

Standardization Efforts for Ayam Goreng Kalasan Industry Cluster Through a Partnership Between the University and Local Government to Maintain its Local Wisdom

Anggoro Cahyo Sukartiko^{1*}, Wahyu Supartono¹, Zaidir², Rendayu Jonda Neisyafitri¹, Rahmat Setiyono³

¹Department of Agro-industrial Technology, Faculty of Agricultural Technology, Universitas Gadjah Mada, Yogyakarta, Indonesia

²Faculty of Science and Technology, Universitas Respati Yogyakarta, Yogyakarta, Indonesia

³Industry and Trade Agency of Sleman Regency, Yogyakarta, Indonesia

Submitted: November 23th 2023; Revised: August 15th 2024; Accepted: August 29th 2024

Keywords:

Chicken
Collaboration
Local food processing
Product uniformity
Quality

Abstract A community service partnership is carried out between a university and a local government to standardize processes and products produced by the *Ayam Goreng Kalasan* industry cluster. Efforts are made through a series of focused discussion activities, knowledge sharing, and material provision, as well as training and mentoring on aspects of standardization, product diversification, and promotion toward marketing with a broader scope. The first three stages were carried out with the involvement of local government. The results of the community service implementation were measured using a comparison of knowledge of business actors before and after the implementation of the activities. A total of 31 business actors, as members of the *Ayam Goreng Kalasan Maju Makmur* industry cluster, have participated in this activity. Increased knowledge is observed in all aspects: standardization, diversification, management, and marketing. The collaboration between the university and the local government, therefore, can increase the participation of business actors, accelerate the required standardization and certification process, and further increase the possibility of sustainability of cluster business development.

1. INTRODUCTION

Ayam Goreng Kalasan is one of the leading typical food products from the Kalasan area, Sleman, Special Region of Yogyakarta (Jayatun, 2019). *Ayam Goreng Kalasan* is one of the traditional specialties still often found amid the rise of international food menus (Chusmeru, 2020). *Ayam Goreng Kalasan* is a delicious and exciting chicken meat dish processed as dry cuisine cooked without soup or sauce (Tarwotjo, 2002). This *Ayam Goreng Kalasan* product is in the form of kremes fried chicken equipped with chili sauce and vegetables from the primary raw materials of native chickens, cut chickens, and laying hens that are no longer productive. The supporting materials are vegetables, herbs, flour, and spices (Nursubiyantoro & Yulianto, 2019a). The production process of *Ayam Goreng Kalasan* generally includes washing chicken, making seasonings, arranging

chicken in a pan for the lifting process, making chili sauce, packing vegetables, and frying chicken kremes (Nursubiyantoro & Yulianto, 2019b).

The problems faced by *Ayam Goreng Kalasan* industry players are diverse. From the aspect of production itself, there is currently no standardization of the *Ayam Goreng Kalasan* production process. Each business actor still uses hereditary recipes that vary from one another. So, the distinctive aspect of *Ayam Goreng Kalasan* has not yet appeared. Quality standardization ensures that goods, products, processes, or services meet established standards (Pancaningrum & Sari, 2014). Quality standardization can assure consumers, help bridge the interests of consumers and the interests of business actors or producers and create products with uniform quality under established quality

ISSN 2460-9447 (print), ISSN 2541-5883 (online)

*Corresponding author: Anggoro Cahyo Sukartiko

Department of Agroindustrial Technology, Faculty of Agricultural Technology, Universitas Gadjah Mada, Jl. Flora 1 Bulaksumur, Yogyakarta 55281, Indonesia
Email: cahyos@ugm.ac.id

Copyright ©2024 Jurnal Pengabdian kepada Masyarakat (Indonesian Journal of Community Engagement)
This work is distributed under a Creative Commons Attribution-ShareAlike 4.0 International License

standards (Angin et al., 2023). In the food industry, quality standardization is defined as food assurance and safety in the implementation of the development of the food industry quality system. Therefore, supervision and control are needed to meet the regulatory requirements of implementing a quality assurance system to produce safe products (Indreswari et al., 2022). The characteristics of quality standardization include safety and consumer preferences for aspects such as nutritional quality, taste, color, size, and so on. Thus, quality standardization can affect producer and utility profits expected by consumers (Swinnen, 2015).

Furthermore, from a management perspective, the current financial bookkeeping process is inadequate, making cash flow and profit-and-loss calculations challenging. In terms of marketing, the residents of Bendan—the area where the cluster is located—generally employ a door-to-door sales system within the neighborhood and the broader market. Product marketing involves identifying and addressing human social needs through planning, setting prices, promotions, and distribution of goods. The goal of marketing is to meet consumer needs or desires and reach the target market (Kotler & Keller, 2016).

While marketing is often associated with the sale of physical goods and promotional transactions, it encompasses a broader scope, including customer relationship management, product decisions, and promotional strategies (Rust, 2020). Many industry players in Dukuh Bendan have not yet explored online sales due to a lack of knowledge about digital marketing technology. Marketing is a crucial business function that directly influences sales and encompasses both internal and external aspects of a company. Effective product marketing aims to satisfy customers, maintain communication with existing clients, attract new customers, and build and develop product image (Kristiyanti & Lisda, 2015). Marketing can also be understood as a social and managerial process that enables individuals or groups to meet their needs by creating, exchanging, and offering valuable products or services (Arman, 2022).

Various efforts have been made by previous researchers to solve the problems faced by business actors in the *Ayam Goreng Kalasan* Industrial Cluster Maju Makmur, such as the introduction of biomass stove and spinner, improvement of work systems and postures, and modification of the baking process to improve the physical and organoleptic quality of products. Meanwhile, activities to increase the capacity of actors in standardization, product diversification, and obtaining halal certificates, to the author's knowledge, have not been carried out much. In addition, business development plans, which are aligned with local government policies and development plans, have also not been carried out. Furthermore, the problem formulation was approached not only through field observations and interviews with business actors but also by involving local government officials with knowledge of the policies and roadmap for the development of industrial clusters in the region as well as access to the

facilitation of certification and registration of a business identification number – a business license identity that includes numbering, security, and an electronic signature.

Therefore, the focus of the activity was to enhance the capacity of business actors in process and product standardization, product diversification, obtaining halal certification, and market expansion efforts. Product diversification involves developing new or existing products by adding variations and providing more choices to consumers while maintaining existing products (Dakhi et al., 2020). It is a form of product development, marketing, and delivery that occurs when a company introduces new variants based on customer expectations (Sutrisno & Darmawan, 2022). In the era of globalization, product diversification is a strategic approach to mapping competitors and potential opportunities, thereby enabling consumer acceptance of diversified products (Humaerah et al., 2020). This strategy provides significant opportunities in the industry and business, as companies can leverage their competitive strengths (Kotler & Keller, 2016). Product diversification allows a company to develop products, expand market areas, and increase revenue, marketing effectiveness, and flexibility (Maknunah & Hariyanti, 2022). For chicken products, diversification can enhance economic value, nutritional value, and quality while extending the shelf life of the meat (Alamsyah et al., 2019).

The purpose of this community engagement activity was to develop product standardization at the *Ayam Goreng Kalasan* Industry Cluster, facilitate increased understanding and facilitation to obtain MUI halal certification, and introduce a digital marketing platform to improve the marketing of *Ayam Goreng Kalasan* products through counseling activities and mentoring business actors, including how they make promotional efforts.

2. METHOD

The community service was performed at the Kalasan Maju Makmur Fried Chicken Industry Cluster in Dukuh Bendan, Tirtomartani Village, Kalasan District, Sleman Regency, DIY. The industrial cluster consists of 35 business actors. However, only 31 participated in the before-after comparison of knowledge analysis. Most business owners are female (>80%), with a range of ages. Businesses are family businesses with various years of establishment, from 1973 to 2022. Most businesses have used online media in their marketing, but only half have used delivery service applications, and less than half use online delivery service apps. Furthermore, the range of products sold is limited to whole fried chicken. The community services were made through observation and focused discussion activities, knowledge sharing, material provision, and training and mentoring on standardization, product diversification, and promotion toward marketing with a broader scope, as shown in Figure 1.

The initial information collection on the condition of the cluster was carried out through communication with the Sleman Regency Industry and Trade Office. Observation and focused discussions were then carried out at the production sites of business actors to see the current

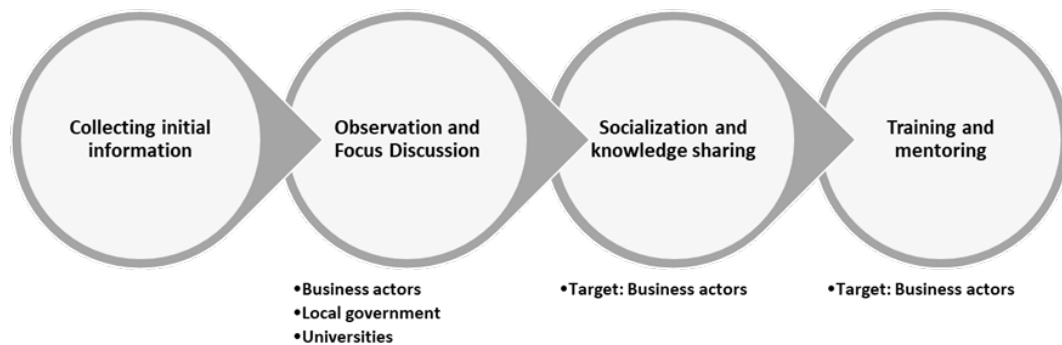


Figure 1 . Steps of activities

conditions as well as complete the initial information obtained. Activity proposals and implementation plans are then formulated by involving cluster administrators, local government representatives, and university academics. At this stage, a priority ranking of activities to be carried out was carried out based on the needs of business actors, human resources from the university, and the availability of facilitation programs from the local government so that the focus of activities and objectives of activities were then formulated, as described in the introduction. In the next stage, sharing knowledge about standardization and certification, product diversification, management, and marketing is then given to business actors. Furthermore, training and mentoring are carried out. As in the previous stage, the type of training and mentoring provided focused on the activity to increase business actors' capacity in process and product standardization, product diversification, assistance for business actors to obtain halal certification, and market expansion efforts.

The results of the community service implementation were measured using a comparison of knowledge of business actors before and after the implementation of the activities, covering three aspects: (1) Standardization; (2) Diversification; and (3) Management & and marketing. Qualitative descriptive analysis was used to explain the process of the community service, starting from observation to training and mentoring.

3. RESULT AND DISCUSSION

3.1 Initial information collection

According to data from the Sleman Regency Industry and Trade Office, the Kalasan Maju Makmur Fried Chicken Industry Cluster consists of 35 business actors and employs a total of 89 workers. From the production aspects, the production capacity is about 9,125 chickens per month, with an average income of about IDR 734,010,000. The business actors experience several problems. In terms of machinery and tools for production, the designed stove for frying whole chickens was found to be vulnerable. Additionally, from a financial perspective, the bookkeeping system still needed improvement. The Kalasan Maju Makmur Fried Chicken Industry Cluster had also developed a cluster development plan with short-term, mid-term, and

long-term goals. The short-term goal included obtaining MUI halal certification, while the mid-term goal focused on enhancing hygienic facilities. Furthermore, for the long-term goal, the industry Cluster planned to have a "Kirab Gunung Ayam Goreng" traditional festival to gain recognition from the locals and foreigners about *Ayam Goreng Kalasan*.

3.2 Observation and focus group discussion

The initial observation was conducted at the Kalasan Maju Makmur Fried Chicken Industry Cluster. This activity is illustrated through an initial discussion with the cluster coordinator, as shown in Figure 2. A Focus Group Discussion (FGD) is a qualitative research method and data collection approach in which a small group of people discusses a particular topic or issue in depth, guided by a moderator (Peter & Zuzanna, 2017). Focus Group Discussion (FGD) method was used to stimulate the *Ayam Goreng Kalasan* business actors' understanding of the procedures and detailed supporting documents needed to obtain halal certification of *Ayam Goreng Kalasan* products. As an initial stage in halal certification, mapping is carried out on the main requirements for obtaining halal certification (such as ownership of certification and risk-based Business Identification Number / NIB) and what has been owned by business actors. Business actors have diversity in risk-based NIB ownership. Some already have the latest version of NIB, while others are still the old version. Therefore, the community service implementation team carried out counseling on migration procedures from the old NIB to the new NIB, followed by assistance in filling through OSS (Figure 2 (a)).

3.3 Knowledge sharing

The community service activities for the production sector focused on standardization efforts, including certification, and product diversification. Product diversification is defined as expanding business opportunities by developing market potential from existing products (Jayathilake, 2018). A study by Arte & Larimo (2022) revealed that product diversification is recommended to improve business performance by creating opportunities for synergies. During the product diversification activities, the team presented various examples of chicken-based products from both local

and international markets to illustrate diversification opportunities. Additionally, an example of product diversification through the creation of frozen chicken products was communicated. The freezing process inactivates a certain percentage of microorganisms in the food, thereby extending the product's shelf life (Kennedy, 2000).



Figure 2. The community engagement activities: (a) Filling in Online Single Submission (OSS) Business Identification Number (NIB); (b) Discussion with the industry cluster management and exposure of product diversification



Figure 3. The community engagement activities: Demonstration of using the vacuum sealer to make the product shelf-life longer and prevent product spoilage

Furthermore, to gather information about product diversification possibilities, Focus Group Discussions were held with business actors to determine potential products and the technology required for their production. This activity is depicted in Figure 2. Additionally, the training provided a demonstration on using a vacuum sealer to extend product shelf life and prevent spoilage, as shown in Figure 3. The vacuum packaging method removes oxygen

from inside the packaging, preserves against microbial contamination, and extends the product's shelf life (Paine & Paine, 2012). Consequently, the vacuum-packed chicken could be distributed to a broader market.

Another factor that needs to be considered when developing product diversification is the management and marketing aspects. Examples of bookkeeping and digital applications are provided that can be used to facilitate input and analysis of the records filled. According to Accounting Standards, bookkeeping is a systematic process of recording business transactions (Owusu et al., 2015). According to the installed accounting system, bookkeeping practices might vary depending on the organization (Sibanda & Manda, 2016). In Small and Medium Enterprises, a poor bookkeeping system affects decision-making, resulting in poor financial management practices (Musah, 2017). Hence, the best practices in bookkeeping are provided in this activity. Furthermore, the activity implementation team showed various social media and static/dynamic websites to increase the marketing knowledge of the business actors. Activities in this area are shown in Figure 2.

3.4 Training and mentoring evaluations

Training is defined as the education and instruction provided to employees as needed to advance their knowledge and skills, thereby improving performance (Anwar & Zebari, 2015). Without practical training, business owners cannot manage their businesses consistently and effectively (Anwar & Surarchith, 2015). According to Ismael et al. (2021), training involves various teaching techniques and expert advice aimed at evaluating and enhancing employees' existing skills and knowledge to simultaneously improve their performance and contribute to the organization's success.

This training program was assessed by distributing identical questionnaires to participants both before and after the training's implementation (pre-test and post-test). The descriptive analysis of the pre-test and post-test results yielded the value of changes in knowledge scores before and after counseling. The before and after training assessments were also implemented in some community engagement activities, such as in transforming household and agricultural waste into valuable products training in Klaten, a district adjacent to Kalasan (Nugrahini et al., 2023), training for increasing capacity in processing superior local products in Maron River Eocokarst (Wijayanti et al., 2024), and training on making organic fertilizer (Khairi et al., 2024).

To measure the level of understanding among business actors regarding the material provided, several questions were distributed to the 31 participants. These questions were categorized into three groups: standardization, diversification, and management and marketing (Figure 2). The measurement results were then presented as the average level of understanding in standardization, diversification, management, and marketing, as shown in Figure 4. Based on these results, it was observed that business actors had

a reasonably high initial understanding of standardization materials and management and marketing, with scores of 62.9% and 83.9%, respectively. However, their understanding of material diversification was still relatively low, at 39.5%.

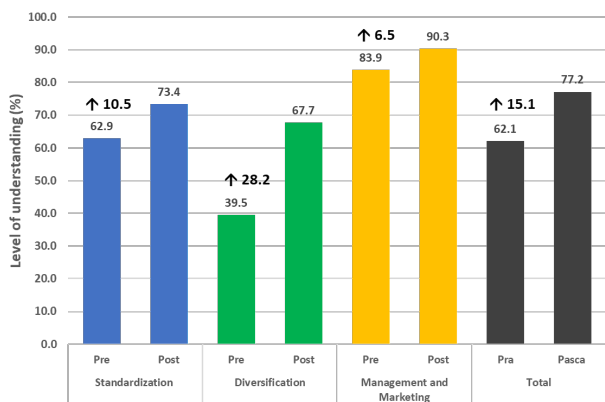


Figure 4 . Changes in the level of understanding of business actors

In the same picture, it is also shown that the provision of material, both through counseling and training, provides an increase in the level of understanding of business actors in the three materials, with the highest percentage increase in understanding of diversified material by 28.2%, followed by standardization material and management and marketing, respectively by 10.5% and 6.5%. The total increase in understanding of business actors using this approach showed a value of 15.1%. Compared to standardization and marketing materials, the highest increase in the level of understanding was obtained on product diversification materials, confirming that business actors still use the previous prevailing habits and have not dared to be creative in diversifying animal products to follow the wishes of consumers of various ages (Rahmawati, 2023), have attractive flavors and shapes (Hafsan et al., 2021), in order to expand the market and increase selling value (Irhami et al., 2024; Rahmawati, 2023).

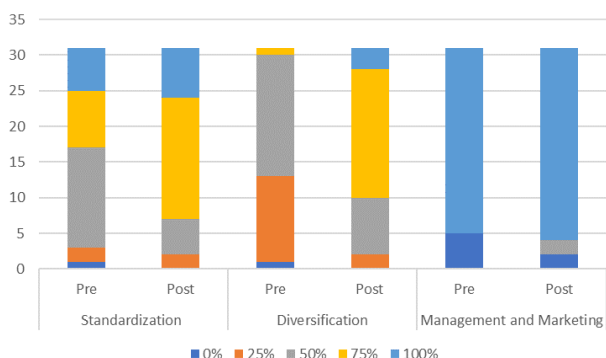


Figure 5 . Proportion of diversity of understanding of business actors

The detailed proportions of the diversity of the business actor’s understanding are shown in Figure 5. Regarding standardization aspects, the understanding of the business

actors was slightly increased. Moreover, the business actors’ understanding of the product diversification aspects increased significantly. Furthermore, in the management and marketing aspects, the proportion showed that the understanding of the business actors was increasing. Therefore, training and counseling could be alternatives to increase the business actors’ knowledge.

4. CONCLUSION

The community empowerment activity, conducted through this community partnership scheme, aimed to standardize the quality and diversify processed chicken products while advancing digital transformation through counseling, mentoring, and promotional efforts. Increased knowledge was observed across all aspects: standardization, diversification, management, and marketing. The pre-test and post-test results indicated a 15.1% increase in understanding among business actors using this approach. This demonstrates that the collaboration between the university and the local government effectively enhanced business actor participation, accelerated the standardization and certification process, and improved the sustainability of cluster business development. As a result, some business actors established process and product standards, successfully obtained halal certificates, and began utilizing alternative media for marketing.

ACKNOWLEDGMENT

The authors would like to thank the Directorate General of Higher Education, Research, and Technology for funding our community service project.

CONFLICT OF INTERESTS

The author declares there is no conflict of interests.

REFERENCES

Alamsyah, A., Basukin, E., Prarudiyanto, A., & Cicillia, S. (2019). Diversifikasi produk olahan daging ayam. *Jurnal Abdi Mas TPB*, 1(1), 63–69.

Angin, D. P., Wiyatno, T. N., Pratiwi, N. P., Damayati, Y., & Renggani, R. R. (2023). *Manajemen mutu*. Penerbit Lakeisha.

Anwar, G. & Surarchith, N. K. (2015). Factors affecting shoppers’ behavior in Erbil, Kurdistan–Iraq. *International Journal of Social Sciences & Educational Studies*, 1(4), 10-16.

Anwar, G. & Zebari, B. A. (2015). The relationship between employee engagement and corporate social responsibility: A case study of car dealership in Erbil, Kurdistan. *International Journal of Social Sciences & Educational Studies*, 2(2), 45-50.

Arman. (2022). *Introduksi manajemen pemasaran: Dasar dan pengantar manajemen pemasaran*. LD Media.

- Arte, P. & Larimo, J. (2022). Moderating influence of product diversification on the international diversification-performance relationship: A meta-analysis. *Journal of Business Research*, 139, 1408-1423.
- Chusmeru. (2020). Makna komunikasi di balik makanan tradisional. *Jurnal Ilmu Komunikasi Acta Diurna*, 16(1), 35-54.
- Dakhi, Y., Dakhi, P., & Sarumaha, Y. M. (2020). Analisis pengaruh diversifikasi produk terhadap keputusan pembelian konsumen di Paguyuban Bakery and Cake Kabupaten Nias Selatan. *Pareto: Jurnal Riset Manajemen dan Bisnis*. 5(1), 22-32.
- Hafsan, Armita, D., Hidayat, A. R., Sijid, D. A., Hajrah, Zulkarnain, & Misbach, I. (2021). Pemberdayaan perempuan melalui diversifikasi produk pangan hewani lokal yang ASUH di Desa Benteng Gajah. *Jurnal SOLMA*, 10(1), 52-60. <https://doi.org/10.22236/solma.v10i1.5491>
- Humaerah, E. Darma, R., & Rahmadanih. (2020). The potential development of diversification of food products from sago. *IOP Conference Series: Earth and Environmental Science*, 473, 1-7.
- Indreswari, R., Wijianto, A., Adi, R. K., Yunindanova, M. B., Agustina, A., & Apriyanto, D. (2022). Standarisasi mutu berbasis total quality control untuk meningkatkan daya saing produk karak. *Prosiding Seminar Nasional Unimus*, 5, 2252-2258.
- Irhani, Anwar, C., Aprita, I. R., Kemalawaty, M., & Irmayanti. (2024). Pembuatan nugget ayam dengan penambahan tempe di Desa Lambunot Paya Kecamatan Kuta Baro Kabupaten Aceh Besar. *Jurnal PKM of JPM WISDOM*, 1(1), 29-33.
- Ismael, N. B., Othman, B. J., Gardi, B., Hamza, P. A., Sorguli, S., Aziz, H. M., Ahmed, S. A., Sabir, B. Y., Ali, B. J., & Anwar, G. (2021). The role of training and development on organizational effectiveness. *International Journal of Engineering, Business and Management*, 5(3), 15-24.
- Jayathilake, H. M. T. M. (2018). Product diversification strategies: A review of managerial skills for firm performance. *International Journal of Advancements in Research and Technology*, 7(7), 90-100.
- Jayatun, Y. A. (2019). Pemanfaatan biomass sebagai sumber energi berkelanjutan pada usaha kecil ayam goreng. *Prosiding Seminar Nasional Pelaksanaan Pengabdian Masyarakat*, 1-6.
- Kennedy, C. J. (2000). *Managing Frozen Foods*. Woodhead Publishing.
- Khairi, A., Dwilaksono, F., Purnamasari, A., & Ardiansah, G. (2024). Training on making organic fertilizer at SMPN 5 Satu Atap Labuhan Badas, Sumbawa Regency. *Jurnal Pengabdian kepada Masyarakat (Indonesian Journal of Community Engagement)*, 10(2), 116-121. <https://doi.org/10.22146/jpkm.93647>
- Kotler, P. & Keller, K. L. (2016). *Marketing management, 15 global edition*. Pearson Education.
- Kristiyanti, M. & Lisda, R. (2015). Website sebagai media pemasaran produk-produk unggulan UMKM di Kota Semarang. *Jurnal Aplikasi Manajemen*, 13(2), 186-196.
- Maknunah, L. U. & Hariyanti, R. E. (2022). The effect of product diversification on purchase decisions. *JARES (Journal of Academic Research and Sciences)*, 7(2), 43-51.
- Musah, A. (2017). Benefits and challenges of bookkeeping and accounting practices of SMEs and its effect on growth and performance in Ghana. *Journal of Accounting, Business and Management (JABM)*, 24(2), 16-36.
- Nugrahini, A. D., Ainuri, M., Wagiman, W., Amalia, R., & Hasanati, S. (2023). Community empowerment in transforming household and agricultural waste into valuable products towards the green village concept. *Jurnal Pengabdian kepada Masyarakat (Indonesian Journal of Community Engagement)*, 9(2), 76-82. <https://doi.org/10.22146/jpkm.79295>
- Nursubiyantoro, E. & Yulianto, W. W. E. (2019a). Pendampingan peningkatan produksi sentra industri Ayam Goreng Kalasan. *Prosiding Pengembangan Ristek dan Pengabdian Menuju Hilirisasi Industri LPPM UPN Veteran Yogyakarta*, 1276-1281.
- Nursubiyantoro, E. & Yulianto, W. W. E. (2019b). *Teknologi peniris minyak: Sentra industri Ayam Goreng Kalasan*. LPPM UPNYK Press.
- Owusu, E. E., Assabil, E. N., & Asare-Kyire, S. (2015). Assessing the impacts of proper bookkeeping on the performance of small and medium scale enterprises (SMEs) in Kwaebibirem district of Ghana. *The International Journal of Science & Technology*, 3(7), 84-91.
- Paine, F. A. & Paine, H. Y. (2012). *A handbook of food packaging*. Springer Science & Business Media.
- Pancaningrum, E. & Sari, D. P. (2014). Strategi pencapaian standar mutu dan pengaruhnya terhadap hasil penjualan di Pasar Eropa. *Jurnal Manajemen dan Kewirausahaan*, 16(1), 47-54.
- Peter, V. E. & Zuzanna, A. (2017). *How to...conduct a Focus Group Discussion (FGD)*. Methodological manual.
- Rahmawati, N. (2023). Pelatihan diversifikasi olahan daging ayam menjadi dimsum pada civitas akademika Universitas Islam Kadiri. *Jurnal Abdiraja*, 6(2), 69-74.
- Rust, R. T. (2020). The future of marketing. *International Journal of Research in Marketing*, 37(1), 15-26.

- Sibanda, J. J. & Manda, D. C. (2016). Symptoms of accounting practices that contribute to small business failures in South Africa. *Problems & Perspectives in Management*, 14(4-1), 194-202.
- Sutrisno, R. I. & Darmawan, D. (2022). Pengaruh promosi penjualan, diversifikasi produk, dan harga terhadap kepuasan pelanggan. *Jurnal Manajemen, Bisnis, dan Kewirausahaan*, 2(1), 1-12.
- Swinnen, J. (2015). *Quality standards, value chains, and international development: Economic and political theory*. Cambridge University Press.
- Tarwotjo, C. S. (2002). *Dasar-dasar gizi kuliner*. Grasindo.
- Wijayanti, P., Setyawardhani, D. A., & Rachman, A. (2024). Increasing capacity in processing superior local products in Maron River Ecolkarst. *Jurnal Pengabdian kepada Masyarakat (Indonesian Journal of Community Engagement)*, 10(2), 80-85. <https://doi.org/10.22146/jpkm.90658>