

TRAINING AND MENTORING ON SCOTCH FISH EGG PROCESSING AS A FUSION MENU IN PULAU MERAH CULINARY TOURISM, BANYUWANGI

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Abstract: Pulau Merah is a prominent culinary tourism destination in Banyuwangi, where local culinary businesses face challenges related to limited menu innovation, inconsistent food quality, and the absence of Standard Operating Procedures (SOP) and standardised recipes. This community service activity aimed to improve the culinary competencies of Yogi Café & Resto through training and mentoring in the processing of Scotch Fish Egg as a fusion menu based on locally available fish resources. The activity employed a participatory approach consisting of theoretical instruction, demonstrations, hands-on practice, mentoring, and a competency test. The training was conducted on April 28, 2026, followed by a Demi Chef competency test on May 1, 2026, involving the owner and employees of Yogi Café & Resto. The training covered fusion food concepts, local fish selection, fishy odour elimination, batter formulation, wrapping techniques, frying procedures, plating, hygiene and sanitation, SOP implementation, and recipe standardisation. The results showed that participants were able to independently apply the production procedures and successfully produce Scotch Fish Egg with a crispy outer texture, tender interior, and reduced fishy odour. The provision of standardised recipes and SOP guidelines also supported production consistency and operational efficiency. Furthermore, two participants successfully completed the Demi Chef competency test, demonstrating competency in raw material preparation, food processing, presentation, and hygiene and sanitation. The activity successfully addressed the partner's limitations in product innovation and production standardisation while providing a potential signature menu that can strengthen the competitiveness of Yogi Café & Resto and support the development of culinary tourism in Pulau Merah, Banyuwangi.

Key Words: Scotch Fish Egg; Fusion Food; Culinary Tourism; Product Innovation; Standard Operating Procedure.

INTRODUCTION

Pulau Merah is recognised as one of the leading tourist destinations in Banyuwangi Regency. According to the Banyuwangi Department of Culture and Tourism, Pulau Merah attracted 89,841 tourist visits during the first half of 2025 (Adinda, 2025). This high visitation rate is attributed to Pulau Merah's established reputation among domestic and international tourists, especially surfers. Pulau Merah is also noted for its culinary tourism. Grilled fish serves as a signature attraction for visitors (Handoko et al., 2022).

There are approximately six food establishments along the corridor to Pulau Merah Beach. Each offers grilled fish, but tourist satisfaction levels vary. Yogi Cafe & Resto, the

partner in this community service initiative, holds the lowest rating (3.5) among these establishments. This lower rating is primarily due to lengthy production processes and inconsistent food quality. Both issues stem from inadequate management practices. On-site observations reveal that the partner's culinary operations are confined to rudimentary fish preparation techniques—namely grilling and frying—with no evidence of menu innovation or product diversification.

These operational constraints mirror the findings of Handoko et al. (2022), who reported that grilled fish processing at the Blimbingsari culinary tourism site exhibited inadequate adherence to hygiene and sanitation standards and lacked formalised standard operating procedures. Conversely, the investigation by Martalia et al. (2025) provides empirical evidence that product innovation leveraging local raw materials can substantially bolster the competitive positioning of culinary enterprises in tourist destinations, as exemplified by the successful development and favourable guest reception of the "Lemon Coffee" welcome beverage in Kemiren Tourism Village.

Moreover, the partner operates without Standard Operating Procedures (SOP) throughout the entire production chain—from raw material reception and processing to final service delivery.

Putri et al. (2024) underscore that SOP implementation is critical in food processing to ensure the consistency of flavour, aroma, texture, and visual presentation. Their findings emphasise that standardised recipes are instrumental in achieving uniform food quality, irrespective of the personnel executing the tasks. Turker & Süzer (2021) further assert that culinary trends—specifically fusion cuisine and the integration of indigenous ingredients—are increasingly preferred by tourists, particularly in cultural and culinary tourism destinations. Consequently, this training and mentoring initiative is essential, not only to redress the partner's immediate operational deficiencies but also to capitalise on the abundant local fishery resources available in the Pulau Merah area.

METHOD

The community service activity employed a participatory method combining training and mentoring, selected for its proven efficacy in enhancing participants' practical competencies, consistent with Turker et al. (2021), who emphasised the importance of demonstration and direct practice in culinary instruction. The target participants comprised the owner and employees of Yogi Cafe & Resto, located on Jl. Pantai Pulau Merah Pancer, Sumberagung Village, Pesanggaran Subdistrict, Banyuwangi Regency. The activity spanned from April to May 2026, with two primary implementation days: April 28, 2026, and May 1, 2026.

The Scotch Fish Egg processing training, conducted on April 28, 2026, commenced with a theoretical component covering the following topics: fusion food concepts, fresh fish selection criteria, fishy odour elimination techniques, Scotch Fish batter formulation, wrapping methods, deep frying temperature and timing parameters, and contemporary plating presentation. The fusion food concept taught adhered to the principle of combining ingredients, techniques, or methods from two distinct culinary cultures to create novel and appealing dishes (Turker & Süzer, 2021). Their research further confirmed that fusion cuisine is increasingly sought after by tourists seeking unique and distinctive culinary experiences.

Following the theoretical sessions, participants engaged in hands-on production of Scotch Fish Egg under the direct supervision of the lecturer and student team. This experiential learning approach aligns with the findings of Diana et al. (2024), who emphasised that integrating cognitive instruction, observational demonstration, and direct practical application effectively enhances participant engagement and skill retention in food processing training. At the conclusion of the session, the team provided the partner with standardised Scotch Fish Egg recipes, uniforms, and production materials. Recipe standardisation is critical to ensuring

consistent product quality, as articulated by Firmansyah (2024), who asserted that standardised recipes—containing precise measurements—facilitate raw material cost control and guarantee flavour uniformity.

The Demi Chef Competency Test was designed to measure and formally recognise participant competencies (representing 2 participants) who had completed the training and mentoring in the following areas: raw material preparation, food processing according to standard procedures, appealing food presentation techniques, and hygiene and sanitation implementation. Firmansyah (2024) affirmed that the application of hygiene and sanitation in food processing constitutes an inseparable component of standard procedures that ensures food safety and consumer satisfaction. The award of competency certification to participants is expected to bestow formal professional recognition within the culinary industry, while concurrently reinforcing the perceived credibility of Pulau Merah's culinary tourism offering among visitors.

RESULTS AND DISCUSSION

The community service activities, conducted on April 28 and May 1, 2026, were executed without procedural impediments and elicited highly favourable responses from the target partner—namely, the owner and employees of Yogi Café & Resto in the Pulau Merah Tourism area, Banyuwangi. Participant engagement was consistently high from the opening session through the conclusion of all activities, reflecting the partner's demonstrable need for product innovation and human resource capacity enhancement within the culinary sector. The sustained active participation further substantiated that the challenges confronted—specifically, limited product innovation and the absence of formalised production standards—constitute genuine operational constraints requiring immediate remediation. These observations corroborate the findings of Martalia et al. (2025), who reported that culinary enterprise operators in tourist destinations require intensive mentoring to develop innovative products grounded in local raw materials.

During the Scotch Fish Egg processing training session held on April 28, 2026, participants progressed through two primary stages: theoretical instruction and hands-on practice. The theoretical component commenced with an introduction to the fusion food concept—defined as the art of harmonising ingredients, seasonings, or cooking techniques originating from disparate culinary cultures into a single novel dish. This process extends beyond mere combination, aiming instead to create a distinctive and appealing flavour synergy. Turker & Süzer (2021) posited that fusion cuisine emerged as a response to globalisation and intensifying intercultural culinary exchange, wherein tourists increasingly seek unique and memorable gastronomic experiences. To illustrate the concept, several well-documented fusion food examples were presented, including sushi burrito (Japanese-Mexican fusion), rendang pizza (Italian-Indonesian fusion), and mozzarella cheese fried rice. Through these exemplars, participants were guided to internalise the essential principles of fusion food creation: selecting premium local ingredients as the foundational "soul" of the dish; incorporating global techniques or flavour profiles to enhance market appeal; and maintaining balance across taste, texture, and visual presentation.

Figure 1.1 Training Activities through Theoretical Presentation and Direct Practice



The subsequent material introduced Scotch Fish Egg as a fusion product adapted from the traditional Scottish dish (Scotch Egg), consisting of boiled eggs wrapped in sausage meat, subsequently modified by substituting sausage meat with fresh local fish paste such as tuna, scad, sardine, or tlengseng. The selection of local fish species was predicated upon their abundant availability and cost-effectiveness at the Pancer Fish Auction Place during peak harvest seasons, coupled with their savoury flavour profile, which appeals to both local palates and tourist preferences. Participants were additionally apprised of the substantial commercial opportunities afforded by this innovation, given that tourist visitation data for Pulau Merah demonstrated marked growth—tripling during the 2026 Eid holiday period relative to regular days—with a total of 240,000 tourists visiting Banyuwangi, positioning Pulau Merah as the most favoured destination (KabarBaik, 2026). With this opportunity, the Scotch Fish Egg menu innovation is expected to serve as a new attraction for tourists visiting Yogi Café & Resto.

Beyond product development, the theoretical component emphasised the critical importance of Standard Operating Procedures (SOP) in food processing as codified, consensual work guidelines that enable all personnel to execute identical tasks using uniform methods. Putri et al. (2024) elucidated that SOP functions as a "workflow recipe" encompassing all operational stages—from maintaining personal hygiene and workplace cleanliness, through ingredient preparation and quality inspection, to food processing in accordance with standard recipes, equipment operation, and cooking process monitoring. Their research further established that consistent SOP implementation effectively mitigates dish inconsistency issues that frequently arise from variations in procedural interpretation and staff execution. The immediate operational benefits of SOP implementation, as presented to participants, included: quality consistency for each portion of Scotch Fish Egg; production time efficiency, particularly during peak service periods; streamlined training of new employees through established guidelines; and reduced guest complaints, as customers remain satisfied with consistent and predictable flavours.

The SOP material was followed by the application of hygiene and sanitation as an inseparable component of standard procedures. Handoko et al. (2022), in their research on hygiene and sanitation analysis of grilled fish processing at Blimbingsari culinary tourism, emphasized that hygiene pertains to personal health, including hand washing obligations, abstention from smoking during cooking, and mask usage when ill, while sanitation pertains to environmental and equipment cleanliness, including cleaning schedules, segregated storage of raw and cooked ingredients, and safe oil temperature regulation. The research further recommended the utilisation of hygiene support equipment—including aprons, hairnets, and masks—to prevent food contamination. Firmansyah (2024) affirmed that embedding hygiene and sanitation protocols within SOP ensures that resulting food products are safe for consumption, enhances guest trust, and prepares the establishment for potential health department inspections or online review platform assessments. The key message conveyed to partners was that SOP need not be complex; it can begin with a simple 5–7 step checklist, written on paper, posted in the kitchen, and implemented collectively.

The final theoretical session addressed recipe standardisation as the key to flavour consistency and guest satisfaction. Participants were introduced to the distinction between

conventional recipes and standardised recipes, the latter containing precise specifications including fish paste weight per egg (in grams), seasoning composition (salt, pepper, onion, binder), frying duration and temperature parameters, and standardised garnish and plating guidelines. Putri et al. (2024) affirmed that recipe standardisation is essential for maintaining consistency in flavour, aroma, texture, and visual presentation, ensuring uniform quality across all product batches regardless of the cook. Firmansyah (2024) further elucidated that recipe standardisation facilitates raw material cost control through precise measurements; simplifies procurement, as ingredient quantities are known for sales targets; accelerates production processes by eliminating the need for per-batch estimation; and enables employees to practise with confidence, knowing results will be consistently excellent. For customers, recipe standardisation ensures that they receive precisely the same taste experience as previously encountered or recommended, thereby improving ratings and reviews through consistent satisfaction.

Following the theoretical session, participants engaged in supervised hands-on production of Scotch Fish Egg under the intensive guidance of the lecturer and student team. Activity implementation demonstrated that participants were able to independently follow each stage of production, from ingredient preparation through frying and presentation. At the conclusion of the session, the service team delivered standardised Scotch Fish Egg recipes, uniforms, and supporting materials to the partner as operational provisions for daily use.

Figure 1.2 Direct Practice Mentoring for Scotch Fish Egg Production



The success of this training session can be attributed to the experiential learning approach that integrates cognitive learning through theory, observation through demonstration, and direct experience through practice. This pedagogical approach has demonstrated efficacy in enhancing participant engagement and skill retention, as articulated by Diana et al. (2024), who asserted that the integration of the three learning components—cognitive instruction, observational demonstration, and direct practical application—effectively and sustainably strengthens participants' conceptual understanding and practical competencies. Participants not only grasped theoretical concepts but also demonstrated the capacity for direct application, as evidenced by their ability to produce Scotch Fish Egg products characterised by crispy outer crusts, tender interiors, and the absence of fishy odour. This innovative product has the potential to become a signature menu differentiating Yogi Café & Resto from competitors in the Pulau Merah Tourism area, while simultaneously responding to the increasingly diverse tourist demands for unique culinary experiences, as articulated by Turker & Süzer (2021) regarding tourists' current search for authentic and innovative gastronomic experiences.

Figure 1.3 Product Results of Scotch Fish Egg Training and Mentoring



Subsequently, on May 1, 2026, the Demi Chef competency test was conducted in collaboration with the Professional Certification Institute of the Banyuwangi State Polytechnic. This competency test involved 2 (two) participant representatives who had completed the previous training, serving as formal recognition of their acquired competencies. Firmansyah (2024) emphasised the importance of competency certification in the culinary industry as a mechanism for formal professional qualification recognition that concurrently enhances business credibility in the perception of consumers. The assessment criteria encompassed raw material preparation, food processing in accordance with standard procedures, aesthetically appealing food presentation techniques, and rigorous hygiene and sanitation implementation throughout the production process. The competency test implementation demonstrated that participants were able to demonstrate all assessed competencies proficiently, from preparation through final presentation. These outcomes indicate that the training programme has successfully equipped participants with knowledge and skills that conform to the professional standards established by the Professional Certification Institute, while simultaneously differentiating conventional food establishments from professional culinary enterprises poised for sustainable growth.

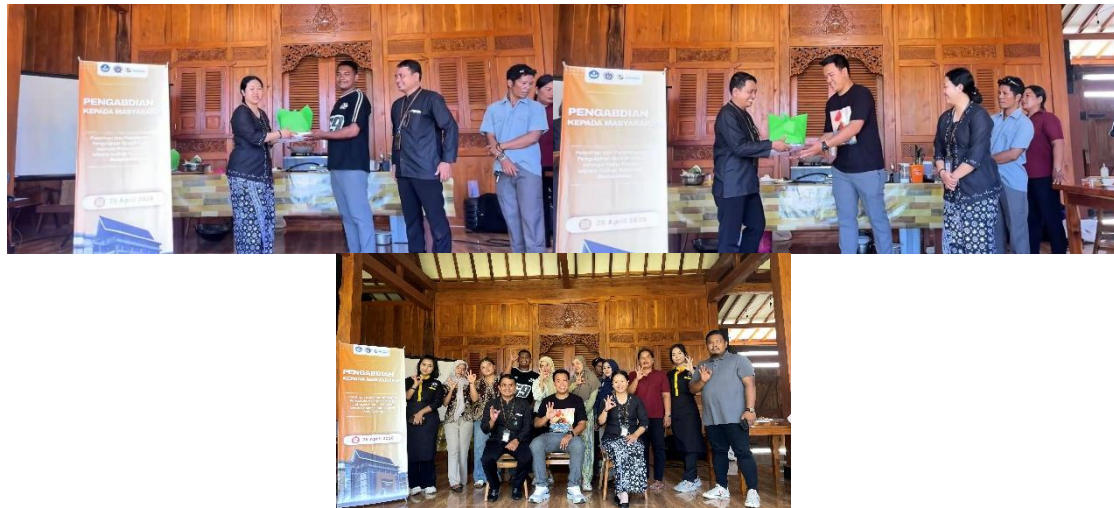
Figure 1.4 Demi Chef Competency Test Implementation



The implementation of this competency test aligns with the importance of workforce competency standardization in the tourism and culinary sectors, particularly in facing increasingly competitive tourist destinations. Handoko et al. (2020), in their research on the originality of Banyuwangi's signature culinary recipes, emphasised that standardisation and competency certification play significant roles in preserving and developing regional cuisine. Competency certification benefits not only individual quality enhancement but also contributes to the overall competitiveness of tourist destinations. The availability of certified personnel enables tourists to consistently receive high-quality culinary experiences, which in turn

positively influences tourist satisfaction and loyalty, and concomitantly reinforces the credibility of Pulau Merah's culinary tourism offering in the perception of both domestic and international visitors.

Figure 1.5 Training and Mentoring Activities for Scotch Fish Egg Processing as a Fusion Menu in Pulau Merah Culinary Tourism



Overall, this community service activity successfully addressed two primary partner challenges: limited innovation in fish product processing and the absence of Standard Operating Procedures and standardised recipes. Through the Scotch Fish Egg processing training, the partner now possesses an innovative, locally-sourced fish-based menu item that can function as a signature offering distinguishing them from competitors, while simultaneously enhancing the value-added of products derived from the region's abundant marine resources. Martalia et al. (2025), in their investigation of local coffee-based welcome beverage development in Kemiren Village, demonstrated that product innovation grounded in local raw materials not only enhances business competitiveness but also reinforces local identity and supports the sustainability of the surrounding community's economy.

Furthermore, through the delivery of standardised recipes and SOP documentation, the partner now possesses codified guidelines ensuring production quality consistency—thereby directly addressing the flavour inconsistency and extended production time issues that have constituted primary tourist complaints. This aligns with the findings of Putri et al. (2024), who affirmed that SOP implementation and recipe standardisation are crucial for maintaining consistency in flavour, aroma, texture, and appearance, ensuring uniform quality across all production batches irrespective of the cook. Firmansyah (2024) further added that consistent SOP implementation enhances operational efficiency and reduces food contamination risks. Consequently, this activity contributes to enhancing Yogi Café & Resto's competitiveness, developing creative economy initiatives based on local potential, and empowering coastal communities in the Pulau Merah Tourism area, Banyuwangi.

CONCLUSION

This community service activity successfully resolved two core partner challenges: limited product innovation and the absence of Standard Operating Procedures (SOP) and standardised recipes. The Scotch Fish Egg training equipped partners with an innovative, locally-sourced fish menu that differentiates them from competitors and adds value to products derived from the region's abundant marine resources. Martalia et al. (2025) demonstrated that

product innovation grounded in local raw materials enhances business competitiveness, reinforces local identity, and supports community economic sustainability.

Furthermore, the provision of standardised recipes and SOP documentation provided partners with codified guidelines that ensure production quality consistency. These guidelines directly resolve the flavour inconsistency and prolonged production time issues that tourists frequently complained about. Putri et al. (2024) confirmed that SOP implementation and recipe standardisation maintain consistency in flavour, aroma, texture, and appearance, ensuring uniform quality regardless of the cook. Firmansyah (2024) added that consistent SOP implementation enhances operational efficiency and reduces food contamination risks. Consequently, this activity enhances Yogi Café & Resto's competitiveness, develops creative economy initiatives based on local potential, and empowers coastal communities in the Pulau Merah Tourism area, Banyuwangi.

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