



TRANSFORMATION OF INDONESIAN MIGRANT WORKERS' MICROENTERPRISES IN KUALA LUMPUR: IMPLEMENTATION OF STANDARD OPERATING PROCEDURES AND QUALITY CONTROL AS A STRATEGY TO IMPROVE PRODUCT COMPETITIVENESS

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ABSTRAK

Program pengabdian masyarakat ini bertujuan untuk meningkatkan kapasitas usaha mikro milik pekerja migran Indonesia di Kuala Lumpur melalui pelatihan dan implementasi Standar Operasional Prosedur (SOP) serta Quality Control (QC). Berdasarkan survei awal, sebagian besar pemilik usaha masih kekurangan keterampilan dasar dalam manajemen produksi dan pengendalian mutu, sehingga menghasilkan kualitas produk yang tidak konsisten. Program ini dilaksanakan pada 18 Mei 2025 dengan melibatkan 35 peserta usaha mikro. Kegiatan meliputi pelatihan teori dan simulasi praktik mengenai penyusunan SOP serta penerapan QC. Evaluasi dilakukan melalui pre-test dan post-test yang menunjukkan peningkatan signifikan pada nilai rata-rata peserta, dari 45,25 menjadi 83,75, dengan peningkatan paling menonjol pada kemampuan menyusun pedoman QC. Hasil ini membuktikan bahwa penerapan SOP dan QC dapat secara efektif meningkatkan konsistensi, kualitas, dan daya saing produk. Namun demikian, masih terdapat tantangan dalam proses implementasi, seperti keterbatasan waktu, peralatan yang minim, serta rendahnya literasi teknis. Oleh karena itu, strategi tindak lanjut—seperti pendampingan berkelanjutan, penggunaan SOP visual, serta pembentukan komunitas pembelajaran sebaya—sangat diperlukan untuk menjamin keberlanjutan program.

ABSTRACT

This community engagement program aimed to enhance the capacity of Indonesian migrant workers' microenterprises in Kuala Lumpur through training and implementation of Standard Operating Procedures (SOP) and Quality Control (QC). Based on a preliminary survey, most business owners lacked fundamental skills in production management and quality control, resulting in inconsistent product quality. The program was conducted on May 18, 2025, involving 35 microenterprise participants. Activities included theoretical training and practical simulations on SOP development and QC application. Evaluation was carried out through pre-tests and post-tests, which revealed a significant improvement in the participants' average score from 45.25 to 83.75, with the most notable increase observed in the ability to draft QC guidelines. The results demonstrated that the application of SOP and QC can effectively improve product consistency, quality, and competitiveness. However, challenges remained in the implementation process, such as time constraints, limited equipment, and low technical literacy. Therefore, follow-up strategies such as ongoing mentorship, the use of visual SOPs, and the establishment of peer learning communities are essential to ensure sustainability.

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INTRODUCTION

Micro and small enterprises have long served as a cornerstone of grassroots economic resilience, including among Indonesian diaspora communities abroad. One particularly active diaspora group in the economic sector is Indonesian migrant workers (TKI) in Malaysia. Despite facing limited access to capital, technology, and formal training, many members of the TKI community have initiated microenterprises, especially in the culinary and handicraft sectors. However, the products produced by these microenterprises often lack consistent quality standards, making it difficult for them to compete in local markets or pursue broader expansion opportunities.

The main challenge faced by microentrepreneurs within the Indonesian migrant worker (TKI) community is not a lack of entrepreneurial spirit, but the absence of a standardized production system. Most production processes are still based on habit and intuition, with no operational guidelines or quality control mechanisms in place. As a result, product outcomes often vary significantly, production defects go undetected, and brand consistency is difficult to maintain. In today's increasingly competitive business environment, product quality is a key factor in building consumer trust and sustaining market loyalty (Friscila L et al., 2020; Saleh et al., 2024).

This condition is further supported by the findings of a preliminary survey conducted among the Muslim Indonesian migrant worker (TKI) community in Melaka, Malaysia. The survey revealed that more than 80% of microenterprise operators did not possess written Standard Operating Procedures (SOP) or any form of

Quality Control (QC) system. Moreover, most of them lacked awareness regarding the importance of documenting production processes or implementing standardized quality control measures. In this context, training in SOP and QC is highly relevant to enhance both the professionalism and competitiveness of their products. The following table summarizes the results of the initial survey among microentrepreneurs in the TKI Melaka community:

Table 1. Preliminary Survey on Microenterprise Challenges among the TKI Community in Melaka

No	Production Aspect	Percentage of Respondents (%)
1	No written Standard Operating Procedure (SOP)	87.5
2	No implementation of Quality Control (QC)	81.2
3	Never attended production-related training	76.4
4	Products lack standardized measurements	79.4
5	Has received product complaints from buyers	68.1

Source: data proceed in 2025

Training on SOP and QC is considered a strategic solution to address these issues. SOP serves as an operational guide that ensures each step in the production process is carried out consistently and efficiently. Meanwhile, QC functions as an early detection system for identifying errors or quality deviations that may compromise product integrity. Various studies have shown that quality management training based on SOP and QC effectively reduces production defects, enhances customer

satisfaction, and expands market access. (Berliandaldo et al., 2020; Ramadhani et al., 2024).

Istiqomah (2023) asserts that micro and small enterprise (MSE) operators who have established SOPs and consistently implemented QC tend to perform better than those without standardized work systems. This is supported by a study by Subagio et al. (2022) which applied SOPs based on the PDCA (Plan-Do-Check-Action) cycle and reported up to a 30% increase in efficiency among microenterprises in the food sector. Furthermore, strengthening the capacity of microentrepreneurs through SOP and QC training aligns with the Sustainable Development Goals (SDGs), particularly Goal 8 (decent work and economic growth) and Goal 9 (industry, innovation, and infrastructure). Thus, this community service program is not only intended to address technical issues in production but also to promote inclusive economic development that empowers vulnerable groups such as migrant workers.

In addition, the needs-based and practice-oriented training approach employed in this program further enhanced its effectiveness. As emphasized by Harahap et al. (2025) dan Asya et al. (2023), training that is tailored to the context of the beneficiaries and utilizes direct simulation methods has a stronger impact in developing both technical skills and systematic thinking among microentrepreneurs. In the context of the TKI (Indonesian migrant worker) community, this method is particularly important to bridge limitations in time availability, equipment, and technical literacy. Taking these conditions into account, this community engagement program was designed to provide technical training on SOP development and QC implementation for

microenterprise operators within the TKI community in Melaka. The ultimate goal is to establish a production system that is efficient, consistent, and quality-oriented. The program is expected to contribute not only to improving product quality, but also to enhancing entrepreneurs' confidence and expanding their market access.

METHOD

This activity employs a Participatory Action Learning (PAL) approach, which emphasizes the active involvement of partners throughout the entire training process. This approach was selected because it effectively integrates learning, reflection, and direct action through contextual and relevant activities. Participants are not merely recipients of information but serve as primary agents in the design and implementation of solutions to the production challenges, they encounter.

Prior to the training, the implementation team conducted field observations and focus group discussions (FGDs) with community representatives. The objective was to identify actual needs, obstacles in the production process, and the partners' level of understanding regarding Standard Operating Procedures (SOP) and Quality Control (QC). The results indicated that the majority of business actors did not yet possess SOP documentation or a quality control system.

Based on the identified needs, the team developed a training module consisting of two main components: (1) Theoretical Material, covering the definition, objectives, and benefits of SOP and QC in micro-enterprises; and (2) Practical Material, consisting of guidelines for developing SOP and QC, accompanied by examples relevant to the participants' business activities. The module was designed in simple language and employed a

visual approach (flowcharts, SOP tables, and QC checklists) to ensure ease of understanding for

participants with diverse educational backgrounds and technical literacy levels.

The training was conducted in both classical and small group formats. The activities began with a pre-test to assess participants' initial understanding. Subsequently, the facilitator delivered the material through interactive discussions. After the theoretical sessions, participants were divided into several groups according to their business types to engage in simulations of SOP and QC development. Each group was guided by students and supervising lecturers in drafting SOP documents and QC checklists tailored to their production workflows. This simulation was followed by hands-on practice, where participants applied the SOP and QC documents they had created in real production activities such as food processing, packaging, and final quality inspection. The training concluded with a post-test to evaluate participants' comprehension following the training.

The evaluation of the activity was conducted quantitatively by comparing pre-test and post-test scores, as well as qualitatively through observations, interviews, and group reflections. The evaluation results were utilized to formulate follow-up recommendations, such as advanced training, periodic mentoring, and the establishment of quality learning communities among business actors.

RESULTS AND DISCUSSION

The training and simulation activities on the development of Standard Operating Procedures (SOP) and Quality Control (QC) were conducted on May 18, 2025, involving 35 micro-

entrepreneurs from the TKI Melaka Community, Malaysia. Based on observations, pre-test and post-test results, and field documentation, the activities successfully enhanced participants' capacities both in terms of conceptual knowledge and technical skills. Prior to the training, most participants were unfamiliar with formal concepts related to SOP and QC. Production was carried out based on habits or personal experience without written standards. This resulted in low product quality consistency and minimal documentation of production errors. Following the training, participants demonstrated significant improvement in understanding and drafting SOPs as well as implementing systematic quality control measures.

The quantitative evaluation results from the pre-test and post-test demonstrate a substantial improvement in understanding. The average pre-test score was 45.25, which increased to 83.75 in the post-test. The following table summarizes the improvement across several key indicators:

Table 2. Average Pre-Test and Post-Test Scores

No	Indicator	Average Pre-Test	Average Post-Test	Improvement
1	Understanding of QC and SOP Concepts	45	83	84.4
2	Ability to Develop SOP Documents	42	85	102.4
3	Ability to Perform Quality Control	50	86	74
4	Awareness of the Importance of Production Standards	44	88	81.8

Source: data proceed in 2025

Furthermore, all participants successfully drafted simple SOPs and QC checklists tailored to their respective business types. The business involved included snack chips, packaged chili sauce, homemade bread, frozen foods, and fashion. The SOPs developed covered stages such as raw material selection, processing, packaging, and final inspection. The QC checklists included criteria for product appearance, taste standards, cleanliness equipment, and expiration date checks. In addition, a face-to-face training session on quality control was conducted, during which the facilitator explained these SOP and QC concept using a slide presentation to an Immigrant group, as illustrated in Figure 1.



Figure 1. Quality Control Material

The implementation of SOP and QC in micro-enterprises has been proven to significantly impact product efficiency and quality. Several participants reported that this was their first realization that product consistency does not solely rely on “the touch of the hand,” but can be achieved through systematic procedures and control. This transformation was not only technical but also psychological: business actors became more confident in managing and developing their enterprises.

These findings align with the studies of Indrawan et al. (2023) dan Solekhah et al. (2022) which indicate that needs-based training can effectively address competency gaps among MSME actors in the local food sector. Meanwhile, Wildah & Junianto (2024) concluded that micro-entrepreneurs who implemented SOP and QC experienced a 30% reduction in defective products and a 20% increase in productivity within three months following the intervention. Similar results were reported in community service activities by Subagio et al. (2022), demonstrating that the PDCA (Plan-Do-Check-Act) approach in developing SOP and QC encourages MSME actors to independently evaluate and improve their production processes.

Although the training was effective, challenges in the implementation of SOP and QC in the field persisted. Three main obstacles were identified: (1) Limited time—most participants were migrant workers managing their businesses alongside their primary jobs, leaving very limited time to consistently apply SOP and QC; (2) Low technical literacy—some participants struggled to systematically document SOPs despite having a verbal understanding of the processes; (3) Limited production tools—several participants required basic equipment to optimally implement QC. These challenges are consistent with findings by Candrawati & Nurcaya (2020); Satrio & Sunarjo (2023) dan Sukarma et al. (2024), who reported that informal MSMEs tend to face difficulties adopting quality management systems due to inadequate infrastructure and human resource support.



Figure 2. SOP Material

To ensure the sustainability of SOP and QC implementation after the training, several strategies have been recommended: (1) Simplification of SOP and QC formats; (2) Establishment of learning communities among business actors; (3) Development of internal quality evaluation systems; (4) Continued mentoring through online sessions or periodic visits; and (5) Implementation of product quality-based incentives. These strategies have been successfully applied in other community service initiatives, such as those reported by Dewi et al. (2019) dan Anshari et al. (2022) who supported MSMEs in the food sector to develop visual SOPs and conduct routine community-based evaluations. In addition to improving product quality, this approach strengthened social solidarity and fostered a collective spirit for mutual growth.

The ultimate impact of implementing SOP and QC is the increased competitiveness of micro-enterprise products. Several participants reported that their products began receiving positive responses from customers, including non-Indonesian consumers around Melaka. The improved consistency in product quality fostered trust and repeat orders. In the long term, this serves as a vital asset for micro-entrepreneurs to expand

their market reach, both through direct and online channels.

Research by Alfiansyah et al. (2024) dan Tri Hapsari (2022) demonstrates that MSMEs with established quality standards and consistent QC implementation tend to more easily penetrate retail markets and digital platforms by meeting quality and eligibility criteria. This indicates that SOP and QC interventions, although simple, serve as a strategic foundation for building professionalism and sustainable growth among micro-entrepreneurs, including diaspora communities such as migrant workers abroad.

CONCLUSION

The community service activity conducted in collaboration with the Muslim TKI Community in Melaka successfully enhanced the capacity of micro-enterprises through training on the development and implementation of Standard Operating Procedures (SOP) and Quality Control (QC) systems. Evaluation results demonstrated significant improvements in participants' knowledge and skills, as evidenced by the differences between pre-test and post-test scores, as well as participants' success in drafting and applying SOPs and QC in their respective production activities. The implementation of SOP and QC positively impacted product quality and consistency increased the professionalism of business actors and strengthened the competitiveness of their products in the local market.

Despite facing challenges related to limited time, tools, and technical literacy, the participatory, visual, and practice-based training approach effectively addressed the needs and conditions of the partners. Beyond technical

training, this activity encouraged a mindset transformation among the business actors, shifting from intuition-based approaches toward systematic and measurable methods. This change was reflected in the post-activity evaluation, where participants reported increased understanding of QC principles, greater confidence in using SOPs and checklists, and a stronger commitment to applying these tools in their daily operations. Additionally, the activity opened opportunities for further development in business management, marketing, and the establishment of more structured business community networks.

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