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Transmission mechanisms of the Merah Putih Village cooperative's multiplier effect on the local economy: A conceptual analysis

Daniel Simamora

Government of Bandung Regency, Jl. Raya Soreang No. 17, Kabupaten Bandung, Jawa Barat 40912 Indonesia
*e-mail: daniel.simamora.1998@gmail.com

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ABSTRACT

The Merah Putih Village Cooperative (KDMP) program is a strategic program initiated by the Indonesian Government to accelerate economic development starting from the village level, aligned with the national long-term development plan agenda. Although this program has significant potential for economic impact, a fundamental understanding of its transmission mechanisms to the local economy remains limited. This study aims to analyze and formulate a conceptual model that maps the multiplier effect transmission mechanisms generated by the KDMP. Using a qualitative method through a systematic literature review, this study identifies and synthesizes various pathways of cooperative economic impact on the local economy. The study results show that KDMP, with its business model, creates multiplier effects through three primary transmission pathways. First, the input provision and consumption. The second is financial intermediation and investment, and the third is value chain aggregation and integration. These pathways collectively generate reinforcing direct, indirect, and induced multiplier effects. This study also formulates a conceptual framework that can serve as an analytical tool for policymakers to design effective support interventions and as a foundation for future research to measure the actual magnitude of the KDMP's multiplier effect.

Keywords: Cooperative, Local Economy, Multiplier Effect

1. INTRODUCTION

Rural economies, particularly in Indonesia, whose economic structure is people-based and agrarian, have long faced persistent structural economic challenges, such as high poverty rates, dependence on the agricultural sector with high price volatility, limited access to business capital, and supply chains dominated by informal intermediaries who often disadvantage producers (Arham et al., 2020; Theresia et al., 2025). In the last decade, the Indonesian government has shifted its development focus by positioning villages as both subjects and epicenters of local economic growth. This development focus, driven from the periphery, is a manifestation of the effort to realize economic equity and justice, which is stated in the National Long-Term Development Plan (RPJPN) 2025-2045. The Golden Indonesia 2045 Vision targets an economic transformation that is not merely strong in the aggregate but also inclusive and rooted in local potential. (Rencana Pembangunan Jangka Panjang Nasional Tahun 2025-2045, 2024). Within this framework, strengthening village-level economic institutions is necessary. As a primary policy to achieve this goal, the government has launched the Merah Putih Village Cooperative (KDMP) program, a large-scale program in cooperative development targeting the establishment of up to 80,000 cooperative units in all villages and sub-districts across Indonesia. This program is not only a sectoral initiative but also an integrated part of the national economic development architecture. In the National Medium-Term Development Plan (RPJMN) 2025-2029, the role of cooperatives is clearly mandated in National Priority 3 to develop the agro-maritime industry and National Priority 6, which focuses on village development for economic growth and equity. Thus, the KDMP is positioned as a policy spearhead to enhance food security, shorten supply chains, create employment, control inflation, expand financial inclusion, and accelerate economic turnover at the grassroots level by serving as an aggregator and consolidator of local village products. (Peraturan Presiden Nomor 12 Tahun 2025 Rencana Pembangunan Jangka Menengah Nasional Tahun 2025 - 2029, 2025).

A review of the academic literature indicates the important role of cooperatives as engines of local multiplier effects in local and rural economic development. Several empirical studies in developing countries have confirmed the positive impact of cooperatives on the Gross Regional Domestic Product (GRDP), where cooperatives can become one of the drivers of the regional economy. Cooperatives, especially Village Unit Cooperatives (KUD), have been proven to improve the welfare of their members through various business programs (Karnain & Rahman, 2020; Ma & Abdulai, 2016a). Cooperative membership is positively correlated with increased household income, asset accumulation, and agricultural productivity (Zou & Wang, 2022). Furthermore, cooperatives serve as effective instruments for community economic empowerment by encouraging people participation in economic activities and the management of local resources (Majee & Hoyt, 2011). In the context of regional economic development, cooperatives are positioned as one of the important pillars capable of translating macro policies into impactful micro-actions at the local level (Castilla-Polo & Sánchez-Hernández, 2020). Cooperatives have been shown to increase farmers' bargaining power, reduce transaction costs, and open up previously inaccessible markets and credit (Alho, 2015).

The impact of an economic policy, such as the establishment of the KDMP, can be analyzed through the concept of the economic multiplier effect. This theory, which is rooted in the Keynesian perspective, explains how an initial injection of expenditure, for example, investment in a cooperative, can generate a total increase in income within the economy that is greater than the initial injection (Semou et al., 2022). This can be divided into three components: The first is the direct effect, which is the increase in output and income for the entity receiving the initial injection, in this case, the KDMP itself. The second is the indirect effect, which is the impact on local supplier industries due to increased demand from the KDMP. Third, there is the induced effect, which is the subsequent impact of the re-spending of income received by workers and cooperative members in the local economy. Studies in various developing countries have applied this framework to analyze the economic impacts of different types of cooperatives. Agricultural cooperatives, for example, have been proven to increase value chain efficiency, increase farmer incomes, and stimulate rural economies (Ma & Abdulai, 2016b). Cooperatives are also recognized as a tool for poverty alleviation and community economic development (Solomon, 2023). Some research

in the past has even attempted to measure broader social impacts through methodologies like Social Return on Investment (SROI), which show that the value created by cooperatives often exceeds mere financial metrics (Darliyanti et al., 2025).

Although the literature provides a strong foundation for the positive contributions of cooperatives in general, a significant research gap emerges when discussing the KDMP phenomenon. First, most existing studies analyze traditional cooperatives that tend to focus on single business units. These cooperatives are generally in the form of savings and loans or agricultural product marketing. In contrast, KMDP is designed as a hybrid business model that integrates various functions, such as retail (like basic necessities and medicine), financial services (like savings and loans and KUR), logistics (such as cold storage and distribution), and even social services (like a village clinic) within a single institutional entity. The complexity and interconnectivity of this hybrid business model create more intricate economic transmission pathways, and few studies have mapped these conceptually. Second, the KDMP is a cooperative model massively and structurally supported by the state through the government, from capitalization and regulation to technical assistance. This characteristic distinguishes it from cooperatives that grow organically from the ground up, thus requiring a separate analysis of how state intervention affects the multiplier mechanism. The urgency of this research lies in the need for development planners, at both national and regional levels, to have a solid conceptual framework to understand, predict, and ultimately maximize the economic impact of substantial public investment in the KDMP program. Without a basic understanding of the transmission mechanisms, policy interventions risk being inefficient and failing to achieve their intended goals. Therefore, this study formulates the following primary research question: How do the multiplier effect transmission mechanisms of the Merah Putih Cooperative work to stimulate the local economy?

2. METHOD

This study uses a qualitative approach with a systematic literature review (SLR) design. This method was chosen for its relevance to the research objective, which is to identify, evaluate, and synthesize findings from various relevant studies to construct a new conceptual model or framework (Snyder, 2019). This approach allows for a deep and structured analysis of the existing body of knowledge to answer research questions concerning "how" and "why" a phenomenon occurs, in this case, the transmission mechanism of the KDMP's multiplier effect.

The literature collection and selection process was conducted systematically following a predefined procedure. The search for articles was performed on two primary high-reputation databases. Scopus for international literature and SINTA for accredited national literature. The use of these two databases aimed to ensure comprehensive coverage of literature from both international and local contexts. The keywords used in the search were structured with Boolean operators to maximize the relevance of the results, such as: ("koperasi" OR "cooperative") AND ("pembangunan ekonomi lokal" OR "local economic development" OR "ekonomi pedesaan" OR "rural economy") AND ("efek pengganda" OR "multiplier effect" OR "dampak ekonomi" OR "economic impact"). The inclusion criteria were: (1) the article is an empirical or conceptual research result published in a peer-reviewed scientific journal; (2) the publication period is between 2015 and 2025 to ensure the currency of data and analysis; (3) the article is written in Indonesian or English; and (4) the focus of the discussion is relevant to the economic impact of cooperatives, rural development, or economic multiplier theory. Conversely, the exclusion criteria included articles not subjected to a peer-review process (such as conference proceedings, books, working reports), articles that only discuss the internal management aspects of cooperatives without connection to external impacts, and articles outside the specified time frame.

The screening process was conducted in several stages adapted from the PRISMA (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*) framework. From the initial search, 50 articles were identified. The first stage was screening by title and abstract to select the most relevant articles. This stage reduced the number of articles to 32. Next, a full-text reading of these 32 articles was conducted for a more in-depth evaluation of their methodology and findings. From this process, 12 articles were excluded

for not fully meeting the inclusion criteria or having low relevance to the issue. The final result of this screening process was 20 articles deemed to be of high quality and strong relevance to the research question.

The data analysis technique used was thematic analysis. All 20 selected articles were read carefully, and data were extracted using a codification form that included information on the research title, author, year, and main findings of the research. From the collected data, an open coding process was conducted to identify key themes that repeatedly emerged regarding the mechanisms of cooperative economic impact. These themes were then grouped and synthesized to build larger categories that form the transmission pathways in the conceptual model. This analysis process was deductive-inductive, where the theoretical framework of the multiplier effect (direct, indirect, induced) was used as an initial deductive lens, which was then enriched and specified inductively with empirical findings from the reviewed literature and linked to the specific business model of KDMP.

3. RESULT AND DISCUSSION

The analysis is conducted to construct the conceptual model of the KDMP's multiplier effect transmission. Analysis begins by synthesizing empirical evidence from the collected literature. The twenty selected articles have a strong foundation for understanding how cooperatives, in general, create economic value at the local level. Key findings from these studies are presented in Table 1, which serves as a reference and validation for each argument developed in this discussion. Collectively, this literature indicates that well-managed cooperatives are capable of increasing member income, creating employment, facilitating access to inputs and markets, and stabilizing local economies.

Table 1. Summary of Selected Literature on the Economic Impact of Cooperatives

Number	Research Title	Author	Year	Research Findings
1	Does cooperative membership improve household welfare? Evidence from apple farmers in China	Ma & Abdulai	2016	Cooperative membership increases yield, household income, and net returns. Empirical evidence comes from apple farmers. This supports both direct and induced income channels through increased member earnings.
2	Impact of Agricultural Cooperatives on Farmers' Collective Action: A Study Based on the Socio-Ecological System Framework	Zhu & Wang	2024	Cooperatives strengthen farmers' collective action, enhance post-harvest coordination, and improve market access. This is relevant to the cooperative's role as an aggregator or value-chain actor.
3	Measuring the Economic Contribution of Agricultural Cooperatives to the National Economy: The Case of Greece	Semou et al.	2022	The study applies a method to estimate the contribution of cooperatives to regional output while also confirming the existence of direct, indirect, and induced effects from the establishment of cooperatives in rural areas.
4	Regional agricultural cooperatives and subjective wellbeing of rural households in China	Wu et al., 2022	2022	Cooperative membership is found to be associated with an increase in households' subjective well-being, while also demonstrating socio-economic effects that strengthen induced spending within the local community.
5	Do cooperatives participation and technology adoption improve farmers' welfare in China? A joint analysis accounting for selection bias	Yang et al.	2021	Cooperative participation encourages the adoption of post-harvest technologies, increases productivity and income, and highlights the role of cooperatives as a transmission channel serving as an input/technology that generates output and stimulates local spending.
6	Cooperatives and Sustainable Development: A Multilevel Approach Based on Intangible Assets	Castilla-Polo & Sánchez-Hernández, 2020	2020	Cooperatives contribute to sustainable development through intangible assets (institutional capacity and social capital) while also supporting the effectiveness

				of local economic transmission by strengthening economic networks in rural areas.
7	Research Trends in Agricultural Marketing Cooperatives: A Bibliometric Review	Qorri & Felföldi	2024	This study finds that cooperatives play an important role as a bridge between smallholder farmers and modern markets, functioning in product aggregation, strengthening bargaining power, and improving the efficiency of agricultural product distribution. Recent research trends also emphasize institutional innovation and value-chain partnerships as key factors determining the sustainability and economic impact of cooperatives on local development.
8	Rediscovering the Cooperative Enterprise: A Systematic Review of Current Topics and Avenues for Future Research	Camargo Benavides & Ehrenhard	2021	This study emphasizes that the main strengths of cooperatives lie in their participatory governance, social orientation, and community-based business model, which collectively lead to increased productivity, income equality, and multiplier effects within their areas of operation.
9	The effect of cooperative membership on agricultural technology adoption in Sichuan, China	Zhang et al.	2020	Cooperative membership has been proven to improve access to information, training, agricultural inputs, and credit facilities, thereby enhancing farm productivity and efficiency. As a result, it reduces post-harvest losses, increases farmers' net income, and expands local business opportunities, thus strengthening economic linkages in rural areas.
10	The Multiplier Effects of Food Relocalization: A Systematic Review	Benedek et al.	2020	This study finds that the localization of food chains can strengthen local economic development by fostering linkages among economic actors within the region.
11	Cooperatives, partnerships and the challenges of quality upgrading: A case study from Ethiopia	Royer et al.	2017	This study finds that agricultural cooperatives function as an effective mechanism of value-chain aggregation, accelerating the circulation of added value at the local level and creating economic multiplier effects through increased income, employment, and reinvestment in rural communities.
12	Can cooperative business models solve horizontal and vertical coordination challenges? A case study in the Australian pineapple industry	Rolfe et al.	2022	This study finds that cooperatives with hybrid business models are able to generate economic multiplier effects through more efficient and participatory value-chain integration. This mechanism aligns with the concept of multiplier effect transmission in cooperatives, particularly through the channels of value-chain aggregation and coordination.
13	Exploring Responsible Research and Innovation in reputable agri-food cooperatives and the link to international orientation. An exploratory empirical case study in Spain	Sánchez Hernández & Castilla-Polo	2024	This study finds that responsible innovation within agri-food cooperatives serves as a key of local economic multiplier effects, as it promotes the development of inclusive value chains, expands business opportunities around cooperatives, and strengthens the economic resilience of rural communities.
14	Farmers' self-reported value of cooperative membership: evidence from heterogeneous business and organization structures	Alho	2015	This study finds that cooperatives function as an economic stabilization mechanism for farmers, providing not only direct financial benefits but also creating multiplier effects through increased purchasing power and strengthened economic activity within rural communities.
15	The impact of entrepreneurship of farmers on agriculture and rural economic growth: Innovation-driven perspective	Pan et al.	2024	Cooperatives play an important role in expanding farmers' access to innovation, training, and investment capital needed to adopt new technologies. Through this intermediation role, cooperatives promote value creation and local economic growth, as increased member income

				stimulates economic circulation within surrounding communities.
16	What is a 'multiplier' anyway? Assessing the Economics of Local Food Systems Toolkit	Jablonski & Thilmany McFadden	2019	This study concludes that the multiplier effects of local food investment provide empirical evidence that community-based economic activities, including village cooperatives, can strengthen local economic development, provided they are supported by policies that promote linkages among actors within the local economic system.
17	The Efficacy of Policy and Legal Framework for Cooperative Governance and Local Economic Development (LED) in Small Towns in a Selected Region in South Africa	Kamara & Rabie	2021	Cooperatives with good governance practices are able to generate new employment opportunities, increase member incomes, and stimulate the emergence of supporting micro-enterprises around their areas of operation. Moreover, the synergy between cooperatives and local governments has been shown to strengthen the effectiveness of local economic development programs.
18	Exploring the inclusiveness of producer cooperatives	Bijman & Wijers	2021	This study concludes that the inclusiveness of cooperatives is a key factor in ensuring that their positive economic impacts are truly distributed across all segments of society, creating multiplier effects that strengthen local economic development and reduce inequality in rural areas.
19	The local multiplier of income support paid in a complementary currency: Comparative evaluation in the city of Barcelona	Roca et al.	2024	The research findings emphasize that organizations that retain a larger share of their spending and income within the community (such as cooperatives that purchase local inputs and pay their members) generate significantly higher multipliers compared to entities that make substantial purchases from outside the region (leakage).
20	The role of agricultural cooperatives in mitigating opportunism in the context of complying with sustainability requirements: empirical evidence from Spain	Sánchez-Navarro et al.	2024	This study concludes that the presence of agribusiness cooperatives plays an important role in reducing opportunistic behavior along the agri-food value chain, particularly among farmers, intermediaries, and large buyers. Through mechanisms of collective governance, price transparency, and membership-based contracts, cooperatives are able to strengthen the bargaining position of small producers, improve price stability, and expand access to markets and production inputs.

Source: Processed (2025)

Based on the evidence from the literature, an analysis is conducted to construct the unique business model of KDMP so that its impact transmission pathways on the economy can be mapped. The KDMP program is designed as an integrated, multi-business entity, encompassing the provision of consumer goods and production inputs, financial services, as well as aggregation and logistics functions. Each of these functions creates a distinct yet interconnected series of multiplier effects

The first transmission pathway can be seen through input provision and consumption. KDMP establishes stores or outlets that provide daily needs, affordable medicines, and agricultural production facilities. This activity directly creates income for KDMP from sales and absorbs local labor as store and warehouse staff (direct effect). Indirectly, to stock its inventory, KDMP will increase demand for products from local suppliers, such as vegetable farmers, chicken breeders, or MSME producers of processed foods in the village. This increased demand creates additional income and employment in other sectors of the village economy (indirect effect), as validated by the study of Ma & Abdulai, (2016a) and Alho, (2015) which highlights the importance of local sourcing. Furthermore, the availability of basic necessities at more stable and affordable prices at KDMP outlets will increase the real income of the community and members. This increased purchasing power will encourage them to re-spend their money on other goods

and services in the local economy, such as food stalls, barber services, or workshops, thereby creating a new round of income (induced effect) (Wu et al., 2022).

The second transmission pathway is through financial intermediation and investment. KDMP has a savings and loan unit and acts as a distributor of the People's Business Credit (KUR) with low interest rates. The direct effect of this economic activity is income for KDMP from interest margins and labor absorption to manage the unit. The indirect effect increases when members, both farmers and MSME actors, use these working capital loans to purchase inputs from local suppliers. For example, a farmer buys fertilizer and seeds from a local agricultural store, or a craftsman buys raw materials from a local supplier. These transactions directly increase the income of other business entities in the village. As shown by Zhang et al., (2020) and Yang et al., (2021) access to affordable capital is a important key for local economic activity. The induced effect appears when productive investments funded by these loans successfully increase members output and income. The additional income received by farmers from better harvests, or by MSME actors from increased sales, is then re-spent within the village economy, creating the multiplier cycle further. This function also strategically suppresses the role of moneylenders, preventing capital leakage from the village economic ecosystem.

The third, and perhaps most transformative, transmission pathway is through value chain aggregation and integration. KDMP is created to function as an accelerator, consolidator, and aggregator for local MSME and agricultural products in village. By providing facilities such as cold storage and logistics services, KDMP addresses one of the main constraints faced by small producers that we can call as economies of scale and market access. The direct effect is income for KDMP from providing storage, transportation, and margins from collective sales, as well as job creation in logistics and warehouse operations. The indirect effects are highly significant where KDMP creates demand for transportation services from local vehicle owners, encourages the improvement and standardization of product quality from farmers and MSMEs to be marketable in wider markets, and has the potential to foster supporting industries such as packaging providers. As found by Zhu & Wang, (2024) and Rolfe et al., (2022), this aggregation role is important for integrating small producers into more profitable value chains. The induced effect of this pathway is very strong. By cutting out middlemen and shortening the supply chain, KDMP directly increases the prices received by farmers at the producer level, which in turn raises the Farmer's Exchange Rate (NTP) and their welfare. This substantial increase in income has big potential to be re-spent in the local economy, creating widespread ripple effects.

The synthesis of these three transmission pathways results in a conceptual model that is relatively new in cooperative studies. This model finds that KDMP is no longer an isolated business entity, but rather an economic processing hub at the village level. It receives initial business capital injections (from the government, members, and loans), processes them through its three main business functions, and generates three layers of economic impact that spread throughout the local economy. A unique feature of the KDMP model is the obligation to allocate 20% of its profits back to the village treasury. This mechanism creates a formal feedback loop or a secondary multiplier round. The funds entering the village treasury can be used by the village government for other development programs within the village area (e.g., local infrastructure improvements or social assistance), which ultimately become a new injection into the local economy and start a new multiplier cycle. See Figure 1

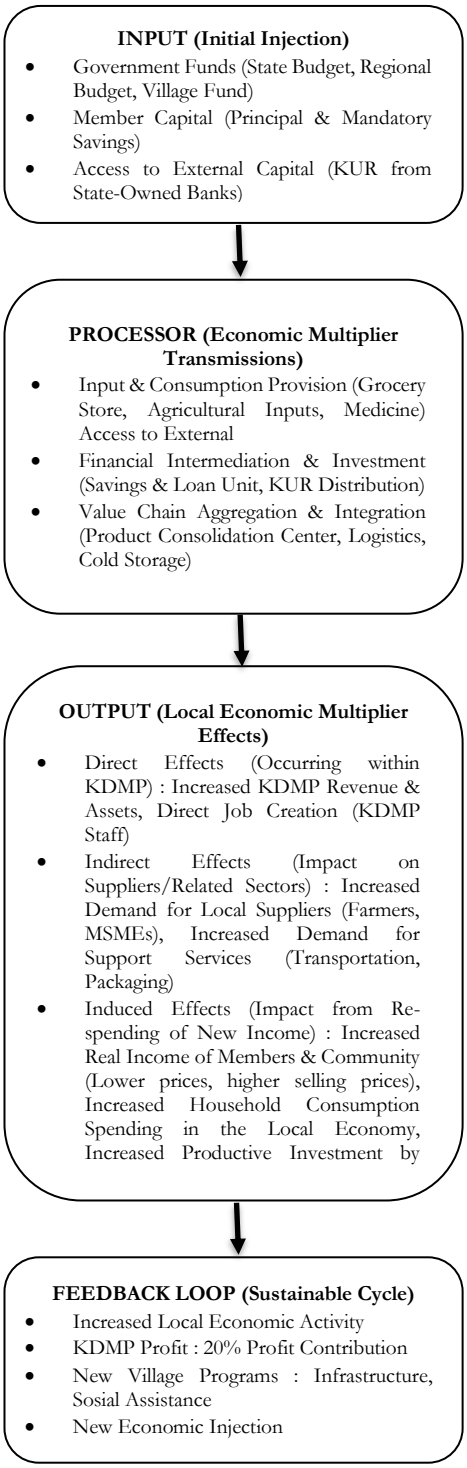

Figure 1. Transmission Mechanism of the Merah Putih Cooperative's Multiplier Effect (Conceptual Model)

This model explains that the impact of KDMP actually extends far beyond its own financial performance. Its success must be measured by its ability to activate and strengthen economic relationships within the village. KDMP is positioned as soft economic infrastructure that reduces transaction costs, addresses information asymmetry, and organizes previously inefficient local markets. However, the magnitude of each transmission pathway is heterogeneous and may very well be highly context-dependent.

The multiplier effect will be greater in villages with a strong production base (agriculture or MSMEs) to supply KDMP, compared to villages with a weaker economic base. Therefore, the success of the KDMP program cannot be measured with a one-size-fits-all approach but must be tailored to the economic potential and capacity of each location, which are certainly different.

4. CONCLUSION

This study produces a conceptual model that explains the transmission mechanisms of the multiplier effect from the Merah Putih Cooperative (KDMP) to the local economy, particularly at the village level. Based on a systematic literature review, this model identifies three main transmission pathways originating from KDMP's hybrid activities and business model. Three main transmission pathways are the input provision and consumption pathway, the financial intermediation and investment pathway, and the value chain aggregation and integration pathway. These three pathways simultaneously generate direct multiplier effects within KDMP itself, indirect effects on local supplier sectors, and induced effects through the re-spending of new income by members and the community. The model also highlights a feedback loop mechanism through the mandatory 20% contribution of the cooperative's activity profits to the village treasury, which has the potential to create a secondary multiplier cycle.

The findings of this study have strategic implications for the government and policymakers. For the Regional Development Planning and Research Agency (Bapperida) and related agencies, this conceptual model can be used as a framework and reference for designing and evaluating the KDMP program. Policy interventions should not only focus on strengthening KDMP internally, but also on strengthening the connectivity between KDMP and the local economic ecosystem, for example, by facilitating business partnerships with MSME (Micro, Small, and Medium Enterprises) suppliers. Furthermore, this model suggests that the success indicators for KDMP also need to be expanded. In addition to measuring the Net Surplus (SHU), the government should develop more comprehensive impact metrics, such as contribution to local GRDP (Gross Regional Domestic Product), local labor absorption rates, increases in the Farmer's Exchange Rate (NTP), and price stability at the village level.

This study has limitations that must be acknowledged. As a conceptual study based on a literature review, the resulting model is qualitative and hypothetical. This research does not measure the magnitude of the multiplier effects. The actual effectiveness of these transmission mechanisms in the field will be influenced by various contextual factors, such as the human resource capability of the cooperative management, the level of member participation, and the unique economic potential of each village, which cannot be fully captured by a general conceptual model.

Therefore, future research is highly recommended tobe conducted. First, quantitative research can be conducted using regional economic analysis tools such as Input-Output (I-O) models or Social Accounting Matrices (SAM) at the sub-district or district level to estimate the multiplier figures for output, income, and employment generated by KDMP. Second, in-depth comparative case studies between successful and less successful KDMPs can provide valuable insights into non-economic factors, such as leadership quality, social capital, and governance, which moderate the effectiveness of the economic transmission mechanisms identified in this study.

Ethical Approval
Not Applicable

Informed Consent Statement
Not Applicable

Author Contributions
Not Applicable

Disclosure Statement
The authors declare no conflicts of interest.

Data Availability Statement
The data presented in this study are available upon request from the corresponding author for privacy.

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Notes on Contributors

Daniel Simamora
https://orcid.org/0009-0007-3857-0075
Daniel Simamora is affiliated with Government of Bandung Regency, Indonesia

REFERENCES

Alho, E. (2015). Farmers' self-reported value of cooperative membership: evidence from heterogeneous business and organization structures. *Agricultural and Food Economics*, *3*(1), 23. https://doi.org/10.1186/s40100-015-0041-6

Arham, M. A., Fadhli, A., & Dai, S. I. (2020). Does Agricultural Performance Contribute to Rural Poverty Reduction in Indonesia? *JEJAK*, *13*(1), 69–83. https://doi.org/10.15294/jejak.v13i1.20178

Benedek, Z., Fertő, I., & Szente, V. (2020). The Multiplier Effects of Food Relocalization: A Systematic Review. *Sustainability*, *12*(9), 3524. https://doi.org/10.3390/su12093524

Bijman, J., & Wijers, G. (2019). Exploring the inclusiveness of producer cooperatives. *Current Opinion in Environmental Sustainability*, *41*, 74–79. https://doi.org/10.1016/j.cosust.2019.11.005

Camargo Benavides, A. F., & Ehrenhard, M. (2021). Rediscovering the Cooperative Enterprise: A Systematic Review of Current Topics and Avenues for Future Research. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *32*(5), 964–978. https://doi.org/10.1007/s11266-021-00328-8

Castilla-Polo, F., & Sánchez-Hernández, M. I. (2020). Cooperatives and Sustainable Development: A Multilevel Approach Based on Intangible Assets. *Sustainability*, *12*(10), 4099. https://doi.org/10.3390/su12104099

Darliyanti, N. I., Nurbuati, D., & Julinda Ekawati, R. (2025). Transformasi Digital Koperasi melalui Localoka BRI: Analisis Social Return on Investment (SROI) pada Koperasi FEB Universitas Airlangga. *Ranah Research: Journal of Multidisciplinary Research and Development*, *8*(1), 14–21. https://doi.org/10.38035/rrj.v8i1.1839

Jablonski, B., & Thilmany McFadden, D. (2019). What is a 'Multiplier' Anyway? Assessing the Economics of Local Foods Systems Toolkit. *Journal of Agriculture, Food Systems, and Community Development*, 1–8. https://doi.org/10.5304/jafscd.2019.08C.013

Kamara, R. D., & Rabie, B. (2021). The Efficacy of Policy and Legal Framework for Cooperative Governance and Local Economic Development (LED) in Small Towns in a Selected Region in South Africa. *Zarządzanie Publiczne*, *1 (53)*, 7–26. https://doi.org/10.4467/20843968ZP.21.001.14134

Karnain, N., & Rahman, M. (2020). Peran Koperasi Unit Desa (Kud) Dalam Meningkatkan Kesejahteraan Anggota Melalui Program Keterampilan Mengolah Makanan. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, *6*(1), 72. https://doi.org/10.37905/aksara.6.1.72-79.2020

Ma, W., & Abdulai, A. (2016a). Does cooperative membership improve household welfare? Evidence from apple farmers in China. *Food Policy*, *58*, 94–102. https://doi.org/10.1016/j.foodpol.2015.12.002

Ma, W., & Abdulai, A. (2016b). Does cooperative membership improve household welfare? Evidence from apple farmers in China. *Food Policy*, *58*, 94–102. https://doi.org/10.1016/j.foodpol.2015.12.002

Majee, W., & Hoyt, A. (2011). Cooperatives and Community Development: A Perspective on the Use of Cooperatives in Development. *Journal of Community Practice*, *19*(1), 48–61. https://doi.org/10.1080/10705422.2011.550260

Pan, Y., Zhang, S., & Zhang, M. (2024). The impact of entrepreneurship of farmers on agriculture and rural economic growth: Innovation-driven perspective. *Innovation and Green Development*, *3*(1), 100093. https://doi.org/10.1016/j.igd.2023.100093

Qorri, D., & Felföldi, J. (2024). Research Trends in Agricultural Marketing Cooperatives: A Bibliometric Review. *Agriculture*, *14*(2), 199. https://doi.org/10.3390/agriculture14020199

Roca, M., Segura, M., Puig, J., & Martín Belmonte, S. (2024). The local multiplier of income support paid in a complementary currency: Comparative evaluation in the city of Barcelona. *Urban Studies*, *61*(1), 95–111. https://doi.org/10.1177/00420980231177138

Rolfe, J., Akbar, D., Rahman, A., & Rajapaksa, D. (2022). Can cooperative business models solve horizontal and vertical coordination challenges? A case study in the Australian pineapple industry. *Journal of Co-Operative Organization and Management*, *10*(2), 100184. https://doi.org/10.1016/j.jcom.2022.100184

Royer, A., Bijman, J., & Abebe, G. K. (2017). Cooperatives, partnerships and the challenges of quality upgrading: A case study from Ethiopia. *Journal of Co-Operative Organization and Management*, *5*(1), 48–55. https://doi.org/10.1016/j.jcom.2017.04.001

Sánchez Hernández, M. I., & Castilla-Polo, F. (2024). Exploring Responsible Research and Innovation in reputable agri-food cooperatives and the link to international orientation. An exploratory empirical case study in Spain. *Journal of Responsible Innovation*, *11*(1). https://doi.org/10.1080/23299460.2024.2322756

Sánchez-Navarro, J. L., Arcas-Lario, N., Bijman, J., & Hernández-Espallardo, M. (2024). The role of agricultural cooperatives in mitigating opportunism in the context of complying with sustainability requirements: empirical evidence from Spain. *Agricultural and Food Economics*, *12*(1), 40. https://doi.org/10.1186/s40100-024-00332-8

Semou, V., Sergaki, P., & Tremma, O. (2022). Measuring the Economic Contribution of Agricultural Cooperatives to the National Economy: The Case of Greece. *The Open Agriculture Journal*, *16*(1). https://doi.org/10.2174/18743315-v16-e2206203

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*, 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039

Solomon, P. (2023). Can cooperatives be a tool for poverty reduction? Social capital perspectives of fisher's cooperatives in India. *Marine Policy*, *147*. https://doi.org/10.1016/j.marpol.2022.105373

Theresia, A., Ikhsan, M., Kacaribu, F. N., & Sumarto, S. (2025). Spillover Effect of Food Producer Price Volatility in Indonesia. *Economies*, *13*(9), 256. https://doi.org/10.3390/economies13090256

Wu, L., Li, C., & Gao, Y. (2022). Regional agricultural cooperatives and subjective wellbeing of rural households in China. *Regional Science Policy & Practice*, *14*, 138–159. https://doi.org/10.1111/rsp3.12502

YANG, D., ZHANG, H., LIU, Z., & ZENG, Q. (2021). Do cooperatives participation and technology adoption improve farmers' welfare in China? A joint analysis accounting for selection bias. *Journal of Integrative Agriculture*, *20*(6), 1716–1726. https://doi.org/10.1016/S2095-3119(20)63325-1

Zhang, S., Sun, Z., Ma, W., & Valentinov, V. (2020). The effect of cooperative membership on agricultural technology adoption in Sichuan, China. *China Economic Review*, *62*, 101334. https://doi.org/10.1016/j.chieco.2019.101334

Zhu, X., & Wang, G. (2024). Impact of Agricultural Cooperatives on Farmers' Collective Action: A Study Based on the Socio-Ecological System Framework. *Agriculture*, *14*(1), 96. https://doi.org/10.3390/agriculture14010096

Zou, Y., & Wang, Q. (2022). Impacts of farmer cooperative membership on household income and inequality: Evidence from a household survey in China. *Agricultural and Food Economics*, *10*(1), 17. https://doi.org/10.1186/s40100-022-00222-x