

## Developing Halal Human Capital for Sustainable MSME Ecosystems: Participatory Action Research in an Indonesian Toll Road Rest Area

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### ABSTRACT

*Halal Product Processing (P3H) certification mentoring is a community service activity aimed at helping P3H training participants obtain halal certification in halal human resource competencies. The research was conducted by mentoring halal human resource participants around the KM 72A Rest Area. The method of this activity is PAR (Participatory Action Research) to be able to answer partner problems directly through a combination of knowledge transfer, field practice and ongoing coaching. Mentoring is carried out by training P3H participants by providing pre- and post-tests, as well as creating SiHalal accounts and of course uploading documents to the application. Conducting simulations in conducting halal verification and validation for assisted MSMEs. Training is carried out until P3H participants are eligible to receive certificates. The result of this service is the certification of P3H training participants, which is expected to provide added value for participants and the community around the KM 72A Rest Area and of course, public or buyer confidence in the sustainability of the halal zone at the KM 72A Rest Area.*

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## INTRODUCTION

The development of the halal industry in Indonesia has shown significant growth over the past decade. As the country with the largest Muslim population in the world, Indonesia has significant potential to become a global hub for the halal industry. The government, through the National Committee for Sharia Economics and Finance (KNEKS), has designated strengthening the halal ecosystem as a national strategic agenda. One of the main pillars of this ecosystem is the development of Halal Human Resources (HR), who possess the knowledge, skills, and integrity to apply halal principles across various industrial sectors. However, the reality on the ground shows that halal literacy among the public, particularly in the Micro, Small, and Medium Enterprises (MSMEs), remains relatively low. Many business

actors do not yet understand the basic concepts of product halal certification, the halal supply chain, or the stages of halal certification according to the regulations of the Halal Product Assurance Agency (BPJPH). This situation has resulted in low levels of compliance with halal standards, even though the MSME sector is the spearhead of national economic growth and the main face of the halal industry in Indonesia. From an economic perspective, MSMEs have significant potential for economic development, but this potential still faces fundamental challenges in increasing competitiveness and expanding market access (Sari et al., 2025). Furthermore, understanding Supply Chain Management (SCM) is crucial, such as determining the right value chain from upstream to downstream, ensuring timely product movement to consumers (Susanti & Darmawan, 2024).

The selection of this community service subject is based on the urgent need to improve halal understanding and literacy among P3Hs and tenants as business actors, considering the mandatory halal certification regulations that will be fully implemented in 2026 (Fajar Julian Azhari et al., 2025). This halal certification acceleration program for MSMEs in Indonesia serves as a reminder of the need for active participation by P3Hs under the LP3H institution spread throughout Indonesia (Anisa et al., 2024). One strategic point that reflects the economic activity of halal-based MSMEs is the rest area on the toll road, which functions not only as a place to rest, but also as a center for culinary activities and promotion of local products. Rest Area Kilometer 72 of the Purbaleunyi Toll Road towards Bandung is one of the locations with high economic activity, involving various culinary, retail, and service tenants. However, initial observations indicate that many tenants still do not understand the importance of implementing halal standards and are not yet ready to achieve halal certification. In this context, strengthening the capacity of halal human resources in the rest area environment is an urgent need. Through the Free Halal (Sehati) program for MSEs, this program is carried out through the Ministry of Religious Affairs and BPJPH (Halal Product Guarantee Agency) to facilitate MSEs in obtaining halal certification (Khair et al., 2023). Community service-based mentoring activities are present as a bridge between the academic world, entrepreneurs and the community, so that halal principles are not only understood normatively, but also applied practically and sustainably. Researchers use Participatory Action Research (PAR) as one of the popular social research models in community service activities, especially in higher education. This is because the principles of PAR are very relevant to the Tridharma of Higher Education, namely; Education and Teaching, Research and Community Service. According to (Rahmah et al., 2025), training has a significant influence on improving Human Resources (HR).

The importance of implementing Community Service activities with the theme of Halal Human Resources lies in three main aspects, namely economic, social and spiritual:

1. From an economic perspective, the halal industry has proven to be a resilient and sustainable sector. Data from the Global Islamic Economy Report shows that global Muslim consumer spending continues to increase and is projected to reach more than USD 2.8 trillion by 2025. Indonesia, as a country with a large market base, has a strategic opportunity to dominate the global halal value chain, provided the quality and competence of halal human resources can be improved evenly, down to the UMKM level.
2. From a social perspective, halal literacy has a direct impact on public trust. Modern consumers are increasingly concerned about the halal status and safety of the products they consume. Therefore, improving business competency in maintaining halal product safety is not only a business responsibility, but also a social responsibility to protect consumers.

3. Meanwhile, from a spiritual perspective, implementing halal principles is not merely an administrative obligation, but also a manifestation of the values of honesty, trustworthiness, and blessings in work. Strengthening halal human resources means instilling the values of integrity, moral awareness, and spiritual ethics in economic activities. This aligns with the spiritual values that underpin character development at Ary Ginanjar University.

## METHOD

This Community Service (PKM) activity uses a participatory, educational, and applied approach, positioning business actors (partners) as active participants in the learning and implementation of the halal system. The method used is Participatory Action Research (PAR) to directly address partner issues through a combination of knowledge transfer, field practice, and ongoing development.

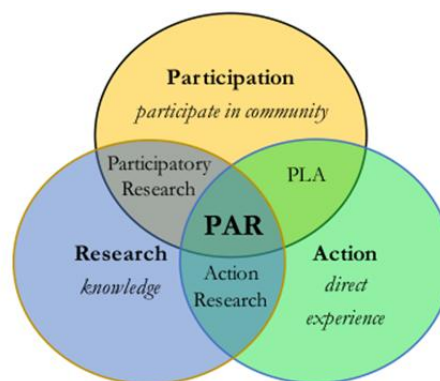


**Figure 1.** Diagram PAR (*Participatory Action Research*)

- a. Preparation Stage
  - Partner identification: Mapping of P3H participants was carried out at Rest Area KM 72 of the Purbaleunyi Toll Road towards Bandung who are engaged in the culinary sector and other processed products.
  - Initial observation: Interviews and discussions were conducted with the manager of Rest Area KM 72.
  - Preparation of training modules: The team of lecturers prepared training modules that include materials for the Halal Product Assistance Process (P3H) Training.
- b. Implementation Stage
 

Training activities are carried out in the form of:

  - Interactive theory class session: Introduction to P3H in the critical halal points in raw material processing, production processes, and presentation of processed foods.
  - Workshops and hands-on practice:
    - ❖ Create a Si Halal account on the [ptsp.halal.go.id](https://ptsp.halal.go.id) page
    - ❖ Practice of preparing administrative documents required for halal certification
    - ❖ Simulation of verification and validation of the halal nature of products and production processes submitted by business actors
- c. Evaluation and Follow-up Stage

- Pre-test and post-test: Conducted to measure the increase in participants' understanding before and after training.
- Online monitoring and mentoring: The team provides post-training mentoring via WhatsApp group.
- Evaluation of activities and documentation: Compiling final reports, documentation and publication of activity results as PKM outputs.

## RESULT AND DISCUSSION

The Community Service Program (PKM) program held at the KM 72A Rest Area successfully contributed significantly to improving knowledge and skills in Halal Product Process Assistance (P3H) for Halal Human Resources (HR) around the KM 72A Rest Area. The training, designed with a participatory and practical approach, proved effective in attracting the enthusiasm of participants, especially the community and business actors around the KM 72A Rest Area.

### *Positive Aspects of Activities*

- Improving Participants' Knowledge and Skills
  - The results of the post-test showed an average increase in participants' understanding of 45% compared to the pre-test, especially in the aspect of the Halal Certification Process, whose products contain processed meat ingredients and animal slaughter, known as.

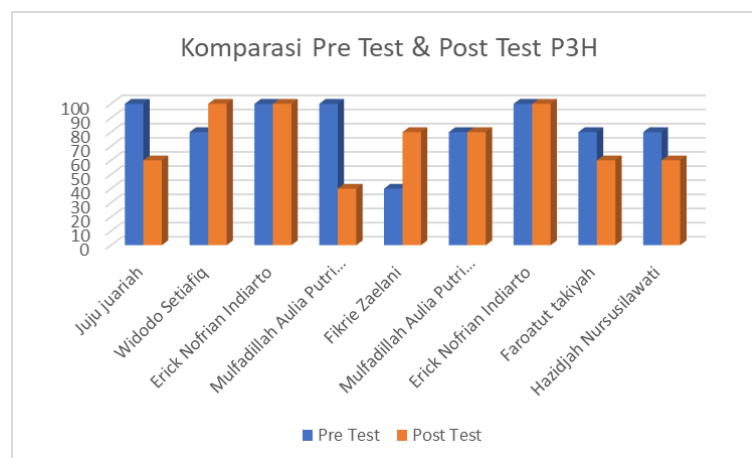


**Figure 2.** Comparison of Pre-Test and Post-Test P3H

- Participants can create an account on the SiHalal app and upload their personal documents to their Halal Companion profile. This process is facilitated directly by a mentoring team consisting of lecturers and students.

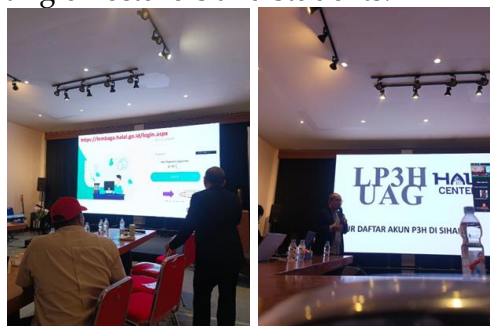


**Figure 3.** Creating a P3H account on SiHalal

b. Implementation of Halal Product Process Companion (P3H)

- Activities went according to plan, including socialization, workshops and direct mentoring, which were carried out well.
- Participants understood the concept of halal product process assistance. This was evident in their responses and practice filling out the documents.
- The workshop had a positive impact, in this case the participants showed an increase in their ability to identify materials and manage halal documents.



**Figure 4.** Mentoring for P3H Participants

c. Rest Area Community Enthusiasm and Commitment

- The Person in Charge and Representative of Rest Area KM 72 A showed full support for this program, by providing a training venue and encouraging the attendance of participants in the Halal Product Process Assistance Training (P3H).
- The commitment of participants and the community in establishing a halal zone at Rest Area KM 72 A as a Halal Hub which aims to become a forum for small and medium enterprises (SMEs) to market products that have received halal certification.



**Figure 5.** UAG Representative and Rest Area KM 72A

The analysis was based on the pre- and post-tests completed by the participants. There was a significant increase in the participants' understanding after participating in this activity, as indicated by the improved post-test scores compared to the pre-test.

Overall, the Halal Product Process Assistance Training (P3H) was deemed beneficial by all participants with a high average score. This was related to the delivery and presentation of the material, which was considered easy to understand, although some participants wanted more practice. The location of the event was also considered very strategic, where the KM 72A Rest Area location as a hub has a capacity for visitors from Jakarta to Bandung, which is always busy, due to the large area and complete facilities for drivers to rest before continuing their journey. In terms of facilities and infrastructure, it was considered supportive of the activity, where there was a meeting room equipped with a sound system, projector, and internet/wifi network. During the session of inputting and uploading documents to the SiHalal application, an error occurred in the login system, however, this was resolved by the assistance team providing manual assistance coordinated through the WhatsApp Group. The login system was back to normal the following day and was in good condition. program.

## CONCLUSION

The Community Service (PKM) activity went according to plan; the socialization, workshop, and direct mentoring were carried out well. From observations during the event, participants understood the concept of Halal Product Process Mentoring (P3H), this was evident from the interaction responses and document filling exercises. The workshop implementation had a positive impact, with participants demonstrating improved skills in material identification and halal document management. Two-way communication between the mentoring team, partners, and participants went well, and participants expressed high interest in participating in the next program. The activity has met its main objectives of increasing halal literacy and readiness for halal certification.

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