



JLPH: Journal of Law, Politic and Humanities

E-ISSN: 2962-2816
P-ISSN: 2747-1985<https://dinastires.org/JLPH> ✉ dinasti.info@gmail.com ☎ +62 811 7404 455DOI: <https://doi.org/10.38035/jlph.v5i2>
<https://creativecommons.org/licenses/by/4.0/>

DEDAYA (Desa Berdaya): Independent Economic Development of Poncokusumo Village Community Through Orange Peel Waste Processing to Create Village Independent Income

Latifa Al Muta Ali¹, Amanda Rahadatul Aisy², Adhiwa Restuanggara Saeputra³, A Nora Silvia Siahaan⁴, Yogi Riyandika⁵, Endang Sri Redjeki⁶.

¹Pendidikan Akuntansi, Universitas Negeri Malang, Indonesia, mutaa747@gmail.com.

²Pendidikan Matematika, Universitas Negeri Malang, Indonesia, aisy.manda19@gmail.com.

³Pendidikan Luar Sekolah, Universitas Negeri Malang, Indonesia, adhiwarangga02@gmail.com.

⁴Geografi, Universitas Negeri Malang, Indonesia, nora.silva.2207226@students.um.ac.id.

⁵Ekonomi Pembangunan, Universitas Negeri Malang, Indonesia, riyandikayogi99@gmail.com.

⁶Fakultas Ilmu Pendidikan, Universitas Negeri Malang, Indonesia, endang.sri.fip@um.ac.id.

Corresponding Author: mutaa747@gmail.com¹

Abstract: Poncokusumo Village, located in Poncokusumo Subdistrict, Malang Regency, has significant potential in orange and apple cultivation. The 484-hectare area is estimated to produce 1.8 tons of commodities per 1000 square meters. The DEDAYA program aims to develop a self-sustaining economy in Poncokusumo Village, thereby achieving village independent income and enhancing the village's strengths through the utilization of orange peel waste into products such as tekaje flour, o-jie-tea, orange chili sauce, and eco-enzyme. This solution involves a holistic approach through (1) socialization and business assistance in developing and managing orange peel waste, and (2) the establishment of the DEDAYA (Desa Berdaya) institution responsible for the structured management of the program. The outcomes include processed orange peel products and scientific publications in Sinta 3 journals. The program's success is measured by training existing entrepreneurs and enhancing the role of local institutions in supporting village independent income through the DEDAYA program.

Keyword: Orange Peel, Empowerment, Village Independent Income.

INTRODUCTION

Students as agents of change have an important role in driving community progress, especially through village empowerment activities. Student institutions such as the Student Executive Board (BEM) are a forum for students to be directly involved in community development. In the village empowerment program, one of the roles of BEM is to design and implement various activities aimed at increasing independence and empowering the community so that it can improve the economic welfare of the village. Students can empower the community through

existing local potential. By optimizing local potential, students not only contribute in the economic aspect, but also in environmental conservation.

The implementation of the village community empowerment program is real evidence that students have the capacity to bring about change in the community. Through the village empowerment program, BEM collaborates with various parties, including the village government and the local community, to form strong institutions. These institutions are expected to be able to manage village potential independently so that the community can feel the long-term benefits of the program that has been designed. The role of students as catalysts and resource liaisons in this program shows how important collaboration is between academics and the community in achieving broader development goals.

The village community empowerment program by students is actually one of the values of the Tri Dharma of Higher Education. The Tri Dharma of Higher Education is the main foundation that serves as a guideline for every university in Indonesia. One of the important pillars of the Tri Dharma is community service, which requires students and academics to actively contribute to advancing and empowering the surrounding community. Community service is not only an obligation, but also a form of moral and intellectual responsibility to apply the knowledge gained in college in real life. Through community service, students can be directly involved in solving problems faced by the community, as well as providing innovative and sustainable solutions. Community service can be carried out by utilizing local potential in an area so that the programs designed can have a real impact on the community. Local potential, such as natural resources, traditional skills, or superior regional products, can be optimized to empower the community and improve their welfare. By developing these potentials, the community not only gains economic benefits, but can also maintain the sustainability of their culture and environment. The use of local potential in community service activities also encourages independence and sustainable development, which ultimately strengthens the social and economic structure at the community level.

One way to implement community service through community empowerment programs is by deploying students, especially those who are members of student organizations (BEM). One of the BEMs that is active in empowering village communities is BEM Universitas Negeri Malang. With full support from the Directorate of Learning and Student Affairs (Belmawa), universities, and village governments, BEM UMM had the opportunity to empower communities in Poncokusumo Village, Poncokusumo District, Malang Regency. In the context of the village empowerment program implemented by BEM in Poncokusumo Village, this community service is realized through various activities aimed at increasing the economic independence of the village. This program not only implements scientific aspects, but also prioritizes cooperation with the community and village government to achieve maximum results. Empowerment of village communities in Poncokusumo Village is focused on increasing the benefits of existing local potential, namely citrus fruits. As we know, oranges are one of the most popular commodities in various parts of the world, not only because of their fresh taste, but also because of their nutritional content that is beneficial for health. In the food and health industries, oranges are often used as the main ingredient for making various products because of their rich nutritional content. In addition to being processed into juice or eaten directly, all parts of the orange, including the peel, have great potential for further use.

Oranges or those with the Latin name citrus are fruits that are rich in benefits that are very important for the body. Orange flesh is known for its high vitamin C content. Devy et al (2010) in Kristiandi & Febrina (2020) stated that citrus plants contain various secondary metabolites, including carotenoids, flavonoids, and limonoids. These compounds are found in various parts of the citrus plant, such as leaves, fruit peel, seeds, and pulp. Specifically in orange peel, orange peel also contains many benefits. According to research conducted by Pracaya (2010), as quoted by Kristiandi & Febrina (2020), the vitamin C content in orange peel is even higher

than in the fruit flesh. Orange peel has benefits comparable to the fruit, and can be processed into various products, such as flour, orange peel tea, orange peel chili sauce, and eco-enzymes. Citrus fruits can thrive in low to medium altitude areas, with subtropical to tropical climates, with sufficient rainfall, and sufficient exposure to sunlight. Poncokusumo Village is a village with a strategic location and is one of the main fruit production centers in East Java Province. Geographically, this village is located in a hilly area with an altitude of between 600 and 1200 meters above sea level. Rainfall in this area ranges from 2300 to 2500 mm per year, with temperatures between 22 and 26 degrees Celsius (Latifah, 2018). These climate conditions are very supportive of the cultivation of various types of horticulture, including Siamese oranges. The development of citrus agribusiness in Poncokusumo Village has begun gradually since 2005, replacing previous apple plantings (Sintia, 2023). Wide business opportunities are one of the main reasons for switching to citrus cultivation.

Siamese oranges are one of East Java's leading commodities. This is because the amount of production continues to increase. Based on data from the Central Statistics Agency of East Java Province, the production of Siamese oranges reached 1,904,593 quintals in 2021 and increased to 3,288,720 quintals in 2022 (BPS, 2023). In Poncokusumo District, Siamese orange production reached around 1.16 million quintals in 2021 and increased to 2.11 million quintals in 2022. This district is also the largest contributor to orange production in Malang Regency, with 1 hectare of land that can accommodate 800 orange trees and produce between 1 and 5 million quintals of oranges. The average income of orange farmers in Poncokusumo District based on a group survey reached IDR 6,000,000 per month.

Orange peel is one part of the orange fruit that is often ignored and thrown away as waste, even though there are still many benefits of orange peel that have not been fully utilized. Orange peel is rich in compounds, such as essential oils, which can be used as air fresheners, perfume base ingredients, and food flavor enhancers (Dewi et al., 2021). In addition, in a study conducted by Analita (2022), orange peel waste can also be used as an ingredient in making aromatherapy soap. However, limited understanding of the economic and functional value of orange peel causes this material to often be wasted, even though with proper processing, orange peel can be turned into high-value products, such as flour, tea, chili sauce, and eco-enzymes. Poncokusumo Village as a center for Siamese oranges still has a lot of potential that has not been fully utilized. Despite having abundant resources, various aspects of economic development in this village still require further attention. The potential that has not been developed includes (1) Poncokusumo Village has not been able to optimally manage orange peel waste to produce various products; (2) Poncokusumo Village has not maximized the village's independent income from existing commodities because so far it has only focused on orange production; (3) Poncokusumo Village has not fully utilized information facilities as a promotional tool for village potential; and (4) Poncokusumo Village has not optimized the role of community institutions as drivers of the local economy. These factors encouraged the proposing team to implement the DEDAYA (Empowered Village) Program to drive the community's economy through the utilization of orange peel waste.

Based on this background, BEM UM Universitas Negeri Malang is committed to supporting the development of the potential of Poncokusumo Village and encouraging the creation of entrepreneurial villages as an effort to optimize local resources. This support is realized through the Student Organization Capacity Building Program (PPK Ormawa) with the title of service "DEDAYA (Empowered Village): Empowerment of the Independent Economy of the Poncokusumo Village Community through Orange Peel Waste Processing to Realize Village Independent Income."

To identify the right steps in obtaining solutions to the problems that occur in Poncokusumo Village, a survey was conducted, the results of which include (1) minimal knowledge and understanding of the community regarding the content and utilization of orange peel waste; (2)

dependence on community income that only depends on the orange fruit itself; (3) the absence of a structured institution to manage the potential of the orange commodity; and (4) the absence of village planning that focuses on the utilization of orange peel. With the identification of the problems above, BEM UM offers a solution through a holistic approach involving the village head and residents, including (1) forming the DEDAYA (Empowered Village) institution as a work team that will coordinate and be responsible for the management of creative product innovations—the DEDAYA (Empowered Village) program consists of a series of activities to manage and produce orange peels to maximize village potential; and (2) developing and creating creative product innovations as a superior village program through socialization, business assistance, management, and increasing soil fertility using eco-enzymes. As a result, this innovative product will help increase community income by utilizing superior commodities that have not been optimally utilized.

The PPK Ormawa BEM UM activities in Poncokusumo Village have several main objectives designed to maximize village potential. First, it is to prepare a village plan that includes the management of local potential through the development of innovative and creative products through the DEDAYA program. Second, this program aims to create four group-based activities, which are measurable through the preparation of work programs by the DEDAYA institution, and include socialization, business assistance, and management and improvement of soil fertility using eco-enzymes. Furthermore, increasing the capacity of human resources involved in the DEDAYA program in Poncokusumo Village which is measured by the increase in village independent income. In addition, it is hoped that a village-responsible institution will be formed with clear management and a measurable work plan that will be measured through the existence of DEDAYA as a working group that coordinates and manages the orange peel utilization program. Later, this activity will support the objectives of the Sustainable Development Goals related to employment and sustainable economic growth through community empowerment programs.

The above objectives will be measured for their success through several indicators. These indicators are described in the following table.

Table 1. Success Indicators

No.	Before	After
1.	Poncokusumo Village does not yet have a village potential development plan.	A program was formed to develop the potential of Poncokusumo Village in the form of innovative and creative products that utilize orange peel waste which will help improve the local community's economy through DEDAYA in a sustainable manner.
2.	Orange peel waste has not been optimally utilized by the people of Poncokusumo Village.	Orange peel waste is utilized by implementing innovative products made from orange peel, with active participation from the village community, involving several activities such as socialization and business assistance, product development and management, and increasing soil fertility through the use of eco enzymes.
3.	The knowledge and understanding of the people of Poncokusumo Village regarding the use and content of orange peel is still lacking.	The community's understanding and insight into the management of orange peel waste through the development of innovative creative products has increased so that village potential can be utilized and the income of local residents can be boosted.
4.	There is no institution that manages creative orange peel products.	The establishment of the DEDAYA (Desa Berdaya) working group institution through a partnership with the Poncokusumo Village

		government as a community liaison, to encourage their participation in the development of creative product businesses using orange peel waste.
5.	The students' abilities in terms of service are still limited, especially in understanding efforts to develop potential in remote villages and identifying the root of the problems in developing this potential.	The soft skill competencies of students in the PPK Ormawa implementation team are increasingly developing, as seen from the increasing concern for the environment, the ability to communicate with villagers, and skills in solving problems.
6.	Soil fertility is decreasing due to the increasing use of chemical fertilizers in the citrus cultivation process.	The creation of alternative eco-enzymes as organic or natural fertilizers aims to restore soil fertility optimally.
7.	The performance of the BEM UM student organization in implementing the Tri Dharma of Higher Education, especially in the aspect of service, is still less than optimal and tends to focus on internal work programs.	There is a growing work program focused on community service that includes support for the development of innovative products that utilize orange peel waste, through collaboration with partners and local communities.
8.	Lack of collaboration in managing orange peel waste in Poncokusumo Village.	The formation of cooperation and partnership networks in managing orange peel waste in Poncokusumo Village.

Creating a local organization like DEDAYA that collects and helps the community create new goods is one way to maximize the resources available in Poncokusumo village. The implementation group works together with the Malang Regency UMKM and Cooperatives Office. After DEDAYA was formed in Poncokusumo Village, DEDAYA is expected to boost the village independent income of Poncokusumo Village.

This activity not only provides benefits for the residents of Poncokusumo Village, but this activity is expected to benefit the wider community. The mandatory outputs of this program include several things. First, a journal will be produced that documents the process of developing diversification of products based on orange peel waste as a commodity in Poncokusumo Village. Second, an activity guide module will be prepared to provide complete instructions while in the village. Third, publication in the form of videos will be carried out on electronic media, especially on YouTube and Instagram BEM Universitas Negeri Malang, to disseminate information and program results. Fourth, products produced from the management of orange peel waste include tekaje flour, o-jie-tea, orange chili sauce, and eco-enzyme. Fifth, a marketing web design will be developed to expand the market reach of the products that have been made. Finally, posters and profiles of the results of the program implementation will be prepared to be used as Intellectual Property Rights (HAKI), which will add value and protection to the results of the program. As an additional output of this program, some of the expected results include the creation of a prototype as an initial example of the product being developed. The following is a picture of the prototype.



Figure 1. Orange Peel Processed Product Prototype

In addition to the prototype, publication in online mass media such as Kompasiana, Liputan6, and Instagram will be carried out to increase the visibility and reach of information about the program. Intellectual property rights will also be obtained in the form of videos that record the process of implementing the development of papaya peel waste products, as well as books that discuss the development of soft skills thematically related to this program. Posters that document the results of the program will also be prepared to complete the documentation and promotion of the work results.

METHOD

There are implementation methods used in the product development program based on orange peel waste. This method is designed to ensure effectiveness and efficiency in every stage of activity implementation, from planning to implementation.

Road Map

In 2024, the expected target is the formation of various activities, including socialization and business assistance, business development and management, and the formation of the DEDAYA institution to develop the potential of citrus fruit commodities in the form of creative product innovations. In addition, it is expected that cooperation will be established with village partners to expand marketing. Entering 2025, the focus will shift to developing village areas as tourist destinations and citrus cultivation areas to increase village income sources. The target in 2025 includes the implementation of the DEDAYA program that allows Poncokusumo Village to achieve independence as an Empowered Village, improve the community's economy through innovative products from orange peel waste, and improve the soft skills of village residents and PKK groups to support the sustainability of the program. In 2026, the planning target includes the transformation of Poncokusumo Village into an advanced village with the development of potential and increasing village income. In addition, this village is expected to become a tourist destination and orange peel processing center, and is known as the largest producer of oranges with innovative products that are characteristic of village production. A summary of the activity road map is summarized in the following image.

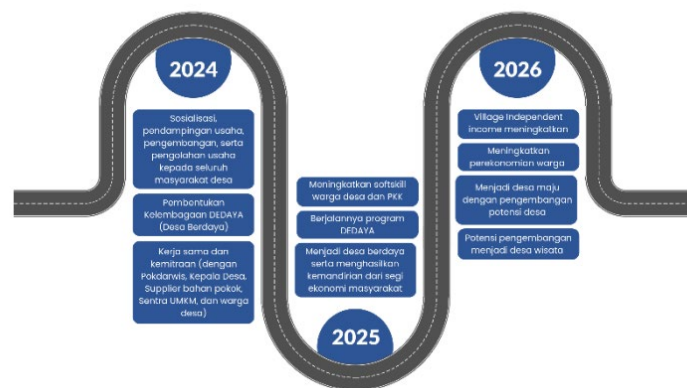


Figure 2. Activity Road Map

Identification of Community Needs through Observation and Interviews

The team identified community needs by conducting observations and interviews. The results of observations and interviews with the community and village officials showed that there is a need to utilize the potential of the village, especially citrus fruits in a more optimal way. The potential of orange peel waste that is often not utilized can be developed into innovative products through the formation of institutions that will coordinate the process. Although

Poncokusumo Village has developed citrus fruit exports to various regions in Indonesia, there is no clear institution to regulate and plan the management of commodity potential which is still limited to small to medium-scale exports. One of the main problems is the lack of a clear flow in the utilization of waste that is considered to have no economic value. Making eco-enzymes can provide better environmental and economic benefits. From an environmental perspective, the fermentation process in making eco-enzymes will produce O₃ gas or ozone (Utpalasari, 2020) and acetic acid which is effective in killing germs, viruses, and bacteria. Enzymes such as Lipase, Trypsin, and Amylase in eco-enzymes can also kill or prevent pathogenic bacteria, and produce NO₃ (nitrate) and CO₃ (carbon trioxide) which are beneficial for the soil. Eco-enzymes can also clean polluted rivers, as antiseptics, and as a substitute for daily household chemicals (Dewi, 2021). Economically, the manufacture of eco-enzymes can reduce the need to buy floor cleaners or insecticides (Utpalasari, 2020).

Brief Description of Target Audience

The proposed innovation includes the development of creative products and the formation of the DEDAYA group as a structured institution to manage community empowerment programs through village potential. Partners in this program involve Poncokusumo Village institutions, including Pokdarwis, Village Government, UMKM Center, and village communities. This program targets the involvement of 10 UMKM in Poncokusumo Village, especially UMKM actors in the citrus-based food and beverage culinary sector. To support the success of the DEDAYA program, student organizations will act as catalysts and resource connectors to assist in introducing partners and strengthening networks.

Intervention Plan

The intervention plan to be carried out consists of several steps. First, socialization and assistance will be provided to the community regarding the development of innovative products for village empowerment. The second step is to form the DEDAYA institution as a working group that will coordinate the community in the village development program, including assistance to create an independent economy. Finally, a product promotion strategy will be designed by utilizing the internet network to facilitate the distribution of products produced from the processing of citrus fruit peel waste.

Village Partnerships

Table 2. Village Partnerships

No.	Partners	Role
1.	Poncokusumo Village Government	Establish cooperation and provide support in the form of funds for the continuation of product development
2.	Environmental Service of Malang Regency	Assisting in providing eco-enzyme fertilizer assistance.
3.	Universitas Negeri Malang	Providing permission and support regarding product promotion
4.	Students from various faculties (Faculty of Education, Faculty of Economics and Business, Faculty of Mathematics and Natural Sciences, Faculty of Engineering, Faculty of Sports Science, Faculty	Identifying the potential and needs of the target community and its geographical conditions. Conducting consultations related to marketing strategies and financial accounting. Reviewing the nutritional content contained in orange peel products. Designing a guidebook on orange peel processed products.

of Social Sciences, Faculty of Letters)

Success Indicators and Measurement Methods

The success of this community service activity can be measured and proven through the increase in community income generated from the intervention program for the development of local commodity products. This program includes four main activities, namely socialization and business assistance, product development and management, and the use of eco-enzymes as an alternative to chemical fertilizers to increase soil fertility and citrus fruit yields. The success of this activity was also realized through the formation of institutions in the form of DEDAYA groups. In addition, the results of the community service can be seen from the implementation of the four activities and the increase in community income as part of the DEDAYA group work program.

Program Implementation

The village empowerment program will be implemented offline for 3 years, with the main objective of increasing village income independently or village independent income in Poncokusumo Village. The implementation of this program will be adjusted to implementation standards that focus on the development of entrepreneurial villages and tourist villages consisting of activity implementation flows, activity schedules, and draft budgets. The following is a scheme for the implementation of activities starting from community assistance, institutional formation, socialization and management of village potential, forming and creating creative product innovations, and increasing village independent income.



Figure 3. Activity Implementation Flow

The implementation schedule of the activities is carried out from April to August. This program is funded by several different sources to support its implementation. The main source of funds comes from Belmawa (Directorate of Learning and Student Affairs) with an allocation of Rp39,975,000. In addition, universities also contribute funds of Rp2,000,000. Poncokusumo Village, as a partner in this program, also contributes funds of Rp9,775,000. Overall, the total budget available for the implementation of this program reaches Rp51,750,000. The funds will be used to finance various aspects of the program, including operations, training, and product development and marketing.

RESULTS AND DISCUSSION

This community service activity can result in a significant increase in the utilization of orange peel waste. The Poncokusumo Village community has succeeded in processing orange peel waste into flour, chili sauce, eco enzyme and tea through intensive training and mentoring. These results show that processing orange peel waste not only reduces environmental problems

but also opens up new economic opportunities for the village community. Processing orange peel waste in Poncokusumo Village is a strategic step that can improve the local economy and the environment. Village communities can create sustainable sources of income and reduce their dependence on the conventional agricultural sector with the existence of this processing unit. This program will improve the standard of living of the community and become a model for other villages in Indonesia to develop the rural economy. Products from processed orange peel include the following:

Orange Peel Flour

This flour made from orange peel has extraordinary potential in the culinary world. Orange peel, which is often considered waste, can actually be processed into a versatile kitchen ingredient. Rather than throwing away unused orange peel, processing it into flour is a more sustainable and beneficial step.



Figure 2. Orange Peel Flour

Orange Peel Chili Sauce

Orange peel chili sauce is a processed product that has many benefits and is very unique because it has a combination of spicy and bitter flavors. In addition to having many benefits, orange peel chili sauce has an extraordinary taste. The spicy and slightly bitter taste of orange peel chili sauce creates a different and appetizing taste. Its distinctive aroma makes you laugh and want to eat more. Orange peel can be added to chili sauce to add nutrients such as vitamin C, fiber, and antioxidants. You can also combine chili sauce with other ingredients such as shallots, garlic, chilies, tomatoes, and shrimp paste to make the taste more complex.



Figure 3. Orange Peel Sambal

Orange Peel Tea

Orange peel tea is an herbal drink made from dried and specially processed orange peels. It has a unique taste and aroma, with a fresh touch and a slight natural sweetness that comes from the

essential oils contained in the orange peel. Orange peel tea is usually served warm, but can also be enjoyed cold for a refreshing drink. This tea can be added with honey, lemon, or other spices to taste for a different presentation. This tea is not only healthy but also fun to enjoy anytime because of its unique taste. Tea made from orange peel provides pleasure and health benefits while utilizing orange peel waste.



Figure 4. Orange Peel Tea

Eco Enzyme



Figure 5. Eco Enzyme

Eco enzyme is made by fermenting organic kitchen waste, consisting of brown sugar, vegetable waste, fruit peels, and water (Pratiwi, 2022). Eco enzyme is very cheap because it uses kitchen waste that is easy to make. Because it takes three months or more for the fermentation process before use, it cannot be made quickly. (Hamzah, 2021) discusses the manufacture and explanation of eco enzyme from vegetable and fruit waste. The results of the study recommend the use of eco enzyme as an environmentally friendly solution to reduce food waste materials in solid waste generation.

One of the benefits of this program is the ability to provide villagers with new skills in waste processing and business management. Villagers will have the knowledge and skills to independently manage citrus waste processing units after receiving special training. This not only increases their ability to produce products of economic value, but also opens up new employment opportunities in the village, reduces unemployment and increases overall per capita income. By providing competitive processed products to a wider market, the program provides significant added value to the community. The program proposes the establishment of citrus peel waste processing units managed by the village community. These businesses will concentrate on the manufacture of various goods such as animal feed, cosmetic ingredients and essential oils. To achieve this goal, people will be trained in processing techniques, business management and marketing strategies. To ensure the successful use of appropriate technology, the project will also work with academics and practitioners.



Figure 6. Community Trying Orange Peel Processed Products

This program shows that empowering local communities through training and mentoring in waste processing can produce long-term positive impacts. The Poncokusumo Village community can manage the processing unit independently, increase productivity, and gain more markets with new skills in processing and business management. Sustainable economic development in Poncokusumo Village includes the following:

1. Economic Potential and Innovation in Orange Peel Waste Processing

Orange peel is one of the abundant resources in Poncokusumo Village, but it has not been used effectively. By using new innovations in processing this waste, the economic value of orange peel, which was previously considered useless, can increase. Products such as essential oils have a wide market at home and abroad, providing great economic opportunities for village communities.

2. Community Empowerment in the Production Process

The success of this program depends on the community empowerment production process. Training not only covers waste processing techniques, but also business management and marketing. This ensures that people can run their businesses independently and take advantage of existing market opportunities. Community involvement in these activities increases a sense of ownership and responsibility for the program, which increases its sustainability.

3. Contribution to Sustainable Development

This program adheres to the principle of sustainable development where economic, social, and environmental aspects support each other. Orange peel waste processing not only generates economic benefits for the community, but also reduces the negative impacts it has on the environment. This program can also be used as a model for other villages that have similar potential, so that their contribution to sustainable development can be broader.

CONCLUSION

The DEDAYA community empowerment program by BEM UMM students has succeeded in making a good contribution in increasing the economic independence and welfare of the Poncokusumo Village community. By utilizing local potential, such as orange peel waste, this program not only helps increase residents' income, but also introduces the concept of sustainable development through environmentally friendly product innovation. Collaboration between students, village government, and local communities shows that good synergy can produce sustainable positive impacts. This program also strengthens the role of students as agents of change who are able to apply knowledge in real life. To maintain the sustainability and expand the impact of the DEDAYA program, it is recommended that BEM UMM continue to provide assistance and monitoring of the development of businesses that have been formed. In addition, it is important to hold further training for the community in aspects of business

management, digital marketing, and product development, so that they are increasingly independent in managing their businesses. Collaboration with more parties, such as the private sector and local government, also needs to be improved to expand the marketing network and open up new opportunities for innovative products produced. Thus, Poncokusumo Village can continue to develop into an independent and highly competitive village.

REFERENCE

- Analita, R. N., Sholahuddin, A., & Elfa, N. (2022). Potensi Lokal Desa Karang Bunga: Sabun Batang Aromaterapi Berbahan Dasar Limbah Kulit Jeruk Siam Banjar. *Community Reinforcement and Development Journal*, 2(1), 31-40.
- Dewi, S. P., Devi, S., & Ambarwati, S. (2021). Pembuatan dan Uji Organoleptik Ecoenzyme dari Kulit Buah Jeruk. *Seminar Nasional & Call for Paper Hubisintek*, 649– 657.
- Febrina, A. (2020). Pemanfaatan Kulit Jeruk Siam Sebagai Pestisida Alami. *Jurnal Agrotek Lestari*, 6(2), 47.
- Latifah, S. W. (2018). Ibm Dusun Sukosari Desa Pandansari Poncokusumo Kabupaten Malang. *Studi Kasus Inovasi Ekonomi*, 2(01), 1–6. <https://doi.org/10.22219/skie.v2i01.5492>
- Sintia, B. (2023). ANALISIS PEMASARAN JERUK SIAM DI DESA PONCOKUSUMO KABUPATEN MALANG (Vol. 4, Issue 1).
- Utpalasari, R. L., & Dahliana, I. (2020). Analisis hasil konversi eco enzyme menggunakan nenas (*Ananas comosus*) dan pepaya (*Carica papaya L.*). *Jurnal Redoks*, 5(2), 135-140.
- Yunita, S., Hatiyah, H., Hafifah, H., Rahman, A., Safitri, R. N., Kamaliyyah, R., ... & Mariani, M. (2023). Pembinaan Masyarakat Melalui Pelatihan Keterampilan Pemanfaatan Limbah Organik (Eco Enzyme) di Desa Pabaan. *Jalujur: Jurnal Pengabdian Masyarakat*, 2(1), 15-22.