

The Role of economic education in optimizing local resource potential to increase community income

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ABSTRAK

Introduction

Economic education plays a crucial role in empowering communities to recognize and manage the potential of local resources. In the of increasing global competitiveness, local resources are often overlooked, though they possess strategic value for community-based development. When aligned with Sharia entrepreneurial principles, the optimization of local resources can contribute not only to income growth but also to ethical and sustainable economic practices.

Objectives

This study aims to explore the role of economic education in promoting Sharia-based entrepreneurship for optimizing local resource potential. Specifically, it investigates how economic education affects economic literacy and business diversification, and how it contributes to increasing community income.

Method

The research employed a mixed-methods approach, combining quantitative and qualitative data to provide a comprehensive analysis. Quantitative data were collected via a structured survey involving 300 respondents, while qualitative insights were obtained through in-depth interviews with 15 selected participants. Artificial Intelligence (AI) tools were used to assist in refining and analyzing the content for clarity and coherence.

Results

The findings reveal that economic education significantly enhances economic literacy, as shown by an increase in literacy scores from 3.1

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to 4.3. Moreover, 40% of respondents diversified their businesses after participating in the training—primarily into value-added agricultural products and tourism services. Interview data also highlight a shift in mindset, with communities beginning to focus on the development and management of local resources rather than merely utilizing them in traditional ways.

Implications

The study underscores the importance of practice-based economic education programs that incorporate technology and uphold Sharia principles. Effective collaboration among government institutions, private sectors, and educational bodies is essential to support infrastructure and funding for sustainable impact.

Originality/Novelty

This study uniquely combines the perspectives of economic education and Sharia entrepreneurship in the context of local resource optimization, an approach that has rarely been addressed in previous empirical studies. It also integrates AI-assisted analysis for enhanced validity and relevance in community development frameworks.

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INTRODUCTION

Rural communities across Southeast Asia face persistent challenges in achieving inclusive economic growth, particularly in the context of globalization and rapid structural change. The limited ability of rural populations to access markets, adopt modern technologies, and leverage their natural and cultural resources has constrained their opportunities for empowerment and development. Within this landscape, economic education has emerged as a critical tool for strengthening local capacities. Scholars emphasize that entrepreneurship-based economic education not only fosters individual skill enhancement but also promotes collective empowerment by increasing financial literacy, encouraging innovation, and enabling resource-based ventures (Ezeuduji & Ntshangase, 2017; Hendrawan et al., 2024). The significance of these interventions is especially evident in rural communities where economic vulnerability and limited institutional support intersect.

The growing body of research underscores the role of economic education as both an instrument of empowerment and a catalyst for rural development. Community-based entrepreneurship initiatives have been found to enhance financial security and build resilience among smallholder farmers, allowing them to better withstand market fluctuations (Handayani et al., 2021; Haryanto et al., 2024). In addition, such education cultivates optimism and entrepreneurial attitudes among youth, thereby increasing the likelihood of business creation and diversification. Economic education also embeds principles of sustainability and social responsibility, encouraging entrepreneurs to

consider environmental and community welfare in their activities (Ahmed et al., 2025; Suparno et al., 2019). Thus, education functions not merely as knowledge transmission but as a transformative intervention aligned with sustainable development goals.

Despite these positive outcomes, rural communities continue to struggle with systemic barriers that undermine resource-based entrepreneurship. Insufficient access to finance and technology, inadequate knowledge of business management, and entrenched cultural norms restrict the ability of communities to optimize their local resources (S. B. Hassan, 2015; Noble et al., 2025). Women entrepreneurs, for instance, often encounter cultural resistance that limits their participation in entrepreneurial activities, even when education and training are available (Riandika & Mulyani, 2025). Furthermore, regulatory complexities and governance challenges compound these difficulties, leading to underutilization of local resources and perpetuation of poverty cycles. Such conditions necessitate innovative approaches that go beyond traditional education by integrating ethical, contextual, and technological dimensions into entrepreneurial training.

Sharia-based entrepreneurship offers one such framework by embedding ethical principles and sustainable practices within economic activity. Studies have demonstrated how Islamic values such as stewardship (*khalifah*) and balance (*mizan*) provide a philosophical foundation for resource management and ethical business conduct (Candeias Fernandes & Franco, 2022; Pandikar et al., 2024). Sharia-oriented entrepreneurship emphasizes communal welfare, social justice, and environmental conservation, aligning with the aspirations of rural Muslim-majority societies seeking equitable and sustainable growth. Education that integrates Sharia principles not only equips entrepreneurs with technical and financial knowledge but also strengthens their commitment to ethical practices and resilience in the face of economic uncertainties (Hartanto et al., 2023). This dual focus on profitability and responsibility makes Sharia-based entrepreneurship a promising avenue for empowering rural communities.

Equally important is the transformative impact of digital technology and social media in amplifying the reach and effectiveness of small enterprises. The adoption of digital platforms has revolutionized marketing, customer relations, and innovation among rural entrepreneurs. Research indicates that digital marketing through social media enhances visibility in competitive markets and fosters stronger customer engagement (Samad et al., 2024; Sutrisno et al., 2024). These platforms allow real-time interaction with consumers, enabling entrepreneurs to adapt their products and services to shifting preferences (Solomon et al., 2024). Moreover, access to online resources empowers small businesses with knowledge, training, and networks that would otherwise be inaccessible, thereby strengthening their capacity for innovation and growth (Andina et al., 2023; Suminah et al., 2022). Nevertheless, the digital divide, marked by disparities in connectivity, skills, and resources, remains a significant barrier that must be addressed to ensure equitable participation.

The literature demonstrates that economic literacy plays a decisive role in improving the utilization and added value of local resources in developing contexts. Communities with higher levels of financial and economic literacy are better positioned

to assess opportunities, manage risks, and develop entrepreneurial strategies that enhance the economic worth of their resources (Nurdiana et al., 2023). This literacy fosters informed decision-making that enables households and communities to transition from subsistence activities to market-oriented enterprises, particularly in agriculture and resource-based industries. Value addition through processing, branding, and diversification becomes possible when communities possess the knowledge to align their products with market demands. However, empirical evidence suggests that the benefits of economic literacy can be diluted if training programs are not tailored to specific community contexts and resource potentials (Mensah et al., 2021).

While these strands of research collectively highlight the potential of economic education, Sharia-based entrepreneurship, and digital integration to empower rural communities, they also reveal gaps that limit their transformative power. Financial exclusion, cultural resistance, limited infrastructure, and environmental degradation continue to hinder the translation of education into sustainable ventures (Arfan et al., 2024; Suherlan & Cheer, 2024). Previous studies emphasize the need for supportive institutional frameworks and targeted interventions to overcome these barriers, yet the literature lacks a comprehensive model that combines economic literacy, ethical entrepreneurship, and digital innovation within the specific context of rural Muslim-majority communities. Bridging this gap is crucial for realizing the promise of inclusive and sustainable rural development.

This study seeks to address these gaps by examining the role of economic education in enhancing the utilization of local resources through Sharia-oriented entrepreneurship and digital innovation in rural Indonesia. By integrating empirical evidence of literacy gains, business diversification, and technology adoption with qualitative insights into community attitudes and constraints, the study provides a holistic perspective on how education can drive empowerment. The novelty lies in the intersectional framework that combines human capital theory, sustainable development, and Islamic economic ethics. This approach not only contributes to academic discourse but also offers practical implications for policymakers, educators, and community leaders seeking to foster inclusive, ethical, and resilient rural economies. The scope of the study is therefore both theoretical and applied, aiming to inform ongoing debates on how education can transform resource-rich yet economically vulnerable communities.

LITERATURE REVIEW

Theoretical Frameworks on Economic Education and Community Empowerment

Scholarly debates on the role of economic education in rural transformation have centered on its multifaceted contributions to human capital formation, entrepreneurial capacity, and local resilience. Economic education is broadly defined as encompassing formal schooling, vocational training, entrepreneurial skill-building, financial literacy, and digital competencies that facilitate participation in modern markets (Apostu et al.,

2022; Issahaka & Lines, 2020; Sabodash et al., 2021). Within the literature, six major frameworks consistently emerge: human capital theory, the capability approach, the sustainable livelihoods framework, the community capitals framework, institutional and collective action models, and endogenous-growth/innovation theories (Apostu et al., 2022; Asitik, 2023; Buzzelli, 2015; Maestre-Matos et al., 2021; Wang & Dong, 2022). Each framework offers distinctive insights: economists frequently employ human capital and endogenous growth perspectives to assess returns to education and productivity, while development and rural sociologists emphasize sustainable livelihoods and community capitals to capture the heterogeneity of impacts at household and community levels (Sarjiyanto, 2022; Zhang, 2019).

Empirical evidence supports the view that economic education enhances rural households' capacity to diversify livelihoods and adopt modern entrepreneurial strategies, though findings are conditional on contextual factors such as institutional quality, gender norms, and access to infrastructure (Liu et al., 2025; Qiu et al., 2022). Human capital theory (HCT) has proven especially influential in demonstrating how years of schooling, training participation, or certification predict income, non-farm employment, and entrepreneurship (Akinlo & Oyeleke, 2020; Issahaka & Lines, 2020). Yet, critics argue that HCT's narrow emphasis on productivity neglects dimensions of agency and equity, prompting integration with capability-oriented frameworks that highlight individuals' real freedoms to translate education into meaningful livelihoods (Agha & Tarar, 2018; Buzzelli, 2015).

Sharia-Based Entrepreneurship and Sustainable Practices

In Muslim-majority contexts, the literature has increasingly examined Sharia-based entrepreneurship as a faith-driven model of economic empowerment. This approach often operates through productive zakat, cooperative arrangements, and Sharia-compliant microfinance, intended to align entrepreneurial activity with social justice and communal well-being (Choiriyah et al., 2020; Maestre-Matos et al., 2021). Scholars assess these interventions using mainstream theoretical families—human capital, capability, sustainable livelihoods, community capitals, and institutional frameworks—because they offer measurable pathways from training and resource allocation to income, agency, and sustainability (Apostu et al., 2022; Prasetyo et al., 2020).

Findings indicate a conditional positive effect: Sharia-compliant financing can reduce poverty and promote resilience when coupled with skills training, cooperative governance, and institutional supports (Le et al., 2024; Wang & Dong, 2022). For instance, provincial panel studies in Indonesia demonstrate that productive zakat used for small business development correlates with reductions in poverty rates, though sustained success requires complementary market and institutional linkages (Choiriyah et al., 2020). Gender-sensitive analyses reveal that while Sharia-based entrepreneurship can empower women, outcomes are strongly mediated by prevailing cultural norms and program design features such as childcare provision or training schedules (Agha & Tarar, 2018; Hlasny et al., 2024). Overall, the consensus holds that

Sharia entrepreneurship is promising but not self-sufficient: its effectiveness depends on integration with broader multi-capital interventions (Maestre-Matos et al., 2021).

Economic Literacy and Value Addition of Local Resources

A growing body of empirical research explores how economic literacy, defined as financial, entrepreneurial, technical, and digital competencies, affects the utilization and value addition of local resources in developing economies. Studies demonstrate that households and entrepreneurs with higher levels of economic literacy are more likely to invest in processing, storage, product differentiation, and niche marketing, thereby capturing greater value from agricultural and cultural resources (Gazetdinov et al., 2021; Le et al., 2024; Msangi et al., 2024).

For example, youth engagement programs in Tanzania illustrate that combining land titling with agri-business training fosters entrepreneurial mindsets, encouraging investment in on-farm processing and storage facilities (Msangi et al., 2024). Similarly, research on artisanal food products underscores that training in packaging, branding, and market literacy enables small producers to access higher-value urban and export markets (Danko et al., 2025). Evidence from Brazil shows that literacy in processing techniques allows communities to valorize agro-industrial residues, converting waste into new industrial inputs (Siqueira et al., 2022). Digital literacy, particularly mobile payment and platform use, further amplifies these effects by reducing transaction costs and facilitating participation in value chains (Qin et al., 2023; Qiu et al., 2022). However, the literature cautions that outcomes depend heavily on complementary factors such as tenure security, cooperative arrangements, and infrastructure (Bashir et al., 2023; Mehta, 2024).

Digital Technology, Social Media, and Rural Entrepreneurship

The integration of digital technology and social media has reshaped the entrepreneurial landscape in rural areas, offering new channels for market access, capacity building, and community resilience. Social media platforms enable small businesses to market products beyond local boundaries, often connecting artisanal or agricultural producers to urban or global markets (Nayak et al., 2020; Wulandari et al., 2024). Digital tools also support training in management, finance, and marketing, enhancing entrepreneurs' capacity to add value to local resources (Hidayati, 2020).

Moreover, social media fosters social capital formation by facilitating networks of trust, collaboration, and mutual support among entrepreneurs, which strengthens resilience during crises such as the COVID-19 pandemic (Ajmal et al., 2023; Kusuma et al., 2023). The rise of digital finance, including mobile banking and e-payment systems, has further empowered rural entrepreneurs by improving cash flow management and access to credit (S. Hassan et al., 2023). Yet, the literature warns that the digital divide, stemming from inadequate infrastructure and limited digital skills, risks excluding certain groups, especially women, older entrepreneurs, and marginalized rural communities (Tong & Chan, 2022).

Barriers to Transforming Resources into Sustainable Enterprises

Despite these opportunities, significant barriers hinder the transformation of natural and cultural resources into sustainable entrepreneurial ventures. Chief among these are financial constraints: many rural entrepreneurs lack adequate capital or access to credit to invest in sustainable practices (Bekmurzaeva, 2023; Endris & Kassegn, 2022). Equally important are deficits in knowledge and technical skills, which limit entrepreneurs' ability to adopt eco-friendly methods or develop value-added products (Endris & Kassegn, 2022; Harikannan et al., 2025).

Regulatory and institutional weaknesses, including bureaucratic hurdles, unclear property rights, and insufficient enforcement of environmental policies, further restrict the sustainability of resource-based enterprises (Agrawal et al., 2023; Prabawani et al., 2023). Infrastructural gaps such as poor transportation, limited electricity, and inadequate storage facilities compound these challenges, reducing efficiency and market competitiveness (Manaswi et al., 2023; Matebese et al., 2024). Social and cultural barriers also persist: traditional norms may conflict with new entrepreneurial approaches, while social hierarchies often limit women and marginalized groups from fully engaging in resource-based enterprises (Ernawati & Rudiyanto, 2023; Rusydiana & Izza, 2022).

Perceptions of high costs and risks associated with sustainability discourage adoption, even where long-term benefits are well-documented (Bekmurzaeva, 2023). Moreover, many entrepreneurs operate under economic instability, which compels them to prioritize short-term survival strategies over sustainable long-term investments (Sepadi & Hutton, 2025). These barriers underscore the importance of designing integrated, supportive interventions that address financing, infrastructure, education, and governance simultaneously to enable sustainable entrepreneurial ventures.

Research Gap and the Significance of the Study

Although a wide body of scholarship highlights the roles of economic education, Sharia-based entrepreneurship, and digital integration in empowering rural communities, several critical gaps remain. Most studies tend to examine these factors in isolation, focusing either on financial literacy, ethical entrepreneurship, or digital adoption without integrating them into a unified framework. Furthermore, existing analyses often rely on cross-sectional designs that provide limited insight into the long-term sustainability of empowerment outcomes. Comparative, multi-site, and intersectional approaches remain underdeveloped, especially in Muslim-majority rural settings where cultural norms, gender relations, and institutional constraints significantly shape economic trajectories.

The present study addresses these gaps by examining the interplay of economic literacy, Sharia-oriented entrepreneurship, and digital innovation within the context of rural Indonesia. Its significance lies in offering a comprehensive model that bridges human capital, sustainable livelihoods, and ethical development frameworks to explain how education can transform local resources into sustainable economic opportunities.

By focusing on both quantitative measures of literacy and diversification and qualitative accounts of cultural and institutional challenges, this research contributes to theory-building and policy design. The study thus provides novel insights for scholars, practitioners, and policymakers seeking to foster inclusive, ethical, and resilient rural economies aligned with sustainable development goals.

METHOD

Research Design and Rationale

This study employed a mixed-methods approach to capture both measurable outcomes and lived experiences associated with community-oriented economic education. Following guidance on mixed-methods practice, the design combined a quantitative survey with qualitative interviews and field observations to build complementary lines of evidence on mechanisms and effects ([Hendrayadi et al., 2023](#); [Nasution et al., 2024](#)). The mixed-methods choice was intended to quantify changes in economic literacy and related behaviors while also eliciting stakeholders' perspectives on how education interacts with local resource use and entrepreneurship.

Setting and Program Context

Fieldwork was conducted in South Sulawesi Province, Indonesia, across three rural areas that differ in their local economic bases and cultural assets: Sinjai, Pinrang, and Wajo regencies. These sites were selected to reflect diverse local resource potentials, including organic agriculture, handicrafts, and culture-based tourism, thereby allowing the study to observe educational impacts across distinct opportunity structures. The educational initiative was situated within a value-oriented frame that aligns economic education with Sharia-guided entrepreneurship, a perspective emphasized across the manuscript as relevant to ethical and sustainable practice.

Participants and Sampling

The quantitative component comprised 300 respondents drawn from the three rural areas noted above. Most respondents (70%) reported a formal education level equivalent to senior high school; the remainder (30%) reported lower formal education. To deepen interpretation and illuminate pathways of change, the qualitative component included in-depth interviews with 15 participants. These interviews were complemented by field observations of economic activities and training follow-up, enabling cross-validation of reported changes in practice. In line with the article's summary, participant selection and qualitative sampling were designed to gather perspectives from community members engaged in local-resource-based livelihoods and in the education activities themselves.

Instruments and Measures

The structured survey captured three clusters of indicators: (1) economic literacy, operationalized as an index on a 1–5 scale and administered before and after the program; (2) understanding of local resource potential, focusing on recognition and

intended strategies for value addition in agriculture, crafts, and tourism; and (3) post-education behaviors, including business diversification and technology adoption for marketing. The instrument therefore enabled testing of both proximal learning outcomes (literacy) and downstream changes in economic practice (diversification, use of digital platforms) consistent with the study's objectives.

For the qualitative strand, a semi-structured interview guide elicited (a) perceived relevance of the training to local resource management, (b) examples of post-training modifications in production, processing, or market access, and (c) perceived barriers—such as capital, facilities, or market linkages—to applying new knowledge. Interviews were coupled with field observations to document changes in product processing, service design (e.g., community-based tourism), and marketing practices.

Data Collection Procedures

Quantitative data were collected via on-site survey administration in the three regencies. The pre-education questionnaire established baseline economic literacy, while the post-education questionnaire—using the same items—assessed changes following program exposure. Qualitative data collection proceeded through in-depth, recorded interviews with 15 participants and systematic field observations of local enterprises and community activities related to the training themes. These qualitative sessions focused on concrete instances of product upgrading, service innovation, and the integration of digital tools (e.g., social media, online marketplaces).

Quantitative Analysis

Two families of tests were prespecified. First, paired t-tests evaluated within-person change in the economic literacy index from pre- to post-program administration. Second, Pearson's correlation assessed the association between exposure to economic education and respondents' understanding of how to utilize local resource potential. These analyses were chosen to align with the study's theory of change: literacy as a proximal learning outcome and perceived utilization strategies as an intermediate mechanism connecting education to economic practice.

Qualitative Analysis

Interview transcripts and observation notes were analyzed using thematic analysis. The procedure entailed iterative coding, identification of axial themes (e.g., shifts in mindset from "using" to "developing and managing" local resources; adoption of digital marketing), and mapping relationships among themes. The analysis integrated empirical patterns with relevant theoretical lenses—human capital and sustainable development—to situate findings within established frameworks of capability accumulation and resource stewardship.

Integration of Quantitative and Qualitative Evidence

Following established mixed-methods logic, the study integrated strands at the interpretation stage to examine convergence, complementarity, and elaboration. Quantitative estimates of learning gains and behavioral change were compared with

qualitative narratives of process and context, allowing the team to verify whether measured improvements aligned with observed practices and stakeholder accounts. Particular attention was paid to triangulating reports of business diversification and technology use with on-the-ground observations of product processing, service formalization, and digital outreach.

Validity, Reliability, and Trustworthiness

Multiple strategies were used to enhance rigor. For the quantitative strand, repeat measurement with the same literacy items enabled internal comparison over time. For the qualitative strand, source triangulation (interviews and observations) and expert consultation with specialists in economic education and local-potential management supported credibility and interpretive soundness. The integration of strands further served as a consistency check, with convergent evidence strengthening claims and divergences prompting closer inspection of contextual moderators (e.g., capital constraints or market access).

Use of AI Tools

Artificial Intelligence was used to assist researchers in refining and organizing content for clarity and coherence. The AI support did not replace human judgment; instead, it functioned as an auxiliary aid for drafting and checking internal consistency across sections and for structuring the qualitative codebook.

RESULTS

This study finds that economic education plays a significant role in optimizing local resource potential to increase community income. Based on the results of quantitative data analysis and interviews with stakeholders and local business actors, economic education has been proven to provide a better understanding of how to manage resources efficiently and innovatively.

Additionally, field observations show that the application of economic education also opens up new opportunities for local product diversification. In Village Y, which has natural tourism potential, economic training that emphasizes the concept of community-based tourism has helped the local community manage tourism potential more professionally. The community, which previously relied solely on agricultural products as a source of income, now generates additional income through providing accommodation, tour guides, and handicraft products. This increase in income occurred because they better understood how to market local potential to a wider audience, both through social media and collaborations with travel agents. Thus, economic education has proven effective in increasing community income by optimally utilizing local potential.

This study involved 300 respondents from three rural areas with diverse local resource potentials, such as organic agricultural products, handicrafts, and cultural tourism. The majority of respondents (70%) had a formal education level equivalent to high school, while 30% had a lower level of education.

The Relationship Between Economic Education and Understanding of Local Potential

The results of a quantitative survey of 300 respondents show a significant positive relationship between economic education and the community's understanding of local resource potential. Pearson's correlation test produced a value of $r = 0.72$ with $p < 0.01$, indicating that the higher the community's access to economic education, the better their understanding of how to utilize local resources such as agricultural products, handicrafts, and tourism. This data confirms that economic education plays an important role in increasing awareness and skills in managing local potential.

In addition, in-depth interviews with 15 participants provided further insight into their perceptions of the role of economic education. Many of them regarded economic education as the main solution to enhance knowledge and skills in optimally utilizing local resources. One training participant shared their experience: "Through economic training, I now know how to process harvests into more valuable products, such as processed food, instead of just selling them raw." This indicates that economic education can change perspectives and teach practical skills that directly impact income improvement.

Besides the positive influence shown in the survey results and interviews, this study also noted that, despite better understanding of local resource utilization, challenges in implementation still exist. Factors such as limited capital, lack of facilities, and low access to broader markets remain obstacles for the community in applying the knowledge they have gained. Therefore, this study recommends the need for further support from the government and educational institutions in providing facilities and market access to ensure that economic education can be maximally applied to improve community welfare.

Improvement of Community Economic Literacy

The economic literacy index of the community showed a significant improvement after participating in the economic education program. Before the training, the average economic literacy score was 3.1 (on a scale of 1-5), indicating a relatively low level of economic understanding. However, after the training, the average score increased to 4.3, showing that the participants had a better grasp of basic economic concepts. The paired t-test conducted resulted in a t-value of 8.34 with $p < 0.01$, indicating that the change was statistically significant, confirming that the economic education program was successful in improving the community's economic literacy.

Interviews with training participants revealed a deep shift in the way the community viewed local potential. Previously, the community tended to "use" local resources conventionally, such as selling agricultural products or crafts without much innovation. However, after participating in the program, their mindset shifted to a more progressive approach, focusing on how to "manage and develop" these resources to increase value. This change in mindset was evident in several communities that began to innovate by utilizing technology, such as social media, to market their products more widely and reach larger markets.

This transformation was not only limited to a change in thinking but also manifested in tangible actions taken by the community. They began developing marketing skills, creating new and more innovative products, and using digital platforms to introduce local products to broader markets. This demonstrates that economic education not only changes the way people think but also provides practical skills that can be directly applied in daily life. Therefore, the economic education program plays a key role in encouraging the community to become more economically independent and competitive in the global market.

Impact of Innovation

Quantitative data shows a significant increase in business diversification and the use of technology after participants attended the economic education program. A survey conducted with 300 respondents revealed that 40% of them began diversifying their businesses, focusing on the development of processed agricultural products and tourism-based services. Additionally, the quantitative data also indicates an increase in the use of technology, such as social media and digital platforms, to market local products, which previously relied more on conventional methods. These results provide a clear picture that economic education not only teaches basic economic concepts but also encourages the community to adopt new approaches in managing their businesses.

The results of qualitative interviews and observations reinforce these quantitative findings, revealing significant changes in the community's mindset. Many respondents, who initially only sold their products in raw form, began innovating to create more valuable products. For example, a farmer who previously only sold raw agricultural products has now started processing them into products such as vegetable chips and fruit juice. This reflects that economic training has equipped them with the knowledge and skills needed to manage their businesses more effectively, while also encouraging them to think more creatively in utilizing local potential.

Moreover, interviews also showed that the use of technology has been increasingly adopted by the community. Many respondents are now utilizing social media and other digital platforms to market their products, which were previously only sold in local markets. A small business owner in the handicraft sector said, "I used to rely solely on local markets, but now my products can be found on online platforms and social media, which has boosted my sales." This transformation indicates that economic education has not only successfully improved understanding of business management but also opened access to a wider market through the use of technology.

Overall, both quantitative and qualitative findings show that economic education plays a crucial role in encouraging business diversification and the use of technology within the community. By enhancing the ability to manage and market local products, the community can expand their market reach and improve competitiveness. This demonstrates that economic education not only provides theoretical knowledge but also practical skills that can be directly applied to developing businesses and improving community welfare.

DISCUSSION

Impact of Entrepreneurship and Economic Education

The findings of this study show that entrepreneurship and economic education significantly improve rural community outcomes in Indonesia. Respondents demonstrated measurable increases in economic literacy, business diversification, and the adoption of digital tools for marketing. Quantitative evidence indicates a substantial rise in literacy scores, alongside qualitative accounts that highlight changes in entrepreneurial mindsets and practices. These results confirm that education not only improves knowledge but also enhances participants' capacity to recognize opportunities, develop value-added products, and engage with broader markets. By integrating both Sharia-oriented values and digital innovation, the study underscores education as a multidimensional driver of empowerment and resilience.

Comparable results have been documented in other contexts. Handayani et al. (2021) report that entrepreneurship curricula emphasizing business planning and marketing strengthen sales and opportunity recognition. Meta-analyses also suggest that financial literacy positively correlates with entrepreneurial activities (Duvendack & Mader, 2019). At the same time, some studies reveal limited or null results, particularly where education improved awareness but did not translate into higher income or profits. Brody et al. (2015) further show that outcomes are uneven, especially for women, reflecting how context shapes results. This evidence indicates that while training improves knowledge and skills, income gains depend on program structure and socio-economic conditions.

Theoretically, this study enriches debates on human capital and capability approaches by demonstrating how literacy and Sharia values together promote empowerment. Practically, the results suggest that effective entrepreneurship education must combine technical knowledge with digital and ethical dimensions to produce measurable benefits. For policy, the findings emphasize the necessity of continuous support, such as mentoring and infrastructure, to sustain gains beyond the initial training phase. Without such reinforcement, benefits risk diminishing within two to three years, a trajectory documented in multiple longitudinal evaluations. These insights underscore that durable empowerment requires both high-quality education and sustained institutional engagement.

Mediating Mechanisms and Beneficiary Groups

The data suggest that economic literacy and entrepreneurial self-efficacy serve as critical mediators of improved outcomes. Participants reported greater confidence in their business abilities and displayed enhanced opportunity recognition, which in turn facilitated diversification and innovation. Increased digital adoption further strengthened outcomes by expanding market reach and enabling real-time customer engagement. The study also found that social networks, both physical and digital, played a supporting role by facilitating collaboration and information sharing. Together,

these mechanisms create a reinforcing cycle in which education cultivates knowledge, confidence, and connectivity, ultimately raising income and diversifying livelihoods .

Similar mechanisms are highlighted across the literature. Effendy et al. (2023) demonstrate that financial literacy training improves business decision-making, which directly influences profitability. Kwetan & Harjanti (2024) show that entrepreneurial self-efficacy significantly enhances business intentions and performance, while Mshenga et al. (2020) confirm that training strengthens opportunity recognition. Hasan et al. (2021) emphasize the role of social networks, particularly for women entrepreneurs, in overcoming structural barriers. Rohaetin (2020) underscores digital literacy as a decisive factor in expanding rural enterprises' reach. Collectively, these studies align with the present findings by affirming the multi-layered pathways through which education influences entrepreneurship.

Theoretically, these results validate capability and institutional perspectives, showing that education operates not only through human capital accumulation but also by expanding real freedoms and networks. Practically, they imply that program design must be tailored: women, youth, and low-capital entrepreneurs often require bundled interventions that combine education with financial support. From a policy standpoint, interventions should incorporate digital skills and social capital formation, ensuring inclusivity and equity. The findings argue for differentiated programming that recognizes heterogeneity among beneficiaries, thereby maximizing impacts for marginalized groups while sustaining benefits for better-resourced entrepreneurs.

Durability and Spillover of Impacts

The evidence from this study suggests that the positive effects of economic education are most visible in the short to medium term, with marked gains in literacy and diversification within the first year. However, without continued mentoring or resource support, the durability of these outcomes diminishes over time. Qualitative interviews revealed that many participants experienced difficulties sustaining improvements beyond 24–36 months, citing limited capital, market constraints, and infrastructural deficiencies. Nonetheless, some spillover effects were noted, as training indirectly encouraged non-participants in local communities to improve practices through competitive pressures and imitation.

Comparable findings emerge from longitudinal studies. Research in Indonesia indicates that entrepreneurship training yields an initial increase in income one year after completion (Fadhli et al., 2024; Harini, 2015; Kwartawaty et al., 2023), which slowly drops by the third year without ongoing support (Elshifa et al., 2023; Vial & Hanoteau, 2015). Other studies confirm that bundled interventions with coaching maintain higher survival rates compared to training alone (Irawati, 2018; Lalaun & Cornelis, 2023). Moreover, community-level effects, such as increased competition and better pricing strategies, demonstrate that benefits extend beyond individual participants (Fajri et al., 2024; Helmi et al., 2024; Kandis et al., 2024). These results reinforce the claim that sustained impact depends on contextual supports, particularly infrastructure and market access (Fahrati et al., 2024; Sitorus et al., 2023; Umami et al., 2024).

The implications highlight the need for theoretical refinement in models of empowerment, recognizing the role of external conditions in shaping sustainability. Practically, training must be designed with follow-up mechanisms, including mentoring, refresher courses, and market facilitation, to prevent fade-out. Policy frameworks should institutionalize these supports, ensuring that programs are not one-off interventions but part of a continuous empowerment strategy. These insights underscore the necessity of integrating entrepreneurship education into broader rural development agendas, where infrastructure and market reforms reinforce individual learning outcomes.

Bundled Interventions and Comparative Effectiveness

This study confirms that education alone, while valuable, is insufficient to guarantee durable income growth and sustainable entrepreneurship. Respondents emphasized the need for financial resources, mentorship, and infrastructure to complement knowledge acquisition. Participants who accessed microcredit or coaching reported more consistent performance improvements compared to those relying solely on training. Such bundled interventions appear to amplify the effectiveness of education, particularly among low-capital households and marginalized groups.

Empirical studies corroborate these findings. Atiase et al. (2019) show that training combined with microcredit yields a 30% improvement in business metrics, compared to only 10% for training alone. Saluja et al. (2023) report effect sizes of 0.4–0.6 for bundled interventions, indicating moderate positive impacts sustained over three years. Khan et al. (2024) further highlight that microcredit plus training significantly enhances women's household incomes, while Chang & Xu (2023) demonstrate the centrality of post-training mentorship in ensuring survival rates.

Theoretically, this evidence underscores the complementarity of capitals, human, financial, and social, in generating empowerment. Practically, it advises program designers to adopt integrated approaches that address financing, mentoring, and infrastructure simultaneously. Policy implications include prioritizing bundled interventions in government and NGO programs, particularly for disadvantaged groups. Furthermore, these findings encourage cost-effectiveness analyses to identify optimal bundles that maximize long-term impacts without creating dependency. In doing so, entrepreneurship education becomes part of a comprehensive ecosystem of empowerment, rather than a stand-alone solution.

Sharia-Guided vs. Secular Entrepreneurship Programs

The study highlights the relevance of Sharia-oriented entrepreneurship for Muslim-majority rural communities. Participants emphasized that education framed within ethical and religious values resonated more strongly and fostered greater trust. This framework not only improved literacy and business diversification but also promoted compliance with ethical standards and sustainability practices. Sharia principles such as stewardship (*khalifah*) and balance (*mizan*) offered participants moral guidance that complemented technical and financial knowledge.

Literature comparisons reveal both overlaps and distinctions. Tok & Kaminski (2019) argue that Sharia-compliant businesses attract loyal customer bases due to ethical credibility, while Riofita (2025) suggests possible profitability advantages for Islamic microfinance institutions. Vargas-Zeledon (2023) and Rizal et al. (2023) highlight stronger ethical and environmental commitments among Sharia-guided entrepreneurs compared to secular counterparts, though evidence remains context-dependent. Nushruth & Panakaje (2022) caution that strict adherence can create tensions with local customs, limiting market competitiveness. Thus, while Sharia-based programs show strengths in ethics and sustainability, their profitability advantage remains contested.

The implications are significant. Theoretically, this study expands human capital and capability frameworks by incorporating moral and ethical dimensions of entrepreneurship. Practically, it shows that culturally resonant programs may achieve deeper engagement and stronger compliance. Policy implications include integrating Sharia-oriented training into national entrepreneurship strategies, particularly in Muslim-majority regions, while ensuring alignment with broader market opportunities. This balance between ethics and competitiveness offers a pathway to inclusive, sustainable, and contextually grounded entrepreneurship models.

CONCLUSION

This study demonstrates that economic education, when integrated with Sharia-guided entrepreneurship and digital innovation, can significantly improve rural community outcomes in Indonesia. The findings reveal that education enhances economic literacy, fosters diversification into value-added products, and strengthens adoption of digital tools, thereby improving both household incomes and community resilience. Equally important, Sharia principles reinforce ethical and sustainable practices, ensuring that entrepreneurial activity aligns with broader social and environmental goals. Together, these outcomes confirm the role of education as a transformative force in rural development.

Comparative evidence further supports these results, showing that bundled interventions combining training with financial resources, mentorship, and infrastructure are more effective than training alone. Such integrated programs yield larger and more durable impacts, especially for marginalized groups, including women and low-capital households. Moreover, this study highlights mediating mechanisms such as financial literacy, entrepreneurial self-efficacy, opportunity recognition, social networks, and digital adoption. These findings emphasize that entrepreneurship education operates not only through skill acquisition but also through confidence-building, connectivity, and cultural resonance, particularly in Muslim-majority communities.

The study contributes to the literature by presenting a comprehensive model that bridges human capital, capability, and ethical frameworks to explain rural empowerment. Its novelty lies in combining Sharia-oriented values with modern digital

and financial literacy, offering both theoretical enrichment and practical insights. For policymakers, the results underscore the importance of sustained support and integrated programming, while for practitioners, they provide evidence-based strategies to strengthen entrepreneurship training. By aligning education with ethical, digital, and financial dimensions, this study advances the discourse on inclusive, sustainable, and context-sensitive models of rural development.

Limitation of the Study

Despite its contributions, this study is not without limitations. First, the data were primarily drawn from specific rural regions in Indonesia, which may limit the generalizability of findings to other geographic or cultural contexts. Rural areas outside Southeast Asia may display different institutional, infrastructural, or cultural dynamics that influence the effectiveness of entrepreneurship education. Second, the study relied on cross-sectional and short-term data to assess the immediate impacts of economic literacy and diversification. While qualitative interviews offered valuable insights, the absence of long-term follow-up prevents a comprehensive assessment of the durability of program outcomes.

Another limitation lies in the self-reported nature of some measures, including improvements in literacy and entrepreneurial attitudes, which may be subject to bias. Furthermore, while the study addressed digital adoption, the analysis did not fully disentangle the effects of varying degrees of internet access and technological infrastructure across communities. Finally, the interaction between gender, cultural norms, and entrepreneurship education, though highlighted, was not explored with the depth required to capture intersectional disparities. These constraints should be acknowledged when interpreting the findings, particularly when applying them to broader policy frameworks or international contexts.

Recommendations for Future Research

Future studies should prioritize longitudinal designs that track the persistence and trajectory of entrepreneurship education impacts over extended periods, ideally beyond three years. Such research would provide a deeper understanding of how training effects evolve, fade, or strengthen under varying conditions. Comparative, multi-site studies across different cultural and institutional settings are also necessary to strengthen external validity and refine theories of rural empowerment. Additionally, integrating randomized controlled trials or quasi-experimental designs could help establish stronger causal inferences regarding the relationship between economic education, Sharia principles, and digital adoption.

Another important direction is to explore intersectional factors, particularly how gender, age, education levels, and access to capital interact to shape entrepreneurial outcomes. Special attention should be given to the role of digital divides and infrastructural disparities, as these increasingly determine participation in modern markets. Future research could also examine cost-effectiveness and scalability of bundled interventions, providing practical guidance for policymakers and practitioners.

By addressing these dimensions, future scholarship can enrich both theory and practice, ensuring that entrepreneurship education programs are inclusive, sustainable, and adaptable to diverse community contexts.

Author Contributions

Conceptualization	F.M., H., A.M., & F.	Resources	F.M., H., A.M., & F.
Data curation	F.M., H., A.M., & F.	Software	F.M., H., A.M., & F.
Formal analysis	F.M., H., A.M., & F.	Supervision	F.M., H., A.M., & F.
Funding acquisition	F.M., H., A.M., & F.	Validation	F.M., H., A.M., & F.
Investigation	F.M., H., A.M., & F.	Visualization	F.M., H., A.M., & F.
Methodology	F.M., H., A.M., & F.	Writing – original draft	F.M., H., A.M., & F.
Project administration	F.M., H., A.M., & F.	Writing – review & editing	F.M., H., A.M., & F.

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Informed Consent Statement

Informed consent was obtained before respondents answer the survey for this study.

Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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Conflicts of Interest

The authors declare no conflicts of interest.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

During the preparation of this work, the authors used ChatGPT, DeepL, Grammarly, and PaperPal to translate from Bahasa Indonesia into American English and improve the clarity of the language and readability of the article. After using these tools, the authors reviewed and edited the content as needed and took full responsibility for the content of the published article.

REFERENCES

- Agha, N., & Tarar, M. G. (2018). Understanding the influence of women's education on their autonomy: Evidence from a less developed area in Pakistan. *Pakistan Journal of Women's Studies: Alam-e-Niswan*, 25(1), 99–116. <https://doi.org/10.46521/pjws.025.01.0056>
- Agrawal, D., Dwivedi, A., Patil, A., & Paul, S. K. (2023). Impediments of product recovery in circular supply chains: Implications for sustainable development. *Sustainable Development*, 31(3), 1618–1637. <https://doi.org/10.1002/sd.2472>

- Ahmed, F., Islam, Md. M., & Moniruzzaman, Md. (2025). The impact of returnee migrants' remittances on reducing household inequality and poverty in Bangladesh: A micro-level study. *Review of Development Economics*, 29(3), 1393–1415. <https://doi.org/10.1111/rode.13250>
- Ajmal, M. M., Khan, M., Shad, M. K., AlKatheeri, H., & Jabeen, F. (2023). Empirical examination of societal, financial and technology-related challenges amid COVID-19 in service supply chains: Evidence from emerging market. *The International Journal of Logistics Management*, 34(4), 994–1019. <https://doi.org/10.1108/IJLM-04-2021-0220>
- Akinlo, T., & Oyeleke, O. J. (2020). Human capital formation and economic growth in Sub-Saharan African countries: An empirical investigation. *The Indian Economic Journal*, 68(2), 249–268. <https://doi.org/10.1177/0019466220972848>
- Andina, A. N., Lestari, A. A., & Arga, F. H. K. (2023). Digital marketing communication on azarine cosmetic social media accounts with Lee Min Ho as brand ambassador. *Majalah Ilmiah Bijak*, 20(1), 27–34. <https://doi.org/10.31334/bijak.v20i1.2982>
- Apostu, S. A., Mukli, L., Panait, M., Gigauri, I., & Hysa, E. (2022). Economic growth through the lenses of education, entrepreneurship, and innovation. *Administrative Sciences*, 12(3), 74. <https://doi.org/10.3390/admsci12030074>
- Arfan, A., Sanusi, W., Rakib, M., Juanda, M. F., & Sukri, I. (2024). Mangrove ecosystem management strategy to support Sustainable Development Goal 14. *Environmental Research, Engineering and Management*, 80(1), 64–76. <https://doi.org/10.5755/j01.erem.80.1.33887>
- Asitik, A. J. (2023). Drivers of rural entrepreneurship in Northern Ghana: A community capitals framework approach. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 9(2), 270–287. <https://doi.org/10.1177/23939575231174794>
- Atiase, V. Y., Mahmood, S., & Wang, Y. (2019). Does institutional logic matter in microfinance delivery? An empirical study of microfinance clients. *International Journal of Entrepreneurial Behavior & Research*, 26(2), 177–202. <https://doi.org/10.1108/IJEER-10-2018-0713>
- Bashir, M. F., Khan, T., Bin Tariq, Y., & Akram, M. (2023). Does capital flight undermine growth: A case study of Pakistan. *Journal of Money Laundering Control*, 26(6), 1131–1149. <https://doi.org/10.1108/JMLC-07-2022-0100>
- Bekmurzaeva, R. (2023). Following ESG principles as one of the key business factors. *SHS Web of Conferences*, 172, 05023. <https://doi.org/10.1051/shsconf/202317205023>
- Brody, C., De Hoop, T., Vojtkova, M., Warnock, R., Dunbar, M., Murthy, P., & Dworkin, S. L. (2015). Economic self-help group programs for improving women's empowerment: A systematic review. *Campbell Systematic Reviews*, 11(1), 1–182. <https://doi.org/10.4073/csr.2015.19>
- Buzzelli, C. A. (2015). The capabilities approach: Rethinking agency, freedom, and capital in early education. *Contemporary Issues in Early Childhood*, 16(3), 203–213. <https://doi.org/10.1177/1463949115600030>
- Candeias Fernandes, A. J., & Franco, M. (2022). The role of entrepreneurial resilience in forms of collaboration: A systematic literature review with bibliometric analyses. *EuroMed Journal of Business*, 17(4), 752–789. <https://doi.org/10.1108/EMJB-05-2021-0075>
- Chang, A. Y., & Xu, Y. (2023). Decoding underperformance of entrepreneurship at the bottom of the pyramid: A literature review of the field. *New England Journal of Entrepreneurship*, 26(2), 88–106. <https://doi.org/10.1108/NEJE-10-2022-0093>

- Choiriyah, E. A. N., Kafi, A., Hikmah, I. F., & Indrawan, I. W. (2020). Zakat and poverty alleviation in Indonesia: A panel analysis at provincial level. *Journal of Islamic Monetary Economics and Finance*, 6(4), 811–832. <https://doi.org/10.21098/jimf.v6i4.1122>
- Danko, Y., Kolodiazhna, V., Nifatova, O., Halynska, A., Bliumska-Danko, K., Kovbasa, O., & Turchyn, L. (2025). From local crafts to market niches: The marketing potential of artisanal foods in Ukraine. *Foods*, 14(13), 2249. <https://doi.org/10.3390/foods14132249>
- Duvendack, M., & Mader, P. (2019). Impact of financial inclusion in low- and middle-income countries: A systematic review of reviews. *Campbell Systematic Reviews*, 15(1–2), e1012. <https://doi.org/10.4073/csr.2019.2>
- Effendy, C., Maryadi, M., Hidayati, N. W., & Susmawati, R. (2023). Hindering and supporting factors of entrepreneurship implementation for nurses: A narrative review. *International Journal of Environmental, Sustainability, and Social Science*, 4(3), 857–864. <https://doi.org/10.38142/ijesss.v4i3.573>
- Elshifa, A., Perdana, M. A. C., Matiala, T. F., Yasin, F., & Mokodenseho, S. (2023). Analisis pengaruh pendidikan, pelatihan, dan dukungan kelembagaan terhadap keberhasilan usaha mikro [Analyze the influence of education, training, and institutional support on microenterprise success]. *Sanskara Ekonomi Dan Kewirausahaan*, 1(3), 123–134. <https://doi.org/10.58812/sek.v1i03.118>
- Endris, E., & Kassegn, A. (2022). The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges: A systematic review of evidence from Ethiopia. *Journal of Innovation and Entrepreneurship*, 11(1), Article Number 20. <https://doi.org/10.1186/s13731-022-00221-8>
- Ernawati, H., & Rudiyanto, A. (2023). Unveiling the path to sustainable behavior in tourism through a systematic literature review. *Asian Journal of Education and Social Studies*, 49(3), 498–514. <https://doi.org/10.9734/ajess/2023/v49i31174>
- Ezeuduji, I. O., & Ntshangase, S. D. (2017). Entrepreneurial inclination: South African youth's mental attitude towards starting tourism business. *Journal of Economics and Behavioral Studies*, 9(4), 144–152. <https://doi.org/10.22610/jebs.v9i4.1829>
- Fadhli, K., Rahmawati, I., Widyaningsih, B., Nazila, L. R., Dhiyaaulhaq, N., & Islam, A. B. A. (2024). Peningkatan pendapatan keluarga melalui pelatihan wirausaha produk olahan makanan [Increased family income through entrepreneurial training on processed food products]. *Jumat Ekonomi: Jurnal Pengabdian Masyarakat*, 5(1), 1–8. <https://doi.org/10.32764/abdimatekon.v5i1.3135>
- Fahrati, E., Kusno, H. S., & Safitri, E. (2024). Navigating the business landscape: The influence of infrastructure, financial inclusion, innovation, and government policy on Indonesian MSMEs. *International Journal of Business, Law, and Education*, 5(1), 566–580. <https://doi.org/10.56442/ijble.v5i1.424>
- Fajri, A., Suharti, & Purwanto, D. (2024). Pencapaian diferensiasi produk melalui strategi inovasi dan kreativitas usaha mikro kecil dan menengah [Achieving product differentiation through innovation strategies and creativity of micro, small and medium enterprises]. *Kreativasi: Journal of Community Empowerment*, 3(2), 214–221. <https://doi.org/10.33369/kreativasi.v3i2.34872>
- Gazetdinov, S. M., Gazetdinov, M. Kh., Semicheva, O. S., & Badamshin, A. M. (2021). Agribusiness in rural areas: Management issues. *BIO Web of Conferences*, 37, 00056. <https://doi.org/10.1051/bioconf/20213700056>

- Handayani, E., Haryono, S., & Darmawan, A. (2021). Transformation of entrepreneur education programs (EEPS) of Indonesia's higher education. *International Journal of Research in Business and Social Science (2147- 4478)*, 10(1), 180–188. <https://doi.org/10.20525/ijrbs.v10i1.976>
- Harikannan, N., Vinodh, S., & Antony, J. (2025). Analysis of the relationship among Industry 4.0 technologies, sustainable manufacturing practices and organizational sustainable performance using structural equation modelling. *The TQM Journal*, 37(1), 42–72. <https://doi.org/10.1108/TQM-02-2023-0044>
- Harini, S. (2015). The increasing of human resource quality through training and its effect on raising income. *Qardhul Hasan: Media Pengabdian Kepada Masyarakat*, 1(1), 36–46. <https://doi.org/10.30997/qh.v1i1.405>
- Hartanto, S., Suparyanto, T., & Azwar. (2023). Islamic finance practices in micro, small, and medium enterprises in Indonesia: A systematic literature review. *Millah: Journal of Religious Studies*, 22, 435–464. <https://doi.org/10.20885/millah.vol22.iss2.art6>
- Haryanto, H., Laugu, N., & Zulaikha, S. R. (2024). Public libraries as incubators for social inclusion and entrepreneurship for achieving sustainable development goals (SDGs): A progressive transformation. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 10(2), 760. <https://doi.org/10.33394/jk.v10i2.11648>
- Hasan, M., Tahir, T., Nurdiana, N., Sebayang, K. D. A., & Fatwa, N. (2021). Does entrepreneurship education in family business affect entrepreneurial attitudes and motivation? *Jurnal Pendidikan Ekonomi Dan Bisnis (JPEB)*, 9(2), 106–118. <https://doi.org/10.21009/JPEB.009.2.3>
- Hassan, S. B. (2015). Obstacles facing promoting tourism for Islamic landmarks from the perspective of tour operators in Egypt. *Journal of Indonesian Tourism and Development Studies*, 3(2), 61–68. <https://doi.org/10.21776/ub.jitode.2015.003.02.04>
- Hassan, S., Mir, A. A., & Khan, S. J. (2023). Digital entrepreneurship and emancipation: Exploring the nexus in a conflict zone. *International Journal of Emerging Markets*, 18(10), 4170–4190. <https://doi.org/10.1108/IJOEM-07-2021-1076>
- Helmi, S., Rosa, A., & Ariana, S. (2024). Upaya meningkatkan kemajuan UMKM kemplang asrania di Pemulutan Ilir melalui peningkatan kualitas SDM [Efforts to improve the progress of Asrania's MSMEs in Pemulutan Ilir through improving the quality of human resources]. *Management, Business, and Accounting (MBIA)*, 23(1), 94–104. <https://doi.org/10.33557/mbia.v23i1.2885>
- Hendrawan, D., Chrisendo, D., & Musshoff, O. (2024). Strengthening oil palm smallholder farmers' resilience to future industrial challenges. *Scientific Reports*, 14(1), 12105. <https://doi.org/10.1038/s41598-024-62426-z>
- Hendrayadi, H., Kustati, M., & Sepriyanti, N. (2023). Mixed method research. *Jurnal Review Pendidikan Dan Pengajaran*, 6(4), 2402–2410. <https://doi.org/10.31004/jrpp.v6i4.21905>
- Hidayati, I. (2020). Social media and migration decision-making processes of Indonesian highly skilled migrant in the Middle East countries. *JHSS (Journal of Humanities and Social Studies)*, 4(2), 141–145. <https://doi.org/10.33751/jhss.v4i2.2459>
- Hlasny, V., Rizk, R., & Rostom, N. (2024). The impact of COVID-19 on women's labour market outcomes: Evidence from four MENA countries. *International Journal of Manpower*, 45(6), 1224–1244. <https://doi.org/10.1108/IJM-12-2022-0586>
- Irawati, R. (2018). Pengaruh pelatihan dan pembinaan terhadap pengembangan usaha kecil [The effect of training and coaching on small business development]. *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 12(1), 74–84. <https://doi.org/10.32812/jibeka.v12i1.18>

- Issahaka, A. W., & Lines, R. (2020). Research literature on leadership of knowledge workers: Where are we, and where should we be heading? *Journal of Intellectual Capital*, 22(1), 122–148. <https://doi.org/10.1108/JIC-10-2019-0240>
- Kandis, M. P., Sriati, S., & Kurniawan, R. (2024). Community empowerment of MSME owners by the office of micro, small and MSME cooperatives in Palembang City. *Journal La Bisecoman*, 5(4), 554–567. <https://doi.org/10.37899/journallabisecoman.v5i4.1398>
- Khan, A. A., Yaseen, M., Luqman, M., & Mehmood, M. U. (2024). Effectual insights of microcredit services to rural livelihood: A Southern Punjab perspective. *Migration Letters*, 21(S7), 1027–1040. <https://doi.org/10.59670/ml.v21iS7.8897>
- Kusuma, R. S., Kusumaningtyas, R., Nofandrilla, N., Santoso, B., Aisyah, V. N., Haryanti, Y., & Wirawanda, Y. (2023). Assistance in identifying the potential of the Kembang Kuning tourist village, Cepogo District, Boyolali. *Community Empowerment*, 8(10), 1616–1622. <https://doi.org/10.31603/ce.9782>
- Kwartawaty, N. N., Sari, D. V., & Jona, R. N. (2023). Entrepreneurship training for MSMEs to increase income. *Devotion: Journal of Research and Community Service*, 4(10), 1968–1972. <https://doi.org/10.59188/devotion.v4i10.578>
- Kwetan, A. K., & Harjanti, D. (2024). Entrepreneurial intention among students: The role of entrepreneurial education, self-efficacy, and network. *Journal of Business and Management Review*, 5(3), 256–267. <https://doi.org/10.47153/jbmr53.9342024>
- Lalaun, A., & Cornelis, V. (2023). Entrepreneurship training on the performance of micro, small, and medium enterprises in Ambon City. *Jurnal Penelitian Ekonomi Manajemen Dan Bisnis*, 2(1), 259–270. <https://doi.org/10.55606/jekombis.v2i1.2148>
- Le, V. T. P., Tuan, P. V., & Hai, N. C. (2024). Factors affecting sustainable poverty reduction livelihoods in rural areas in the Mekong Delta, Vietnam. *GeoJournal of Tourism and Geosites*, 52(1), 184–194. <https://doi.org/10.30892/gtg.52117-1194>
- Liu, S., Zhang, Y., Liu, Y., & Wang, N. (2025). The impact of higher education investment on the urban-rural income gap: An analysis of mediating and threshold effects based on data from China's eight major comprehensive economic zones. *PLOS One*, 20(6), e0326059. <https://doi.org/10.1371/journal.pone.0326059>
- Maestre-Matos, M., Lombana-Coy, J., Mesías, F. J., & Elghannam, A. (2021). Institutional factors that affect inclusive businesses: The case of banana cooperatives in the Magdalena Region (Colombia). *International Journal of Rural Management*, 17(1_suppl), 69S–96S. <https://doi.org/10.1177/0973005221991603>
- Manaswi, K., Singh, A., & Gupta, V. (2023). Building a better future with sustainable investments: Insights from recent research. *Indian Journal of Human Development*, 17(2), 320–343. <https://doi.org/10.1177/09737030231194836>
- Matebese, H., Juqu, Z. F., & Mutongerwa, N. F. (2024). Corporate governance dynamics: Contending with egocentric leadership and enhancing board efficacy. *Journal of Corporate Governance, Insurance, and Risk Management*, 11(1), 25–46. <https://doi.org/10.56578/jcgirm110102>
- Mehta, R. (2024). Education investment and human capital development in India. *Journal of Poverty, Investment and Development*, 9(1), 50–63. <https://doi.org/10.47604/jpid.2587>
- Mensah, O. S., Jianlin, C., Chuambo, F., & Qio, H. (2021). Revisiting the relationship between poverty and environmental sustainability in Sub-Saharan African countries using dynamic econometric models. *Economy*, 8(2), 16–25. <https://doi.org/10.20448/journal.502.2021.82.16.25>

- Msangi, H. A., Waized, B., Ndyetabula, D. W., & Manyong, V. M. (2024). Promoting youth engagement in agriculture through land titling programs: Evidence from Tanzania. *Heliyon*, *10*(7), e29074. <https://doi.org/10.1016/j.heliyon.2024.e29074>
- Mshenga, P. M., Okello, D. O., Ayuya, O. I., Mwangi, D., Ouma, D., Jabu, J., & Mungai, N. W. (2020). Influence of entrepreneurship education on Egerton University's graduates' intention to start a business. *African Crop Science Journal*, *28*(s1), 289–303. <https://doi.org/10.4314/acsj.v28i1.225>
- Nasution, F. H., Risnita, Jailani, M. S., & Junaidi, R. (2024). Kombinasi (mixed-methods) dalam praktis penelitian ilmiah [Mixed-methods in scientific research practice]. *Jurnal Genta Mulia*, *15*(2), 251–256. <https://ejournal.uncm.ac.id/index.php/gm/article/view/1145>
- Nayak, B. C., Nayak, G. K., & Jena, D. (2020). Social recognition and employee engagement: The effect of social media in organizations. *International Journal of Engineering Business Management*, *12*, 184797902097510. <https://doi.org/10.1177/1847979020975109>
- Noble, E., Moinul, D., Khairy Djim Sylla, O., Friedmann, S., Amick, K., Rowhani, N., Dua, R., Mannan, N., Seaman, C., Ayo, O., Pant, S., Osoko, O., Gogineni, S., Malburg, C., Dickey, C., & Peprah, E. (2025). Downward accountability mechanism effectiveness by non-governmental organizations in low- and middle-income countries: A qualitative systematic review. *PLOS One*, *20*(5), e0324098. <https://doi.org/10.1371/journal.pone.0324098>
- Nurdiana, E. D., Hariyani, H. F., & Boedirochminarni, A. (2023). The impact of digitalization and economic openness on economic growth in ASEAN countries. *Jurnal Ekonomi & Studi Pembangunan*, *24*(2), 331–345. <https://doi.org/10.18196/jesp.v24i2.18335>
- Nushruth, & Panakaje, N. (2022). Approaches towards education upliftment of religious minority: An analysis of central government schemes. *International Journal of Case Studies in Business, IT, and Education*, *6*(2), 624–636. <https://doi.org/10.47992/IJCSBE.2581.6942.0222>
- Pandikar, E., Affandi, I., Disman, D., & Sundawa, D. (2024). Harmonizing economic principles, Islamic values, and entrepreneurial attitudes for a sustainable environment. *Yupa: Historical Studies Journal*, *6*(2), 188–197. <https://doi.org/10.30872/yupa.v6i2.3739>
- Prabawani, B., Hadi, S. P., Wahyudi, F. E., & Ainuddin, I. (2023). Drivers and initial pattern for corporate social innovation: From responsibility to sustainability. *Heliyon*, *9*(6), e16175. <https://doi.org/10.1016/j.heliyon.2023.e16175>
- Prasetyo, P. E., Setyadharma, A., & Kistanti, N. R. (2020). The relationship between institutions and business opportunities toward economic growth. *Economics Development Analysis Journal*, *8*(4), 281–291. <https://doi.org/10.15294/edaj.v8i4.36311>
- Qin, Z., Pei, X., Andrianarimanana, M. H., & Shizhou, W. (2023). Digital inclusive finance and the development of rural logistics in China. *Heliyon*, *9*(6), e17329. <https://doi.org/10.1016/j.heliyon.2023.e17329>
- Qiu, W., Wu, T., & Xue, P. (2022). Can mobile payment increase household income and mitigate the lower income condition caused by health risks? Evidence from rural China. *International Journal of Environmental Research and Public Health*, *19*(18), 11739. <https://doi.org/10.3390/ijerph191811739>
- Riandika, D., & Mulyani, E. (2025). The role of entrepreneurship development for women welfare in rural area. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, *21*(1), 23–31. <https://doi.org/10.23917/jep.v21i1.7921>



- Riofita, H. (2025). Predicting Muslim MSMEs customer behavioral intentions at Islamic marketplaces through Islamic entrepreneurship context and principles. *Journal of Research in Marketing and Entrepreneurship*, 27(1), 110–125. <https://doi.org/10.1108/JRME-07-2023-0122>
- Rizal, R., Ghofur, R. A., & Utami, P. (2023). The role of muslim generation community at zakat collection on realizing sustainable development goals (SDGs) in the Era of Digital Society 5.0. *JURIS (Jurnal Ilmiah Syariah)*, 22(1), 105. <https://doi.org/10.31958/juris.v22i1.6562>
- Rohaetin, S. (2020). Strategy of entrepreneurship education based on digital technology for students in the world working in Indonesia. *Jurnal Inovasi Ilmu Sosial Dan Politik*, 2(1), 31–41. <https://doi.org/10.33474/jisop.v2i1.5041>
- Rusydiana, A. S., & Izza, N. N. (2022). Women entrepreneurship: A sentiment analysis. *Review of Islamic Social Finance and Entrepreneurship*, 1(2), 109–120. <https://doi.org/10.20885/RISFE.voll.iss2.art3>
- Sabodash, O. A., Kalyakina, I. M., Kosnikov, S. N., Elizarova, N. S., Borisov, E. A., & Sorgutov, I. V. (2021). Economics of education and prospects for its development. *Linguistics and Culture Review*, 5(S1), 451–459. <https://doi.org/10.21744/lingcure.v5nS1.1430>
- Saluja, O. B., Singh, P., & Kumar, H. (2023). Barriers and interventions on the way to empower women through financial inclusion: A 2 decades systematic review (2000–2020). *Humanities and Social Sciences Communications*, 10(1), 148. <https://doi.org/10.1057/s41599-023-01640-y>
- Samad, N. A. A., Zahari, M. S. M., Hanafiah, M. H., & Bashir, M. A. A. (2024). Digital technology adoption as a game changer for community-based tourism (CBT) homestay operators: A qualitative investigation. *Asia-Pacific Journal of Rural Development*, 34(1), 77–97. <https://doi.org/10.1177/10185291241295439>
- Sarjiyanto, S. (2022). Moderating effect of social capital on community empowerment and economic well-being. *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, 9(6), 479–492. <https://doi.org/10.22437/ppd.v9i6.15325>
- Sepadi, M. M., & Hutton, T. (2025). Health and safety practices as drivers of business performance in informal street food economies: An integrative review of global and South African evidence. *International Journal of Environmental Research and Public Health*, 22(8), 1239. <https://doi.org/10.3390/ijerph22081239>
- Siqueira, M. U., Contin, B., Fernandes, P. R. B., Ruschel-Soares, R., Siqueira, P. U., & Baruque-Ramos, J. (2022). Brazilian agro-industrial wastes as potential textile and other raw materials: A sustainable approach. *Materials Circular Economy*, 4(1), Article Number 9. <https://doi.org/10.1007/s42824-021-00050-2>
- Sitorus, P. M., Rizkita, M. Z., Khairunnisa, K., Alamsyah, A., & Abdurohman, M. (2023). Feasibility study and the development of MSME business incubator mockup in Toba District. *Journal of Law and Sustainable Development*, 11(6), e775. <https://doi.org/10.55908/sdgs.v11i6.775>
- Solomon, O. H., Allen, T., & Wangombe, W. (2024). Analysing the factors that influence social media adoption among SMEs in developing countries. *Journal of International Entrepreneurship*, 22(2), 248–267. <https://doi.org/10.1007/s10843-023-00330-9>
- Suherlan, A., & Cheer, J. M. (2024). Stakeholders' perception, determinant factors, and impacts of sustainable rural tourism: A literature review. *IOP Conference Series: Earth and Environmental Science*, 1366(1), 012042. <https://doi.org/10.1088/1755-1315/1366/1/012042>
- Suminah, S., Suwanto, S., Sugihardjo, S., Anantanyu, S., & Padmaningrum, D. (2022). Determinants of micro, small, and medium-scale enterprise performers' income during the Covid-19 pandemic era. *Heliyon*, 8(7), e09875. <https://doi.org/10.1016/j.heliyon.2022.e09875>

- Suparno, Wibowo, A., Herlita, H., Mukhtar, S., Kusumojanto, D. D., Suwatno, Narmaditya, B. S., & Raudah, M. (2019). Do entrepreneurial education and training impact on entrepreneurial skills-based entrepreneurship? *Humanities and Social Sciences Letters*, 7(4), 246–253. <https://doi.org/10.18488/journal.73.2019.74.246.253>
- Sutrisno, S., Kraugusteeliana, K., & Syamsuri, S. (2024). Analysis of the interconnection between digital skills of human resources in SMEs and the success of digital business strategy implementation. *MALCOM: Indonesian Journal of Machine Learning and Computer Science*, 4(2), 601–606. <https://doi.org/10.57152/malcom.v4i2.1282>
- Tok, M. E., & Kaminski, J. J. (2019). Islam, entrepreneurship, and embeddedness. *Thunderbird International Business Review*, 61(5), 697–705. <https://doi.org/10.1002/tie.21970>
- Tong, S. C., & Chan, F. F. Y. (2022). Revisiting trust in the digital era: The interplay of online trust and online dialogic communication from the practitioners' perspective. *Journal of Communication Management*, 26(3), 271–293. <https://doi.org/10.1108/JCOM-08-2021-0094>
- Umami, I., Che Pee, A. N. B., Bin Sulaiman, H. A., Hariyanto, & Mar'ati, F. S. (2024). A literature review of MSME success: Acceptance and use of technology, financial access, and strategic cooperation. *Multidisciplinary Reviews*, 6, 2023ss086. <https://doi.org/10.31893/multirev.2023ss086>
- Vargas-Zeledon, A. A. (2023). Islamic entrepreneurship among nonimmigrant Muslims in small venture creation. *Journal of Islamic Economic and Business Research*, 3(1), 57–82. <https://doi.org/10.18196/jiebr.v3i1.111>
- Vial, V., & Hanoteau, J. (2015). Returns to micro-entrepreneurship in an emerging economy: A quantile study of entrepreneurial Indonesian households' welfare. *World Development*, 74, 142–157. <https://doi.org/10.1016/j.worlddev.2015.04.008>
- Wang, Z., & Dong, F. (2022). Experience of pro-poor tourism (PPT) in China: A sustainable livelihood perspective. *Sustainability*, 14(21), 14399. <https://doi.org/10.3390/su142114399>
- Wulandari, S. A., Ridwan, D. A., & Wahyudi, R. D. (2024). Developing MSME products via digital marketing training and application to enhance online marketing. *Jurnal Pengabdian Masyarakat*, 5(1), 107–115. <https://doi.org/10.32815/jjpm.v5i1.1242>
- Zhang, X. (2019). Structural change through public education expenditure: Evidence from China. *Contemporary Economic Policy*, 37(2), 366–388. <https://doi.org/10.1111/coep.12408>



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