Group, shows that the problems faced in the field of technology are the lack of use of tools/machines to support increased production and the economic value has not been maximized, the lack of local government attention has implications for the production process which is still ongoing. traditional by relying on the skill of the pelangang's hands in spinning rope, with each group spinning only 10 rolls/day which is marketed at a selling price of around Rp. 220,000/Roll (80m), while if using the help of a spinning machine it can reach 20-25 rolls/day; There has been no innovation in diversification of product forms produced from processing ship anchor ropes, apart from the fact that currently they are only used as fishing aids or ship fasteners, even though the use of processing anchor ropes can be made into several ready-to-sell derivative products in the form of household craft creations with economic value. This diversification is an effort to find and develop new products or markets or both in order to pursue growth, increase sales, profitability and flexibility (Annafik AF., 2012). The results of diversification can be turned into several derivative products ready to sell in the form of household craft creations with economic value. This is because there has never been an organization or institution that has provided training in rope spinning innovation, therefore support, collaborative mentoring and continuous efforts from the government, supporting institutions and business actors are needed (Saleh N., 2023).

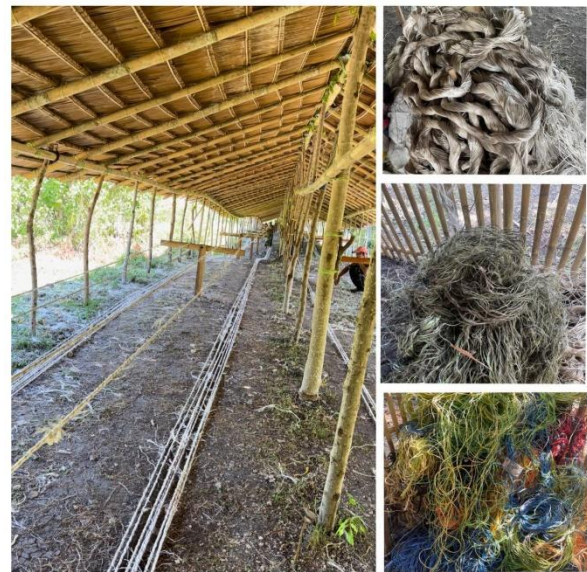


Figure 1. Location of Punggulalang/Spinning and Mooring Rope Waste

The "Samboyang" rope processing business group has been included in the productive economic business group since 2020 and is one of the micros, small and medium enterprise (MSME) groups in Polewali Mandar Regency which is known as the district with the highest level of MSMEs in West Sulawesi (Seri Rezki Fauziah, 2019), where the majority of members of this group are housewives who also work as rope spinners/punggulalang in their daily lives. The wages from each member's rope spinning are uncertain, because sales are still adjusted to the number of orders from buyers. Until now, the production output of the "Samboyang" group is only rope products, there has been no innovation that implements a strategy of diversification innovation, namely dividing more specific types of derivative products (Astuti PP., 2022). other forms or product results.

The implementation of Community Service activities generally aims to contribute to society for the sake of creating progress and independence for the nation and state. In particular, the implementation of this activity aims to help the "Samboyang" Rope Processing Business Group to be able to develop its business so that it has the potential to improve community welfare, especially in terms of household economic independence. The implementation of this activity is problem solving in nature which

involves collaboration between the world of education, government and society, the results of which are expected to be able to support increased productivity and income for target partners.

The focus of this Community Service activity is diversification of ship mooring/anchor rope waste recycling products, where the activity will specifically help the "Samboyang" rope processing business group to produce product diversification or vary the forms or results/products that previously existed (rope anchor) into several other derivative products with economic value with the aim of maximizing profit/or profits while expanding the marketing network in product sales.

The implementation method includes a series as in Figure 2 and can be explained as follows:

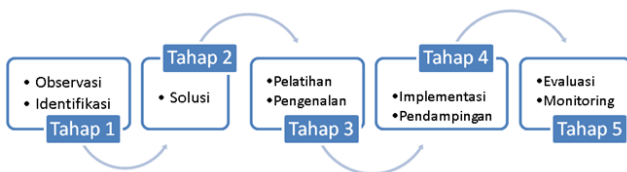


Figure 2. Method of Implementing Community Service

1. Initial Stage (I), at this stage begins with observation and identification through surveys and intensive discussions (*sharing problem*) to obtain information related to the formulation of priority problems and needs of target partners.
2. Stage II, at this stage a needs analysis is carried out and planning solutions to the problem conditions faced by the target partners.
3. Stage III, at this stage training and introductions are carried out to partners regarding the use of rope spinning tools/machines, product diversification training, marketing training via digital platform media, and application-based bookkeeping training. At this stage, materials and props that will be used in training activities are also prepared.
4. Stage IV, Implementation and assistance to target partners, includes implementation and assistance in all training activities in the form of theory and practice, counseling and training in

the use of tools and product manufacture to assistance in implementing the knowledge and experience that has been obtained from several trainings provided.

5. Final Stage (V), at this stage, includes evaluating the success of training and monitoring activities. The implementing team will carry out monitoring and evaluation by direct visits to target partner locations to see to what extent the results of training and assistance in service activities are implemented and utilized, starting from the use of rope spinning tools/machines, diversification of mooring rope products, utilization of product-based marketing. digital and the use of bookkeeping applications in the "Samboyang" rope processing business group.

RESULTS AND DISCUSSION

Based on the results of observations made on the "Samboyang" Rope Processing Business Group in Polewali Mandar, it is known that this business group is facing various problems in the fields of technology and product diversification. This condition then becomes the main focus in the implementation stages of community service activities which aim to improve the economic welfare of the group through product diversification for recycling ship mooring rope waste. Following are the activities. Based on the stages, the following are the results of the activities:

Needs Analysis and Solution Planning:

Analysis shows an urgent need for procurement of rope spinning machines that can increase productivity from 10 rolls per day to 20-25 rolls per day. Apart from that, there is a need for product innovation training to produce product diversification from ship mooring rope waste, which does not only focus on conventional products (ropes for fishing), but also expands to creative products that have a higher selling value.



Figure 3. Traditional Rope Spinning Process



Figure 4. Training Process

Technology Training, Product Diversification, Marketing and Bookkeeping

At this stage, several training sessions are carried out for partners. First, introduction and training on the use of rope spinning tools/machines as a technological solution that can increase production capacity. This training aims to speed up the production process while maintaining quality, so that the group can produce more rope in a shorter time. Second, product diversification training was carried out, where partners were introduced to various opportunities for developing products derived from ship mooring ropes, such as household craft products that have aesthetic and functional value. Third, marketing training via digital platforms is also provided to support partners in marketing products more widely, considering that conventional marketing has not been able to reach a larger market. Lastly, application-based bookkeeping training is also provided to improve group financial management capabilities.

Implementation and Assistance

The final stage is implementation and direct assistance to partners in applying all the knowledge and skills that have been obtained during the training. This mentoring process involves the use of rope spinning tools/machines, making diversified products, and marketing strategies through digital media. This assistance aims to enable partners to smoothly implement the innovations they have learned and strengthen their abilities in managing their business independently.



Figure 4. Delivery of rope spinning equipment/machines and product diversification support equipment.

CONCLUSION

Overall, the implementation of this community service activity was successful in providing a solution to the problems faced by the "Samboyang" Rope Processing Business Group. With the presence of rope spinning

equipment/machines, group productivity increases significantly. In addition, product diversification from ship mooring rope processing provides new opportunities for the group to increase the added value of their products. Digital marketing and bookkeeping training also open up opportunities for the group to be more competitive in the wider market. As a result, this activity not only increases production capacity, but is also able to encourage an increase in the economic welfare of business groups in Polewali Mandar.

SUGGESTION

Based on the results of implementation and observations of community service activities that have been carried out, the following are several suggestions that can be given for program sustainability and development:

1. Optimizing the use of technology
2. Increased capacity in product diversification
3. Sustainable Digital Marketing
4. Strengthening Management and Bookkeeping
5. Support and Collaboration with the Government or Third Parties
6. Periodic Evaluation and Sustainable Program
7. Marketing Network Development

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