



Empowering Coastal Fisheries Through Cooperatives: A Case Study of Bahari Indah Perkasa Cooperative in Mlaten Village, Pasuruan Regency, Indonesia

Mariyana Sari^{1*}, Wildan Alfarizi¹, Luthfiah Rahma Dini³ and
Muhammad Fawwaz Syabani⁴

Fisheries Agrobusiness, Faculty of Fisheries and Marine Science, Universitas Brawijaya, Jl. Veteran,
Malang, Indonesia

*Corresponding Author: mariyanasari@ub.ac.id

ARTICLE INFO

Article History:

Received: May 30, 2025

Accepted: July 25, 2025

Online: Aug. 19, 2025

Keywords:

ACTORS,
Cold storage,
Cooperative,
Empowerment,
Perception

ABSTRACT

The establishment of the Bahari Indah Perkasa Cooperative in Mlaten Village, Nguling Sub-district, Pasuruan Regency, was a response to limited fish storage facilities available to local fisheries ACTORS. This study aimed to analyze the cooperative's role in empowering members' businesses, evaluate members' perceptions, and assess its economic and social impacts. The research was conducted from January to February 2025, involving 15 members and administrators. Data were collected through observation, interviews, documentation, and questionnaires, and analyzed using a mixed-methods approach. Quantitatively, the cooperative's overall ACTORS score was 34.9, placing it in the moderate category, with individual scores of Authority (4.5), Confidence and Competence (7.4), Trust (6.5), Opportunity (7.2), Responsibility (4.8), and Support (4.5). Members' perceptions averaged 81.66%, indicating strong agreement on the cooperative's positive role—particularly in Opportunity (85%) and Confidence and Competence (83.33%). The socioeconomic impacts were also high, with respondents reporting improvements in income (87%), employment (85%), and education (81%) following the cooperative's establishment. The provision of cold storage facilities with a capacity of 50 tons and a 3-ton refrigerated truck has improved product quality, expanded market access, and enhanced economic stability. Overall, the findings indicate that while the cooperative's empowerment role is moderate, its impact is substantial. Strengthening governance and support mechanisms could further enhance its effectiveness and long-term sustainability.

INTRODUCTION

Fisheries cooperatives in Indonesia play a vital role in increasing the income and productivity of business ACTORS, particularly in coastal areas. These cooperatives function as platforms for collective decision-making in accordance with shared group norms. According to data from the Ministry of Cooperatives and SMEs (2018), there were 2,884 fisheries cooperatives in Indonesia, representing 2.09% of the total number of cooperatives nationwide, most of which operate as micro-enterprises (Taniu *et al.*, 2024).

In East Java, the marine fisheries sector makes a substantial contribution to maritime potential, with an estimated catch of approximately 1.7 million tons per year (**Gisty Ajeng Septami *et al.*, 2017**). One of the promising regions is Pasuruan Regency, which has a coastline of about 48km and a sustainable fish potential of 49.51 thousand tons annually (**Nugroho, 2015**).

In 2019, Pasuruan Regency recorded 1,045 active cooperatives (**BPS, 2020**). Mlaten Village is one of the areas in the regency with a high concentration of fisheries-related businesses, particularly in fish processing activities such as smoking, boiling, and salting. As a form of people-based economic institution, cooperatives play a crucial role in supporting community empowerment, especially in the fisheries sector, with direct impacts on the economic and social conditions of their members. According to **BPS (2023)**, Mlaten Village has two active cooperatives, one of which—the Bahari Indah Perkasa Cooperative—focuses specifically on the marine and fisheries sector.

The Bahari Indah Perkasa Cooperative was established in 2021 to address the problem of limited fish storage capacity, which resulted in stockpiling issues for Poklahsar Bahari, a local fish processing business group in Mlaten Village. The cooperative was initiated by the Ministry of Marine Affairs and Fisheries (MMAF) to strengthen institutional capacity among fisheries business ACTORS in the village. To resolve the storage problem, the MMAF provided cold storage facilities with capacities of 30 and 20 tons, as well as a refrigerated vehicle (thermoking) with a 3-ton capacity to support product distribution for fisheries businesses.

This study aimed to analyze the role of the Bahari Indah Perkasa Cooperative in empowering its members' businesses, examine members' perceptions of its role, and assess the economic and social impacts experienced by members as a result of its establishment.

MATERIALS AND METHODS

The research was conducted at the Bahari Indah Perkasa Cooperative, located in Mlaten Village, Nguling Sub-district, Pasuruan Regency, East Java, from January to February 2025. A mixed-methods approach was employed, integrating both quantitative and qualitative methods. The study utilized primary and secondary data. Primary data were collected through interviews, observations, questionnaires, and documentation, while secondary data were obtained from cooperative reports and relevant literature.

The study population consisted of 15 individuals, comprising both administrators and members of the Bahari Indah Perkasa Cooperative. A non-probability sampling method was used, in which all members of the population did not have an equal chance of being selected (**Sugiyono, 2022**). Specifically, a saturated sampling technique was applied, where the entire population served as the sample. This approach is appropriate for small populations, typically fewer than 30 individuals. The sample included six cooperative administrators and nine cooperative members.

Quantitative data analysis was conducted using the Likert scale and class interval, applying the ACTORS indicators—Authority, Confidence and Competence, Trust, Opportunity, Responsibility, and Support—to evaluate the cooperative’s role in empowering members’ businesses (Kasih, 2022). The questionnaire was designed to measure members’ agreement or disagreement with the cooperative’s roles, with response categories of “High” (score 3), “Moderate” (score 2), and “Low” (score 1). Responses were converted into numerical data, and scores were calculated based on class intervals derived from the established indicators, as presented in Table (1).

Table 1. Class interval

No	Indicators	Minimum Score	Maximum Score
1	Authority	2	6
2	Confidence and Competence	3	9
3	Trust	3	9
4	Opportunity	3	9
5	Responsibility	2	6
6	Support	2	6
Total Score		15	45

Source: Processed Primary Data, 2024

The boundaries between class intervals must be clearly defined and non-overlapping to ensure that each observed value is accurately categorized into the appropriate class. The lower limit of the first class interval is set at the minimum value of the data, while the upper limit of the last class interval corresponds to the maximum value (Imro’ah *et al.*, 2019). Class intervals are essential for assessing the cooperative’s role based on the three levels of responses in the questionnaire: High, Moderate, and Low. Each ACTORS indicator has a different number of intervals, depending on the number of questions in the questionnaire, and is analyzed separately.

The following variables were used to determine the class interval for evaluating the cooperative’s role:

$$\text{Interval Width (I)} = \frac{X_n - X_i}{C}$$

- **C** = Number of class intervals
- **X_n** = Maximum total score
- **X_i** = Minimum total score
- **K** = Number of questionnaire items (instrument items)

Based on this calculation, the partial class intervals for assessing the cooperative's role can then be constructed. These intervals allow categorization into three levels of cooperative role: Low, Moderate, and High. The intervals are applied for each ACTORS indicator based on the number of questionnaire items related to it.

The class intervals for the cooperative's role assessment are presented in Table (2) below:

Table 2. Partial class intervals for the cooperative's role assessment

Category	Score Range	Interpretation
Low	$X_i - (X_i + I)$	Role is low
Moderate	$(X_i + I) - (X_i + 2I)$	Role is moderate
High	$(X_i + 2I) - X_n$	Role is high

Note: The exact numeric values of each interval will vary depending on the total number of questions (K) and the scoring range obtained from respondents. These should be filled in once the scoring data is available.

Table 3. Partial class intervals for the role of the cooperative

No	Role Indicator	Class Interval	Category
1	Authority	2.00 – 3.30	Low
		3.31 – 4.60	Moderate
		4.61 – 6.00	High
2	Confidence and Competence	3.00 – 5.00	Low
		5.01 – 7.00	Moderate
		7.01 – 9.00	High
3	Trust	3.00 – 5.00	Low
		5.01 – 7.00	Moderate
		7.01 – 9.00	High
4	Opportunity	3.00 – 5.00	Low
		5.01 – 7.00	Moderate
		7.01 – 9.00	High
5	Responsibility	2.00 – 3.30	Low
		3.31 – 4.60	Moderate
		4.61 – 6.00	High
6	Support	2.00 – 3.30	Low
		3.31 – 4.60	Moderate
		4.61 – 6.00	High

Source: Processed Primary Data, 2024

Table 4. Cumulative class intervals for the cooperative's role

No	Class Interval	Category
1	15.00 – 25.00	Low
2	25.01 – 35.00	Moderate
3	35.01 – 45.00	High

Source: **Processed Primary Data, 2024**

Qualitative data analysis was used to examine cooperative members' perceptions of the role of the Bahari Indah Perkasa Cooperative in supporting the empowerment of member businesses, as well as analyzing the economic and social impacts experienced by members before and after the cooperative's establishment. This analysis followed the Miles and Huberman model, which consists of three stages: data reduction, data display, and conclusion drawing/verification.

A Likert scale was employed to collect data on members' levels of agreement or disagreement with various statements. The scale consisted of five response options:

- Strongly Agree (SA) = 5
- Agree (A) = 4
- Neutral (N) = 3
- Disagree (D) = 2
- Strongly Disagree (SD) = 1

(Sugiyono, 2022)

To support qualitative interpretation with numerical analysis, the following formula was used to calculate the final result:

$$\text{Final Score (\%)} = \left(\frac{\text{Total Score}}{\text{Maximum Score} \times \text{Number of Respondents}} \right) \times 100\%$$

Table 5. Interpretation criteria

Score Range (%)	Interpretation
0% – 20%	Strongly Disagree
20.1% – 40%	Disagree
40.1% – 60%	Neutral
60.1% – 80%	Agree
80.1% – 100%	Strongly Agree

This approach provides both quantitative validation and qualitative depth, allowing a more comprehensive understanding of members' perceptions and the cooperative's socioeconomic impacts.

RESULTS

Bahari Indah Perkasa Cooperative

The Bahari Indah Perkasa Cooperative is located in Mlaten Village, Nguling Sub-district, Pasuruan Regency. This cooperative operates in the fields of fish marketing, fish transportation services, and fish storage services. The services provided by the cooperative are accessible to both members and non-members; however, priority is given to members in utilizing these facilities. The frozen fish handled by the cooperative is sourced from various regions, including Surabaya, Sidoarjo, Madiun, and Pati, and consists of species such as skipjack tuna (tongkol), hairtail (layur), mackerel tuna (cakalang), among others.

The establishment of Bahari Indah Perkasa Cooperative originated from an initiative by the Ministry of Marine Affairs and Fisheries (MMAF) in 2021, during a visit to the local fish processing and marketing group (POKLAHSAR Bahari) in Mlaten Village. During this visit, the MMAF encouraged the formation of a cooperative to strengthen the group's business operations. As part of its support, the Ministry committed to providing a cold storage facility to ensure the sustainability of cooperative members' enterprises. Following its establishment, the cooperative received two cold storage units with capacities of 30 tons and 20 tons, totaling 50 tons of storage capacity. In 2022, the MMAF provided an additional assistance in the form of a refrigerated truck (thermoking) with a capacity to store up to 3 tons of fish.

The role of cooperatives in supporting members' business empowerment

Based on data obtained from questionnaires and interviews with cooperative administrators, the Bahari Indah Perkasa Cooperative has carried out its role in accordance with Article 4 of Law of the Republic of Indonesia Number 25 of 1992. Article 4 Paragraph 1 states, "Build and develop the economic potential and capabilities of members in particular and the community in general to improve their economic and social welfare." Article 4 Paragraph 2 states, "Play an active role in efforts to improve the quality of life of individuals and society." Article 4 Paragraph 3 states, "Strengthen the people's economy as the foundation of the strength and resilience of the national economy, with Cooperatives as its pillar." Article 4 Paragraph 4 states, "Strive to realize and develop the national economy as a joint effort based on the principles of family and economic democracy."

The role of cooperatives, specifically the Bahari Indah Perkasa Cooperative, is integral to enhancing the success and prosperity of its members through a structured evaluation based on ACTORS indicators—Authority, Confidence and Competence, Trust, Opportunity, Responsibility, and Support. This assessment reveals multiple facets of cooperative functionality and areas for improvement.

The indicator of Authority scored 4.5, categorizing it as moderate. This suggests that while members have opportunities to voice their ideas, the final decision-making

power rests predominantly with the management. This reflects a common dynamic in cooperatives where management must balance control with member engagement, as supported by literature emphasizing member participation as a critical element of governance and organizational trust (**Kamara & Rabie, 2021**). The need for further improvements is consistent with findings from various cooperative frameworks that highlight the importance of inclusive decision-making processes to empower members effectively (**Maestre-Matos *et al.*, 2021**).

Scoring 7.4 on the Confidence and Competence indicator, Bahari Indah Perkasa Cooperative significantly boosts members' confidence through adequate resources and training initiatives. Such findings align with research showing that cooperatives can foster an environment conducive to skill development and business acumen, thus enhancing overall member competence (**Murphy & Arban, 2021**). This improvement in confidence is vital, as cooperative structures that prioritize member growth tend to exhibit higher performance outcomes (**Campos & Reich, 2019**).

The Trust indicator, which received a score of 6.5, indicates a moderate level of member trust in the cooperative's management. Transparency in operations and active record-keeping appears to be pivotal in sustaining this trust (**Kamara & Rabie, 2021**). However, this area also signals the necessity for enhanced transparency measures and accountability frameworks to fortify member trust, a crucial aspect that can influence member engagement and satisfaction (**Kamara & Rabie, 2021**).

Opportunity, assessed at 7.2, illustrates the cooperative's success in creating business advantages for its members. The ability to provide facilities that enhance competitiveness aligns well with the broader objectives of cooperatives, which aim to support their members economically and socially (**Bachert *et al.*, 2021**). This reflects a strong emphasis on fostering the entrepreneurial spirit among cooperative members through various support measures, which is further substantiated by literature detailing the economic integration facilitated by cooperatives (**Murphy & Arban, 2021**).

Responsibility, rated at 4.8, underscores the cooperative's commitment to implementing policies that positively impact member welfare. Such responsibility encompasses ensuring that cooperative actions contribute to broader community welfare, supported by studies indicating that cooperatives often align their goals with societal benefits (**Uhnöo & Persson, 2021**). The Support indicator stands at 4.5, indicating a moderate level of effective assistance mechanisms such as cold storage and training access. Despite these efforts, there remains a pressing need for enhanced training programs, which are crucial for ensuring that members are fully equipped to compete effectively in the marketplace (**Maestre-Matos *et al.*, 2021**).

In summary, the cumulative ACTORS score of 34.9 categorizes the Bahari Indah Perkasa Cooperative's role as moderate, demonstrating its existing strengths while also highlighting definite areas for improvement. The overall analysis illustrates that while the cooperative is on a promising path toward empowering its members, intentional strategic

enhancements in governance, transparency, support, and training are essential to fully realize its potential.

Cooperative members' perceptions of the role of cooperatives in supporting member business empowerment

Members' perceptions of their cooperative's role are a key determinant of how effectively the organization can support business empowerment. The Bahari Indah Perkasa Cooperative received positive feedback across several ACTORS indicators, underscoring the essential role of cooperatives in strengthening governance, trust, and support mechanisms for members.

The Authority indicator recorded an average score of 82.22%, indicating strong agreement among members regarding the cooperative's authority to lead business empowerment initiatives. This finding aligns with literature emphasizing that well-structured governance and active member involvement are crucial for operational effectiveness and trust (Messabia *et al.*, 2022; Liu *et al.*, 2023). Research also shows that high member understanding and participation in governance enhance a cooperative's ability to empower its members through effective authority (Fulong & Ramos, 2024).

The Confidence and Competence indicator scored 83.33%, reflecting members' recognition of the cooperative's role in improving their skills and self-assurance. This result is consistent with studies highlighting the ability of cooperatives to enhance member competencies through training and resource provision, enabling greater entrepreneurial success (Michaud & Audebrand, 2019; Kim *et al.*, 2024). Increased confidence and capacity also create an enabling environment for innovation and business growth (Amonarriz *et al.*, 2016).

The Trust indicator achieved an average score of 82.78%, demonstrating strong member belief in the cooperative's integrity and reliability. Trust is widely acknowledged as foundational for member engagement, and can be strengthened through transparency and consistent communication (Neupane *et al.*, 2022). A high level of trust facilitates stronger relationships between members and management, contributing to long-term cooperative success (Michaud & Audebrand, 2019).

The highest score was recorded for Opportunity (85%), suggesting that members perceive the cooperative as providing substantial opportunities for business development and sustainability. Well-organized cooperatives are known to enhance market access and growth potential through collective action (Wijers, 2019). The ability to mobilize resources effectively further improves member welfare and development (Ali *et al.*, 2024).

Responsibility scored 81.11%, indicating members' recognition of the cooperative's obligation to protect and promote their economic interests. This aligns with findings indicating that successful cooperatives implement proactive social responsibility measures to address member needs (Higuchi *et al.*, 2020; Rathore, 2017).

The lowest score was recorded for Support (75.56%), suggesting that members see room for improvement in this area. Effective support systems—such as technical training and infrastructure provision—are vital for enabling members to address evolving business challenges (**Dewi *et al.*, 2022; Onah *et al.*, 2024**).

Overall, the cooperative achieved an average score of 81.66% across all ACTORS indicators, showing that it is largely effective in empowering its members. The results suggest strong member confidence in the cooperative's authority, trustworthiness, and competence, while pointing to the need for strengthening support mechanisms.

Economic and social impact analysis

The Bahari Indah Perkasa Cooperative has had a significant socio-economic impact on its members, particularly in terms of income, employment, and education. Data from questionnaires and interviews indicate that the cooperative has fostered a supportive environment for economic improvement.

For income, members reported substantial increases since joining the cooperative, consistent with studies showing that cooperatives can raise members' incomes by improving market access and resource management (**Kumar *et al.*, 2018; Ali *et al.*, 2024**). The provision of cold storage facilities has been critical in maintaining fish quality, reducing spoilage, and securing higher sales prices (**Rahayu *et al.*, 2023; Ali *et al.*, 2024**).

In terms of employment, the cooperative has created new job opportunities within its operations—such as storage, logistics, and marketing—and has supported members in developing independent businesses. These findings are consistent with literature highlighting the role of cooperatives in promoting local employment, skill development, and productivity. Technical training provided by the cooperative has further prepared members for both cooperative and independent roles.

For education, the cooperative has improved access to training and information, enabling members to engage more effectively in management and decision-making. Prior research shows that such educational investments enhance skills, collective efficacy, and member engagement (**Berhan & Gebeyehu, 2018; Efmon *et al.*, 2021**). By arranging additional training and providing educational support, the cooperative has helped address historical gaps in local educational resources, promoting long-term community development (**Schneider *et al.*, 2021**).

Before its establishment, many members—particularly fish processors—struggled with limited storage facilities and unstable income due to seasonal fluctuations. Since then, the cooperative's investments in infrastructure and market access have reduced waste and improved economic stability. These changes align with studies showing that stable economic conditions provided by cooperatives can sustain household incomes and improve community welfare (**Yenni *et al.*, 2023**).

In summary, the Bahari Indah Perkasa Cooperative has proven effective in improving members' socio-economic conditions by increasing income, creating

employment, and expanding educational access. Moving forward, targeted improvements in support services and educational initiatives could further strengthen its role as a driver of sustainable community development.

CONCLUSION

The Bahari Indah Perkasa Cooperative has demonstrated a measurable contribution to empowering its members' businesses in Mlaten Village, with a cumulative ACTORS score of 34.9 (moderate category). Among the six ACTORS indicators, the highest scores were recorded for Confidence and Competence (7.4) and Opportunity (7.2), while Authority (4.5), Trust (6.5), Responsibility (4.8), and Support (4.5) indicate areas for targeted improvement. Members' perceptions averaged 81.66%, reflecting strong agreement on the cooperative's positive role, particularly in generating business opportunities (85%) and enhancing skills and confidence (83.33%). Socioeconomic impacts were notably high, with income, employment, and education indicators improving to 87%, 85%, and 81%, respectively, after the cooperative's establishment. The provision of 50 tons of cold storage capacity and a 3-ton refrigerated truck has been pivotal in improving product quality, market access, and economic stability. While the cooperative is fulfilling its legal mandate under Law No. 25/1992, enhancing governance inclusivity, transparency, and member support services could shift its performance from moderate to high, thereby amplifying both economic and social benefits for the community.

REFERENCES

- Ali, M.; Qianqian, G. and Wen-guang, G.** (2024). Measuring the impacts of cooperative membership on household income: a case study of zanzibar. *S. Afr. j. econ. manag. sci.*, 27(1). <https://doi.org/10.4102/sajems.v27i1.5329>
- Amonarriz, C.; Landart, C. and Cantín, L.** (2016). Cooperatives' proactive social responsibility in crisis time: how to behave?. *Revesco Revista De Estudios Cooperativos*, 123: 7-36. <https://doi.org/10.5209/reve.53252>
- Bachert, P.; Wäsche, H.; Albrecht, F.; Hildebrand, C.; Kunz, A. and Wöll, A.** (2021). Promoting students' health at university: key stakeholders, cooperation, and network development. *Front. Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.680714>
- Baehaqi Syamsu, N.** (2023). Peran Koperasi Sebagai Lembaga Pemberdayaan Dalam Meningkatkan Taraf Hidup Masyarakat. *Jurnal Sosial Teknologi*, 3(6): 461–468. <https://doi.org/10.59188/Jurnalsostech.V3i6.788>
- Berhan, E. and Gebeyehu, S.** (2018). The role of cooperatives on the socio-economic development of ethiopia. *J. Manag. Res.*, 11(1): 1. <https://doi.org/10.5296/jmr.v11i1.13221>

- Bps.** (2020). Statistik Daerah Kabupaten Pasuruan. 161–164.
- Bps.** (2023). Kecamatan Nguling Dalam Angka.
- Campos, P. and Reich, M.** (2019). Political analysis for health policy implementation. *Health Systems & Reform*, 5(3): 224–235.
<https://doi.org/10.1080/23288604.2019.1625251>
- Dewi, R.; Eliyana, A. and Anwar, A.** (2022). The role of women entrepreneurship antecedents in supporting social and economic well-being. *Problems and Perspectives in Management*, 20(2): 438–447.
[https://doi.org/10.21511/ppm.20\(2\).2022.36](https://doi.org/10.21511/ppm.20(2).2022.36)
- Efmon, R.; Firwan, T. and Kamarni, N.** (2021). Analysis of cooperative development on economic performance in padang munipacity 2012–2019. *Jurnal Ekonomi Pembangunan*, 19(01): 1–19. <https://doi.org/10.22219/jep.v19i01.15457>
- Fulong, L. and Ramos, B.** (2024). Socioeconomic impact of a credit and development cooperative on the life of members in the province of isabela. *SJBM.*, 12(1): 18–26.
<https://doi.org/10.11648/j.sjbm.20241201.13>
- Gisty Ajeng Septami, Pyan Putro Surya Amin M. and Irfan Teguh Prima.** (2017). Overviewing East Java’s Maritime Economic Potential: Input-Output Analysis. *East Java Economic Journal*, 1(1): 96–109.
<https://doi.org/10.53572/Ejavec.V1i1.4>
- Higuchi, A.; Coq-Huelva, D.; Arias-Gutiérrez, R. and Alfalla-Luque, R.** (2020). Farmer satisfaction and cocoa cooperative performance: evidence from tocacha, peru. *Int. food agribus. manag. rev.*, 23(2): 217–234.
<https://doi.org/10.22434/ifamr2019.0166>
- Imro’ah, N.; Firdaus, A. and Shantika, M.** (2019). Penentuan Garis Kemiskinan Provinsi Menggunakan Metode Multiple Classification Analysis. *Bimaster : Buletin Ilmiah Matematika, Statistika Dan Terapannya*, 8(4): 789–798.
<https://doi.org/10.26418/Bbimst.V8i4.36198>
- Kalendzhjan, S. and Кадол, H.** (2022). Social entrepreneurship as a catalyst for sustainable socio-economic development. *Dela Press Conference Series: Economics, Business and Management*, 3(36).
<https://doi.org/10.56199/dpcsebm.kvzv9880>
- Kamara, R. and 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>
- Kasih, D.** (2022). Peran Koperasi Unit Desa Dalam Pemberdayaan Masyarakat Di Desa Tanjung Bungong Kecamatan Kaway XVI. *Ilmiah Prodi Muamalah*, 14(1): 55–63.
- Kim, S.; Ahyoung, K.; Huh, K. and Park, S.** (2024). The effects of corporate social responsibility on member loyalty: the mediating effect of psychological ownership

- and customer citizenship behaviour in korean consumer cooperatives. *Ann. Public Coop. Econ.*, 96(1): 99-120. <https://doi.org/10.1111/apce.12485>
- Kumar, A.; Saroj, S.; Joshi, P. and Takeshima, H.** (2018). Does cooperative membership improve household welfare? evidence from a panel data analysis of smallholder dairy farmers in bihar, india. *Food Policy*, 75: 24-36. <https://doi.org/10.1016/j.foodpol.2018.01.005>
- Liu, Z.; Qu, J.; Wu, X.; Niu, X. and Feng, S.** (2023). Improving member satisfaction with cooperatives: the role of participation in governance. *Ann. Public Coop. Econ.*, 95(3): 703-722. <https://doi.org/10.1111/apce.12456>
- Maestre-Matos, M.; Lombana, J.; Díaz, F. and 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>
- Messabia, N.; Beauvoir, E. and Kooli, C.** (2022). Governance and management of a savings and credit cooperative: the successful example of a haitian sacco. *Vision the Journal of Business Perspective*, 27(3): 397-409. <https://doi.org/10.1177/09722629221074130>
- Michaud, M. and Audebrand, L.** (2019). Inside out, outside in: “supporting members” in multi-stakeholder cooperatives. *Management Decision*, 57(6): 1382-1398. <https://doi.org/10.1108/md-01-2017-0042>
- Murphy, J. and Arban, E.** (2021). Assessing the performance of australian federalism in responding to the pandemic. *Publius the Journal of Federalism*, 51(4): 627-649. <https://doi.org/10.1093/publius/pjab026>
- Neupane, H.; Paudel, K.; Adhikari, M. and He, Q.** (2022). Impact of cooperative membership on production efficiency of smallholder goat farmers in nepal. *Annals of Public and Cooperative Economics*, 93(2): 337-356. <https://doi.org/10.1111/apce.12371>
- Nugroho, M.** (2015). Pemberdayaan Masyarakat Nelayan Di Kabupaten Pasuruan : Kajian Pengembangan Model Pemberdayaan. *Jurnal Teknologi Pangan*, 6(1): 19–26.
- Nur Hasanah, Qoriah S. and Eko Sugiharto.** (2022). Persepsi Pembudidaya Ikan Terhadap Peran Penyuluh Perikanan Di Desa Muara Aloh Kecamatan Muara Muntai Kabupaten Kutai Kartanegara. *Jurnal Pembangunan Perikanan Dan Agribisnis*, 9(2): 69–81. <https://doi.org/10.30872/Jppa.V9i2.19>
- Onah, O.; Ume, C.; Nwangwu, K.; Omeje, E. and Oranu, C.** (2024). Assessment of the operational performance of farmers' cooperative societies in south east nigeria. *Am. int. j. agric. stud.*, 9(1): 17-26. <https://doi.org/10.46545/aijas.v9i1.314>
- Rahayu, S.; Lestari, D. and Rosanti, N.** (2023). Analysis of influential factors in the agricultural sector cooperatives success in lampung province. *Jurnal Penelitian Pertanian Terapan*, 23(4): 579-589. <https://doi.org/10.25181/jppt.v23i4.3271>

- Rathore, B.** (2017). Joint liability in a classic microfinance contract: review of theory and empirics. *Studies in Economics and Finance*, 34(2): 213-227. <https://doi.org/10.1108/sef-02-2016-0040>
- Schneider, K.; Castellanos, D.; Fernando, F. and Holcomb, J.** (2021). Measuring the impact of a full service grocery store in a food desert. *Int. J. Community Soc. Dev.*, 3(2): 161-176. <https://doi.org/10.1177/25166026211015488>
- Sugiyono.** (2022). *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D* (2nd Ed.). Alfabeta.
- Taniu, S.; Sari, D. W.; Satria, D.; Haryanto, T. and Wardana, W. W.** (2024). Impact Evaluation Of Cooperative Membership On Welfare: Evidence From Captured Fishery Households In Indonesia. *Marine Policy*, 159(September 2023): 105923. <https://doi.org/10.1016/j.marpol.2023.105923>
- Uhnöo, S. and Persson, S.** (2021). The flip side of the coin: perils of public–private disaster cooperation. *Journal of Contingencies and Crisis Management*, 30(4): 440-450. <https://doi.org/10.1111/1468-5973.12387>
- Wijers, G.** (2019). Inequality regimes in Indonesian dairy cooperatives: understanding institutional barriers to gender equality. *Agriculture and Human Values*, 36(2): 167-181. <https://doi.org/10.1007/s10460-018-09908-9>
- Yenni, N.; Restu, R.; Arif, M.; Nurwihastuti, D. and Putra, M.** (2023). Restoration program effect through conservation of mangrove forest in Kwala Gebang village, Gebang sub-district, Langkat district. *Randwick International of Social Science Journal*, 4(4): 867-876. <https://doi.org/10.47175/rissj.v4i4.819>