

## Recycling Mining Rope Waste Karama Village, Tinambung District, Polewali Mandar Regency, West Sulawesi Province

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### Abstract

*Rope recycling craft is a productive economic activity that utilizes raw materials from weathered rope waste which is recycled into new rope. The urgency of this community empowerment activity is carried out, apart from reducing the impact of rope waste on the environment it can also provide an opportunity for each community to be able to develop their potential and try to increase their income. The problem faced by Partners is a lack of skills in increasing quality production and marketing. The objectives of this activity are 1) to improve partners' skills regarding production and 2) to improve human resource capabilities in marketing. Solutions and Targets The final result to be achieved in this activity is to increase partners' skills in producing and marketing high quality and sustainable ropes. The purpose of this service and empowerment program activity. Improving the skills of partner group members in increasing the production and marketing of their business results. know the rope production system in Karama Village, Polewali Mandar Regency to meet existing market demand in terms of technological developments and Green Economy principles as well as the level of employment for the people of Karama Village. The methods applied to overcome these problems are through counseling, training with demonstrations of recycling rope waste, as well as mentoring and mentoring to make products ready for market. The activity was carried out on 14-15 August 2023 at the business location of the Siasayangi Business Group, Karama Village, Tinambung District, Polewali Mandar Regency. Activities consisted of participatory counseling coupled with demonstrations of recycling rope waste. The results of recycling this rope waste can also be sold so that it can increase income and improve the family's economy. Recycling rope requires patience, patience, and innovation, and training is still needed*

**Keywords:** *Green Economy; dynamic and sustainable; rope craftsman*

### Abstrak

Tujuan dari kegiatan program pengabdian dan pemberdayaan ini untuk meningkatkan keterampilan anggota kelompok mitra dalam meningkatkan produksi dan pemasaran hasil usahanya dan untuk mengetahui sistem produksi tali tambang di Desa Karama Kabupaten Polewali Mandar untuk memenuhi permintaan pasar yang ada dari segi perkembangan teknologi dan prinsip *Green Economy* serta tingkat penyerapan tenaga kerja masyarakat Desa Karama. Metode yang diterapkan dalam mengatasi permasalahan tersebut ialah melalui penyuluhan, pelatihan dengan demonstrasi daur ulang limbah tali tambang, sertapembimbingan dan pendampingan menjadi produk yang siap dipasarkan.. Kegiatan terdiri atas penyuluhan partisipatif yang dirangkaikan dengan demonstrasi daur ulang limbah tali tambang Dengan pendekatan pemberdayaan yang dilakukan diharapkan dapat membantu mitra dalam peningkatan keterampilan dan kemandirian dalam usaha daur ulang limbah tali tambang sehingga para pengrajin dapat mengembangkan usahanya secara dinamis dan lestari. Hasil pelaksanaan pengabdian ini yang dilaksanakan dalam bentuk pelatihan dan pembimbingan daur ulang limbah tali tambang berjalan dengan baik dan lancar serta dapat diterima dengan baik. Limbah tali tambang dapat diolah dengan menggunakan peralatan yang memadai, Sehingga dari segi produktivitas yang dilakukan oleh anggota kelompok dapat meningkatkan produksi baik dari kuantitas maupun kualitas, sedangkan pada aspek pemasaran yang dilaksanakan pada kegiatan ini dapat memberikan wawasan dan pemahaman kepada mitra tentang upaya pemasaran melalui promosi dan distribusi produk, baik secara langsung maupun melalui media sosial kepada konsumen. Dampak yang diperoleh masyarakat setelah kegiatan ini diharapkan usaha ini dapat menyerap tenaga kerja sekitar yang lebih banyak dan mampu memfasilitasi perkembangan usaha mitra untuk kemudian memberikan *multiplier effect* bagi usaha sejenis

**Kata kunci:** *Green Economy; dinamis dan lestari ; pengrajin tali tambang*

### INTRODUCTION

The introduction must contain (in sequence) the general background, a review of previous literature (state of the art) as the basis for a statement of the scientific novelty of the article, a statement of scientific novelty, and the research problem or hypothesis. At the end of the introduction, the purpose of the article

study must be written. In the scientific article format, literature reviews are not permitted as in research reports, but are carried out in the form of a review of previous literature (state of the art) to show the scientific novelty of the article.

Karama Village is one of the villages in the District Connect Polewali Mandar

Regency. Karama Village consists of 3 hamlets, namely Karama Hamlet, Manjopai Hamlet and Lambe Hamlet. Karama Village has the following territorial boundaries: a) North side: borders Balanipa sub-district b) South side: borders directly on the Mandar Sea c) West side: borders Tangnga-Tangnga Village d) East side: borders Tamangalle Village. Where the center of government is centered in Karama Hamlet and in this hamlet the village head's office is also placed. Karama is one of the villages with the largest area in Tinambung District with an area of +299 Ha consisting of agricultural areas + 64 Ha, residential areas + 205 Ha and others + 30 Ha including rope spinning (BPS, 2022). The majority of residents of Karama Village, Tinambung District, Polewali Mandar Regency generally work as fishermen because the location of this village is a coastal area. Awareness of poverty in this region has made many residents open jobs other than fishing.

The craft of recycling mine rope waste, apart from fishermen, is a productive economic activity that utilizes basic materials from weathered rope waste which is recycled into new ropes, which can be used to tether ships, boats and so on. The development of recycled rope rope crafts in Karama Village provides an opportunity for every community to develop their potential and try as hard as possible to earn additional income which will be used to meet their daily living needs. If these craftsmen are not organized, they tend to have difficulty getting capital injections when orders increase and/or expand to a wider market. There is no taker who supervises the craftsmen. So marketing is done traditionally and personally. The marketing carried out is still focused on the surrounding market and has not extended to offering goods to areas outside the sub-district

In Karama Village there are rope recycling craftsmen managed by several community groups. This business is a small business that is managed traditionally and has been passed down from generation to generation, with the characteristics of a workforce of 10-15 people, most of whom are family members, the capital used is relatively small and the technology

used is still very simple. This group of craftsmen experiences various obstacles, including: capital, production, marketing as well as a lack of knowledge and skills regarding entrepreneurship, especially matters relating to the fields of production management and marketing, apart from that they also depend on internal capital and most of the craftsmen borrow funds from collectors. So the price is determined by the rope collector.

The problems faced by community groups, especially Partners, are: 1. Problems in the Production Sector, this is due to the lack of adequate production equipment/equipment used in the production process, in addition to the lack of partner skills in producing quality ropes, so partners only sell products produced in small quantities. 2. Problems in the Marketing Sector faced by partners due to a lack of knowledge in marketing management so that what partners have done so far includes, the market is still limited, partners only make and sell products to consumers around the sub-district, then promotion has not been carried out much, even though there is great potential for partners to increase sales turnover if promotions are held.

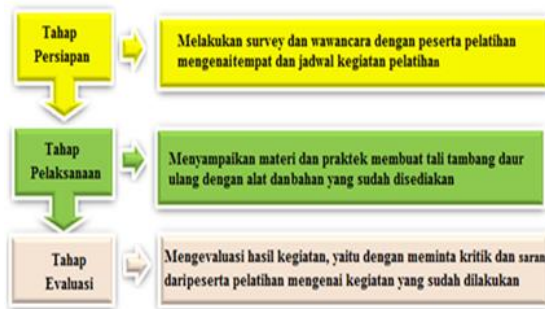
Therefore, through this beginner's community service program, it is important aim to improve the skills of partner group members in increasing production, marketing and to understand the rope production system in Karama Village, Polewali Mandar Regency in order to meet existing market demand both in terms of technological developments and Green Economy principles as well as the level of employment of the Karama Village community. The knowledge in the field of production and marketing management in collaboration with lecturers from the agribusiness discipline of Al Asyariah Mandar University, West Sulawesi, providing assistance to partner groups which is combined with website-based production and marketing improvement training which can help with the administration of partner groups and also as a production promotion event for maintaining the sustainability of partner businesses, increasing awareness of environmental

sustainability in the community in Karama Village, Polewali Manda Regency

## IMPLEMENTATION METHOD

The research flow should be presented in this section accompanied by figure captions. Image captions are placed as a section from. The image title (figure caption) is not part of the image. The methods used to complete the research are written in this section.

Stages of implementation of the Beginner Community Service Program as shown in the following picture:



- 1. Preparation.** At this preparatory stage, a survey is carried out to take inventory of changes in community conditions, especially the partner group of assisted rope craftsmen, so that the design of the activities carried out can provide solutions to partner problems. Apart from that, in this initial stage there will also be wider socialization of the program.
- 2. Implementation of activities.** Implementation of activities includes: pre-test and post-test on participants, the aim is to measure the extent of the participants' level of understanding towards production management aspects and marketing management aspects, production strengthening activities through structuring raw material stocks, adding partner group production facilities, partner group strengthening activities and human resource development activities.

Training to increase knowledge and skills in the fields of production and marketing and mentoring will be carried out to

increase the knowledge and abilities of the rope craftsmen group so that the managed partner businesses can develop and be sustainable.

## Implementation of Production Sector Training that is :

- Prepare training materials together with the service team from the initial survey conducted to partners, before the presentation of the material is carried out, pre-test and post-test on participants, the aim is to measure the extent of participants' understanding of how the production process is carried out by partners.
- Conduct discussions about partners' needs in implementing the recycled rope production process
- Carrying out direct practice (demo) of rope production in the following way: first, the raw material is made into fibers. Second, the raw materials are spun by three people using a windmill and then rolled into a roll. The three rolls are put together using a very simple tool, namely "Puso" into one bundle by rotating it using a pinwheel, finally, the finished rope is rolled up then tied and ready to be marketed.

## Implementation of Field Training

### Marketing that is :

- Providing knowledge material and opening insight to partners regarding online marketing management and new product innovation and the importance of quality in rope products. The target is that craftsmen are no longer unfamiliar with the social media Facebook, Instagram and Twitter
- Providing marketing management assistance to partners

## RESULTS AND DISCUSSION

The target group that is the collaborative partner in implementing this activity is the Siasayangi Business Group. An overview of the problems in terms of traditional equipment faced by the community in Karama Village Figure 1.



Figure 1. Names of traditional equipment used for the production of recycled mine rope waste in partner groups

**Training Stage**

Training activities were carried out for two days, namely on 14–15 August 2023 at the Siasangi group business premises. The counseling material provided to partner groups is as follows.

a. Production Management Training

Counseling on Production Management aims to provide additional knowledge and skills to business group members on how to increase the productivity of products produced using chas drilling tools.

b. Marketing Management

Providing knowledge material and opening insight to partners regarding online marketing management and new product innovation and the importance of quality in rope products. The target is craftsmen who are no longer unfamiliar with the social media Facebook, Instagram and Twitter

c Providing training and marketing management assistance to partners. In addition to training outreach, a mine rope cycle processing demonstration was also carried out. Demonstration activities for recycling ropes can be seen in Figure 2.



Figure 2. Training on Recycling Mining Rope Waste

The results of the implementation of this service, which was carried out in the form of training and guidance on the recycling of mining rope waste, went well and smoothly and were well received by the partner group. To measure the level of knowledge of participants. During the implementation of this training, a Pre-test and Post-Test were carried out regarding production management and marketing management. And the results were that before implementation, partner knowledge about aspects of production management that did not yet know was 73.59%, while those that already knew were 26.41%. After the implementation was carried out, the level of partner knowledge regarding aspects of production management was seen to increase, namely 83.28% who knew and 16.72% who did not know. Meanwhile, in productive and quality rope recycling activities, there was also an increase in the knowledge of participants/partners from 81.12% who did not know to 100.00% who knew. Likewise, in the marketing management aspect before the training was carried out, the level of knowledge of participants/partners was 92.34% who did not know and 7.66% who knew. In the aspect of marketing using social media, 75.48% did not know and 24.52% already knew. After the training was carried out there was an increase in partner knowledge from 92.34% who did not know to 96.00% who knew about aspects of marketing management, Meanwhile, marketing of recycled rope using social media went from 75.48% who didn't know to 100% who knew.

Table 1. Pre-test and post-test results regarding partners' knowledge and skills regarding Production and Marketing Management in Karama Village, Polawalimandar Regency

What is asked in the questionnaire	Before Activities Community service		After the activity Community service	
	Not yet	Already	Not yet	Already
	%			
Knowledge of Aspects in Production Management	73.59	26.41	16.72	83.28
Productive and high-quality way to recycle mining rope	81.12	18.88	0.00	100.00
Knowledge of aspects in marketing management	92.34	7.6	5.00	96.00
How to market using social media	75.48	24.52	0.00	100.00

Rundown of beginner community service (PMP) activities that have been carried out:  
 Production Management and Marketing Management Training  
 Date: August 14, 2023

Place: Mining Rope Recycling Business "Siasayangi" Lambe Hamlet, Karama Village

Table 2. Rundown of Day I Community Service Activities

No	Program	Presenter/Responsible Person	O'clock
1	Registration	Team members	08.00 - 09.00
2	Opening Direction regarding the implementation of the Beginner Community Service Program	Abd Jamal, SP, M. Adm. KP	09.00 - 09.45
3	<i>Coffee Break</i>	Team	09.45 - 10.00
4	Presentation of Marketing Management material	Ir. Siadiana, M.Sc	10.00 – 12.00
5	Ishoma	Team	12.0 – 13.00
6	Production Management	Abd Jamal, SP, M. Adm. KP	13.00- 13.45

#### Activity II

Practice milling rope using a chas drill given to the group

Date: August 15, 2023

Place: Mining Rope Recycling Business "Siasayangi" Lambe Hamlet, Karama Village

No	Program	Presenter/Responsible Person	O'clock
1	Registration	Team members 2.3	08.00 - 09.00
2	<i>Ice Breaking</i>	Team	09.00 - 09.15
3	Practical Session on Rope Picking using a chas drill	Dahniar, assisted by a team and two students	09.15 – 12.00

4	Ishoma	Team	12.00 – 13.00
5	The winding of the rope has been completed		13.00 - finish

The recommended recycling process for mining rope waste for farmer groups based on the results of community service activities carried out is as follows.

- 1). Decomposing or separating mining rope that is still suitable for recycling. Each roll of used mining rope is first untangled and put back together again with a length of 20 meters and a diameter of 20 inches. Any re-spun rope must also be arranged to contain silk, nylon and silk-nylon combination fibers.
- 2). These ropes are then cut into several sections 20 meters long to be untangled and separated. The strands that look new and smooth without abrasions will later become the outer "skin" of the rope. Meanwhile, the dirty part will become the core of the rope. Based on the experience and expertise of the workers, these ropes are re-spun to become ropes that are ready to be used.
- 3). The tool is a wooden pole assisted by a chas drill which functions to spin strands of rope hundreds of meters long.
- 4). Then, after spinning, the recycled rope is rolled up neatly. A roll of rope is sold at a price of IDR 200 thousand per roll (80 m long)," then marketing is carried out both directly and via social media.



Figure 3. Recycled Mining Ropes Ready to Be Marketed

Based on the results obtained from this community service activity, it appears that recycling rope with adequate equipment can increase production, both quality and quantity.

## CONCLUSION

This activity, which was carried out in the form of training and guidance on the recycling of mining rope waste, went well and smoothly and was well received by the partner group. The level of knowledge of participants/partners is measured by carrying out a Pre-test and Post-Test regarding production management and marketing management. And the results were that before implementation, partner knowledge about aspects of production management that did not yet know was 73.59%, while those that already knew were 26.41%. After the implementation was carried out, the level of partner knowledge regarding aspects of production management was seen to increase, namely 83.28% who knew and 16.72% who did not know. Meanwhile, in productive and quality rope recycling activities, there was an increase in the knowledge of participants/partners from 81.12% who did not know to 100.00% who knew. Likewise, in the marketing management aspect before the training was carried out, the level of knowledge of participants/partners was 92.34% who did not know and 7.66% who knew. In the aspect of marketing using social media, 75.48% did not know and 24.52% already knew. After the training was carried out there was an increase in partner knowledge from 92.34% who did not know to 96.00% who knew about aspects of marketing management. Meanwhile, marketing of recycled rope using social media went from 75.48% who didn't know to 100% who knew. From the results above, in terms of productivity carried out by group members, it is hoped that it can increase production both in terms of quantity and quality, while in the marketing aspect carried out in this activity it can provide insight and understanding to

partners regarding marketing efforts through product promotion and distribution, both directly as well as via social media to consumers. It is hoped that the impact obtained by the community after this activity will increase the income of the partner group and be able to facilitate the development of partner businesses and then provide a multiplier effect for similar businesses.

### **SUGGESTION**

With the community empowerment program through increasing production and marketing in the "Siasayangi" business group, it is hoped that it will be able to increase the added value and sustainability of the businesses managed so far and it is hoped that It is hoped that the impact obtained by the community after this activity will be able to absorb more local workers

### **THANK-YOU NOTE**

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