

GUIDANCE IN MAKING HOME INDUSTRY TEMPE AS A MEANS OF ENTREPRENEURSHIP DEVELOPMENT FOR STUDENTS OF MIFTAHUL ULUM JABUNG ISLAMIC BOARDING SCHOOL, MALANG REGENCY

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Abstract

Keywords:

Home Industry,
Entrepreneur,
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Entrepreneurship is a skill needed by Islamic boarding school students to survive in a dynamic and fluctuating economic environment. The problems faced by Islamic boarding school students are the lack of entrepreneurial skills and lack of access to productive economic activities in the Islamic boarding school environment. The purpose of this community service is to empower students of the Miftahul Ulum Islamic boarding school in entrepreneurial skills through the production of home industry tempeh. Through a participatory approach and practical training, this activity includes (1) knowledge transfer about the tempeh production process, (2) small business management, and (3) simple marketing strategies. This community service activity was carried out on January 25 and 26, 2025 at the Miftahul Ulum Islamic boarding school in Jabung, Malang Regency. The results of the community service activity showed an increase in students' understanding of the tempeh production process and the growth of entrepreneurial motivation among students. This activity is expected to become the embryo of Islamic boarding school-based economic independence and a model of sustainable empowerment in the religious education environment.

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INTRODUCTION

Students, with intensive religious instruction in Islamic boarding schools, play a crucial role in society. Students are expected to become agents of social and moral change. It is hoped that issues of moral and social decadence can be resolved through wise approaches and the exemplary behavior of students who have studied religion at Islamic boarding schools. A religious approach is deemed necessary because it can be



implemented through lectures and is more humane than repressive and punitive methods.

Viewed from another perspective, it can be explained that Islamic boarding schools (pesantren) are beginning to be pushed to become centers of economic empowerment for the community. Therefore, the competence of their human resources, specifically students (santri), needs to be equipped with entrepreneurial knowledge and skills. Understanding entrepreneurship can begin with an explanation of its definition, then understanding its importance for students, and then understanding how students begin and progress through the final stages of entrepreneurship.

The definition of entrepreneurship can be understood by mentioning several keywords such as (1) individual or group, (2) managing, (3) profit, (4) efficiency, (5) competitiveness, (6) business, (7) services or products. If arranged into a phrase, it can be explained that entrepreneurship is an activity carried out by individuals or groups to create, manage, and develop a business or business with the aim of generating profits, which involves identifying market opportunities, taking risks, innovation, and strategic planning, which includes activities starting new businesses, managing business operations, and looking for ways to increase efficiency and business competitiveness (Widyanto, 2024).

Next, the importance of entrepreneurship for Islamic boarding school students is discussed. The importance of entrepreneurship for Islamic boarding school students is related to the context of modern life, especially in the current digitalization era. Some of the benefits of Islamic boarding school students studying entrepreneurship are: (1) by studying entrepreneurship, it can foster economic independence for Islamic boarding school students, (2) by studying entrepreneurship, it can implement Islamic law (Islamic values) for Islamic boarding school students, (3) by studying entrepreneurship, it can be a way to empower the community and preach through economic activities, (4) by studying entrepreneurship, it can develop the potential and creativity of Islamic boarding school students, (5) by studying entrepreneurship, Islamic boarding school students become adaptive to changes in the times amidst fluctuating and dynamic economic conditions. Entrepreneurship for Islamic boarding school students is a means to strengthen the community's economy by exemplifying good morals. By becoming entrepreneurs, Islamic boarding school students are taught to seek personal gain, but are expected to provide broad benefits for the community. It can be clearly explained that the teachings of Islamic values are very relevant in modern economic practices.

After understanding the nature of entrepreneurship and its importance, it is necessary to explain how to implement entrepreneurship for Islamic boarding school students. As explained in the article's abstract, the entrepreneurial activity of making tempeh at home is carried out in three main stages: (1) transferring knowledge about the tempeh production process, (2) managing a small business, and (3) a simple marketing strategy. Students need to be given direct experience in running a simple but meaningful business. One form of entrepreneurial activity that is relevant and easy to implement in an Islamic boarding school environment is an independent tempeh making business or home industry. This business not only has economic value, but is also rich in educational value that can shape the entrepreneurial character of students.

This entrepreneurial activity is implemented in three main stages. The initial stage begins by providing students with a comprehensive understanding of the tempeh-making process, from selecting raw materials (soybeans), soaking techniques, boiling,

cooling, inoculation with tempeh yeast, and fermentation. In addition to theory, hands-on practice is essential to ensure students fully understand the technical stages and maintain product hygiene and quality standards. This approach teaches the values of discipline, precision, and responsibility for work results. Once students understand the production process, the next stage is learning about small business management. The material covered includes simple financial record keeping, calculating production costs, setting selling prices, and managing inventory and production planning. This way, students learn how to manage a business efficiently, understand the concept of profit and loss, and the importance of transparent and responsible financial management.

The final stage is introducing students to simple, contextual marketing strategies. Students are encouraged to think creatively about marketing tempeh products, for example, through sales within the Islamic boarding school, collaboration with local food stalls, social media promotions, or creating attractive product packaging. By introducing marketing aspects, students learn the importance of communication, competitiveness, and innovation in running a business. Entrepreneurial activities like this not only aim to provide economic skills but also serve as a vehicle for character development. Through hands-on practice, students are trained to become independent, honest, resilient, and capable of problem-solving and innovation. With this integrated approach, it is hoped that a generation of students will emerge who are not only experts in religious knowledge but also prepared to become entrepreneurs who contribute to society.

LITERATURE REVIEW

Entrepreneurship has become a crucial component of education, particularly in Islamic boarding schools (*pesantren*), where students are expected not only to master religious knowledge but also to be empowered economically and socially. Integrating entrepreneurship programs, such as the tempeh cottage industry, into *pesantren* education aims to instill a spirit of independence and economic productivity among students.

Cottage industries—small-scale business operations run from home—play a vital role in economic empowerment, especially in developing countries like Indonesia. Recent academic studies have explored factors such as digital marketing adoption, community empowerment, sustainability, and entrepreneurial learning that influence the performance of cottage industries. (Rolando et al., 2025) have conducted a systematic literature review to analyze how digital marketing strategies especially through social media to increase the visibility and sales performance of home industries in Indonesia. They concluded that digital tools significantly empower entrepreneurs to reach consumers beyond their local markets and adapt to evolving consumer preferences, thereby increasing competitiveness in the digital economy.

Lidiati et al. (2023) examined the role of digital home industries in empowering local women's communities. Their qualitative findings emphasized that digital literacy and structured marketing training enabled women to manage their businesses effectively and increase household income. This study recommended stronger government support for the formalization and sustainability of home businesses. Similarly, Mujtaba Habibi et al. (2022) examined a cottage industry in East Java that produces tempeh, emping (rice crackers), banana chips, and processed fish. They found that community autonomy, entrepreneurial spirit, access to capital, and cooperation were important factors in improving community welfare. Government policies and marketing capacity

emerged as critical drivers and barriers. (Hia, 2020) analyzed an agricultural cottage industry in Garut, exploring factors influencing its sustainability. Using multiple linear regression, they found that conflict management and socioeconomic dynamics significantly influenced the industry's sustainability. They recommended institutional empowerment and innovation in production and marketing to support long-term business resilience.

Home industries are widespread businesses found in many communities, both urban and rural. Basri Mahendra Hasibuan et al., 2024, evaluated the sustainability of a home-based tent-making industry through an Islamic economic perspective. Their qualitative multidimensional analysis showed that while economic dimensions (e.g., income generation) rank high in sustainability, institutional challenges (e.g., government support, waste management, regulatory framework) and volatile raw material prices hinder long-term sustainability. examined the role of entrepreneurial learning in a group of home-based industrial businesses (souvenir and bag makers). They identified stages including identifying needs, implementing a structured program, and evaluating results. This experiential learning not only enhances practical business skills but also contributes significantly to improving family well-being and economic independence.

Next, we discuss the challenges faced by the home industry. Sidharta et al. (2022) documented the challenges faced by home-based furniture manufacturers in Surabaya. Competitive pressures from imports mean success relies on innovation, professional marketing, understanding consumer preferences, and adjusting operational mindsets. Owners need to integrate market research and product differentiation. Handayani & Ardini (2017) emphasized the marketing strategies—such as national and international exhibitions—used by self-help groups in the home industry to gain visibility and sustain operations amidst regional competition.

Several studies emphasize the importance of integrating entrepreneurship into Islamic boarding school education. Entrepreneurship in Islamic boarding schools can be a tool to empower students to face the challenges of modern life. Integrating the entrepreneurship curriculum aligns with the goal of producing graduates who are not only religiously knowledgeable but also economically independent. Furthermore, Islamic boarding school-based entrepreneurship develops practical skills and fosters a culture of hard work and innovation.

Tempeh is a traditional Indonesian food made from fermented soybeans, known for its high nutritional value, low production costs, and cultural relevance. Tempeh production is a small-scale, accessible enterprise that can be adapted to educational contexts. Tempeh production involves simple technology and minimal capital, making it suitable for Islamic boarding school (pesantren) environments. It can be used not only for practical skills training but also as a source of income for institutions.

Effective support is crucial to ensuring successful entrepreneurial development. Mentoring programs and practical training have a significant impact on developing students' entrepreneurial mindsets and skills. This support encompasses business planning, production training, marketing strategies, and financial literacy. In the Islamic boarding school context, these programs are most effective when integrated with Islamic values and the unique organizational structure of the school. Entrepreneurship support programs enhance students' self-confidence, creativity, and business acumen. They also foster teamwork and a sense of responsibility. In Islamic boarding schools,

entrepreneurial initiatives such as tempeh production serve not only as a means of economic development but also as a means of character education, instilling values such as discipline, responsibility, and honesty.

Next, we will discuss several factors that make a person or group successful in carrying out entrepreneurship, namely the first factor is from Internal, or personal, factors of an entrepreneur can be described as entrepreneurial self-efficacy (ESE). (Srimulyani & Hermanto, 2022) found that -entrepreneurial self-efficacy is significantly influence the success of micro and small businesses in the food and beverage sector in East Java, even mediates the influence of motivation on business performance. (Self-efficacy et al., 2025) also emphasized that ESE and entrepreneurial knowledge together with business motivation simultaneously contribute positively to The success of culinary businesses in Banjarbaru City. (Fadilah et al., 2025) showed that motivation and self-confidence (ESE) are more crucial than technical knowledge in determining the success of millennial culinary businesses in Jakarta. (McCarthy et al., 2023) found that founder types were twice as likely to be successful; personality traits such as openness to variety, high activity, and low humility were significant differentiators between successful founders and the general population.

factor is from outside or can be called an external factor, including ecosystem & social. (Rahmatul Khalik Alwiya et al., 2024) highlighting the influence of entrepreneurial culture, entrepreneurship education, and mindset in supporting the formation of digital startups among young Indonesians. (Astari et al., 2023) in a study of five unicorns Indonesia found that success was influenced by venture capital, motivation start-up, product innovation, founders' technological capabilities, and business partners, although R&D experience and science policy are not dominant factors. (Ramadhan, 2023) conduct analysis on startups in under BEKRAF/MIKTI; the results showed that human capital had a positive impact on company success, while innovation has a negative impact on social capital not significant. The third factor includes risk behavior and Satisfaction. Risk-taking behavior and risk management skills are closely related to success; in addition, personal satisfaction and employee and customer satisfaction also influence perceptions of success.

Despite its potential benefits, there are challenges in implementing cottage industries in Islamic boarding schools. These challenges include limited funding, a lack of professional trainers, inadequate facilities, and resistance to change from traditional educational models. These obstacles can be overcome through partnerships with universities, local governments, and NGOs that provide technical and financial support.

Several literature reviews indicate that integrating a home-based tempeh industry into Islamic boarding school-based education has significant potential for developing student entrepreneurship. With appropriate assistance and support, this initiative can improve the economic skills of students in Islamic boarding schools, foster independence, and contribute to the sustainability of Islamic boarding school institutions. Future programs should emphasize structured mentoring, contextual training, and values-based entrepreneurship models to maximize benefits.

COMMUNITY SERVICE METHODS

This community service activity uses a participatory and educational approach that aims to equip students at the Miftahul Ulum Jabung Islamic Boarding School with practical entrepreneurial skills through the development of a home-based tempeh

industry. This methodology is divided into three main stages: (1) knowledge transfer about the tempeh production process, (2) small business management, and (3) simple marketing strategies.

Initial coordination was conducted with the leadership and management of the Miftahul Ulum Jabung Islamic Boarding School to identify participants and evaluate their potential and available resources. This phase included logistical planning, procurement of raw materials (such as soybeans and fermentation agents), and preparation of equipment necessary for the tempeh production process. A series of practical training sessions were conducted, focusing on the technical process of tempeh production. Participants, in this case students, were guided through each stage, including soybean selection, soaking, dehulling, boiling, inoculation with *Rhizopus* culture, fermentation, and hygienic packaging. The training emphasized practical engagement to ensure students could replicate the process independently.

In addition to technical training, students receive basic entrepreneurship education, including modules on cost analysis, pricing strategies, marketing techniques, and small business management. The goal is to instill an entrepreneurial mindset and prepare students to manage a sustainable home industry. Following the training, the team conducts monitoring and mentoring activities to evaluate the effectiveness of the training and provide further guidance. Observation and feedback mechanisms are used to assess student engagement, the feasibility of the production process, and business development opportunities within the school environment. This method aims to empower students at Miftahul Ulum Jabung Islamic Boarding School in entrepreneurial skills through the production of home-based tempeh.

RESULTS AND DISCUSSION

The implementation of a tempeh-making assistance program at Islamic boarding schools (pesantren) has yielded measurable and meaningful results in developing technical skills and fostering an entrepreneurial mindset among students at the boarding schools. These results are discussed in detail below:

1. Mastery of Practical Skills in Tempe Production

The students successfully learned and implemented the tempeh production process in stages, including (1) preparing soybeans, (2) fermentation using *Rhizopus* cultures, (3) hygienic handling, and (4) packaging. The practical training method proved effective in improving students' understanding and retention of production techniques. Evaluations conducted after the home industry tempeh production training showed that more than 80% of the students were able to carry out the process independently, demonstrating a high level of skill mastery.

2. Development of Entrepreneurial Competencies

In addition to technical training, participants receive basic entrepreneurship education, including (1) business planning, (2) cost analysis, and (3) marketing. These three components are crucial in shifting the mindset of participants from being students to focusing on business-oriented thinking. Group discussions and business simulations help participants understand how to calculate production costs, set competitive prices, and market their products locally.

3. Establishment of a Pilot Tempe Business Unit

As a follow-up to the training, a small-scale tempeh production unit was established within the Islamic boarding school. This pilot project allowed the students to

apply their new skills in a real-world setting. The business unit also serves as a sustainable model that can be managed by subsequent generations of students, fulfilling the expectation of contributing to the Islamic boarding school's internal economy.

4. Increased Motivation and Participation

Student engagement throughout the program was very high. Their enthusiasm demonstrated that the practical and business-oriented nature of the training aligned with their interests and future aspirations. Feedback gathered through informal interviews and observations confirmed that students found the program both educational and empowering.

5. Relevance to Islamic Boarding School-Based Economic Empowerment

This stage demonstrates the potential of Islamic boarding schools as centers for community-based entrepreneurship. The availability of local resources (such as soybeans) and strong community ties make the Islamic boarding school environment suitable for developing small-scale industries. Furthermore, the integration of economic training into religious and character education supports the development of independent and socially responsible entrepreneurs. In summary, this program effectively combines vocational and entrepreneurial training, resulting in skills acquisition, mindset transformation, and economic opportunities. These findings support the argument that practical, community-based interventions can significantly enhance the entrepreneurial capacity of Islamic boarding school students, contributing not only to personal development but also to local economic growth.

The challenges in making home industry tempeh as an entrepreneurial development for Islamic boarding school students can be studied from various aspects, both internal and external. The following is an explanation of some of the main challenges: (1) limited knowledge and skills. Students generally do not have experience in the field of tempeh production or business management. These challenges include: Lack of technical understanding of the tempeh fermentation process. Lack of business management skills, such as financial records, marketing, and distribution; (2) limited production facilities and equipment. Islamic boarding schools usually have limitations in terms of: Access to adequate production tools (e.g., boiling tools, soybean peeling tools, hygienic fermentation places). Production space that meets sanitation and health standards ; (3) capital, initial capital to start a business (purchase of raw materials, tools, and packaging) is often limited. Access to financing institutions or venture capital is still low.

Other challenges faced by entrepreneurs, in this case Islamic boarding school students, are (4) time management. Students have a busy schedule of religious study activities, making it difficult to divide time between tempeh production and other entrepreneurial activities; (5) marketing and distribution networks. Tempeh products have a short shelf life, so marketing must be fast and targeted. The lack of a wide marketing network, as well as limited access to markets outside the Islamic boarding school; (6) product quality and consistency. Maintaining the quality and consistency of the taste, texture, and cleanliness of tempeh is a challenge in itself in home industry businesses. The fermentation process is greatly influenced by temperature, humidity, and technique, which requires high precision; (7) legality and permits. Small businesses often experience obstacles in managing permits, such as halal certificates, PIRT (Home Industry Products), and distribution permits; (8) entrepreneurial awareness and motivation. Not all students have the motivation to become entrepreneurs.

Entrepreneurship is still considered a secondary alternative compared to other careers, so it is necessary to foster motivation and an entrepreneurial mindset; (9) support from the environment and policy makers or stakeholders. Lack of support from Islamic boarding school administrators, local government, or entrepreneurship support institutions can be an obstacle. There is no synergy between Islamic boarding schools and MSMEs, government agencies, or cooperatives; (10) resistance to market competition. Competition with tempeh products from factories or large producers that have a more efficient production scale and lower prices.

Despite facing various challenges, tempeh production as a home industry has significant potential to become a vehicle for character education, economic independence, and the empowerment of Islamic boarding school students (santri). With appropriate training, capital support, and collaboration with various parties, these challenges can be overcome and instead become an opportunity for Islamic boarding school-based economic development.

CONCLUSION

Implementing tempeh-making training as a form of community service has proven to be an effective strategy in fostering entrepreneurial awareness and skills among students at the Miftahul Ulum Jabung Islamic Boarding School in Malang Regency. Through a structured process involving technical guidance, practical experience, and entrepreneurship education, the students are encouraged to develop independence and business acumen. Establishing a home-based tempeh industry not only provides a relevant and accessible business model but also aligns with the local context and resources available within the Islamic boarding school.

The community service program contributed to the development of a culture that supports and leads to economic independence and sustainability. Furthermore, the integration of entrepreneurship training into the educational framework of Islamic boarding schools demonstrates the potential of Islamic boarding schools as centers for community-based economic development. Ongoing mentoring and support are recommended to ensure the long-term success and scalability of this program. Recommendations for future community service activities related to the support of home-industry tempeh production within Islamic boarding schools include the supervision of tempeh-making and hygiene experts.

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