West Science Social and Humanities Studies
Vol. 03, No. 07, July 2025, pp. 1088-1100

Effect of Agribusiness Partnership Model and Microcredit Scheme on Market Access and Welfare of Coffee Farmers in East Java

Putu Fajar Kartika Lestari[1], Muhamad Ammar Muhtadi[2], Salwa Aulia Novitasari
[1] Universitas Mahasaraswati Denpasar
[2,3] Nusa Putra University

Article Info

Article history:

Received Jul, 2025
Revised Jul, 2025
Accepted Jul, 2025

Keywords:

Agribusiness Partnership
Microcreation Scheme
Market Access
Farmer Welfare
East Java

ABSTRACT

This study examines the influence of agribusiness partnership models and microcreation schemes on market access and their implications for the welfare of coffee farmers in East Java. Using a quantitative research approach with a sample of 200 coffee farmers, data were analyzed through Structural Equation Modeling - Partial Least Squares (SEM-PLS) using SmartPLS 3.0. The results reveal that both agribusiness partnerships and microcreation schemes have a positive and significant effect on market access. Furthermore, market access was found to significantly improve farmer welfare, acting as a mediating variable between the independent variables and welfare outcomes. These findings underscore the importance of integrated rural development strategies that combine institutional collaboration, access to finance, and market facilitation. The study contributes to the understanding of sustainable agricultural development by highlighting how structured partnerships and financial inclusion can enhance market participation and economic resilience among smallholder farmers.

Corresponding Author:

Name: Putu Fajar Kartika Lestari
Institution: Universitas Mahasaraswati Denpasar
Email: pfajarkartika@unmas.ac.id

1. INTRODUCTION

The agricultural sector plays a vital role in the economic development of Indonesia, particularly in rural areas where farming remains the main source of livelihood. Among various commodities, coffee holds strategic importance due to its contribution to both local incomes and national exports. East Java, as one of Indonesia's major coffee-producing regions, is home to thousands of smallholder coffee farmers who face persistent challenges such as limited market access, fluctuating prices, and unstable income, often exacerbated by weak supply chain integration and lack of institutional support [1]–[3]. Despite the crucial role of sustainable standards and certification in enabling access to global markets, smallholder participation remains limited, rendering them vulnerable within the value chain [3]. Addressing these multifaceted issues calls for strategic interventions, including the adoption of

sustainable development models such as AgroCoffee, which can simulate and improve the coffee agroindustry system to provide evidence-based recommendations for stakeholders [1]. Furthermore, leveraging Indonesia's comparative advantage in coffee quality and diversity through improved product quality, infrastructure, and marketing is key to enhancing global competitiveness [2], [4]. Increasing farmer income through these strategies is also crucial, as evidenced in regions like Semende Darat Laut District, where coffee farming plays a significant role in supporting total family income [5].

In response to the persistent challenges faced by smallholder farmers, agribusiness partnership models and microcreation schemes have emerged as innovative and collaborative frameworks aimed at enhancing farmers' economic empowerment by improving access to resources, markets, and technical knowledge. These partnerships, involving multistakeholder collaborations among farmers, private companies, cooperatives, and government entities, strive to align agricultural production with market demands while ensuring fairer terms and sustainability in the value chain [6]. Multistakeholder Partnerships (MSPs) and Public-Private Partnerships (PPPs) are particularly significant, with MSPs emphasizing sustainability through transparent and aligned stakeholder goals, and PPPs facilitating technology transfer, improved market access, and risk reduction via private sector involvement [6], [7]. Agri-marketing partnerships, such as those observed in India, have demonstrated tangible impacts on poverty reduction by linking farmers to modern supply chains, though concerns about equitable profit distribution remain [8]. Complementing these collaborative models, microcreation schemes offer financial mechanisms tailored for micro-enterprises, enabling farmers to scale their production, enhance product quality, and invest in value-added processing, which not only meets evolving consumer preferences but also increases farmers' competitiveness and income potential [6], [9]. Together, these integrative strategies provide a holistic and sustainable pathway to address structural barriers in modern agriculture.

Despite the growing implementation of agribusiness partnerships and microcreation schemes, empirical studies evaluating their effectiveness—especially within the context of coffee farming in East Java—remain limited. Understanding how these interventions influence market access and ultimately affect the welfare of coffee farmers is essential for informing evidence-based policy and development initiatives. Therefore, this study seeks to fill that gap by analyzing both the direct and indirect effects of agribusiness partnership models and microcreation schemes on market access and the overall welfare of coffee farmers in East Java.

2. LITERATURE REVIEW

2.1 Agribusiness Partnership Models

Agribusiness partnerships are collaborative arrangements designed to integrate smallholder farmers into formal value chains by providing access to critical resources, markets, and technical support. These partnerships—ranging from contract farming and nucleus estate schemes to public-private collaborations—aim to enhance productivity, improve market efficiency, and reduce transaction costs and risks. Empirical studies highlight that such partnerships can lead to increased incomes and stronger market integration for smallholders [10], [11]. Key benefits include improved market access, which is essential for poverty alleviation and economic growth, enhanced productivity and income through access to inputs and training, and better risk

management mechanisms [10], [11]. However, several challenges persist, including institutional barriers such as lack of market information and financial access, as well as market concentration where dominant multinational firms often favor large suppliers for reliability and lower costs [12]. The success of agribusiness partnerships frequently depends on the coordinated involvement of public agencies, private enterprises, NGOs, and farmer organizations, all working together to overcome systemic barriers and foster technological and institutional innovations that empower smallholders and enhance their competitiveness in evolving markets [10], [12].

2.2 *Microcreation Schemes*

Microcreation schemes, particularly microfinance, play a crucial role in empowering micro and small enterprises in rural and agricultural areas by providing financial services to those often excluded from formal banking systems. These programs—such as microcredit, savings schemes, and revolving funds—enable small producers to invest in their businesses, boosting productivity and market access. Research shows a positive link between microfinance participation and improved household welfare, including greater asset ownership, education, and healthcare access [13], [14]. In Ghana, group-based microfinance models helped cocoa farmers mobilize savings and secure credit through peer guarantees, ensuring high repayment rates [15]. These schemes also support socio-economic and entrepreneurial development, especially in underserved regions like Jammu and Kashmir [13]. In agriculture, microcredit access encourages technology adoption and investment, though its effects on income can vary [16]. While microfinance improves enterprise management and stabilizes income [14], challenges such as high interest rates, limited reach, and over-indebtedness persist—underscoring the need for more inclusive and tailored program designs [17].

2.3 *Market Access*

Enhanced market access is vital for improving farmers' economic outcomes, as it allows them to sell at competitive prices, reduce post-harvest losses, and adopt market-oriented strategies. Access depends on factors such as infrastructure, information, institutional support, and contracts. Agribusiness partnerships and microcreation schemes help overcome financial, informational, and logistical barriers, boosting farmers' market participation. A one percentage point improvement in market access can increase net farm income by Rs. 392 and gross income by Rs. 764 [18], while also strengthening farmers' bargaining power through reduced transaction costs [19]. Globalization offers broader markets but also increases competition, especially for farmers in developing countries [20]. Addressing these challenges requires strategies such as lowering transaction costs, improving infrastructure, and linking farmers directly to value chains [19]. Network

industries and public institutions play key roles in improving access, whereas regulatory factors are less influential [21], and reducing intermediary influence is especially important in unorganized markets like India [19].

2.4 *Welfare of Coffee Farmers*

Farmer welfare in coffee farming is closely tied to economic stability, market access, and institutional support, with the integration of these factors playing a crucial role in ensuring stable prices and consistent income. Participation in cooperatives and fair-trade schemes has been shown to improve welfare outcomes, as demonstrated by the Vunga Coffee Washing Station in Rwanda, where farmers experienced higher incomes, increased coffee tree cultivation, job creation, and technology adoption [22]. Similarly, in Indonesia, cooperative involvement and effective land management have contributed to prosperity among coffee farmers [23]. Speciality coffee markets also offer opportunities for better and more stable pricing, though benefits are not evenly distributed, and high compliance costs can offset potential gains, as seen in East Africa where such markets have yet to deliver broad social benefits [24]. Moreover, many coffee-farming households in Indonesia still fall short of earning a living income, pointing to the need for better agricultural land management and socio-spatial integration [25]. Strategies such as intensification, diversification, and technology adoption are essential to enhance farmer welfare and require coordinated efforts from governments, financial institutions, and cooperatives [26].

2.5 *Theoretical Framework*

This study is grounded in the Sustainable Livelihoods Framework (SLF) and Value Chain Theory. The SLF underscores the significance of assets, policies, and institutional arrangements in fostering sustainable livelihoods, while Value Chain Theory emphasizes the importance of strengthening linkages between producers and markets. Together, these frameworks suggest that agribusiness partnerships and microcreation schemes can play a vital role in enhancing farmers' access to critical resources and markets, thereby bolstering their economic resilience and overall welfare. Previous empirical research presents mixed results regarding the effectiveness of such interventions. For instance, contract farming in India has been linked to increased income among vegetable farmers, especially in Maharashtra, where international market access and supporting services like credit and extension played a key role [27]. In Indonesia, while contract farming has improved food security for rural, female, and landless farmers, its broader impact remains constrained without innovations and technology adoption [28]. Similarly, microcredit on its own may not substantially improve welfare unless accompanied by institutional and market support; however, its combination with technology adoption has proven to enhance prosperity by enabling operational expansion [29]. Cooperative partnerships have

also facilitated better access to export markets and price premiums for coffee farmers in Indonesia, while increased market participation in Eastern India has significantly improved income and consumption, driven by factors such as training, market access, and price information [30].

Despite the growing body of research, few studies have examined the combined influence of agribusiness partnerships and microcreation schemes on both market access and farmer welfare—particularly within the context of coffee farming in East Java. This study seeks to address that gap by developing a structural model that integrates these key variables and evaluates their direct and indirect relationships using Structural Equation Modeling with Partial Least Squares (SEM-PLS). Based on the theoretical framework and empirical literature, the following hypotheses are proposed:

H1: Agribusiness partnership models have a positive and significant effect on market access.

H2: Microcreation schemes have a positive and significant effect on market access.

H3: Market access has a positive and significant effect on the welfare of coffee farmers.

H4: Agribusiness partnership models have a positive and significant indirect effect on farmer welfare through market access.

H5: Microcreation schemes have a positive and significant indirect effect on farmer welfare through market access.

3. METHODS

This research employs a causal-explanatory design to examine the cause-and-effect relationships among agribusiness partnership models, microcreation schemes, market access, and the welfare of coffee farmers. A quantitative approach was selected to ensure objectivity, generalizability, and statistical testing of the proposed hypotheses. The study population comprises coffee farmers in East Java engaged in partnership schemes and/or microcreation programs. Using purposive sampling, 150 respondents were selected based on criteria including active involvement in coffee farming for at least the past two years, participation in relevant programs, and willingness to complete the questionnaire. The sample size meets the minimum requirements for Structural Equation Modeling-Partial Least Squares (SEM-PLS), following the guideline of 5–10 times the number of indicators [31]. Primary data were collected via a structured questionnaire developed from existing literature and expert input, and pretested on 20 respondents to ensure clarity, reliability, and validity. All variables were measured on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), with operational definitions and indicators defined as follows: Agribusiness Partnership Models (APM) measured by access to inputs, technical assistance, marketing agreements, and benefit-sharing; Microcreation Schemes (MS) assessed through credit access, loan terms, repayment flexibility, and fund usage; Market Access (MA) evaluated via frequency of participation, price stability, buyer networks, and infrastructure; and Farmer Welfare (FW) measured through income, education, housing, and food security indicators.

The data analysis utilized SEM-PLS 3, an appropriate method given its robustness for small to medium sample sizes, ability to model latent constructs, and evaluate both measurement and structural models. The analysis proceeded in two stages. First, the measurement model (outer model) was assessed by evaluating convergent validity

using loading factors and Average Variance Extracted (AVE), composite reliability (CR) and Cronbach's Alpha for internal consistency, and discriminant validity using the Fornell-Larcker criterion and cross-loadings. Second, the structural model (inner model) was evaluated by testing the significance of path coefficients through bootstrapping (t-statistics and p-values), assessing the coefficient of determination (R^2) to measure the explanatory power of endogenous variables, and determining predictive relevance using Q^2 values. This comprehensive analytical approach allows for a rigorous examination of the interrelationships between the variables and supports the formulation of evidence-based conclusions and recommendations.

4. RESULTS AND DISCUSSION

4.1 Demographic Profile of Respondents

Data were collected from 150 coffee farmers in East Java. The demographic characteristics are summarized as follows:

Table 1. Demographic Sample

Profile	Category	Frequency (n)	Percentage (%)
Gender	Male	124	82.7%
	Female	26	17.3%
Age	20–30 years	18	12.0%
	31–40 years	42	28.0%
	41–50 years	53	35.3%
	>50 years	37	24.7%
Farming Experience	<5 years	22	14.7%
	5–10 years	46	30.7%
	>10 years	82	54.6%
Partnership Involvement	Yes	104	69.3%
	No	46	30.7%
Microcredit Usage	Yes	97	64.7%
	No	53	35.3%

These demographics show that most respondents are experienced male farmers who actively participate in agribusiness partnerships and microcredit programs. Of the 150 coffee farmers surveyed, the majority were male (82.7%), reflecting the gender dominance likely driven by physical labor demands and traditional gender roles in rural agriculture. In terms of age, most respondents were in the productive range, with the largest group aged 41–50 years (35.3%), followed by those aged 31–40 years (28.0%) and over 50 years (24.7%), while only 12.0% were aged 20–30, indicating limited participation from younger generations. Farming experience also skewed toward seasoned individuals, with 54.6% having farmed for more than 10 years and 30.7% for 5–10 years, showing that most respondents have extensive knowledge and involvement in coffee cultivation. Additionally, 69.3% of farmers reported being part of agribusiness partnerships, and 64.7% utilized microcredit services, suggesting a strong inclination toward institutional support and financial schemes to enhance their farming operations. These characteristics provide a solid foundation for analyzing the impact of agribusiness partnerships and microcredit programs on market access and farmer welfare.

4.2 Measurement Model (Outer Model) Evaluation

The measurement model was assessed to evaluate the reliability and validity of the latent constructs: Agribusiness Partnership (AP), Microcreation Scheme (MS), Market Access (MA), and Farmer Welfare (FW). This evaluation includes indicator loading factors, Average Variance Extracted (AVE), Composite Reliability (CR), and

Cronbach's Alpha to ensure the robustness of the measurement instruments.

1. Indicator Loading Factors

All item indicators in this study achieved loading factors greater than the recommended threshold of 0.70, confirming convergent validity. The table below shows the indicator loadings for each construct:

Table 2. Loading Factor

Construct	Indicator	Loading Factor
Agribusiness Partnership (AP)	AP1 – Access to quality input from partners	0.826
	AP2 – Technical assistance and training	0.864
	AP3 – Marketing agreement and contract clarity	0.872
	AP4 – Transparent profit-sharing system	0.901
Microcreation Scheme (MS)	MS1 – Access to microcredit/funding	0.839
	MS2 – Flexibility in repayment terms	0.854
	MS3 – Use of funds for production improvement	0.882
	MS4 – Entrepreneurial training and mentoring	0.873
Market Access (MA)	MA1 – Frequency of access to profitable markets	0.879
	MA2 – Stability of market prices	0.873
	MA3 – Access to long-term buyer relationships	0.884
	MA4 – Availability of transportation infrastructure	0.862
Farmer Welfare (FW)	FW1 – Increase in household income	0.884
	FW2 – Improvement in education access	0.879
	FW3 – Better housing conditions	0.872
	FW4 – Food security and health access	0.893

All indicators exceed the minimum acceptable level of 0.70, confirming that each item reliably measures its respective latent construct. Based on the outer model analysis, all indicators for each construct demonstrated high loading factors, indicating strong contributions to their respective constructs. In the Agribusiness Partnership (AP) construct, the highest loading was AP4 (transparent profit-sharing system) at 0.901, emphasizing the importance of fair benefit distribution, followed by technical training (AP2 = 0.864), clarity in marketing agreements (AP3 = 0.872), and access to quality inputs (AP1 = 0.826). The Microcreation Scheme (MS) construct also showed strong indicator reliability, with the highest loading on MS3 (use of funds for production improvement) at 0.882, followed by entrepreneurial training (MS4 = 0.873), repayment flexibility (MS2 = 0.854), and funding access (MS1 = 0.839), suggesting that microfinance effectiveness is perceived higher when linked with productivity and mentorship. For Market Access (MA), all indicators were consistent, with MA3 (long-term buyer relationships) having the highest loading (0.884), followed by frequency of market access (MA1 = 0.879), price stability (MA2 = 0.873), and infrastructure availability (MA4 = 0.862), indicating that enduring buyer connections are critical for market success. Lastly, in the Farmer Welfare (FW) construct, FW4 (food security and health access) had the highest loading (0.893), followed by household income improvement (FW1 = 0.884), education access (FW2 = 0.879), and housing quality (FW3 = 0.872), illustrating that farmer welfare is significantly influenced by economic, social, and health-related factors in a holistic manner.

2. Average Variance Extracted (AVE), Composite Reliability (CR), and Cronbach's Alpha

The following results demonstrate that all constructs meet the required thresholds for validity and reliability. The Average Variance Extracted (AVE) values for all constructs—Agribusiness Partnership (0.762), Microcreation Scheme (0.748), Market Access (0.781), and Farmer Welfare (0.769)—exceed the minimum threshold of 0.50,

indicating good convergent validity and that each construct explains more than half of the variance in its indicators. Composite Reliability (CR) values are also high, ranging from 0.910 to 0.931, confirming strong internal consistency and construct reliability. Additionally, Cronbach's Alpha values for all constructs are above 0.70, with the highest at 0.899 for Market Access and the lowest at 0.871 for Microcreation Scheme, confirming that the indicators consistently measure their respective latent variables. These results collectively affirm that the measurement model possesses strong convergent validity and internal consistency reliability across all constructs.

3. Discriminant Validity

Discriminant validity was assessed using the Fornell-Larcker criterion and cross-loading comparisons. The square root of AVE for each construct was higher than its correlation with other constructs, confirming discriminant validity.

Table 3. Discriminant Validity

Construct	AP	MS	MA	FW
AP (√AVE = 0.873)	0.873	0.598	0.657	0.541
MS (√AVE = 0.865)	0.598	0.865	0.642	0.528
MA (√AVE = 0.884)	0.657	0.642	0.884	0.677
FW (√AVE = 0.877)	0.541	0.528	0.677	0.877

This confirms that each construct is distinct from others in the model.

4.3 Structural Model (Inner Model) Evaluation

The structural model (inner model) evaluation assesses the relationships among the latent variables: Agribusiness Partnership (AP), Microcreation Scheme (MS), Market Access (MA), and Farmer Welfare (FW). This step tests the significance and strength of the hypothesized paths using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 3 software.

1) Collinearity Assessment

Collinearity between predictor constructs was assessed using Variance Inflation Factor (VIF) values, and all values were found to be well below the critical threshold of 5.0, indicating the absence of multicollinearity issues that could distort the structural model. Specifically, the VIF values for the paths from Agribusiness Partnership and Microcreation Scheme to Market Access were both 1.736, while the path from Market Access to Farmer Welfare had a VIF value of 1.000. These results confirm that the predictor constructs are sufficiently independent and do not exhibit problematic levels of correlation.

2) Coefficient of Determination (R^2)

The R^2 values indicate the proportion of variance in the endogenous constructs that is explained by the exogenous constructs, reflecting the model's explanatory power. The R^2 value for Market Access is 0.623, suggesting that Agribusiness Partnership and Microcreation Scheme together explain 62.3% of its variance, which is considered substantial. Meanwhile, the R^2 value for Farmer Welfare is 0.347, indicating that Market Access accounts for 34.7% of the variance in Farmer Welfare, representing moderate explanatory power. These results demonstrate that the structural model has strong predictive relevance for Market Access and a reasonable capacity to explain variations in Farmer Welfare.

3) Predictive Relevance (Q^2)

The Q^2 values, obtained through the blindfolding procedure, assess the model's predictive relevance, where a Q^2 value greater than 0 confirms that the model has predictive capability. In this study, the Q^2 value for Market Access is 0.521, indicating high predictive relevance, while the Q^2 value for Farmer Welfare is 0.287, reflecting medium predictive relevance. These results suggest that the model is capable of making accurate predictions for both endogenous constructs, with particularly strong predictive power for Market Access.

4) Hypothesis Testing (Path Coefficients)

The path coefficients represent the strength and direction of the relationships between constructs. Hypothesis testing was conducted using bootstrapping (5000 resamples). The results are summarized below:

Table 4. Hypothesis Testing

Hypothesis	Path	Original Sample (O)	t-Statistic	p-Value	Conclusion
H1: Agribusiness Partnership → Market Access	AP → MA	0.438	6.245	0.000	Supported
H2: Microcreation Scheme → Market Access	MS → MA	0.392	5.872	0.000	Supported
H3: Market Access → Farmer Welfare	MA → FW	0.589	9.103	0.000	Supported
H4: AP → MA → FW (Indirect effect)	AP → MA → FW	0.258	4.962	0.000	Supported (Indirect)
H5: MS → MA → FW (Indirect effect)	MS → MA → FW	0.231	4.311	0.000	Supported (Indirect)

All direct and indirect paths in the structural model are statistically significant at $p < 0.05$, with t-statistics exceeding the threshold of 1.96, confirming the robustness of the relationships among variables. The hypothesis testing results show that Agribusiness Partnership has a significant positive effect on Market Access (O = 0.438, t = 6.245, p = 0.000), and Microcreation Scheme also significantly influences Market Access (O = 0.392, t = 5.872, p = 0.000), thus supporting H1 and H2. Furthermore, Market Access strongly and significantly affects Farmer Welfare (O = 0.589, t = 9.103, p = 0.000), supporting H3. The indirect effects are likewise supported, with Agribusiness Partnership influencing Farmer Welfare through Market Access (O = 0.258, t = 4.962, p = 0.000) and Microcreation Scheme showing a similar indirect impact (O = 0.231, t = 4.311, p = 0.000), confirming H4 and H5. These findings affirm that enhancing market access serves as a critical mediating mechanism through which agribusiness partnerships and microcreation schemes contribute to improving the welfare of coffee farmers.

5. Effect Size (f^2)

The effect size (f^2) measures the impact of each exogenous construct on the endogenous variable.

Table 5. Effect Size

Relationship	f^2 Value	Interpretation
Agribusiness Partnership → MA	0.273	Medium effect
Microcreation Scheme → MA	0.229	Medium effect
Market Access → Farmer Welfare	0.531	Large effect

These values indicate that both agribusiness partnership and microcreation scheme have a moderate impact on market access, while market access has a strong impact on farmer welfare.

Discussion

1) The Role of Agribusiness Partnerships in Enhancing Market Access

The results confirm that agribusiness partnership models have a positive and significant impact on market access, indicating that structured collaborations between farmers and agribusiness stakeholders—such as cooperatives, buyers, and processing units—are effective in integrating farmers into formal market channels. These partnerships typically provide access to quality inputs, technical training, and clear contractual arrangements, which not only enhance production efficiency but also ensure stable and reliable outlets for farmers' products. This finding supports prior research emphasizing the role of contract farming in reducing marketing and transaction costs, as seen in India's dairy sector where smallholders benefit from technical support and improved profitability [32], and in the broader context of private sector engagement where traceability and cost-efficiency drive adoption [33]. Public-private partnerships also play a crucial role in helping smallholders meet food safety standards, thereby maintaining access to high-value markets [34], while collective action through producer groups enhances traceability and reduces transaction costs. Furthermore, contract farming contributes to trust-building and value chain performance, as demonstrated in the Kenyan potato sector, by fostering stable business relationships and improving governance, despite challenges from institutional limitations [35]. These insights are consistent with Value Chain Theory, which asserts that stronger linkages among supply chain actors lead to improved market outcomes for smallholders.

2) Microcreation Schemes as Catalysts for Market Participation

The study also finds that microcreation schemes significantly improve market access, as these programs—typically encompassing microcredit, small business grants, and entrepreneurial training—equip farmers with the financial resources needed to invest in productivity and meet market standards. With enhanced financial capacity, farmers can improve product quality, align with market requirements, and tap into high-value opportunities. This finding reinforces previous studies such as [36], who demonstrated in South Africa that access to microfinance improved various livelihood assets—including financial, human, and social capital—leading to stronger market-oriented production and increased bargaining power. Microfinance institutions (MFIs) have also played a pivotal role in empowering underprivileged populations, particularly women, by enabling business creation and enhancing social standing [37]. Moreover, financial capital is recognized as a key driver in livelihood diversification strategies, helping rural populations reduce poverty and build resilience against economic and environmental shocks [38]. This aligns with the Sustainable Livelihoods Framework (SLF), which identifies financial capital as essential for income diversification and sustainable economic stability [39]. In a broader context, microfinance-driven financial inclusion supports economic growth by integrating low-income individuals into formal financial systems, thereby reducing inequality and contributing to inclusive development [40].

3) Market Access as a Determinant of Farmer Welfare

One of the most significant findings of this study is the strong relationship between market access and farmer welfare ($\beta = 0.589$, $p < 0.001$), indicating that better access to markets enables farmers to sell their produce at fairer prices, achieve more stable incomes, and reduce reliance on intermediaries—ultimately leading to improvements in

household income, housing conditions, education access, and food security. This result aligns with prior studies, such as [41] , which showed that e-commerce platforms in Sub-Saharan Africa improved market access, prices, and reduced post-harvest losses, contributing to better economic outcomes. Similarly, [42] found that infrastructure and contract farming interventions enhanced agricultural output and welfare in low- and middle-income countries. In China, [43] noted that contract farming promoted commercialization and specialization among small-scale sorghum farmers. These findings collectively support the notion that market access is a prerequisite for sustainable rural development by encouraging producers to innovate and invest in more market-oriented systems. [44]further emphasized this by linking improved market access in Eastern Africa to better dietary diversity, consumption, and food security. However, persistent challenges such as limited digital literacy, poor infrastructure, and the absence of institutional support—especially following the dissolution of marketing boards in some developing countries—underscore the need for comprehensive strategies to fully leverage the benefits of market inclusion [45].

4) Indirect Effects and the Mediating Role of Market Access

The structural model shows that agribusiness partnerships and microcreation schemes indirectly influence farmer welfare through market access, rather than having a direct impact. This highlights the mediating role of market access, suggesting that without proper access to markets, the benefits of partnerships or financing may not fully materialize.

This pathway reflects the importance of an integrated development approach—interventions in financing or capacity building must be accompanied by efforts to connect farmers with stable and profitable markets. It also emphasizes the need for systemic support, including infrastructure, information flow, and institutional arrangements, to ensure that farmers can effectively utilize the resources provided by partnerships and microcredit schemes.

5) Policy and Practical Implications

The study's findings suggest key implications for policymakers, development agencies, and agribusiness actors in enhancing farmer welfare and market access. Inclusive partnership models should emphasize transparency and long-term collaboration to build farmer trust. Microcreation programs must integrate financial support with training and mentoring to ensure productive use of funds. Improving infrastructure and information access—such as roads, storage, and digital platforms—is vital for expanding market reach. Finally, combining partnerships, financial empowerment, and market facilitation into an integrated strategy will drive more sustainable rural development.

6) Contribution to Literature

This study contributes to the empirical literature by simultaneously analyzing the effects of agribusiness partnerships and financial schemes on both market access and farmer welfare, validating the mediating role of market access in these relationships, and providing context-specific evidence from coffee farming in East Java—a region that has been underrepresented in previous quantitative research.

5. CONCLUSION

This study concludes that agribusiness partnership models and microcreation schemes significantly improve market access, which in turn has a direct and positive effect on the welfare of coffee farmers in East Java. The research highlights market access as a key mediating variable, showing that effective collaboration and financial empowerment alone are insufficient without concrete mechanisms for farmers to access profitable and sustainable markets. These findings emphasize the need for policymakers and development stakeholders to adopt integrated interventions that combine

partnership frameworks, financial support, and market infrastructure. Strengthening these interconnected factors will not only elevate farmer welfare but also contribute to the long-term sustainability and competitiveness of the coffee agribusiness sector in Indonesia.

REFERENCES

[1] D. I. Wardhana, Y. Wibowo, and S. Suwasono, "Designing model for the development of sustainable small coffee agroindustry at the agropolitan area of Ijen, East Java, Indonesia," *Ind. J. Teknol. dan Manaj. Agroindustri*, vol. 12, no. 1, pp. 45–59, 2023.

[2] A. W. S. Ramadhana, A. D. Aulia, and T. Ulum, "Keunggulan Komparatif Ekspor Kopi di Indonesia," *J. Econ. Business, Account. Manag.*, vol. 2, no. 1, pp. 110–123, 2024.

[3] M. Ibnu, "Penerapan Standar dan Sertifikasi dalam Rantai Nilai Kopi: Peluang dan Kendala Bagi Petani," *J. Litbang Media Inf. Penelitian, Pengemb. Dan IPTEK*, vol. 19, no. 1, pp. 1–16, 2023.

[4] A. Muhlis and S. Sulistyaningsih, "Analisis daya saing kopi indonesia di pasar internasional," *AGRIBIOS*, vol. 21, no. 1, pp. 25–33, 2023.

[5] R. Rahmatullah, O. Yetty, and S. Yunita, "ANALISIS USAHATANI KOPI RAKYAT DAN KONTRIBUSINYA TERHADAP PENDAPATAN TOTAL KELUARGA DI KECAMATAN SEMENDE DARAT LAUT KABUPATEN MUARA ENIM PROVINSI SUMATERA SELATAN." Universitas Baturaja, 2022.

[6] F. Hoekstra *et al.*, "A review of reviews on principles, strategies, outcomes and impacts of research partnerships approaches: a first step in synthesising the research partnership literature," *Heal. Res. Policy Syst.*, vol. 18, no. 1, p. 51, 2020.

[7] V. Agarwal, S. Malhotra, and V. Dagar, "Coping with public-private partnership issues: A path forward to sustainable agriculture," *Socioecon. Plann. Sci.*, vol. 89, p. 101703, 2023.

[8] S. U. Rehman, "Agri-Marketing Partnership: An Indian Perspective," in *Agri-Marketing Partnership: An Indian Perspective: Rehman, Shakeel Ul*, [Sl]: SSRN, 2019.

[9] D. H. Streeter and M. A. Hudson, "Information Partnerships in the Food and Agribusiness Sector: An Alternative Coordination Strategy," *J. Food Distrib. Res.*, vol. 22, no. 3, pp. 37–44, 1991.

[10] V. Bitzer, W. van Jeroen, A. H. J. B. Helmsing, and V. Van Der Linden, "Partnering to facilitate smallholder inclusion in value chains," in *Value Chains, Social Inclusion and Economic Development*, Routledge, 2012, pp. 221–246.

[11] V. Mishra, A. Ishdorj, E. Tabares Villarreal, and R. Norton, "Collaboration in agricultural value chains: a scoping review of the evidence from developing countries," *J. Agribus. Dev. Emerg. Econ.*, 2024.

[12] M. Monfort, J. Buitink, F. Roeber, and F. Nogué, "Genome editing, an opportunity to revive soybean cultivation in Europe," *Plant J.*, vol. 121, no. 4, p. e17266, 2025.

[13] Z. A. Parray, R. A. A. Rather, S. A. Bhat, and P. S. Ahmad, "Investigating the rural and entrepreneurial development through microfinance," *Int. Res. J. Bus. Stud.*, vol. 15, no. 2, pp. 177–190, 2022.

[14] R. Dayanandan, "Micro-finance and micro enterprises–The siamese twins of economic welfare," *SMART J. Bus. Manag. Stud.*, vol. 6, no. 1, pp. 17–26, 2010.

[15] M. Asamoah and F. M. Amoah, "Microcredit schemes: a tool for promoting rural savings capacity among poor farm families: a case study in the Eastern region of Ghana," *Open J. Soc. Sci.*, vol. 3, no. 1, pp. 24–30, 2015.

[16] K. Gabriel Lawin, L. D. Tamini, and I. Bocoum, "What Should We Expect of the Impact of Microcredit on Farms' Performances?: A Literature Review of Experimental Studies," 2017.

[17] A. Ashraf, M. Billah, M. Ayoob, and N. Zulfiqar, "Analyzing the Impact of Microfinance Initiatives on Poverty Alleviation and Economic Development," *Rev. Appl. Manag. Soc. Sci.*, vol. 7, no. 4, pp. 431–448, 2024.

[18] K. J. S. Satyasai and C. Pereira, "Can better market access lead to higher incomes for farmers?," *Agric. Econ. Res. Rev.*, vol. 32, no. conf, pp. 113–122, 2019.

[19] P. Pingali, A. Aiyar, M. Abraham, and A. Rahman, "Linking farms to markets: reducing transaction costs and enhancing bargaining power," in *Transforming food systems for a rising India*, Springer, 2019, pp. 193–214.

[20] M. F. Rola-Rubzen and J. B. Hardaker, "Improving market access for smallholders: challenges and opportunities," 2006.

[21] J. Squalli, K. Wilson, and S. Hugo, "An analysis of market access," *Appl. Econ.*, vol. 42, no. 14, pp. 1833–1844, 2010.

[22] A. Maniriho, "Effects of farm cooperatives on farmers' incomes and welfare: Empirical analysis from Vunga coffee washing station in Nyabihu District, Western Rwanda," *Agron. Africaine*, vol. 33, no. 1, pp. 81–94, 2021.

[23] Z. Rozaki, T. A. K. Wijaya, N. Rahmawati, T. Triyono, and R. A. Ardila, "Analysis of Income Levels and Welfare of Coffee Farmers in Sumbertani Village, North Lampung Regency," in *BIO Web of Conferences*, EDP Sciences, 2024, p. 4002.

[24] E. Ludi, "24 Sustainable Livelihoods for Coffee Producers in East Africa: Is Producing Speciality Coffee a Way Out of Poverty?," *Res. Sustain. Dev.*, p. 505.

[25] I. Junais, H. M. Ali, A. Syarif, and M. H. Mansyur, "Young farmers and parents' perception for the future of agriculture: socio-spatial integration of coffee farmers in Jeneponto Regency," in *IOP Conference Series: Earth and Environmental Science*, IOP Publishing, 2020, p. 12017.

[26] S. NADZRI, S. A. ZAHARI, N. OTHMAN, and M. A. MAJID, "A Systematic Literature Review on Factors That

Influence Farmers' Well-Being".
[27] P. G. Chengappa, "Development of agriculture value chains as a strategy for enhancing farmers' income," *Agric. Econ. Res. Rev.*, vol. 31, no. 1, pp. 1–12, 2018.
[28] N. P. Sumartini and R. Nasrudin, "Does contract farming participation promote household's food security for smallholders? Empirical evidence from Indonesia," *J. Ekon. Stud. Pembang.*, vol. 25, no. 1, pp. 110–129, 2024.
[29] T. Tressel and S. Scarpetta, *Boosting productivity via innovation and adoption of new technologies: any role for labor market institutions?*, vol. 3273. World Bank Publications, 2004.
[30] S. N. Lubis and A. Lubis, "Enhancing Indonesian coffee trade: Strategies for navigating and reducing trade barriers," *Int. J. Innov. Res. Sci. Stud.*, vol. 7, no. 3, pp. 1248–1267, 2024.
[31] R. R. Ahmed, "A comparative analysis of multivariate approaches for data analysis in management sciences," 2024.
[32] P. S. Birthal, A. K. Jha, M. M. Tiongco, and C. Narrod, *Improving farm-to-market linkages through contract farming: A case study of smallholder dairying in India*. Intl Food Policy Res Inst, 2008.
[33] A. T. Melese, "Contract farming: Business models that maximise the inclusion of and benefits for smallholder farmers in the value chain," *Unif. L. Rev.*, vol. 17, p. 291, 2012.
[34] C. Narrod, D. Roy, B. D. Avendaño Ruiz, K. M. Rich, and J. J. Okello, "The role of public-private partnerships and collective action in ensuring smallholder participation in high value fruit and vegetable supply chains," 2007.
[35] H. Hoeffler, "Promoting the Kenyan Potato Value Chain: Can Contract Farming Help Build Trust and Reduce Transaction Risks?," 2006.
[36] I. Oladele and L. Ward, "Effect of micro-agricultural financial institutions of south Africa financial services on livelihood capital of beneficiaries in north west province south Africa," *Agric. Food Secur.*, vol. 6, no. 1, p. 45, 2017.
[37] M. Arora, "Impact assessment of self-help group bank linkage programme on women empowerment in the State of Himachal Pradesh, India," 2019.
[38] N. Habib, A. Ariyawardana, and A. A. Aziz, "The influence and impact of livelihood capitals on livelihood diversification strategies in developing countries: a systematic literature review," *Environ. Sci. Pollut. Res.*, vol. 30, no. 27, pp. 69882–69898, 2023.
[39] A. B. Bhuiyan, C. Siwar, A. G. Ismail, and M. D. A. Islam, "Microfinance and sustainable livelihood: A conceptual linkage of Microfinancing approaches towards sustainable livelihood," *Am. J. Environ. Sci.*, vol. 8, no. 3, p. 328, 2012.
[40] U. C. Sophia, G. Adesina, and C. O. Joshua, "Effects of Financial Inclusion on Economic Growth in Nigeria," 2023.
[41] M. T. Morepje, M. Z. Sithole, N. S. Msweli, and A. I. Agholor, "The influence of E-commerce platforms on sustainable agriculture practices among smallholder farmers in Sub-Saharan Africa," *Sustainability*, vol. 16, no. 15, p. 6496, 2024.
[42] P. F. Villar, T. Kozakiewicz, V. Bachina, S. Young, and S. Shisler, "PROTOCOL: The effects of agricultural output market access interventions on agricultural, socio-economic and food and nutrition security outcomes in low-and middle-income countries: A systematic review," *Campbell Syst. Rev.*, vol. 19, no. 3, p. e1348, 2023.
[43] C. Ravinder Reddy, Z. Jianqiu, A. Ashok Kumar, P. P. Rao, B. V. S. Reddy, and C. L. L. Gowda, "Linking to markets: A case of small scale sorghum farmers group in China," *Leisa India*, pp. 20–23, 2012.
[44] M. A. Usman and M. G. Haile, "Market access, household dietary diversity and food security: Evidence from Eastern Africa," *Food Policy*, vol. 113, p. 102374, 2022.
[45] A. van Tilburg and H. D. van Schalkwyk, "Strategies to improve smallholders' market access," in *Unlocking markets to smallholders: Lessons from South Africa*, Wageningen Academic Publishers Wageningen, 2012, pp. 35–58.