



Community Empowerment through the Utilization of Coffee Husk Waste (Cascara) to Produce Economically Valuable and Marketable Cascara Tea in Arjasari Village, Banjaran Subdistrict, Bandung Regency

Muhamad Raihan

Program Studi Administrasi Negara, Universitas Al-Ghifari Bandung, Indonesia
muhamadraihaan22@gmail.com

Tegar Al Fattah

Program Studi Administrasi Negara, Universitas Al-Ghifari Bandung, Indonesia
tegaralfattah8@gmail.com

Rega Gustiana

Program Studi Sistem Informasi, Universitas Al-Ghifari, Bandung, Indonesia
regaagustiana15@gmail.com

Erscha Azahra Nitimihardja

Program Studi Farmasi, Universitas Al-Ghifari, Bandung, Indonesia
erscha.azahra@gmail.com

Gilang Irawan

Program Studi Manajemen, Universitas Al-Ghifari, Bandung, Indonesia
gilangrawanfrediansyah@gmail.com

Apta Alana

Program Studi Teknologi Pangan, Universitas Al-Ghifari, Bandung, Indonesia
aptaunfari@gmail.com

Aurel Satya Virlianty

Program Studi Manajemen, Universitas Al-Ghifari, Bandung, Indonesia
aurelsatyavirlianty12@gmail.com

Shabrina Syalsabila Azzada

Program Studi Administrasi Negara, Universitas Al-Ghifari,, Bandung, Indonesia
shasyaazza@gmail.com

Naura Yasyfa Purwadi

Program Studi Sastra Inggris, Universitas Al-Ghifari, Bandung, Indonesia
naurayasyfap@gmail.com

Revalina Septia Putri

Program Studi Hubungan Internasional, Universitas Al-Ghifari, Bandung, Indonesia
revalinasp478@gmail.com

Received: 15 April 2026 | Accepted: 20 Mei 2026 | Published: 30 Juni 2026

Abstract

The utilization of coffee husk waste (Cascara) into value-added products is one of the efforts that can be undertaken to support community empowerment and the development of local economic potential. This initiative aims to enhance the knowledge and skills of the community in Arjasari Village, Banjaran Subdistrict, Bandung Regency, in processing coffee husk waste into Cascara tea, which has economic value and marketability. This research employed a quantitative method, with data collection conducted through outreach sessions, discussions, demonstrations, processing practices, product trials, mentoring, and evaluation using pre-tests and post-tests. The pre-test results indicated that the community's knowledge was still limited,



particularly regarding the definition and processing of Cascara, its commercialization potential, and the product's market value. Following the outreach and mentoring activities, the post-test results showed an increase in the community's understanding across all measured aspects, with 100% of respondents understanding the use of coffee husks as Cascara and 97% understanding the definition and processing methods, commercialization potential, market value, and health benefits. The results of this study indicate that processing coffee husks into Cascara tea can enhance the utilization of coffee byproducts while opening opportunities for creating added value and developing local products with market potential. The sustainability of the program requires improvements in product quality, production standardization, packaging, pricing, and the strengthening of marketing strategies.

Keywords: Community Empowerment; Coffee Husk Waste; Cascara; Added Value; Marketable.

1. INTRODUCTION

Community empowerment through the utilization of coffee husk waste to produce economically valuable and marketable cascara tea in Arjasari Village, Banjaran Subdistrict, Bandung Regency, is one of the initiatives that can be developed to optimize the potential of coffee as a commodity while increasing the utility value of its processing waste. Indonesia is one of the world's leading coffee-producing countries with significant potential for the development of plantation commodities (Martauli, 2018). Coffee plants thrive in tropical climates and are cultivated across various regions with favorable geographical conditions. One of Indonesia's coffee-producing regions is West Java, particularly Bandung Regency, which is known as a major center for Arabica coffee production (Fithriyyah et al., 2020). The geographical and environmental conditions of Bandung Regency, which are suitable for coffee cultivation, give this commodity the potential for continued development—not only in terms of increasing coffee bean production but also through the development of coffee processing byproducts into value-added products.

Increased coffee cultivation and processing activities are also accompanied by a rise in byproducts such as coffee husks and pulp. During the depulping process, every 100 kg of coffee yields approximately 56.8 kg of coffee beans and 43.2 kg of coffee husks and pulp (Romalasari, 2019). These figures indicate that coffee husks constitute a significant volume of byproducts, necessitating proper management. If not utilized, coffee husks tend to be discarded or left to pile up and undergo natural decomposition. This situation has the potential to negatively impact the environmental quality around coffee processing areas. Therefore, increased coffee production must be accompanied by efforts to manage byproducts to prevent waste problems from escalating while simultaneously creating economic benefits for the community (Arafat et al., 2025).

One area with potential for coffee commodity development is Arjasari Village, Banjaran Subdistrict, Bandung Regency (Haritsah et al., 2025). Agricultural and plantation activities form part of the local community's economic resources (Suherman et al., 2024), including coffee cultivation and processing. Increased coffee productivity in this area has the potential to generate ever-larger amounts of coffee husk waste. However, the utilization of coffee husks as value-added products still faces various limitations, particularly regarding knowledge, processing skills, product innovation, and an understanding of market opportunities. Amini et al. (2025) demonstrated that coffee husk waste can be utilized to produce bio-briquettes as a form of waste processing that simultaneously enhances its utility. This indicates that coffee husks are not merely waste but have the potential to be developed into various products with both practical and economic value.

Various efforts to utilize agricultural waste have also been undertaken in Arjasari Village, Bandung Regency, both through student Community Service (KKN) activities and community empowerment programs involving relevant institutions. Coffee waste can be utilized, for example, to produce liquid organic fertilizer (POC) and livestock feed. This processing aligns with the "waste-to-product" concept, which involves transforming previously unused materials into products with practical value. This concept also supports the implementation of a circular economy through more optimal resource utilization. Nevertheless, diversification of coffee husk utilization is needed so that the community has more product alternatives that are not only environmentally beneficial but also have the potential to be developed as consumer products with higher economic value (Nurjanah et al., 2025).



One potential alternative use for coffee cherry peel is cascara. Cascara is coffee cherry peel that has undergone a drying process and can be used as a base ingredient for a brewed beverage similar to tea (Romadhona et al., 2022). Processing coffee husks into cascara tea can serve as a relatively simple processing alternative with the potential to be adopted by communities at both the household and business group levels. In addition to helping reduce coffee husk waste, this processing can yield a new product with its own distinct characteristics, benefits, and market value. Thus, coffee husks—previously viewed as byproducts—can be transformed into a higher-value beverage product through appropriate processing. The development of cascara tea also presents opportunities from a marketing perspective. Products must not only be produced but also packaged and positioned as items that appeal to consumers. The concept of “marketability” in cascara tea development relates to the product’s ability to meet market needs and preferences—in terms of quality, hygiene, packaging, product information, and product appeal. Therefore, community empowerment must not only focus on technical skills in processing coffee husks into cascara but must also introduce aspects of packaging, product branding, and marketing opportunities so that the resulting product has the potential for sustainable development.

These issues highlight a gap between the availability of coffee husk waste as a raw material and the community’s ability to process it into economically valuable and marketable products. Limited knowledge regarding cascara, proper processing techniques, hygiene and drying standards, as well as product development opportunities, are key aspects that require attention. Community empowerment is a relevant approach because it positions the community as the primary actors in the capacity-building process, rather than merely as beneficiaries (Susanto et al., 2025). Through knowledge transfer, training, hands-on practice, and mentoring, the community is expected to acquire skills that can be independently applied in processing coffee husk waste.

The utilization of coffee husk waste to produce cascara tea also holds strategic value as it integrates environmental, social, and economic aspects (Anggraeni & Wibowo, 2021). From an environmental perspective, cascara processing can serve as an alternative to reduce the amount of unused coffee husks. From a social perspective, this activity can enhance the community’s knowledge and skills in developing the potential of local resources. Meanwhile, from an economic perspective, cascara tea has the potential to be developed into a marketable product that can support the diversification of community-based businesses. This approach aligns with the “waste-to-product” principle, where waste is no longer viewed as material to be discarded but as a resource that can be processed into new products with added value.

Given these conditions, a community empowerment initiative is needed to transform coffee husk waste into economically valuable and marketable cascara tea in Arjasari Village, Banjaran Subdistrict, Bandung Regency. This initiative aims to enhance the community’s understanding and skills in utilizing coffee husks through the processing into cascara tea, while also introducing aspects of product packaging and marketing potential. Through these activities, it is hoped that the community will not only be able to reduce the problem of coffee husk waste but also develop innovative products based on local potential that offer added value and economic opportunities. Ultimately, the utilization of coffee husks into cascara tea is expected to serve as a form of empowerment that supports the sustainable use of local resources and opens opportunities for the development of signature products by the Arjasari Village community.

This research and community service activity aims to: (1) Enhance the knowledge and skills of the Arjasari Village community in utilizing coffee husk waste by processing it into cascara tea; (2) Encourage the utilization of coffee husk waste into value-added processed products as an effort to reduce waste from coffee processing and optimize the potential of local resources. (3) To improve the community’s understanding of the potential for developing cascara tea as an economically valuable and marketable product, thereby supporting business opportunities and increasing the economic value for the residents of Arjasari Village.

2. METHOD

The research and community service were conducted using quantitative and participatory methods through several stages: a survey and identification of potential, a pilot test of cascara tea processing, outreach and education, hands-on training, and evaluation via pre-tests and post-tests. These stages were



designed to enhance the community's knowledge and skills in transforming coffee husk waste into value-added products.

1. Survey and Identification of Potential

The initial stage involved conducting a field survey at one of the coffee processing sites in Arjasari Village—specifically, Laskar Kopi—to identify the potential of coffee as a commodity, the availability of coffee husk waste, and the waste management practices currently employed by the community. The survey was carried out through observations and interviews with coffee processors to gather information on the coffee processing procedures and the utilization of byproducts. The survey results indicated that the coffee husks generated from the processing were already being used as compost. However, this utilization could still be expanded through product diversification. Based on these findings, the community service team proposed an alternative use for coffee husks: transforming them into cascara tea—a beverage with potential for added value and market opportunities. This phase was also used to identify the community's needs regarding knowledge and skills in processing coffee husks into economically valuable products.

2. Cascara Tea Processing Trial

The second phase involved a trial to process coffee husks into cascara tea. The coffee husks were first selected and washed with water to remove any remaining debris. Next, the husks were sun-dried for approximately 5–7 days until thoroughly dry. The dried coffee husks were then used as the base ingredient for cascara tea. The brewing process involved placing the dried coffee husks into a glass and pouring hot water at a temperature of approximately 90°C over them. The coffee husks were then left to steep for a short while until the brewed liquid turned brown and developed a distinctive aroma and flavor. The results of the trial were used as demonstration materials and product samples during community outreach activities. The pilot phase was conducted to ensure that the processing method is simple and easy for the community to implement. Additionally, this phase aimed to produce sample products that could be used to directly introduce the characteristics of cascara tea to the community.

3. Cascara Tea Outreach and Education

The third phase consisted of outreach activities to educate the community on the utilization of coffee husk waste to produce cascara tea. The material presented includes the definition of cascara, the potential of coffee husks as a raw material for products, the benefits of utilizing waste, processing stages, brewing techniques, and opportunities for developing cascara tea as a product with economic value. The outreach does not only focus on the processing aspect but also introduces the “waste-to-product” concept—that is, the utilization of waste into new products that have both utility and added value. The community was made aware that coffee husks, which were previously used only as compost, can also be developed into a beverage through proper processing. During the event, community members were given the opportunity to taste cascara tea made from coffee husks sourced from Arjasari Village. This hands-on experience aimed to deepen the community's understanding of the product's characteristics while broadening their perspective on the potential for developing cascara as a marketable local product.

4. Hands-On Practice and Guidance in Cascara Tea Production

The next phase involved hands-on practice in making cascara tea. Community members were guided through each stage of processing, from selecting and washing the coffee husks, through the drying process, to brewing. Guidance was provided throughout the process to ensure community members understood the processing procedures and could replicate the process independently. In addition to production aspects, the community was also educated on the importance of ingredient hygiene, optimal drying processes, storage, and product packaging. Packaging was introduced as a key factor in enhancing the product's appeal and market value, ensuring that cascara tea is not only suitable for personal consumption but also has the potential to be developed as a marketable product.

3. RESULTS AND DISCUSSION

Overall, the research and community service activities were carried out through a series of steps, beginning with the identification of potential opportunities and challenges in the field, pilot testing of coffee husk processing, outreach on cascara tea, hands-on training and guidance on production, and finally, an evaluation of the community's knowledge and interest. This series of activities is expected to encourage the



community of Arjasari Village to develop more optimal uses for coffee husk waste so that it serves not only as compost but can also be processed into cascara tea—a product with added value, economic potential, and market opportunities.

Training Implementation

The survey was conducted in person by visiting one of the coffee processing facilities in Arjasari Village, namely Laskar Kopi. One of the locations visited was the coffee processing facility owned by Nanang Purnama, which took place on July 12, 2026. The purpose of this survey was to gather information on the business owner's level of knowledge regarding the management of coffee processing waste, as well as to assess their understanding of the potential for utilizing this waste as a raw material in the production of Cascara tea.



Figure 1. Initial discussion with Owner of Laskar Kopi

Source: Personal Documentation, 2026

Production of Cascara Tea

1. Selection of Coffee Cherries

The initial stage in the production of Cascara Tea is the process of selecting and sorting coffee cherries. At this stage, the coffee cherries used must have an optimal level of ripeness and be of good quality. Coffee cherries that meet these criteria are generally characterized by a bright red color and show no signs of damage or physical defects. The selection of raw materials is a critical aspect because the quality of the coffee cherries will influence the characteristics of the resulting Cascara Tea, particularly in terms of taste and aroma. Therefore, the sorting process is conducted to ensure that only the highest-quality coffee cherries are used in the processing stage, thereby producing a high-quality Cascara Tea product.



Figure 2. Coffee Cherry Selection

Source: Personal Documentation, 2026



2. Washing and Cleaning

After ripe, high-quality coffee cherries have been selected, the next step is washing with clean water. This process is carried out to remove dirt or contaminants still adhering to the surface of the coffee cherries while simultaneously separating the floating cherries, as they generally have lower quality. Thorough washing is necessary to ensure the raw materials are clean and suitable for processing to the next stage. Thus, the washing stage is a crucial part of maintaining the cleanliness of the raw materials and supporting the quality, flavor, and market value of the resulting Cascara Tea.



Figure 3. Washing and Cleaning
Source: Personal Documentation, 2026

3. Coffee Cherry Processing

After the coffee cherries have been selected and washed, the next step is to separate the coffee beans from their outer husks, known as cherries. This process is typically carried out by pressing the coffee cherries to extract the beans from the pulp and husks. The key here is that to achieve perfect coffee husks, the process must be done manually; if the husks are separated using a machine, it will reduce the nutritional content of the coffee husks.



Figure 4. Coffee Husk Processing
Source: Personal Documentation, 2026

4. Drying

The drying stage for coffee husks can be done naturally by utilizing sunlight. The coffee husks are sun-dried for approximately 5–7 days until they are evenly dry. During this process, the coffee husks must be placed in a clean, dry area protected from sources of contamination to ensure the cleanliness and quality of the material are maintained.



Figure 5. Drying
Source: Personal Documentation, 2026



5. Preparing Cascara Tea

After undergoing the drying process for 5–7 days, the dried coffee husks can be used to brew Cascara Tea. To prepare it, place the dried coffee husks in a glass and add hot water at a temperature of about 90°C. Next, let the brew steep for a few minutes until it turns a brownish color. Once the brewing process is complete, the Cascara Tea is ready to be served and enjoyed.



Figure 6. Serving Cascara Tea
 Source: Personal Documents, 2026

6. Packaging & Promotion

In the final stage, the dried coffee husks are processed into Cascara Tea in the form of tea bags by placing the ingredients into tea bags, which are then sealed to prevent the contents from spilling out during brewing. Next, the product is packaged in attractive, airtight packaging to maintain quality and hygiene and extend the shelf life of Cascara Tea. To enhance variety and flavor, Cascara Tea can also be combined with additional ingredients such as spices and aromatic herbs, including lemon, cinnamon, cloves, and ginger.



Figure 7. Cascara Tea Packaging & Outreach Event with Residents of Arjasari Village
 Source: KKN Team Documentation, 2026

The outreach event was held on July 31, 2026, at Laskar Kopi from 1:00 PM until completion. The outreach event was attended by 14 people, including the owner of Laskar Kopi, the Laskar Kopi coordinator, the head of Hamlet 2, the chairperson of the Youth Association, and the PKK cadres from Arjasari Village. During this event, we explained that coffee husks can be used to make a beneficial beverage called Cascara Tea. We also demonstrated to the community how to process these coffee husks and informed them that Cascara Tea offers health benefits and is safe to consume.

Achievement of Community Service Objectives:

The implementation of community empowerment activities in Arjasari Village, Banjaran Subdistrict, Bandung Regency, demonstrates positive progress toward the established objectives. These achievements are evident in the community's increased knowledge, their involvement in coffee husk processing practices, and a better understanding of the economic potential and marketing of Cascara tea. The results of the activities are further detailed below according to each community service objective as follows.



1. Enhancing Community Knowledge and Skills in Processing Coffee Chaff into Cascara Tea

The first objective focused on enhancing the community's capacity to identify and process coffee chaff into Cascara Tea (Analianasari et al., 2025). Based on the pre-test results, the community's initial knowledge regarding the utilization of coffee chaff was still uneven. A total of 57% of respondents were aware that coffee husks could be used to make Cascara tea, while the remaining 43% were unaware of this use. A lower level of understanding was observed regarding the definition and processing methods, as all respondents (100%) lacked knowledge of these aspects prior to the program.

This situation was addressed through outreach sessions, demonstrations, hands-on practice, and mentoring. The community was introduced to the processing stages, ranging from raw material selection, washing and cleaning, separating the husks from the coffee fruit, drying, to brewing (Sedana, 2026). During the hands-on activities, the community not only received theoretical explanations but also gained direct experience in following the Cascara tea processing procedure.

The post-test results showed a fairly clear improvement. After participating in the series of activities, 100% of respondents understood that coffee fruit peel can be used as an ingredient for Cascara Tea. Regarding definitions and the processing steps, 97% of respondents understood the material presented, while 3% still required further clarification. These findings indicate that an empowerment approach combining instruction with demonstrations and hands-on practice effectively enhances the community's understanding of coffee peel processing.

Thus, the first objective can be considered successfully achieved, particularly in terms of increasing knowledge and introducing basic skills for processing Cascara tea. However, sustainable production skills still require ongoing guidance so that the community can maintain consistent quality and implement the process independently.

2. Utilization of Coffee Husk Waste as a Value-Added Product

The second objective relates to changing perspectives on and the utilization of coffee husks, which were previously used primarily as compost material. Initial findings at Laskar Kopi indicate that coffee husks produced during coffee processing have, in fact, been utilized as compost. However, this utilization can be further expanded through product diversification. This situation served as the basis for developing an alternative method of processing coffee husks into Cascara tea.

Through community service activities, the public is introduced to the "waste-to-product" approach—that is, transforming byproducts of coffee processing into new products with added value and functionality. Coffee husks are no longer merely regarded as waste to be discarded or used as compost (Budiwanti, 2021), but can be processed into a beverage through relatively simple processing steps. This process includes raw material selection, cleaning, drying, brewing, and packaging.

The results of the study also indicate that utilizing coffee husks to produce Cascara Tea enables the diversification of coffee byproducts. The resulting product is not limited to dried form but has been further developed into tea bags with more practical packaging (Santi et al., 2026). This development demonstrates a process of increasing added value through processing and packaging.

Thus, the second objective has been achieved in the introductory and implementation stages of utilizing coffee husks to produce value-added processed products. From an empowerment perspective, this initiative provides the community with an alternative to optimize available local resources. However, to quantitatively demonstrate economic value enhancement, further analysis of production costs, cost of goods sold, selling prices, and revenue generated from product sales is still required in the next development phase.

3. Enhancing Understanding of the Economic Potential and Marketability of Cascara Tea

The third objective focuses on the community's understanding of the opportunities for developing Cascara Tea as a product with economic value and market potential. Pre-test results indicate that economic aspects are one area that the community still lacks understanding of. A total of 87% of respondents were unaware



of the commercial potential of Cascara Tea, while only 13% were aware of it. Regarding market value, 83% of respondents were unaware of Cascara's market value, while only 17% possessed this knowledge.

Through outreach and guidance, the community was then made to understand that product development extends beyond simply knowing how to make Cascara Tea. The product also needs attractive packaging, a distinct brand identity, adequate information, and characteristics that appeal to potential consumers (Mughni & Retnongingsih, 2025). In the practical phase, Cascara Tea was developed as tea bags and packaged using materials designed to maintain quality while enhancing the product's appeal.

This shift in understanding was evident in the post-test results. A total of 97% of respondents understood the commercial potential and selling points of Cascara Tea, while 3% of respondents still did not understand these aspects. These results indicate an increase in public understanding of the economic opportunities that can be developed from the utilization of coffee husks.

Nevertheless, the results of the activity show that the product's marketability cannot yet be considered fully achieved in the sense that it has entered the market commercially. The achievements obtained are still at the stage of increasing awareness and introducing the basic elements of marketing. Further development is still needed, particularly in determining prices based on production costs, refining packaging design and information, identifying target consumers, ensuring quality consistency, and selecting marketing channels.

4. Synthesis of Community Service Achievements

Overall, the three objectives of the community service program demonstrate interrelated achievements. The activities not only enhanced the community's understanding of Cascara but also introduced basic processing skills and opened new perspectives on the economic potential of coffee byproducts. The most noticeable change was observed in the knowledge assessment results. At the beginning of the program, the community still had limited knowledge regarding the definition, processing methods, commercialization, and market value of Cascara. After participating in outreach sessions, demonstrations, hands-on training, mentoring, and product trials, the vast majority of respondents—97–100%—gained a solid understanding of these aspects.

These findings indicate that the empowerment activities have successfully built the community's initial capacity to transform coffee processing byproducts into value-added products. However, success at the basic knowledge and skill level does not automatically guarantee commercial success. Therefore, the program's sustainability must be directed toward standardizing production processes, quality control, brand and packaging development, calculating cost of goods sold and selling prices, and more targeted marketing strategies.

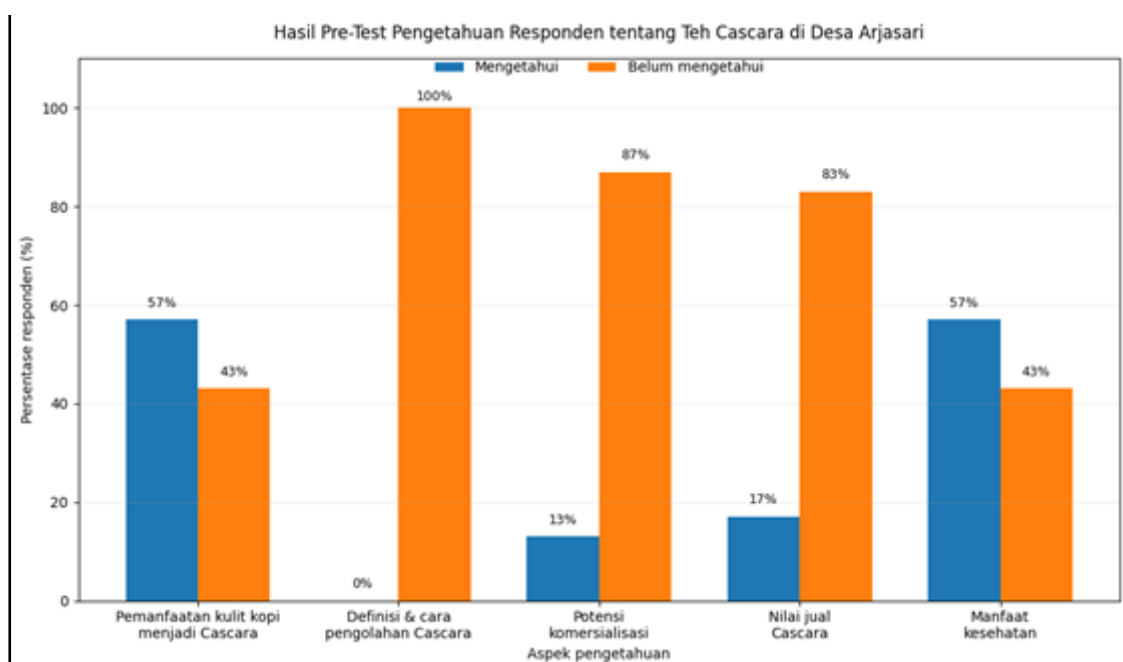




Figure 7. Pre-test results diagram

Source: author, 2026

Based on the pre-test results, it was found that respondents' initial level of knowledge regarding the use of coffee fruit peel as Cascara tea varied. A total of 57% of respondents were aware that coffee fruit peel can be used as Cascara, while 43% were not. Regarding the definition and processing of Cascara, none of the respondents (100%) had any knowledge of these aspects. Knowledge regarding the economic aspects was also relatively low. A total of 87% of respondents were unaware of the commercial potential of Cascara tea, while only 13% were aware of it. Meanwhile, regarding market value, 83% of respondents were unaware of the market value of Cascara products, while 17% were aware of it. Regarding health benefits, 57% of respondents were aware of the benefits of Cascara tea, while the remaining 43% were not.

Overall, the pre-test results indicate that the initial knowledge of respondents in Arjasari Village remains limited, particularly regarding the definition, processing techniques, commercialization potential, and market value of Cascara Tea. These findings highlight the need for educational and mentoring activities that focus not only on the processing procedures but also on product development and economic opportunities. Processing coffee husks into Cascara Tea also provides an alternative for waste utilization that is relatively easy for the community to implement, as the raw materials are readily available from coffee processing activities in Arjasari Village. Thus, the initiative not only introduces a new product but also encourages the community to view waste as a resource with untapped potential for development.

These initial conditions formed the basis for implementing the initiative to transform coffee husks into Cascara Tea. Through outreach and hands-on training, the community was introduced to the stages of coffee husk processing, enabling them to utilize a material previously viewed as waste as a raw material for a beverage product. This process is a crucial part of applying the "waste-to-product" concept—transforming byproducts of coffee processing into new products with practical benefits and economic potential. Processing coffee husks into Cascara Tea also provides an alternative for waste utilization that is relatively easy for the community to implement, as the raw materials are readily available from coffee processing activities within Arjasari Village. Thus, the initiative not only introduces a new product but also encourages the community to view waste as a resource with untapped potential for development.

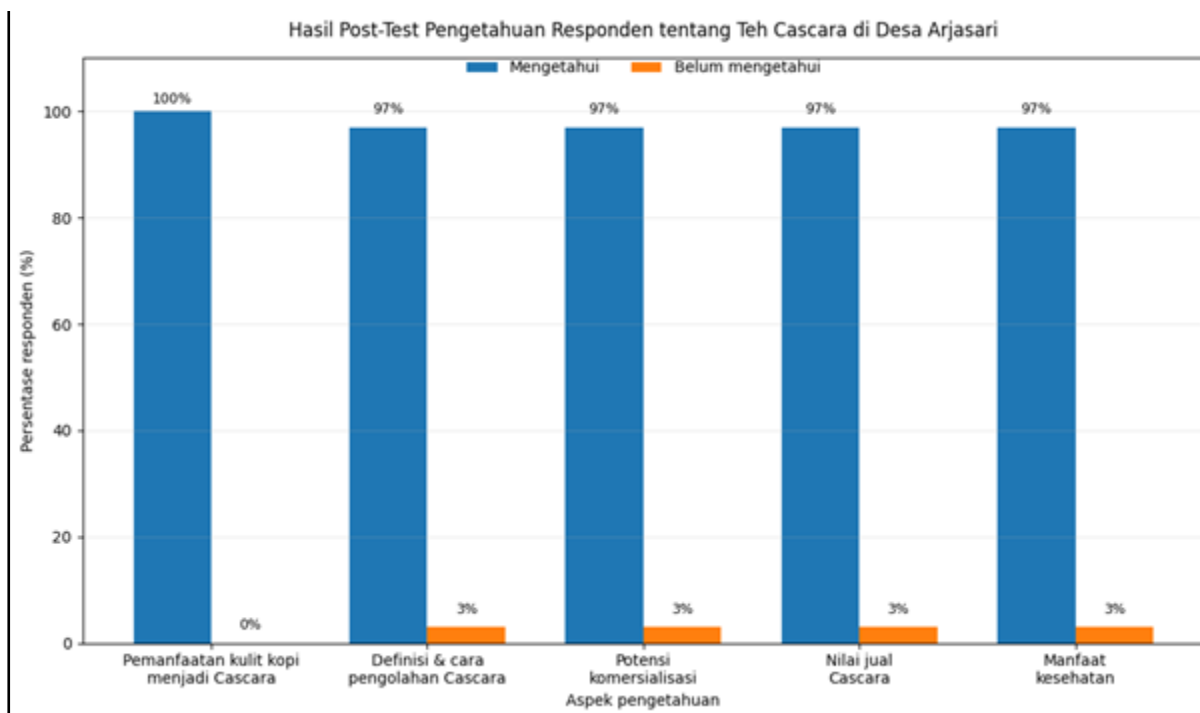


Figure 8. Post-test results diagram

Source: author, 2026



The post-test results show an increase in the percentage of respondents who understand the use of coffee cherry husks as Cascara tea after participating in the outreach and mentoring activities. Regarding the use of coffee fruit peel as Cascara, 100% of respondents were aware that coffee fruit peel can be processed into a beverage. Meanwhile, regarding the definition and processing methods, 97% of respondents understood them, while 3% did not.

An increase in understanding was also observed regarding the potential for commercialization, market value, and health benefits. For each of these aspects, 97% of respondents demonstrated understanding, while 3% did not. These results indicate a change in the respondents' knowledge following the provision of educational materials, demonstrations, and hands-on experience in the processing and testing of Cascara tea.

Descriptively, the post-test results indicate that the outreach and mentoring activities had a positive impact on the respondents' understanding in Arjasari Village regarding the utilization of coffee fruit peel waste. The increased knowledge relates not only to familiarity with Cascara but also encompasses the processing methods, commercialization opportunities, market value, and health benefits. Thus, these activities can serve as a first step in promoting the utilization of coffee fruit peel waste into value-added products in Arjasari Village.

The increased community understanding of commercialization potential and market value indicates that the empowerment efforts are beginning to guide the community toward utilizing coffee fruit peel not only from an environmental perspective but also from an economic one (Ardi et al., 2025). Coffee husks, which previously were not optimally utilized, can be developed into Cascara Tea, thereby transforming a low-value material into a consumable product with market potential.

The economic value of Cascara tea can be seen in the process of adding value to coffee husks. This added value arises through the stages of processing, packaging (Hafiludin et al., 2025), and product development, so that coffee husks are no longer merely a byproduct but can become part of coffee-based derivative products. This situation opens opportunities for the community to develop alternative businesses that utilize the local resources available in Arjasari Village.

In addition to economic value, marketability is a crucial aspect in the development of Cascara Tea. The resulting product must possess characteristics that are acceptable to consumers—in terms of quality, packaging, appearance, product information, price, and ease of access. Therefore, the outcomes of these activities should not only focus on the community's ability to produce Cascara Tea but also on their capacity to develop the product so that it has market appeal and potential.

The marketability of Cascara Tea can be enhanced through more attractive and practical packaging, the creation of a product identity or brand, and the use of social media as a promotional tool. The product can also be positioned as one of the processed products based on the local coffee commodities of Arjasari Village. By highlighting this local identity, Cascara Tea serves not only as a beverage but also as a product that represents the agricultural potential and processed goods of the local community. Although the evaluation results indicate an increase in the community's understanding of commercialization potential and market value, developing the product into a truly marketable item still requires further steps. The community needs guidance in setting prices based on production costs, improving packaging design and labeling, maintaining consistent quality, identifying target consumers, and selecting appropriate marketing channels. In this way, the knowledge gained can be translated into tangible capabilities for product development.

Overall, the evaluation results indicate that the outreach and mentoring activities conducted in Arjasari Village have yielded positive results in enhancing the community's understanding of utilizing coffee husks to produce Cascara. This increased understanding is expected to encourage the community to improve product quality, enhance the value of coffee waste, and open up broader marketing opportunities. Thus, the use of coffee husks to produce Cascara has the potential to support community business development while contributing to the increased economic value of coffee as a commodity in Arjasari Village.



4. CONCLUSION

Based on the results of community empowerment activities in Arjasari Village, Banjaran Subdistrict, Bandung Regency, the use of coffee cherry peel waste to produce Cascara tea can serve as an alternative method for processing coffee byproducts that can increase the added value of local commodities. Pre-test results indicated that community knowledge remained limited, particularly regarding the definition, processing methods, commercialization potential, and market value of Cascara. Following outreach sessions, demonstrations, hands-on training, and mentoring, post-test results showed an improvement in community understanding across all measured aspects. This demonstrates that empowerment activities combined with hands-on practice can enhance the community's knowledge and skills in utilizing coffee husks.

The utilization of coffee husks to produce Cascara tea also demonstrates economic and marketing potential. This product, which was previously a byproduct of coffee processing, can be developed into a value-added beverage with the potential to be marketed as a product based on the local resources of Arjasari Village. This initiative not only contributes to the more productive use of waste but also opens opportunities for community-based business development. To support sustainability and enhance the product's marketability, follow-up actions are needed, including improving quality and standardizing production, developing packaging and product branding, setting prices, and strengthening marketing strategies. Thus, this community service initiative can be viewed as the initial phase of empowerment based on local potential, which has successfully enhanced community capacity while introducing an alternative use for coffee husks—namely, Cascara tea. Further steps are needed so that this increased knowledge can develop into consistent production skills and ultimately generate sustainable business activities for the community of Arjasari Village.

REFERENCES

- Amini, H. W., Rizkiana, M. F., Palupi, B., Hidayati, N., Raharjo, S. H., Nurani, Y., Aziz, M. N. N., Saputri, O., Permatasari, I., & Fandora, A. J. (2025). Pelatihan Pembuatan Pupuk Organik Cair dari Limbah Kulit Kopi di Desa Pakis Jember. *Jurnal Tepat: Teknologi Terapan untuk Pengabdian Masyarakat*, 8(1), 82–93.
- Analianasari, A., Noer, I., Berliana, D., Soeherman, G. P., & Maryana, D. T. (2025). Circular economy: Pemanfaatan limbah cascara di sentra agroforestri kopi Pesawaran. *SEMAR (Jurnal Ilmu Pengetahuan, Teknologi, dan Seni bagi Masyarakat)*, 14(2), 221–229.
- Anggraeni, N. N., & Wibowo, R. (2021). Analisis pengembangan kombucha cascara pada UD. *Matt coffee dengan pendekatan triple layered business model canvas. Jurnal Sosial Ekonomi Pertanian*, 14(1), 19–31.
- Arafat, M. A., Sudirman, M. Y., Restu, M., Larekeng, S. H., Rusdin, R. A., & Kining, E. (2025). Pemberdayaan Petani Melalui Inovasi Limbah Kulit Kopi Dengan Mikroba Konsorsium: Farmer Empowerment Through Coffee Skin Waste Innovation With Consortium Microbes. *Talenta Conference Series: Agricultural and Natural Resources (ANR)*, 6(2), 229–239.
- Ardi, S., Rekayati, R., Ayu, D., Nur, L., & Dewi, A. K. (2025). Transformasi kopi menjadi produk bernilai ekonomis: Upaya pemberdayaan petani di Desa Balesari. *NEAR: Jurnal Pengabdian kepada Masyarakat*, 5(1), 186–196.
- Budiwanti, I. (2021). Analisis kualitas standar mutu kompos kulit buah kopi robusta (*coffea canephora*) dan kotoran sapi menggunakan bioaktivator Em4 dan Orgadec. Universitas Islam Negeri Maulana Malik Ibrahim.
- Fithriyyah, D., Wulandari, E., & Sendjaja, T. P. (2020). Potensi komoditas kopi dalam perekonomian daerah di Kecamatan Pangalengan Kabupaten Bandung. *Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 6(2), 700–714.
- Hafiludin, H., Chandra, A. B., Alfisuma, M. Z., & Pratiwi, W. S. W. (2025). Peningkatan nilai tambah produk perikanan pesisir dengan perbaikan kemasan dan pemasaran. *Jurnal Pembelajaran Pemberdayaan Masyarakat (JP2M)*, 6(3), 695–711.
- Haritsah, H., Mataburu, I. B., & Setianingsih, A. I. (2025). Pengaruh perubahan iklim terhadap produktivitas kopi arabika di Kabupaten Bandung. *Media Pertanian*, 10(1), 78–88.
- Martauli, E. D. (2018). Analysis of coffee production in Indonesia. *JASc (Journal of Agribusiness Sciences)*, 1(2), 112–120.



- Mughni, M., & Retnongingsih, S. (2025). Peran Elemen Visual Kemasan Ramah Lingkungan Jumpstart Dalam Meningkatkan Daya Tarik Penjualan. *Magenta| Official Journal STMK Trisakti*, 9(01), 1309–1323.
- Nurjanah, A., Alam, A., Albab, I. A., Rahmani, I., Nurfaridah, R., Wahdaniyatillahi, R. A., Wulandari, S., Hedi, S., Arimbi, T., & Yuniati, U. (2025). Pengelolaan Limbah Kulit Kopi Menjadi Produk Teh (Cascara) di Desa Girimulya: Pengabdian. *Jurnal Pengabdian Masyarakat dan Riset Pendidikan*, 4(1), 6767–6774.
- Romadhona, A. R., Dewi, N. K. P. C., & Indrawan, K. A. Y. (2022). Pengolahan limbah kulit kopi Arabika Kintamani sebagai alternatif menunjang sustainable development goals. *Prosiding Pekan Ilmiah Pelajar (PILAR)*, 2, 633–639.
- Romalasari, A. (2019). Pemanfaatan limbah kulit kopi cascara menjadi teh celup. *Prosiding Industrial Research Workshop and National Seminar*.
- Santi, I., Emelda, A., Asmaliani, I., Madi, N., & Anshar, M. A. (2026). P Pelatihan Pembuatan Teh Celup Kombinasi Pegagan, Secang dan Stevia Sebagai Upaya Diversifikasi produk Herbal PKK Desa Paddinging:-. *Jurnal Mandala Pengabdian Masyarakat*, 7(1), 745–754.
- Sedana, G. (2026). Memperkuat Agribisnis Kopi Berbasis Masyarakat Petani (Kasus Kelompok Petani di Bali). CV. NUSANTARA PRESS INDONESIA.
- Suherman, D., Sutriadi, R., Dwicaksono, A., & Firman, T. (2024). Territorial Splitting and Its Role in Promoting Sustainable Local Economic Development and Governance in Tourist Destination Areas. *Tourism-Spectrum: Diversity & Dynamics*, 1(2), 115–127. <https://doi.org/https://doi.org/10.56578/tsdd010205>
- Susanto, D. A., Triandini, P., Taufik, Y., Rauf, A., Wahyudi, Z., Putridiani, S. A., Romainur, R., Abdurrokhim, M., & Fussalam, Y. E. (2025). Pemberdayaan Masyarakat. CV. Edu Akademi.