Community Empowerment Through Processing Waste into Fashion Products uses Heat Techniques Press to Increase Community Income in Senggigi Village, West Lombok District

MUHAMMAD MUJAHID DAKWAH, MOHAMMAD NAJIB ROODHI, DJOKO SUPRAYETNO, IWAN KUSMAYADI, ABDURRAHMAN, ZAMRONI ALPIAN MUHTAROM, ZEFANYA ANDRYAN GIRSANG, APRIADI, I DEWA AYU DENIK TIRTANINGRUM

Management Study Program (Mataram University) Email: mujahid.fe@unram.ac.id

Received 08 October 2024 | Revised 11 January 2025 | Accepted 17 January 2025

ABSTRACT

The aim of this service activity is to empower the community by processing waste into fashion products using heat press techniques to increase community income in Senggigi Village, West Lombok Regency. The problem faced by partners is related to the large amount of plastic waste which, if burned, can produce dangerous compounds, apart from that, plastic waste can also damage the sustainability and beauty of the Senggigi tourism area. The method used to overcome this problem is in the form of community service activities which will be carried out to process waste into fashion products using the Heat Press Technique, which is a new breakthrough in handling waste which can also increase income for the local community. As a result of partner activities, they have the ability to overcome the problem of increasing waste volume by managing waste into fashion products using heat press techniques.

Keywords: Community Empowerment, Waste, Fashion Product, Heat Press, Senggigi Village

1. INTRODUCTION

"Save The Planet" is a motto that can remind us of the ever-mounting waste (Müller & Schönbauer, 2020). Earth's pollution from rubbish is now not only on land, pollution is also a big concern in marine ecosystems (Gunalan & Hasbullah, 2020). The World Bank in a report released data regarding global waste production. This international financial institution claims that in 2016 there were 2.01 billion tons of waste piled up in the world. If you look at the rate of growth of the Earth's population, especially urbanization growth of up to 70 percent, then according to predictions from the institution based in Washington DC, United States, by 2050 waste generation will reach 3.4 billion tons (Setiawan, 2021).

Senggigi Village is one of the villages in Batulayar District, West Lombok Regency, West Nusa Tenggara, Indonesia (Lalu Erwan Husnan & Lalu Ratmaja, 2022). This village is a tourism area with natural beauty that has been recognized by the world (Permadi, Ula, & Sakti,

2020), so it needs to be protected from various aspects of its beauty (Sulistyowati et al., **2022**), one of which is waste handling. The community service activity that will be carried out to process waste into Fashion products using the Heat Press Technique is a new breakthrough in handling waste which can also increase income for the local community. Apart from the aim of cleaning Senggigi as a tourist destination area. This service activity will also continue with ideas that can reduce socio-economic problems in Sengigi Village and collaborate with various parties to maintain the sustainability and beauty of the Senggigi Tourism Area.



Figure 1. Condition of Garbage on Senggigi Beach

Figure 1 shows the condition of rubbish that is a problem on Senggigi Beach. One type of waste is plastic waste. One type of waste that is a problem is plastic waste (Irwan Siagian, Nurma Tambunan, Bondan Dwi Hatmoko, & Hanum Nurul Aulia, 2022). The time required for plastic to completely decompose is estimated to be 100 to 500 years. (Rahmayani & Aminah, 2021). Currently, most low density polyethylene (LDPE) plastic waste is simply thrown away in final disposal sites (TPA) or landfills. Meanwhile, the rest is burned and some is recycled. This treatment does not solve the problem because one day the landfill will be full of plastic waste. Meanwhile, destroying plastic waste by burning it at low temperatures will cause pollution problems because it produces dangerous compounds that are carcinogens, such as poly chloro dibenzodioxins and poly chloro dibenzofurans. (Wardhana, Hanafi, Finali, & Umar, 2022).

Based on the explanation above, to overcome the current problem of plastic waste in Indonesia, especially Senggigi Village, which originates from households, this can be done by recycling waste into fashion products such as tote bags, raincoats, tablecloths, shoe covers, and others, depending The waste material used has water-repellent characteristics, which is now quite popular and is trending among the public, especially women aged 17-25 years (**Farida, Widoretno, & Yuliastuti, 2020**). Thus, plastic waste/waste has great potential and requires a touch of design to become a usable product, has commercial value by increasing value rather than just destroying (burning) the waste which will later cause air pollution. (**Simbolon, Zulkifli, & Sugito, 2021**).

Based on the description above, it is necessary to carry out "Community Empowerment through Processing Waste into Fashion Products Using Heat Press Techniques to Increase Community Income in Senggigi Village, West Lombok Regency", which is packaged in a community service package by the Management Department Service Team, Faculty of Economics and Business, University Mataram.

Community Empowerment Through Processing Waste into Fashion Products uses Heat Techniques Press to Increase Community Income in Senggigi Village, West Lombok District

2. METHODOLOGY

This service activity was carried out by the service team in collaboration with the Senggigi Village Office to empower the community to process waste into fashion products using heat press techniques so as to increase the income of the Senggigi village community. This activity was carried out several times in the period August-October 2024.

The method for implementing community service is carried out through 3 (three) stages, these stages can be seen in Figure 1.



Figure 2. Interview with Partners

1. Pre-Consecration

The service team carried out an observation and interview process with the school and informants who had visited Senggigi Village, especially informants who had rented the beach.

2. Implementation of Community Service

Community service is carried out through counseling and Focus Group Discussions (FGD). The extension aims to provide a comprehensive understanding of Heat Press-based businesses. The FGD aims to jointly formulate the opportunities and challenges of establishing a Heat Press-based business unit. This is important to do so that business managers will be able to anticipate existing challenges to become opportunities for business development

3. Post of Community Service The target of this service activity is that visitors are able to make Fashion Products according to standards and the formation of a Heat Press-based business unit, especially a plastic waste processing business. Post-service activities are carried out through regular visits to check whether the desired targets have been achieved. Apart from that, we also carry out evaluations via online forms to see the progress of each target.

3. RESULT AND DISCUSSION

3.1. Pre-Consecration

At this stage, observations and interviews are carried out with the school and partners related to the problems being faced. The documentation for this activity can be seen in Figure 3.



Figure 3. Interview with Partners

Figure 3 shows the pre-service activities carried out by the research team. Based on the results of interviews, it was found that the problem faced by partners was the increasing volume of plastic waste, one of which was caused by visitors who did not understand how to process plastic waste wisely. This is of course because not all levels of society understand about processing plastic waste into fashion products. Apart from that, another problem is that partners do not yet have waste management into Fashing products using the Heat Press Technique. The solutions that will be implemented through this service are:

- 1. Turning plastic waste processing activities into Fashion products using the Heat Press technique as a tour package. Visitors who come to the beach will get a new experience in the form of processing plastic waste into fashion products using the Heat Press technique.
- 2. Forming a business unit to produce Fashion products using Heat Press techniques with partnership principles

3.2. Implementation of Community Service

Community service activities are carried out through outreach and Focus Group Discussions (FGD). Counseling is carried out to provide an in-depth understanding of Heat Press-based businesses. The FGD aims to jointly formulate the opportunities and challenges of establishing a Heat Press-based business unit. This is important to do so that business managers will be able to anticipate existing challenges to become opportunities for business development. The activities for implementing this service can be seen in Figure 4, 5 and 6.

Community Empowerment Through Processing Waste into Fashion Products uses Heat Techniques Press to Increase Community Income in Senggigi Village, West Lombok District



Figure 4. Counseling on the Use of Heat Press

Figure 4 shows the activity of presenting material related to how to use Heat Press to partners



Figure 5. FGD Use of Heat Press

Figure 5 shows discussion activities related to the use of Heat Press



Figure 6. Partners Train Using Heat Press

Figure 6 shows activities where partners try to use the Heat Press machine. The activity documentation above shows the service implementation activities that have been carried out. Starting from counseling, FGDs to partners trying to use the Heat Press machine. The activity closed with a group photo between the service team and partners which can be seen in Figure 7.



Figure 7. Photo with Partners and Service Team

3.3. Post of Community Service

The target of this service activity is that visitors are able to make Fashion Products according to standards and the formation of a Heat Press-based business unit, especially a plastic waste processing business. Post-service activities are carried out through regular visits to check whether targets have been achieved. Apart from that, the service team also carries out evaluations via an online form to see the progress of each target. The results of the evaluation were carried out using a pre-test that had been given previously and then compared with the post-test that had been carried out. The results of the pre-test and post-test can be seen in Figure 8.



Figure 8. Result Pre-test and Post-test

Reka Elkomika 27

Figure 8 shows an increase in knowledge and skills by partners ranging from 5% to 30%.

4. CONCLUSIONS

Based on the community empowerment activities that have been carried out, it can be concluded that partners have experienced a significant increase in knowledge and skills related to processing waste into fashion products using heat press techniques. The pre-test and post-test results show an increase in knowledge and skills by partners ranging from 5% to 30%. The response from partners after participating in this activity was very positive, they felt more confident and motivated to implement the techniques learned in their daily lives and saw the economic potential of waste processing. As a next step, it is recommended to provide further training regarding the design and packaging of waste-based products to make them more attractive and have high selling value, as well as improving product marketing capabilities both conventionally and digitally to expand markets and increase income.

ACKNOWLEDGEMENT

The author would like to thank the Research and Community Service Institute of the University of Mataram which has facilitated and funded this service activity in the form of a PNPB UNRAM Service Grant. And we would also like to express our gratitude to the Senggigi Village partners who have provided the service team with space to share knowledge and knowledge with the interests of the community.

LIST OF REFERENCES

- Farida, N., Widoretno, S., & Yuliastuti, E. (2020). Pembuatan Kantong Kain "Tote Bag" Sebagai Pengganti Kantong Plastik Pada Pemuda Wirausaha Blitar. *Jurnal Graha Pengabdian, 2*(4), 296–304. https://doi.org/10.17977/um078v2i42020p296-304
- Gunalan, S., & Hasbullah, H. (2020). Analisis Pemaknaan Semiotika Pada Karya Iklan Layanan Masyarakat. *Jurnal Nawala Visual*, *2*(2), 44–51. https://doi.org/10.35886/nawalavisual.v2i2.117
- Irwan Siagian, Nurma Tambunan, Bondan Dwi Hatmoko, & Hanum Nurul Aulia. (2022). PKM Bank Sampah Koperasi Warga Sadaya (Kowasa) Kecamatan Jonggol Kabupaten Bogor. *J-ABDI: Jurnal Pengabdian Kepada Masyarakat, 1*(12), 3457–3466. https://doi.org/10.53625/jabdi.v1i12.2076
- Lalu Erwan Husnan, & Lalu Ratmaja. (2022). Persepsi Wisatawan Terhadap Penggunaan Bahasa di Daerah Wisata Lombok. *Journal of Mandalika Review*, *1*(1), 23–28. https://doi.org/10.55701/mandalika.v1i1.5
- Müller, R., & Schönbauer, S. M. (2020). Zero Waste—Zero Justice? *Engaging Science, Technology, and Society, 6*, 416–420. https://doi.org/10.17351/ests2020.649

Permadi, L. A., Ula, L. V., & Sakti, D. P. B. (2020). Pengaruh E-Wom dan Citra Destinasi

Terhadap Niat Berkunjung Kembali ke Pantai Senggigi di Tengah Wabah Covid-19. *JMM UNRAM - MASTER OF MANAGEMENT JOURNAL, 9*(2), 212–220. https://doi.org/10.29303/jmm.v9i2.550

- Rahmayani, C. A., & Aminah, A. (2021). Efektivitas Pengendalian Sampah Plastik Untuk Mendukung Kelestarian Lingkungan Hidup Di Kota Semarang. *Jurnal Pembangunan Hukum Indonesia*, *3*(1), 18–33. https://doi.org/10.14710/jphi.v3i1.18-33
- Setiawan, A. (2021). Membenahi Tata Kelola Sampah Nasional. Retrieved September 10, 2024, from https://indonesia.go.id/kategori/indonesia-dalam-angka/2533/membenahi-tatakelola-sampah-nasional
- Simbolon, E. Y., Zulkifli, Z., & Sugito, S. (2021). Penerapan Ornamen Pada Desain Totebag Ditinjau Berdasarkan Prinsip-Prinsip Desain. *Gorga : Jurnal Seni Rupa*, *10*(1), 184–193. https://doi.org/10.24114/gr.v10i1.23164
- Sulistyowati, T., Agustawijaya, D. S., Muchtaranda, I. H., Prabowo, A., Muhajirah, M., & Ngudiyono, N. (2022). SIMULASI BEBAN RUNTUH LERENG DENGAN METODE ELEMEN HINGGA (FINITE ELEMENT METHOD) MENGGUNAKAN PROGRAM ABAQUS SE (STUDI KASUS LERENG VILLA SENGGIGI). *Konstruksia*, *13*(2), 23–32. https://doi.org/10.24853/jk.13.2.23-32
- Wardhana, P. B. W., Hanafi, A. F., Finali, A., & Umar, M. L. (2022). Potensi Limbah Plastik sebagai Sumber Energi Terbarukan Menggunakan Proses Degradasi Termal dan Katalitik. *J-Proteksion: Jurnal Kajian Ilmiah Dan Teknologi Teknik Mesin*, 7(1), 14–20. https://doi.org/10.32528/jp.v7i1.8242