



Improving Rural Businesses' Operational Competence in Jatimulya Village Through a Standard Operating Procedure Workshop

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ARTICLE INFO

Article history

Received : 19-9-2026

Revised : 02-10-2026

Accepted : 03-10-2026

Keywords

standard operating procedure; rural business; micro-enterprise; community engagement; operational management

ABSTRACT

Rural micro-enterprises in Jatimulya Village, Sumedang Utara, West Java, operate in a relatively developed environment close to industrial clusters, and therefore do not face the infrastructure and logistics constraints most commonly reported in the rural entrepreneurship literature. Their principal constraint is operational. Production, administration, raw-material tracking, and simple financial recording are carried out on the basis of habit and oral instruction rather than documented procedure, which results in inconsistent product quality, dependence on particular individuals, and difficulty in delegating work as the business grows. This community engagement activity addressed the problem through a workshop on developing simple Standard Operating Procedures (SOPs) suited to household-scale food and snack production. The activity was conducted in four stages: identification of needs through survey and interviews with business owners and village representatives; internal planning and preparation of a workshop module and a simple SOP template; a workshop of six sequential sessions combining material delivery with guided drafting; and an evaluation session to determine follow-up needs. Participants comprised rural business owners, their workers, and members of the wider community. The evaluation indicates a shift in participant perception on three points: from regarding SOPs as unnecessary at small scale to recognising the value of even a simple written procedure; from disregarding process detail to treating detail as the basis of a workable procedure; and from reluctance to hand production over to new workers to greater confidence in delegating once a written procedure and supervision are in place. Two follow-up needs emerged: technical guidance on determining product expiry dates, and a means of documenting recipe-based processes without disclosing proprietary formulations.

Usaha mikro perdesaan di Desa Jatimulya, Sumedang Utara, Jawa Barat, berada pada lingkungan yang relatif berkembang dan berdekatan dengan kawasan industri, sehingga tidak menghadapi kendala infrastruktur dan logistik sebagaimana



umumnya dilaporkan dalam literatur kewirausahaan perdesaan. Kendala utama yang dihadapi bersifat operasional. Kegiatan produksi, administrasi, penelusuran bahan baku, serta pencatatan keuangan sederhana dilakukan berdasarkan kebiasaan dan instruksi lisan, bukan berdasarkan prosedur tertulis, sehingga menimbulkan ketidakkonsistenan mutu produk, ketergantungan pada orang tertentu, dan kesulitan dalam mendelegasikan pekerjaan seiring berkembangnya usaha. Kegiatan pengabdian kepada masyarakat ini menjawab permasalahan tersebut melalui workshop penyusunan Standard Operating Procedure (SOP) sederhana yang sesuai dengan karakteristik produksi makanan dan minuman skala rumah tangga. Kegiatan dilaksanakan dalam empat tahap: identifikasi kebutuhan melalui survei dan wawancara dengan pelaku usaha serta perangkat desa; perencanaan internal dan penyiapan modul workshop beserta templat SOP sederhana; pelaksanaan workshop yang terdiri atas enam sesi berurutan yang memadukan penyampaian materi dengan praktik penyusunan; serta sesi evaluasi untuk menentukan kebutuhan tindak lanjut. Peserta terdiri atas pemilik usaha, pekerja, dan masyarakat umum. Hasil evaluasi menunjukkan perubahan persepsi peserta pada tiga hal: dari menganggap SOP tidak diperlukan pada skala kecil menjadi menyadari manfaat prosedur tertulis meskipun sederhana; dari mengabaikan detail proses menjadi memandang detail sebagai dasar penyusunan prosedur; serta dari keengganan menyerahkan proses produksi kepada pekerja baru menjadi lebih percaya diri dalam mendelegasikan pekerjaan selama prosedur tertulis dan supervisi tersedia. Dua kebutuhan tindak lanjut teridentifikasi, yaitu panduan teknis penentuan masa kedaluwarsa produk dan mekanisme pendokumentasian proses berbasis resep tanpa mengungkapkan formulasi yang dirahasiakan.

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A. INTRODUCTION

Micro, small and medium-sized enterprises (MSMEs) form the backbone of the Indonesian economy. In terms of the number of business units, MSMEs dominate the national business structure, and the vast majority of them are micro-enterprises. MSMEs also account for the majority of the workforce (Tambunan, 2019). Consequently, any effort to enhance the capacity of MSMEs, particularly micro-enterprises, has a direct impact on the welfare of the vast majority of economic actors in Indonesia. This situation makes the empowerment of micro-enterprises a strategic priority, both for the government and for universities through their community engagement activities.

The role of MSMEs is not limited to job creation, but also extends to poverty reduction. Nursini (2020) found empirical evidence that the development of MSMEs contributes to poverty reduction in Indonesia through the expansion of employment opportunities and



increased incomes for low-income communities. These findings confirm that strengthening micro-enterprises is a key instrument for inclusive economic development. This is particularly true in rural areas, where formal employment opportunities are generally limited.

Jatimulya Village, North Sumedang Sub-district, Sumedang Regency, West Java, is one such village with this potential. The community's main livelihood is farming, either as landowners or farm labourers. Some residents have set up their own businesses, generally involved in the production of snacks and locally processed foods on a household scale. Small-scale processed food businesses of this kind are commonplace in Indonesia. However, a number of studies indicate that the production processes are often not supported by adequate operational guidelines, meaning that product quality and safety are not guaranteed (Fitriana et al., 2020; Lestari et al., 2022).

Rural businesses generally face specific challenges. Siemens (2012) identified a number of constraints facing rural businesses: remote locations far from economic centres, an ageing population, limited key infrastructure, and difficulties in meeting demand due to the fragmentation of economic activities. In Indonesia, MSMEs also face capital constraints and marketing difficulties (Tambunan, 2019). These structural constraints are often the primary focus of empowerment programmes. Consequently, internal and operational constraints are frequently overlooked.

Among the various factors determining the development of MSMEs, human resource capacity plays a key role. Surya et al. (2021) demonstrate that government policy, capital support and the strengthening of human resource capacity simultaneously have a positive impact on the development of MSMEs. These findings suggest that capital assistance alone is insufficient without improving entrepreneurs' ability to manage their businesses. The capacity building referred to here encompasses the ability to manage production processes in an organised and measurable manner.

In addition to structural constraints, many small businesses face operational challenges stemming from limited management knowledge. Production, administration, tracking of raw materials, workflows and even financial record-keeping are often carried out based on habit and verbal instructions, rather than documented procedures. Operations management studies identify standardised processes as the foundation of quality and efficiency (Petropoulos et al., 2026). Studies on MSMEs in India also indicate that management practices in small businesses tend to be informal and poorly documented (Unnikrishnan et al., 2015). Consequently, this leads to inconsistencies in product quality, a reliance on specific individuals, and difficulties in scaling up the business.

The assumption that management practices are only relevant to large companies is not supported by empirical evidence. McKenzie and Woodruff (2017) developed measures of business practices in micro and small enterprises across seven developing countries, covering marketing, stock management, record-keeping and financial planning. They found that variations in business practices account for as much of the variation in sales, profits and productivity in micro-enterprises as they do in larger companies. Better business practices also predict higher survival rates and faster sales growth. Thus, improvements in working methods are in fact highly relevant to small-scale enterprises.

The question then is why these beneficial practices have not been adopted. Bloom et al. (2013) conducted a field experiment by providing management practice coaching to textile firms in India. The implementation of standardised management practices increased productivity through improvements in quality, efficiency and a reduction in stock levels. The previous low level of adoption was primarily due to information barriers, namely that business operators were unaware of the existence of these practices or did not realise their



benefits. These findings suggest that interventions based on education and guidance have a strong foundation for driving operational improvements.

From a knowledge management perspective, the challenge facing micro-enterprises lies in how knowledge is stored and passed on. Knowledge regarding how to manufacture products, ingredient measurements and work sequences is generally held only in the minds of the owner or specific workers. Durst and Edvardsson (2012) note that the identification, storage or retention, and utilisation of knowledge are the least understood topics in knowledge management research on MSMEs. More comprehensive follow-up studies emphasise the importance of knowledge management for the sustainability of MSMEs (Durst et al., 2023). Without codification, process knowledge is vulnerable to loss and difficult to transfer to new workers.

A Standard Operating Procedure (SOP) is a form of codified process knowledge, set out as written guidelines that explain how to carry out work correctly, consistently and safely. In the home-based food industry, production SOPs have been shown to help control process and quality deviations. Lestari et al. (2022) developed production SOPs based on Good Food Production Practices for the Home-Based Food Industry (CPPB-IRT) and Work Improvement in Small Enterprises (WISE) for the home-based snack food industry. They identified 31 process deviations and developed 33 documents, comprising work procedures, work instructions and forms, which were deemed suitable for implementation.

The importance of written work guidelines is also evident from another study on food SMEs in Indonesia. Fitriana et al. (2020) found that production problems at Betawi dodol SMEs stemmed from workers who were unfamiliar with the characteristics of their work equipment and had not received appropriate guidance on production processes. Workers were also unaware of the importance of hygiene in preventing product contamination. Once standards and good manufacturing practices were implemented, the level of *Escherichia coli* contamination in the products was successfully reduced. These findings confirm that the absence of work guidelines has a direct impact on product quality and safety, rather than being merely an administrative issue.

The success of implementing standards in food businesses is largely determined by the behaviour of the people who carry them out. Raharjo et al. (2023) demonstrate that the food safety culture in Indonesia's food industry is influenced by human behaviour; consequently, the implementation of standards cannot rely solely on documentation and equipment. In small food businesses, limitations in human, financial and technical resources also make it difficult to implement quality management systems designed for medium and large enterprises. Dzwolak (2014) shows that small food businesses are more successful in implementing elements of a food safety system when flowcharts, documented procedures and record-keeping are simplified. Therefore, the development of standard operating procedures (SOPs) for micro-enterprises should begin with a format that is concise, practical, easy to understand and directly involves business operators.

The principle of simplification also applies to training design. Drexler et al. (2014) compared standard accounting training with simplified training based on rules of thumb for micro-entrepreneurs. The simplified training significantly improved financial practices, the quality of reporting and business income, with a greater impact on entrepreneurs with low initial skills or practices. On the other hand, a review by McKenzie and Woodruff (2014) suggests that the impact of business training on business performance in developing countries tends to be limited. An experiment by de Mel et al. (2014) in Sri Lanka also found that training changed business practices but had no impact on the profits and sales of existing businesses. The implication is that training in the development of standard operating procedures (SOPs)



needs to be designed simply, produce concrete outcomes, and be accompanied by a plan for ongoing support.

Another challenge specific to the food industry is recipe confidentiality. For many food and drink business owners, recipes are key assets that are deliberately kept secret, meaning that owners may be reluctant to openly document their production processes. Kitching and Blackburn (1998) found that small business owners rely more on informal methods, such as maintaining the confidentiality of information, to protect their intellectual property. These methods are chosen because they are more familiar, less expensive, and are considered to be just as effective as formal protection. Therefore, when drawing up standard operating procedures (SOPs) for food businesses, it is necessary to consider how to document processes without compromising the confidentiality of formulations.

Based on the above, micro-enterprises in Jatimulya Village face primarily operational, rather than structural, challenges. The village's proximity to an industrial estate means that infrastructure and logistical constraints are relatively minor. Conversely, the majority of businesses have not yet implemented standard operating procedures (SOPs), resulting in inefficient production processes, disorganised administration, inconsistent product quality, and difficulties for owners in delegating tasks. Consequently, this community service initiative took the form of a workshop on drafting simple SOPs, using a 'learning by doing' approach. The aim was to enhance the operational competence of business owners, ensuring that each participant had written working guidelines that could be immediately applied in their day-to-day production activities.

B. METHODS

This community engagement activity was conducted in Jatimulya Village, Sumedang Utara District, Sumedang Regency, West Java Province, with rural micro-enterprises as the primary partners. The activity was designed as a participatory programme rather than a one-directional transfer of knowledge, on the consideration that a Standard Operating Procedure can only be applied if it is formulated by the business owners themselves in accordance with the processes they actually carry out. The whole series of activities was conducted over a year, with the workshop itself held on July 16th 2026 at Jatimulya's village meeting hall.

The first stage was the identification of needs. The team held discussion sessions with the community and conducted a survey and interviews with rural business owners in order to determine which aspects of their operations most required improvement. This stage also involved coordination with the village government, both to obtain permission and to help identify prospective participants. The findings of this stage indicated that the dominant problem was not capital or marketing, but the absence of written work procedures.

The second stage was internal planning. On the basis of these findings, the team held a discussion to determine the appropriate form of intervention and agreed that the activity would consist of a workshop combined with a facilitated discussion session. Preparation was then carried out, covering the finalisation of the workshop module, the preparation of a simple SOP template, the assignment of roles within the team, the arrangement of logistics, and the confirmation of participants through the village liaison.

The third stage was the implementation of the workshop, which was arranged into six sequential sessions: (1) an introduction to the concept and function of SOPs; (2) mapping of the business processes actually carried out by the participants; (3) arrangement of these processes into a flow process; (4) writing of the SOP using the provided template; (5) testing and revision of the draft SOP; and (6) evaluation and formulation of follow-up steps. Each



session combined a short delivery of material with hands-on practice, so that participants would leave the workshop holding a draft SOP for their own business.

The fourth stage was evaluation. Evaluation was carried out through observation during the practical sessions, a facilitated group discussion at the close of the workshop, and short questions concerning the participants' understanding and intentions before and after the activity. The results were used both to assess the immediate outcome of the workshop and to determine the follow-up activities considered necessary by the community.

C. RESULTS AND DISCUSSION

This community service initiative took place in three stages: a preliminary survey, a workshop on drafting standard operating procedures (SOPs), and an evaluation session. The workshop was held on 16 July 2026 at the Jatimulya Village hall and was attended by 40 participants, comprising business owners, workers and residents interested in starting a business. The majority of participants produce snacks and processed foods on a household scale, such as crackers, biscuits and other local snacks. The implementation of this community service programme comprised three sets of activities, namely a preliminary survey, the workshop itself, and an evaluation session:

1. Survey and interviews to identify the needs of the target community. These were carried out prior to the workshop and involved rural business owners as well as representatives of the village government. The interviews confirmed that most of the businesses operate on the basis of habit and oral instruction, and that the owners had never documented their production processes in written form.
2. A workshop attended by rural business owners, their workers, and members of the wider community. The workshop was facilitated by academics from Telkom University, who not only guided the participants in developing their own SOPs but also explained the role of SOPs in improving the consistency of product quality, the efficiency of the production process, and the readiness of the business to grow beyond its present dependence on the owner.
3. An evaluation session to determine subsequent activities. In this session the participants stated that their most pressing further need was guidance on determining the expiry date of their products, an issue directly related to the food and beverage character of most of the businesses in the village.

1.1. Community Engagement Activities

Surveys and interviews were conducted prior to the workshop, involving business owners and representatives of the village administration. The interviews revealed that almost all businesses operate based on tradition. Production methods are passed on orally from the business owner to family members or workers, and not a single business has documented its production process. Some owners admitted to facing difficulties when asking their children or nieces and nephews to assist with production, as the steps involved are 'only in their heads' and difficult to explain in a logical sequence. Business owners also described several recurring problems. When orders increase for example, in the run-up to the holiday season production becomes disorganised because it is unclear who is responsible for what and where to begin. The quality of the output is often inconsistent: products made by one family member differ from those made by another. Production time is also frequently wasted because materials have not been prepared in advance or certain steps have been overlooked.



Interestingly, issues relating to capital and marketing did not emerge as the main concerns. This is understandable given that Jatimulya Village is situated relatively close to industrial estates and the city centre, meaning that access to markets and raw materials does not pose a significant obstacle. This situation differs from the general picture of rural enterprises, which are often constrained by distance and infrastructure (Siemens, 2012). Consequently, the team decided that the most pressing need was to improve working practices through the development of written procedures. The workshop was attended by 40 participants representing rural businesses' owners, employee, and general society in Jatimulya Village, most of which produce local snacks and processed food and beverages on a household scale. At the opening of the session, the majority of participants stated that they had never used any written procedure, and several regarded such documentation as relevant only to larger firms.

The mapping and flow process sessions proved to be the turning point of the activity. When the participants were asked to describe their own production process step by step, many of them realised that several stages they had assumed to be self-evident were in fact carried out differently by each worker, particularly in weighing raw materials, determining cooking time, and packaging. This realisation made the need for written procedures concrete rather than theoretical, and it noticeably increased participation in the drafting session that followed.

Using the simple template provided, each participant drafted an SOP for one selected process in their own business. The drafts were then read out and reviewed together, so that unclear steps could be identified and revised on the spot. This testing and revision session showed that the participants were able to produce usable procedures once the format was kept short and expressed in everyday language rather than formal managerial terminology.

The change in the participants' understanding before and after the workshop is summarised in Table 1.

Table 1. Comparison Before and After SOP Training

No	Before Training	After Training
1	Does not consider the importance of having a standard operating procedure, since the scale is small, the rural businesses rely on direct training	Started to acknowledge the importance of having SOP, even though it is a simple one.
2	Did not pay attention on detailed processes	Understood the importance pay attention in details to build the SOP
3	Not confidence in passing the business process to new employee	Have more confidence in involving new employee to engage with production processes as long the SOPs are present along with supervision

As shown in Table 1, the most substantial change occurred at the level of perception. The participants moved from regarding an SOP as unnecessary at a small scale to recognising that even a simple written procedure is useful; from disregarding process detail to treating detail as the basis of a workable procedure; and from reluctance to hand production over to a new worker to a greater willingness to delegate, provided that a written procedure and supervision are in place. This last point is particularly significant, since dependence on



particular individuals is one of the operational constraints that most limits the growth of small businesses (Petropoulos et al., 2026; Unnikrishnan et al., 2015).

The first change relates to how participants view SOPs. At the start of the workshop, some participants believed that written procedures were only necessary for factories or large companies. This view is understandable, as their businesses had been running without any documentation up to that point. Following the workshop, participants began to see SOPs as a day-to-day tool, rather than a purely administrative matter. The findings of Bloom et al. (2013) provide a relevant explanation: beneficial management practices are often not implemented because business owners are unaware of their benefits, rather than because they are unable to implement them. McKenzie and Woodruff (2017) also demonstrate that good business practices are linked to the performance of micro-enterprises, just as they are in larger companies.

The second change concerns attention to detail. Before the workshop, participants were accustomed to working with approximations. After drafting and testing the SOPs, they realised that small differences such as the duration of sun-drying or the amount of salt could result in different products. Fitriana et al. (2020) reported a similar finding among Betawi dodol SMEs. There, workers who had not received proper guidance on the production process were the source of problems relating to product quality and hygiene. In other words, the details set out in the SOPs are directly linked to the quality of the products received by consumers.

The third change was the most significant for the sustainability of the business. Previously, the owner had been reluctant to delegate work to new staff for fear that the results would not meet standards. Having a draft SOP in place, owners stated they were more willing to involve others, provided there was still supervision during the initial stages. Reliance on a single person had previously limited production capacity, particularly when demand rose (Petropoulos et al., 2026; Unnikrishnan et al., 2015). Bloom et al. (2013) also noted that improvements in management practices and the flow of information made business owners more willing to delegate decision-making. Although the scale of the businesses differed significantly, the same pattern was evident in the home-based businesses in Jatimulya.

It should be noted that the changes shown in Table 1 are still at the level of understanding and intention. The evaluation was carried out on the same day, so it is not yet possible to determine whether the SOPs are actually being used in day-to-day production. The literature on business training evaluation highlights that changes in practice following training do not necessarily translate into improvements in business performance (de Mel et al., 2014; McKenzie & Woodruff, 2014). Therefore, the results of this activity are best viewed as a first step.

1.2 Conducting a Workshop on the Development of Standard Operating Procedures

The workshop was structured around a 'learning by doing' approach: participants learnt whilst directly drafting SOPs for their own businesses. The material was briefly presented in each session, after which participants immediately put it into practice. In the first session, the facilitator explained the concept of SOPs using the analogy of a recipe. Participants were asked to compare two ways of writing a cake recipe. The first method reads: "take about 10 spoonfuls of flour, add eggs and margarine as required, then bake until cooked". The second method specifies clear measurements, a temperature of 180°C, and a baking time of 30 minutes. This simple comparison proved easier for participants to grasp than a definition-based explanation. Some participants immediately realised that the phrases 'as needed' and 'approximately', which they usually used, were in fact the source of variations in production outcomes.



The second and third sessions were the liveliest parts. Participants were asked to write down all the tasks they carried out from the morning until the product was finished, then organise them into a workflow using simple symbols: an oval for start and finish, a square for work steps, a diamond for decisions such as quality checks, and arrows for the sequence. When breaking down the process step by step, many participants realised for the first time that stages which had previously been considered self-evident were, in fact, carried out differently by each person. Differences most frequently arose regarding the weighing of ingredients, determining the duration of cooking or sun-drying, and packaging methods. One participant, for example, mentioned that she usually sun-dried the crackers 'until dry', whilst her child would take them off the line sooner, as what constitutes 'dry' varies from person to person. This situation illustrates the problem of knowledge that is embedded within individuals and has never been codified. Durst and Edvardsson (2012) note that the storage and retention of knowledge are among the least managed aspects in small businesses. In Jatimulya, knowledge of the production process relied entirely on the owner's memory. Once participants saw for themselves the differences in working practices within their own businesses, the need for written procedures no longer felt like an external theory, and participation in subsequent sessions increased.

In the fourth session, participants drafted an SOP using a one-page template containing the name of the SOP, the business name, the author, the date, a list of ingredients, a list of equipment, and numbered work steps along with their estimated durations. As an example, the facilitator demonstrated an SOP for the production of cassava crackers comprising eight steps. The steps began with peeling and washing 2 kg of cassava for 10 minutes, followed by grating, squeezing out the liquid, mixing in the seasoning, and slicing the dough to a thickness of approximately 2 mm. The dough was then left to dry in the sun for at least four hours, deep-fried in oil at 180°C, and drained before being packaged. Participants were reminded to describe each action in a single sentence, use active verbs, and specify precise measurements. The majority of participants were able to complete a draft SOP for one key process in their business. This ability stemmed from the short format and the use of everyday language. This finding is consistent with that of Drexler et al. (2014), who found that simplified training materials were easier for micro-entrepreneurs to implement than standard, more technical materials. Dzwolak (2014) also demonstrated that small food businesses are more successful in implementing quality systems when their flowcharts and procedural documents are kept concise. Lestari et al. (2022) developed 33 CPPB-IRT-based SOP documents for a home-based snack food industry. Compared to that approach, the one-page-per-process SOPs used in this initiative are indeed far simpler. However, for businesses that previously had no documentation at all, a concise format provides a more realistic starting point before transitioning to a more comprehensive documentation system.

The fifth session took the form of a trial run. Each participant exchanged their draft SOP with the participant sitting next to them. Participants who received an SOP were asked to understand the other person's work process solely from the written document, and then to answer three questions: whether all the steps were clear, whether there were any confusing terms, and whether any steps seemed to be missing. This session revealed quite a few shortcomings, such as spice measurements not being specified, steps for preparing equipment being omitted, and local terms that only the author understood. Participants then revised their drafts on the spot. For the team, this session was important because it allowed participants to see first-hand that a good SOP is one that others can follow without needing further explanation.



1.3 Future Planning and Follow-up Activities

Most of the participants expressed an interest in applying SOPs in their businesses, particularly after recognising their potential for improving the efficiency of the production process. Two matters nevertheless emerged during the evaluation session which need to be addressed in subsequent activities.

The first concerns the confidentiality of recipes. Since most of the partner businesses produce food and beverages, in which the original recipe is regarded as the principal asset of the business and is deliberately kept secret, the owners were reluctant to write their formulations down plainly and to display them during the workshop. This reluctance is reasonable and should not be treated as resistance to the programme. A follow-up activity may therefore introduce a modular structure of documentation, in which the sequence of work, the timing, the equipment used, and the quality-control criteria are written into an operational SOP that any worker may read, while the exact composition of the formulation is kept in a separate restricted annex held only by the owner. In this way the benefits of standardisation may be obtained without compromising the confidentiality that the owners consider essential to their business.

The second concerns product shelf life. The participants explicitly requested guidance on determining the expiry date of their products, a requirement related both to consumer safety and to the ability of the businesses to enter wider markets and to obtain product certification. This need lies beyond the scope of the present workshop and is therefore proposed as the theme of the next community service activity, which may combine the basic principles of shelf-life estimation with practice in simple product labelling.

In addition, follow-up assistance in the form of periodic mentoring is planned, so that the SOP drafts produced during the workshop are genuinely applied, reviewed, and revised in accordance with the actual conditions of each business.

D. CONCLUSION

This community service activity was aimed at addressing the operational problem faced by rural businesses in Jatimulya Village, namely the absence of written work procedures, which led to inconsistent product quality, dependence on particular individuals, and difficulty in delegating work. Through a workshop on the development of simple SOPs, the participants were guided from mapping their own production processes to drafting, testing, and revising a procedure for their own business.

The activity produced a change of perception together with an initial capability. Participants who had previously considered SOPs relevant only to large firms came to recognise the value of even a simple written procedure, gave closer attention to process detail, and expressed greater confidence in involving new workers in production provided that a procedure and supervision are in place. Each participating business also left the workshop holding a draft SOP that can be applied immediately in its daily activities.

The activity nevertheless has limitations. The evaluation was carried out immediately after the workshop, so that it measured changes in understanding and intention rather than the sustained application of the SOPs in practice. The number of participating businesses was also limited and cannot be taken to represent all rural businesses in the region. It is therefore recommended that subsequent activities include periodic mentoring to observe the actual implementation of the procedures, a modular documentation format that separates operational steps from confidential formulations, and training on the determination of product shelf life as requested by the partners.



E. ACKNOWLEDGEMENTS

The authors would like to thank Telkom University for the grant that made this community service activity possible. Appreciation is also extended to the rural business community of Jatimulya Village and to the village government for granting permission, providing important information, and supporting the implementation of the activity.

F. AUTHOR CONTRIBUTIONS

Galuh Sudarawerti (GS); Anton Mulyono Azis (AMA); Sutarman (S); Fanji Farman (FF).

Activity implementation: GS, AMA, FF; Pre-workshop survey, discussion, and liaison with the village government and community: FF; Material delivery (speakers): GS, AMA; Supervision: AMA, S; Impact analysis: GS, AMA; Article preparation: GS; Article revision: AMA, S.

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