

Empowering pesantren fish-processing MSMEs through packaging, management, and business-legality mentoring

Masruhin^{1*}, Moch. Iqbal Satria Pratama², Kharisma Firdaus³

^{1,2,3} Universitas Sunan Gresik, Gresik, East Java, Indonesia

*Corresponding author: masruhin@lecturer.usg.ac.id

Submitted	Revised	Accepted
28 July 2026	8 September 2026	8 September 2026

Abstract

Islamic boarding schools (pesantren) can strengthen local economic resilience through productive micro, small, and medium enterprises (MSMEs); however, their sustainability depends on product quality, sound management, legal compliance, and market readiness. This community service program aimed to identify priority constraints and provide practical mentoring for an alumni-managed fish-processing business unit at MBI Mambaul Falah Islamic Boarding School, Bawean Island, Indonesia. The program adopted a Participatory Action Research (PAR)-oriented approach involving collaborative problem identification, action planning, mentoring, observation, and reflection. The documented beneficiary was one alumni-managed business unit producing bonggolan and fish balls; the available program records did not specify the exact number of individual participants or implementation dates. Baseline observations and partner interviews identified the use of simple, unlabeled airtight packaging, reported spoilage during some off-island shipments, limited formal business-management practices, and incomplete business-legality readiness. The mentoring activities focused on problem mapping, business-management guidance, packaging and labeling recommendations, and preparation for Business Identification Number registration. The available documentation did not confirm issuance of the Business Identification Number, completion of food-production certification, halal certification, quantified packaging performance, sales growth, or pretest-posttest competency outcomes. Accordingly, the results are presented as documented service outputs rather than as evidence of causal improvement in economic independence. The mentoring clarified priority actions related to safer packaging, formal record keeping, business legality, and future digital marketing, while also highlighting the pesantren's alumni-based business-management model. The program provides a feasible foundation for MSME strengthening; however, measurable follow-up indicators are required to determine subsequent changes in product loss, market reach, revenue, legal status, and institutional economic contribution.

Keywords: pesantren MSME; fish processing; packaging; business legality; community empowerment

Abstrak

Pondok pesantren dapat memperkuat ketahanan ekonomi lokal melalui pengembangan usaha mikro, kecil, dan menengah produktif, namun keberlanjutan usaha sangat dipengaruhi oleh mutu produk, tata kelola, legalitas, dan kesiapan pasar. Program pengabdian kepada masyarakat ini bertujuan mengidentifikasi kendala prioritas serta memberikan pendampingan

praktis pada satu unit usaha pengolahan ikan yang dikelola alumni Pondok Pesantren MBI Mambaul Falah, Pulau Bawean, Indonesia. Kegiatan menggunakan pendekatan berorientasi Participatory Action Research melalui identifikasi masalah bersama, perencanaan tindakan, pendampingan, observasi, dan refleksi. Penerima manfaat yang terdokumentasi adalah satu unit usaha alumni yang memproduksi bonggolan dan bakso ikan; jumlah peserta individu dan tanggal pelaksanaan tidak tercantum dalam laporan sumber. Observasi awal dan wawancara mitra menemukan penggunaan kemasan plastik kedap udara sederhana tanpa label, laporan pembusukan pada sebagian pengiriman luar pulau, praktik manajemen usaha yang belum formal, serta kesiapan legalitas yang belum lengkap. Pendampingan yang terdokumentasi berfokus pada pemetaan masalah, penguatan manajemen usaha, rekomendasi kemasan dan pelabelan, serta persiapan pengurusan Nomor Induk Berusaha. Laporan sumber tidak mendokumentasikan penerbitan NIB, penyelesaian sertifikasi pangan rumah tangga, sertifikasi halal, kinerja kemasan terukur, pertumbuhan penjualan, maupun hasil kompetensi pretest-posttest. Oleh karena itu, hasil dilaporkan sebagai luaran layanan yang terdokumentasi, bukan sebagai bukti kausal peningkatan kemandirian ekonomi. Pendampingan menghasilkan prioritas tindak lanjut pada pengemasan, pencatatan usaha, legalitas, dan pemasaran digital, serta menegaskan potensi model pengelolaan usaha berbasis alumni. Evaluasi lanjutan diperlukan dengan indikator kerusakan produk, jangkauan pasar, pendapatan, status legalitas, dan kontribusi ekonomi kelembagaan.

Kata kunci: UMKM pesantren; pengolahan ikan; kemasan; legalitas usaha; pemberdayaan masyarakat

INTRODUCTION

Pesantren increasingly function not only as religious education institutions but also as local economic actors through cooperatives, production units, entrepreneurship programs, and alumni-based enterprises. Recent Indonesian studies indicate that leadership, institutional business units, entrepreneurship, and community integration are important determinants of pesantren economic resilience and self-reliance (Adamin et al., 2025; Hakim et al., 2025; Kusuma Wisudawan et al., 2025; Muiz et al., 2025). These findings are particularly relevant to community-service initiatives because the sustainability of pesantren enterprises depends on the ability to convert social capital, alumni networks, and local resources into professionally managed and market-ready businesses.

MBI Mambaul Falah Islamic Boarding School on Bawean Island has developed an alumni-entrepreneurship model in which graduates are encouraged to manage business activities aligned with their educational backgrounds. Program documentation identifies a fish-processing enterprise managed by fisheries alumni and also notes broiler and greenhouse activities associated with alumni from animal-husbandry and agricultural fields. For the fish-processing unit, the available baseline information is primarily qualitative rather than financial. The business produces bonggolan and fish balls, uses simple airtight plastic packaging without visual product labels, and, according to the business manager, has experienced spoilage during some off-island shipments. Production volume, shipment frequency, spoilage rates, sales, profit, and monetary losses were not documented; therefore, these indicators are not estimated in this article.

Packaging and business management are important priorities for food MSMEs because packaging affects product protection, information provision, brand identity, logistics, and market presentation. Community-service studies in Indonesia have shown that packaging and labeling mentoring can strengthen MSME readiness for wider marketing, particularly when combined with digital branding and sustained assistance (Relawati et al., 2021; Sukmasetya et al., 2021; Nasrulloh et al., 2022). Similarly, business-management mentoring that combines simple bookkeeping with digital promotion can strengthen MSME operational capacity (Farida et al., 2022; Yuliani et al., 2022). Collectively, these studies also suggest that one-off training is rarely sufficient because effective implementation requires continued mentoring and routine application.

Business legality is another important enabling factor for food MSMEs. In Indonesia, a Business Identification Number (Nomor Induk Berusaha, NIB) provides a basic legal identity for business actors under the risk-based licensing system, while food-production and halal requirements vary according to product category and applicable regulations. Recent studies indicate that halal-certification assistance can help MSMEs navigate administrative procedures and that certification may be associated with improved operational or market performance; however, certification alone does not establish economic independence (Fatchurrohman & Nuha, 2022; Giyanti & Indriastiningsih, 2019; Sadiyah & Erawati, 2024; Akbar & Rohman, 2023; Nur Azizah et al., 2025). Legal readiness should therefore be viewed as one component of a broader business-development pathway.

Digital marketing represents a further opportunity once the foundations of product quality, packaging, management, and legality have been sufficiently strengthened. Indonesian community-empowerment programs have reported improvements in MSME digital-marketing knowledge, social-media use, branding, marketplace access, and promotional reach following structured training and mentoring (Widiyanto et al., 2022; Yuliani et al., 2022; Mirani et al., 2022; Himarosa et al., 2022; Saragih & Ulum, 2022). In the present program, however, digital marketing was documented primarily as a recommended next step rather than as a completed intervention outcome.

Based on the documented needs assessment, the priority problem was defined as limited business readiness in packaging, formal management, and legal preparation within the alumni-managed fish-processing MSME. The program therefore aimed to identify these priority constraints and provide practical mentoring to support subsequent standardization and market development. The program did not measure sales, profit, market expansion, institutional income, or reduced dependence on external financing; consequently, it does not claim to have increased economic independence.

METHODS

The program employed a Participatory Action Research (PAR)-oriented community-service approach. The documented process comprised partner engagement, collaborative problem identification, action planning, mentoring, observation, and reflection. Because the available

records do not specify the number or dates of complete PAR cycles, no cycle count is reconstructed. The method therefore reports only intervention components that were explicitly documented.

The program was conducted with the MBI Mambaul Falah Islamic Boarding School community on Bawean Island, Gresik Regency, East Java, Indonesia. The directly documented beneficiary was one alumni-managed fish-processing business unit producing bonggolan and fish balls. Pesantren administrators and alumni were also involved as partners within the broader business ecosystem. The available records did not document the total number, age, sex, or other detailed characteristics of individual participants.

Baseline information was obtained through field observation and discussions with the business manager and pesantren representatives. The assessment focused on product type, packaging practices, distribution experience, business management, and legal readiness. Documented concerns included the use of simple airtight plastic packaging without product labels, reported spoilage during some off-island shipments, informal or insufficiently formalized business-management practices, and the need to strengthen business legality. Production volume, the frequency of spoiled shipments, financial losses, market-reach indicators, and baseline sales data were not available.

The documented intervention included discussions of product-processing and packaging problems, guidance on packaging and labeling improvement, recommendations for business management and governance, and assistance related to NIB registration through the Online Single Submission system. The program also identified PIRT or equivalent food-production licensing, halal certification, digital marketing, and product standardization as subsequent development priorities. Because completion of these processes was not documented, they are reported as follow-up priorities rather than completed outputs.

The primary documented outputs were completion of the partner needs assessment, identification of priority business constraints, delivery of business-management and packaging guidance, and initiation or preparation of business-legality assistance. The available documentation did not include predefined quantitative success targets, pretest-posttest scores, objective packaging-performance tests, sales or profit changes, product shelf-life testing, organoleptic testing, or confirmation of NIB issuance. These missing indicators are treated as evaluation limitations rather than estimated retrospectively.

Qualitative findings were summarized descriptively across five domains: product and packaging, business management, legality, marketing, and institutional governance. No inferential statistical analysis was performed because participant-level quantitative data were not available. Reports of product spoilage are therefore presented as partner-reported observations rather than quantified rates.

Program documentation indicates institutional collaboration with the pesantren but does not provide a formal ethics-approval number, an institutional-permission identifier, or a documented participant-consent procedure. No identifiable participant photographs are included in this copy. Before final publication, the authors should ensure that all applicable

journal requirements regarding institutional permission and consent have been fulfilled and appropriately reported.

Program sustainability depends on partner ownership of subsequent development steps, including formal bookkeeping, packaging standardization, completion of business-legality requirements, food-safety compliance, halal certification where applicable, and gradual adoption of digital marketing. The alumni-based governance model offers a potential mechanism for continuity because the business units are managed by graduates whose educational backgrounds are aligned with the relevant business sectors.

RESULTS

The results summarize documented observations and completed mentoring outputs while distinguishing them from recommended follow-up actions. The available evidence is qualitative and reflects one alumni-managed business unit rather than a quantitative pretest-posttest evaluation.

Table 1. Documented baseline findings, program status, and follow-up priorities

Domain	Documented finding/output	Operational follow-up
Product	Bonggolan and fish balls were produced by the alumni-managed unit.	Maintain product focus while strengthening process and quality documentation.
Packaging	Simple airtight plastic packaging was used without a visual product label.	Improve protective packaging, labeling, and product-information completeness.
Distribution	The manager reported that some products spoiled during shipments outside the region; frequency and financial loss were not recorded.	Document shipment duration, damage rate, temperature/handling conditions, and product loss.
Business management	The business was managed separately from the pesantren's academic/spiritual administration and operated by alumni; detailed bookkeeping indicators were not reported.	Formalize roles, routine records, cost calculation, and performance monitoring.
Business legality	Guidance/preparation for NIB registration was documented; actual issuance was not confirmed in the source report.	Complete NIB status and proceed with applicable food-production and halal requirements.
Digital marketing	Digital marketing was discussed as a development need, not as a completed measurable program outcome.	Implement after core product, packaging, and legality readiness is strengthened.

Domain	Documented finding/output	Operational follow-up
Institutional model	Pesantren support for alumni entrepreneurship was documented across fisheries, broiler, and greenhouse activities.	Use alumni expertise as local champions for enterprise continuity and cross-unit learning.

Packaging was the most immediate problem identified in the fish-processing unit. Products were packed in simple airtight plastic without visual labels. The business manager reported that products shipped outside the region did not always arrive in acceptable condition and that spoilage occurred in some shipments. Because no shipment logs, destination-specific failure rates, transport-duration records, or financial-loss data were available, these observations are not converted into percentages or monetary estimates.

Business-legality mentoring was another documented program output. The team provided guidance on obtaining an NIB through the Online Single Submission system and explained the relevance of subsequent food-production and halal requirements. However, the available records do not confirm issuance of an NIB, PIRT or equivalent food-production authorization, or a halal certificate during the program. The result is therefore reported as guidance and preparatory assistance rather than as completed legalization.

The program documentation also describes an alumni-based governance model. The fish-processing business is managed by fisheries alumni, while other pesantren enterprises include broiler activities associated with animal-husbandry alumni and greenhouse activities associated with agricultural graduates. This arrangement suggests an existing mechanism for aligning alumni expertise with productive activities, although comparative performance data across business units were not available.

DISCUSSION

The principal contribution of this community-service program lies in clarifying a practical development pathway for an alumni-managed pesantren food MSME. Rather than demonstrating economic independence, the documented findings identify foundational constraints that should be addressed before stronger market and financial outcomes can reasonably be expected. This interpretation is consistent with recent pesantren literature indicating that business units, leadership, entrepreneurship, community participation, and institutional governance contribute to economic resilience, while self-reliance remains a multidimensional outcome that requires sustained organizational capacity (Adamin et al., 2025; Hakim et al., 2025; Kusuma Wisudawan et al., 2025; Muiz et al., 2025).

Packaging emerged as the clearest product-level constraint. In food MSMEs, packaging performs protective, informational, and marketing functions simultaneously. Community-service programs in Indonesia have reported that packaging and labeling assistance can strengthen product presentation and readiness for digital marketing, although implementation often requires continued support and access to suitable suppliers (Relawati et al., 2021; Sukmasetya et al., 2021; Nasrulloh et al., 2022). For the MBI Mambaul Falah business unit, the

reported spoilage during some off-island shipments indicates that packaging should be evaluated not only for visual presentation but also for logistics performance and product stability. Future mentoring should therefore document product shelf life, transport conditions, packaging integrity, damage frequency, and handling procedures.

Improving business management is equally important because market expansion without basic records can obscure whether growth actually improves financial performance. Farida et al. (2022) showed that mentoring in simple bookkeeping and social-media marketing can generate concrete operational outputs in a food MSME, while Yuliani et al. (2022) reported that branding, marketplace access, and financial-reporting awareness can be developed through structured socialization, training, and mentoring. In the present program, management weaknesses were identified but were not measured using a baseline-postintervention rubric. The next practical step is therefore to introduce a minimal management dashboard covering production costs, sales, product losses, inventory, cash flow, and monthly profit.

Business legality should be interpreted as an enabling condition rather than as a direct indicator of economic independence. NIB registration provides a basic legal identity, while applicable food-production and halal requirements may strengthen regulatory readiness and consumer confidence. Studies of Indonesian MSMEs suggest that halal-certification assistance can reduce administrative barriers and that certification may be associated with operational or financial performance (Fatchurrohman & Nuha, 2022; Giyanti & Indriastiningsih, 2019; Akbar & Rohman, 2023; Sadiyah & Erawati, 2024; Nur Azizah et al., 2025). Nevertheless, because the present program did not document completed certification or subsequent sales changes, legality is discussed as a strategic preparation pathway rather than as evidence of increased income.

Digital marketing is likewise more appropriately positioned as a subsequent development phase than as a completed result. Several Indonesian empowerment programs report that targeted mentoring can improve digital-marketing knowledge, establish social-media or marketplace accounts, and expand promotional activities (Widiyanto et al., 2022; Mirani et al., 2022; Himarosa et al., 2022; Saragih & Ulum, 2022). Those programs, however, generally report specific implementation outputs. Because digital marketing appears mainly as a recommendation in the present documentation, this article does not claim that digital-market adoption occurred.

The alumni-based governance model represents a notable institutional asset. Aligning business activities with alumni educational backgrounds may strengthen ownership, technical relevance, and continuity. This observation is consistent with recent work emphasizing entrepreneurship incubation, santri empowerment, and community integration as mechanisms for pesantren economic development (Hakim et al., 2025; Kusuma Wisudawan et al., 2025). Nevertheless, the contribution of this model should be evaluated using measurable indicators such as business survival, employment, revenue contribution, reinvestment, and the number of alumni enterprises sustained over time.

The principal limitation of the program report is the absence of quantitative baseline and follow-up indicators. The number of individual participants, implementation dates, shipment-loss records, sales and profit data, NIB completion status, packaging performance, and formal competency outcomes were not documented. Consequently, the strongest defensible conclusion is that the program identified priority business constraints and delivered preparatory mentoring. Future implementation cycles should establish measurable targets in advance, including reductions in spoilage, packaging compliance, completion of legality milestones, bookkeeping adoption, digital-marketing activity, market reach, revenue, and institutional contribution.

From a sustainability perspective, a staged development strategy appears most feasible. The first stage should stabilize product quality, packaging, and business records; the second should complete legal and food-safety requirements; the third should strengthen branding and digital marketing; and the fourth should evaluate financial and institutional contributions. This sequence would enable the pesantren to translate its existing alumni network and sector-specific expertise into a more accountable business-development system while avoiding unsupported claims of economic independence.

CONCLUSION

The program identified packaging, business management, and legal readiness as the principal documented constraints of the alumni-managed fish-processing MSME at MBI Mambaul Falah Islamic Boarding School. The business produced bonggolan and fish balls using simple unlabeled airtight packaging, and the manager reported spoilage during some off-island shipments. The community-service team conducted problem mapping, provided management and packaging guidance, and supported preparation for NIB registration, while food-production licensing, halal certification, packaging standardization, and digital marketing remained follow-up priorities. Because participant-level outcomes, confirmed legal-compliance milestones, sales growth, product-loss rates, and institutional revenue data were not available, the program cannot yet be interpreted as evidence of increased economic independence. Its main contribution is the establishment of a practical strengthening pathway that should be evaluated using measurable operational and financial indicators in subsequent mentoring cycles.

RECOMMENDATIONS

Within the next 1-3 months, the business manager and pesantren should document the status of NIB registration, establish routine production and financial records, and create a shipment-loss log. Within 3-6 months, the partner should test and standardize packaging, complete applicable food-production and halal requirements, and develop compliant product labels. Digital marketing should be introduced once these foundations are in place. The university community-service team should then conduct follow-up evaluation using measurable indicators of spoilage, packaging compliance, bookkeeping adoption, market reach, sales, profit, and institutional contribution.

ACKNOWLEDGEMENTS

The authors thank MBI Mambaul Falah Islamic Boarding School on Bawean Island and its management, particularly Kyai Ali Subhan, M.Ap., for supporting the community-service activities and for sharing information regarding the pesantren's alumni-based business-development initiatives.

REFERENCES

- Adamin, M., Firdaus, A., & Ali, Z. M. (2025). Determinants of successful economic independence in pesantren: SEM analysis. *The Economic Review of Pesantren*, 3(2). <https://doi.org/10.58968/erp.v3i2.550>
- Akbar, G. R., & Rohman, I. K. (2023). Analysis of the impact of halal certificate on the performance of micro and small enterprises with the propensity score matching method. *Journal of Strategic and Global Studies*, 6(1). <https://doi.org/10.7454/jsgs.v6i1.1108>
- Farida, F., Irmaliya, F., Hapsari, Y. A., Arumsari, N., Hidayatullah, D. S., & Maesaroh, M. (2022). Business management training for MSMEs GRD Frozen Food. *Community Empowerment*, 7(3), 598-601. <https://doi.org/10.31603/ce.5625>
- Fatchurrohman, M., & Nuha, M. U. (2022). Optimization of halal product process companions in accelerating halal certification in Indonesian MSME products. *Indonesia Journal of Halal*, 5(2), 150-156. <https://doi.org/10.14710/halal.v5i2.16229>
- Giyanti, I., & Indriastiningsih, E. (2019). Impact of halal certification on the performance of food small medium enterprises. *Jurnal Ilmiah Teknik Industri*, 18(2). <https://doi.org/10.23917/jiti.v18i2.7242>
- Hakim, L., Zikrifah, A., Rahma Melati, T., Tresnawati, D., Karti, K., & Kresnapatty, D. (2025). The role of pesantren in economic empowerment of the ummah: A qualitative descriptive study in Indonesia. *El-Kahfi Journal of Islamic Economics*, 6(1), 108-120. <https://doi.org/10.58958/elkahfi.v6i01.473>
- Himarosa, R. A., Rahman, M. B. N., Nuryani, R., & Sofyantoro, F. (2022). Developing digital platform to increase the sales of MSME in Kalakijo, Bantul, Yogyakarta. *Community Empowerment*, 7(9), 1639-1645. <https://doi.org/10.31603/ce.7163>
- Kusuma Wisudawan, A., Khairullah, & Rosidi. (2025). Entrepreneurial empowerment of santri: A systematic literature review on economic self-reliance in pesantren. *Ijtima'iyya: Jurnal Pengembangan Masyarakat Islam*, 18(2), 301-312. <https://doi.org/10.24042/ijpmi.v18i2.23816>
- Mirani, D., Aryansah, J. E., Musdalifah, F. S., Abror, M. Y., & Murti, K. (2022). MSMEs' go digital assistance as an effort to support MSMEs' upgrading program in Banyuasin Regency. *Community Empowerment*, 7(4), 650-659. <https://doi.org/10.31603/ce.6266>

- Muiz, A., Aini, S. Q., & Noh, M. S. B. M. (2025). Advancing sustainable economic empowerment in pesantren by community-based development theory. *IQTISHODUNA: Jurnal Ekonomi Islam*, 14(1), 357-368. <https://doi.org/10.54471/iqtishoduna.v14i1.1803>
- Nasrulloh, N., Pramono, A., & Amar, M. I. (2022). Program pengembangan kewirausahaan melalui strategi pelatihan pengemasan dan pelabelan pangan bagi UKM di Kelurahan Gandul Depok. *LOGISTA - Jurnal Ilmiah Pengabdian kepada Masyarakat*, 6(1), 176-180. <https://doi.org/10.25077/logista.6.1.176-180.2022>
- Nur Azizah, S., Koeswinarno, K., Nur Salam, A., Ansyah, R. H. A., Kustini, K., Atieqoh, S., & Fakhruddin, M. (2025). Linking halal certificate and micro, small and medium enterprises (MSMEs) performance in Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, 18(6), 1271-1290. <https://doi.org/10.1108/IMEFM-12-2023-0463>
- Relawati, R., Ariadi, B. Y., & Tain, A. (2021). Eco-friendly packaging training for women farmers group to support digital marketing in Tawangargo Village, Malang Regency. *Community Empowerment*, 6(5), 849-855. <https://doi.org/10.31603/ce.4531>
- Sadiyah, S., & Erawati, E. (2024). Effectiveness of halal traceability and self-declared certification on Indonesian MSMEs performance. *Indonesian Journal of Islamic Economic Law*, 1(2). <https://doi.org/10.23917/ijael.v1i2.4816>
- Saragih, S. E., & Ulum, M. B. (2022). Empowering society during COVID-19 outbreaks: Digital marketing optimization for MSMEs and human rights perspective. *Indonesian Journal of Advocacy and Legal Services*, 4(1). <https://doi.org/10.15294/ijals.v4i1.54419>
- Sukmasetya, P., Rochiyanto, A., Hidayat, C. N., Nafiah, A., & Sari, N. I. (2021). Implementasi digital branding sebagai upaya peningkatan mutu produksi industri kreatif rumah tangga. *Community Empowerment*, 6(3), 336-342. <https://doi.org/10.31603/ce.3793>
- Widiyanto, A., Sulastiyono, R., Santoso, W., Abdilah, S., Rizki, M. F., & Perayoga, R. (2022). Empowering MSMEs in Dlinggo Hamlet through digital marketing as a means of promotion. *Community Empowerment*, 7(6), 988-993. <https://doi.org/10.31603/ce.6695>
- Yani, N. W. M. S. A., Aditya, I. W. P., Pambudi, B., Wirawan, P. E., & Dewi, N. L. P. A. D. S. (2022). Local culinary marketing training through virtual Wonderfood Sayan Village. *Community Empowerment*, 7(4), 613-619. <https://doi.org/10.31603/ce.6940>
- Yuliani, N. L., Efendi, M. R., Sanjaya, O., Fuadi, M. I., Faisal, A., & Rainaldy, A. (2022). Development of digital marketing models for MSMEs to improve the community's economy. *Community Empowerment*, 7(4), 731-736. <https://doi.org/10.31603/ce.5587>
- Badan Pusat Statistik. (2025). Statistik Indonesia 2025. BPS-Statistics Indonesia.
- Government of Indonesia. (2014). Law No. 33 of 2014 concerning halal product assurance.
- Government of Indonesia. (2018). Food and Drug Authority Regulation No. 22 of 2018 concerning guidelines for home-industry food production certification.

Government of Indonesia. (2021). Government Regulation No. 5 of 2021 concerning risk-based business licensing.

Government of Indonesia. (2021). Government Regulation No. 39 of 2021 concerning the implementation of halal product assurance.

