



Community economic independence through essential oil product diversification and digital marketing in Jatijejer Village

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ABSTRACT

Jatijejer Village has significant potential for developing essential oils from various aromatic plants. To increase the selling value of essential oil products and improve marketing effectiveness, training is needed in the diversification of essential oil derivative products and digital marketing training. This community service program aims to increase the economic independence of the Jatijejer Village community through training and mentoring in the diversification of essential oil-based products and digital marketing. The activity was implemented through participatory training, hands-on practice, and intensive mentoring in the production of derivative products, such as balms and hand sanitizers, as well as digital marketing training, including introducing marketplaces, social media, and digital promotions. Program evaluation indicated a significant improvement in participants' knowledge and skills, with average pre-test scores of 56 percent increased to 97 percent in post-test assessments. There was an improvement in economic independence, demonstrated by the increasing variety of products, namely balms and hand sanitizers, and the start of product marketing through digital platforms. This program will be continued with the opening of the Jatijejer Essential Oil House and souvenir center, which will become an integrated tourist destination for the dissemination of knowledge and increasing sales of essential oil products.

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1. INTRODUCTION

Essential oils are oils composed of volatile compounds obtained from various parts of plants such as leaves, flowers, fruit peels, roots, stems, and seeds (Julianto, 2016). Essential oils have distinctive aromas according to their plant sources; therefore, they are highly diverse in type. These oils are high value commodities widely utilized in the health and aromatherapy industries due to their bioactive compound content. One of their main activities is their aromatherapeutic effect, which is highly beneficial in reducing stress, improving mood, and enhancing sleep quality through the use of the sense of smell

(Khasanah et al., 2024). Based on these activities, essential oils have strong potential to be developed into various derivative products that are beneficial for health.

Recently, collaboration among farmer groups, PKK, and BUMDES in Jatijejer Village, Trawas, Mojokerto, East Java, has produced essential oils from various plants, namely lemongrass, citronella, jasmine, clove, and lime (Gondokesumo et al., 2025). The resulting essential oils have been sold and marketed on a limited scale in the form of raw materials. Ideally, essential oils as high value commodities should not be sold as raw materials but should be developed into higher value derivative products. Thus, the main problem faced by the partners, particularly the PKK group, is the low added value of essential oil products and the limited diversification of essential oil-based products. There has been limited innovation to maximize the potential of essential oils into derivative products. This gap between existing potential and actual utilization underlies the urgency of implementing the current community service activity.

One potential form of diversification is the production of balms and hand sanitizers based on essential oils. Balms not only have the potential to relieve muscle aches, headaches, and nasal congestion, but the essential oil content also enhances aromatherapeutic effects that can provide calming and relaxing sensations (Nisa, 2024). Hand sanitizers are also essential, as the high level of daily activities requires a practical method for cleaning hands before eating or after touching contaminated objects without the need to find water and soap. It is known that essential oils possess antibacterial properties that can work synergistically with other antiseptics such as alcohol to eliminate germs and bacteria (Triyani et al., 2021).

The second problem is related to the limited marketing reach of the products and weak promotional and branding strategies. Essential oil products produced in Jatijejer Village have been marketed conventionally by the BUMDES team and are limited to the surrounding area. However, structured utilization of social media and online marketplaces to increase sales has not yet been implemented. These products are also not widely recognized by broader markets due to limited understanding of branding strategies, promotional content creation, and effective communication of product benefits to consumers. Therefore, the digitalization of marketing constitutes the second urgency to expand market reach and increase product sales. Effective promotion and branding are also necessary to attract consumer interest and trust, enabling these essential oil products to be recognized as beneficial health products. Without the adoption of digital marketing, essential oil products and their derivatives will face difficulties competing with similar products that have already leveraged digital platforms.

Accordingly, in response to the need for diversification of essential oil-based products and the digitalization of marketing, the Community Service Team of Universitas Surabaya and Universitas Wijaya Kusuma Surabaya organized a training program on essential oil-based product diversification and digital marketing. This program aimed to provide knowledge and skills to the Jatijejer Village community in the production of balms and hand sanitizers, as well as insights into the importance of digital marketing as an effort to support business development and enhance the economic self-reliance of the Jatijejer Village community.

2. METHODS

The training and mentoring phase on essential oil product diversification and marketing digitalization constituted a continuation of the second year of community service activities that had been implemented previously. These activities included a field study visit to the Essential Oil Institute of Universitas Brawijaya and Omah Atsiri Baloga in Batu City, training and mentoring on the application

of the Internet of Things in precision irrigation systems for village agricultural land, as well as training and mentoring on essential oil production from clove, jasmine, and lime plants. The method used in the implementation of this community service program was training and mentoring, which aimed to provide both theoretical understanding and practical skills to the community (Nugraheny et al., 2019). The approach adopted was community-based empowerment with participatory principles, in which the community played an active role throughout the learning, practice, and evaluation processes.

This activity was conducted in Jatijejer Village, Trawas District, Mojokerto Regency, East Java, on 29 November 2025 and 7 December 2025. The training was attended by 30 participants consisting of the Community Service Team from Universitas Surabaya and Universitas Wijaya Kusuma Surabaya, as well as representatives of farmer groups, PKK, BUMDes, and village officials of Jatijejer. The event began with an opening session, prayer, welcoming remarks from the village head and the head of the community service team, followed by material presentations, production mentoring, and evaluation.

The materials delivered in the essential oil product diversification training were divided into two main parts. The first part focused on strengthening theoretical understanding of the biological effects of essential oils on health, explaining the importance of product diversification, and introducing the tools, materials, and procedures required for the production of balms and hand sanitizers. The second part consisted of hands-on practice in producing essential oil-based products, namely balms and hand sanitizers. Participants were provided with practical guidance in designing and producing these products, starting from formulation to the packaging process.

The digital marketing method was implemented through training and hands on mentoring on the direct use of marketplace platforms. The activity began with a presentation on the importance and benefits of selling through marketplaces, an introduction to the Shopee application, procedures for creating an account and managing an online store, as well as the importance of branding and creating attractive content. After the material presentation, a question-and-answer session was conducted, followed by mentoring in the creation of online stores. Indicators of success for the digital marketing training included: (1) Participants' ability to create an online store account on a marketplace platform; and (2) Participants' ability to produce simple promotional content in the form of product photos.

The evaluation of the activity was conducted in a structured manner through pre-tests and post-tests, surveys, and interviews. The pre-test and post-test were used to measure the increase in participants' knowledge before and after the activity (Amarullah, 2023; Pribadi et al., 2020). The evaluated aspects included: (1) Improvement in participants' knowledge of essential oil product diversification and digital marketing; (2) Improvement in participants' skills in producing balms and hand sanitizers; and (3) Participants' ability to manage digital marketing through marketplace platforms.

3. RESULTS AND DISCUSSION

Results

The essential oil product diversification activity in Jatijejer Village aimed to improve community economic independence and support the realization of Jatijejer as the first Essential Oil Village in East Java. The activity began with opening remarks from the Head of Jatijejer Village and the Head of the Community Service Team, who emphasized the importance of innovation in essential oil-based products to improve community welfare.

The essential oil product diversification training was attended by 30 participants consisting of representatives from farmer groups, PKK, BUMDes, and village officials. Participants received hands-on training in producing essential oil derivative products, namely balm and hand sanitizer. They were

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directly involved in every stage of the production process, starting from material preparation, production, to product packaging (Figure 1).



Figure 1. Participants practice making essential oil-based balm and hand sanitizer

The training evaluation was conducted using pre-test and post-test methods to measure improvements in participants' understanding and skills. The results showed a significant increase in participants' understanding of the importance of innovation and diversification of essential oil-based products (Table 1). Before the training, the average pre-test score was only 56 percent, indicating that participants' basic understanding of the technical procedures for producing balm and hand sanitizer was still limited. After the training, the average post-test score increased sharply to 97 percent, reflecting an almost complete understanding of all topics delivered. This improvement confirms that the training was effective in enhancing participants' knowledge and skills, particularly in technical aspects such as the production process of essential oil-based balm and hand sanitizer.

Table 1. Pre-test-post-test scores of essential oil product diversification training participants

Items	Pre-Test Scores (%)	Post-Test Scores (%)
Explain the benefits of essential oils as aromatherapy and antibacterial agents.	80	100
Explain the importance of innovation and diversification of essential oil-based products.	82	100
Explain the procedure for making essential oil-based balms.	30	95
Explain the procedure for making essential oil-based hand sanitizers.	32	93
Average Score	56	97

In addition to the quantitative evaluation, short interviews were conducted with participants after the activity. The interview results indicated that participants were able to independently produce balm and hand sanitizer and understood the potential of these products to be developed as essential oil-based businesses. The products resulting from the training were also tested by participants and were considered useful for meeting daily needs, particularly as practical health and hygiene products. This program successfully improved participants' skills, knowledge, and income potential. Participants who previously had no production skills were able to produce balm and hand sanitizer. These two products have the potential to increase sales by adding new variants of essential oil-based products. Other essential oil-based products will be designed for future development agendas.

In the second training session on digital marketing, the community service team introduced the theme "Jatsiri Go Digital," where Jatsiri is the brand name of the essential oil products from Jatijejer

Village. In this activity, 30 participants received technical training related to preparation for online selling, procedures for registering an online store, and detailed guidance on how to manage a marketplace store, so that community members could easily understand and follow each step of the process (Figure 2).



Figure 2. Assistance in creating and managing jatsiri product online stores on the marketplace

The results of the digital marketing training showed an improvement in participants' abilities and skills in using marketplaces for online selling. After completing the training, participants not only understood the concept of digital marketing but were also able to directly apply the technical steps required to sell on marketplaces, including store management, branding and content creation, pricing strategies, and communication with consumers. With these skills, Jatsiri products are expected to gain wider recognition and reach a broader market.

Discussion

The significant increase in post-test scores compared to pre-test scores indicates that practice-based training methods combined with mentoring are effective in improving the knowledge and skills of rural communities. These results are consistent with the community-based empowerment approach, which positions the community as active subjects in the learning process, thereby enabling the acquired knowledge to be more easily understood and applied in business practices (Harini et al., 2023).

The diversification of essential oil products into balms and hand sanitizers provides added value to local commodities that were previously marketed in raw form. The training materials were developed based on literature reviews indicating that essential oils derived from jasmine, clove, and lime possess aromatherapeutic and antibacterial effects (Aisyah et al., 2020; Rahmawati et al., 2025; Rusli & Rerung, 2018; Triyani et al., 2021; Yuliana et al., 2023). Lime essential oil, which is rich in limonene and citral, produces a fresh citrus aroma with antistress effects and enhances sensations of calmness and well-being (Rizqi et al., 2024). The mechanism of aromatherapy effects in essential oils involves stimulation of olfactory receptors that subsequently transmit signals to the brain centers responsible for emotion and memory, influencing the release of neurotransmitters such as serotonin and dopamine that produce calming and pleasurable effects (Mustariningrum et al., 2024).

In addition to their aromatherapeutic effects, essential oils are also known for their antimicrobial activity against bacteria and fungi, which is why they are widely used as components of hygiene products. The antimicrobial mechanisms of essential oils that have been extensively studied include disruption of cell membranes, interference with microbial metabolism, and inhibition of essential microbial enzymes (Khoirotunnisa et al., 2025; Kurniasari, 2021; Nisyak et al., 2022). For example, eugenol, a major compound

in clove essential oil, is well known for its ability to damage microbial cell membranes and disrupt intracellular enzymatic functions (Lestari, 2017). Citral, a compound found in lime essential oil, also has the ability to disrupt cytoplasmic membranes and cause bacterial cell death (Ramadhani et al., 2025).

The development of balms and hand sanitizers in the second year of the community service program represents a continuation of the first-year activities, which focused on the production of inhalers and diffusers based on citronella and lemongrass essential oils. Balm, as a semisolid ointment-based preparation, contains active medicinal substances and generally exhibits rubefacient properties, namely the ability to relax muscles or provide a warming sensation, and is commonly used to relieve muscle aches, headaches, and nasal congestion (Jumriani et al., 2022). The addition of essential oils to balms can enhance the aromatherapeutic effects of the plant sources used, thereby increasing comfort and relaxation. Furthermore, the use of essential oils makes the balm more environmentally friendly and safer by minimizing the use of synthetic ingredients.

Meanwhile, hand sanitizer is developed as an antiseptic product that is effective in inhibiting and even killing disease-causing bacteria. Hand sanitizers generally contain alcohol as the active ingredient at a concentration of 60–70 percent. The use of alcohol as an antiseptic is quite effective in eliminating bacteria; however, alcohol is irritative in nature and can cause skin irritation and dryness (Sianipar et al., 2021). Therefore, hand sanitizers usually require the addition of moisturizing agents such as glycerin or aloe vera gel. Recently, hand sanitizers have also been widely enriched with essential oils derived from various plants, which not only function as additional antimicrobial agents but also provide a natural, refreshing aroma and relaxation effects through their aromatherapeutic properties.

In the marketing aspect, the main challenges faced by village MSMEs include price competition and similar products, the absence of strong branding, and limited utilization of marketplaces. Therefore, digital marketing training was focused on optimizing marketplace usage and strengthening product branding. Currently, marketplaces such as Shopee, Tokopedia, and Lazada are widely used to market products in an easy and affordable manner and are capable of reaching national markets. Consumers generally have greater trust in purchasing through marketplaces due to the availability of rating systems, reviews, guarantees, and transaction security. Sellers can also take advantage of promotional features such as flash sales, store vouchers, shipping subsidies, and paid advertisements to increase sales. Marketplaces further facilitate sellers in managing logistics, as official couriers, automatic shipping cost calculations, and various payment methods are readily available. The training materials also covered procedures for sales preparation, store registration, and effective management of online stores on marketplaces.

Examples of successful MSMEs that have sold products online through marketplaces were also presented to motivate the community to learn and apply the acquired knowledge to improve their product sales. Product branding was another important topic in this training. The creation of simple logos, consistent color schemes, effective communication with consumers, and clear product background information were emphasized as important elements to attract consumer purchase interest. In addition, the development of content such as usage tips, instructions, product advantages, testimonials, and promotional content can help build strong branding for the products being sold.

Overall, the results of the activities indicate that the series of trainings on essential oil product diversification and digital marketing were able to enhance community capacity and improve the competitiveness of MSMEs in Jatijejer Village. This program not only produced outputs in the form of new products and skills, but also generated outcomes in the form of increased community readiness to manage businesses sustainably. Further assistance is still needed to ensure the sustainability of economic impacts and to support the realization of Jatijejer Village as an Essential Oil Village in East Java.

4. CONCLUSION AND RECOMMENDATIONS

The community service program implemented in Jatijejer Village successfully diversified essential oil-based products derived from clove, jasmine, and lime into balm and hand sanitizer, thereby increasing the added value of these local plants. The evaluation results showed a significant improvement in participants' understanding and skills, as reflected by an increase in the average pre-test score from 56 percent to 97 percent in the post-test. In addition, the digital marketing training also had a positive impact on increasing consumer trust and boosting product sales. This program is planned to be sustainable; following a series of production trainings, the village community will continue to receive assistance in marketing their products until the realization of Jatijejer Village as the first Essential Oil Village in East Java.

Although the program demonstrated positive outcomes, several limitations were identified, including uneven digital technology mastery among participants and the absence of long-term evaluation related to revenue growth and business sustainability. Based on these limitations, it is recommended that future community service programs provide longer mentoring periods to ensure that production and digital marketing skills can be independently applied by all participants. Furthermore, more intensive follow-up assistance is needed in branding and promotion of essential oil products and their derivatives. Regular monitoring and evaluation should also be conducted to measure the sustainable impact of the program on increasing the income of village MSMEs.

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REFERENCES

- Aisyah, S., Effendi, Z., & Hawalis, S. N. (2020). Optimasi pembuatan lilin aromaterapi berbasis stearic acid dengan penambahan minyak atsiri cengkeh (*Syzygium aromaticum*). *Jurnal Hexagro*, 4(1), 73-82. <https://doi.org/10.36423/hexagro.v4i1.362>
- Amarullah, S. S., Saputra, A., Marni, D. S., Athirah, P., Nur'Alian, N. A., & Izwar, I. (2023). Pemanfaatan produk lokal berbasis minyak serai wangi (*Cymbopogon nardus* (L) rendle) dalam rangka peningkatan kapasitas ekonomi masyarakat Desa Pantan Reduk. *Jurnal Pengabdian Masyarakat Bangsa*, 1(7), 956-963. <https://doi.org/10.59837/jpmba.v1i7.290>
- Gondokesumo, M. E., Azminah, A., Ardiansyahmiraja, B., & Suryaningsih, D. R. (2025). Knowledge enhancement through field learning: Transforming Jatijejer into the first atsiri village in East Java. *Dinamisia: Jurnal Pengabdian Kepada Masyarakat*, 9(1), 311-322. <https://doi.org/10.31849/dinamisia.v9i1.22963>
- Harini, N., Suhariyanto, D., Indriyani, I., Novaria, N., Santoso, A., & Yuniarti, E. (2023). Pendampingan pemberdayaan masyarakat dalam meningkatkan perekonomian desa: Community empowerment assistance in improving the village economy. *Amalee: Indonesian Journal of Community Research and Engagement*, 4(2), 363-375. <https://doi.org/10.37680/amalee.v4i2.2834>

- Julianto, T. S. (2016). *Minyak atsiri bunga Indonesia*. Deepublish.
- Jumriani, J., Sinala, S., & Ibrahim, I. (2022). Formulasi sediaan balsem stik dari lada putih (Piper album). *Jurnal Mandala Pharmacon Indonesia*, 8(2), 141-150.
<https://doi.org/10.35311/jmpi.v8i2.202>
- Khasanah, N., Sukmawati, E., Rantauni, D. A., & Aksari, S. T. (2024). Penerapan aromaterapi lavender dengan peningkatan kualitas tidur ibu hamil trimester III. *Journal of Andalas Medica*, 2(5), 205-213. <https://doi.org/10.57213/antigen.v2i3.324>
- Khoirotunnisa, U., Ulandari, A. S., Rahayu, I. D., & Iqbal, M. (2025). Literature review: Aktivitas antibakteri ekstrak etanol daun kemangi (*Ocimum basilicum* L.) terhadap bakteri patogen. *Sains Medisina*, 3(4), 148-154. <https://doi.org/10.63004/snsmed.v3i4.664>
- Kurniasari, R. D. (2021). *Pengaruh minyak atsiri Lavandula angustifolia terhadap diameter zona hambat, kebocoran asam nukleat dan protein: Uji in vitro pada bakteri Propionibacterium acnes* (Thesis). Universitas Islam Sultan Agung.
- Lestari, W. C. (2017). *Efek antibakteri uap minyak atsiri bunga cengkeh (Syzygium aromaticum L.) terhadap pertumbuhan Escherichia coli dan Staphylococcus aureus dengan metode gaseous contact* (Thesis). Universitas Islam Indonesia.
- Mustariningrum, D. L. T., Khiong, T. K., Akup, A. M., Wardani, F. D. A. K., & Keb, S. T. (2024). *Rahasia pengobatan alami dengan peppermint essential oil*. UNJ Press.
- Nisa, H. (2024). Formulasi balsem stick minyak atsiri menta piperita, copaifera officinalis (Jacq.) L, DAN gaultheria procumbens L. *Journal of Pharmacy Tiara Bunda*, 1(2), 12-19.
<https://doi.org/10.62619/jptb.v1i2.64>
- Nisyak, K., Hisbiyah, A. Y., & Haqqo, A. (2022). Aktivitas antibakteri ekstrak etanol dan minyak atsiri sirih hijau terhadap methicillin resistant Staphylococcus aureus. *Journal of Pharmaceutical Care Anwar Medika (J-PhAM)*, 5(1), 1-14. <http://dx.doi.org/10.36932/jpcam.v5i1.82>
- Nugraheny, D. C., Utami, P. P., Vioreza, N., & Putri, A. (2021). PKM pendampingan dan penyuluhan kerajinan limbah kreatif pada pemulung di TPA Bantar Gebang Bekasi. *Jurnal Penamas Adi Buana*, 5(01), 1-12. <https://doi.org/10.36456/penamas.vol5.no01.a3625>
- Pribadi, E., Kardinan, A., Trisilawati, O., & Rizal, M. (2020). Cost of production and feasibility study of organic citronella agribusiness. *Jurnal Penelitian Tanaman Industri*, 26(2), 119-128.
<https://doi.org/10.21082/jlitri.v26n2.2020.119-128>
- Rahmawati, L. M., Januarti, I. B., Assidiqi, E. R., & Rosyida, R. (2025). Karakteristik dan aktivitas antibakteri minyak atsiri daun cengkeh dari daerah cluwak terhadap bakteri Staphylococcus aureus ATCC 25923. *Journal of Pharmaceutical and Sciences*, 8(1), 378-383.
<https://doi.org/10.36490/journal-jps.com.v8i1.484>
- Ramadhani, M. A., Turaya, M. R. A., Aminah, M., Mardiyanti, D., & Vifta, R. L. (2025). Uji aktivitas antibakteri mouthwash dan antioksidan minyak atsiri kulit jeruk nipis (Citrus aurantifolia): Antioxidant and antibacterial activity test of lime essential oil (Citrus aurantifolia). *Indonesian Journal of Pharmacy and Natural Product*, 8(01), 90-100.
<https://doi.org/10.35473/ijpnp.v8i01.4178>
- Rizqi, J., Amestiasih, T., & Rahmadani, I. F. (2024). Formulasi dan evaluasi organoleptik minyak atsiri jeruk nipis sebagai sediaan aromaterapi. *Media Informasi*, 20(2), 67-72.
<https://doi.org/10.37160/mijournal.v20i2.634>

- Rusli, N., & Rerung, Y. W. R. (2018). Formulasi sediaan lilin aromaterapi sebagai anti nyamuk dari minyak atsiri daun nilam (*Pogostemon cablin* Benth) kombinasi minyak atsiri buah jeruk nipis (*Citrus aurantifolia* Swingle). *Jurnal Mandala Pharmacoon Indonesia*, 4(1), 68-73. <https://doi.org/10.35311/jmpi.v4i1.26>
- Sianipar, H. F., Siahaan, T. M., Siahaan, M. M., & Saragih, M. (2021). Diseminasi hand sanitizer mampu mengurangi pertumbuhan mikroba di Siantar Estate. *Mitra Mahajana: Jurnal Pengabdian Masyarakat*, 2(1), 56-63. <https://doi.org/10.37478/mahajana.v2i1.803>
- Triyani, M. A., Pengestuti, D., Khotijah, S. L., Susilaningrum, D. F., & Ujilestari, T. (2021). Aktivitas antibakteri hand sanitizer berbahan ekstrak daun sirih dan ekstrak jeruk nipis. *NECTAR: Jurnal Pendidikan Biologi*, 2(1), 16-23. <https://doi.org/10.31002/nectar.v2i1.1559>
- Yuliana, B., Makkulawu, A., & Amal, A. R. (2023). Formulasi dan uji kestabilan fisik lilin aromaterapi minyak atsiri bunga melati (*Jasminum sambac* L). *Journal Syifa Sciences and Clinical Research*, 5(1), 81-90. <https://doi.org/10.37311/jsscr.v5i1.18874>
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