DOKUMEN KORESPONDENSI
ARTIKEL JURNAL INTERNASIONAL BEREPUTASI

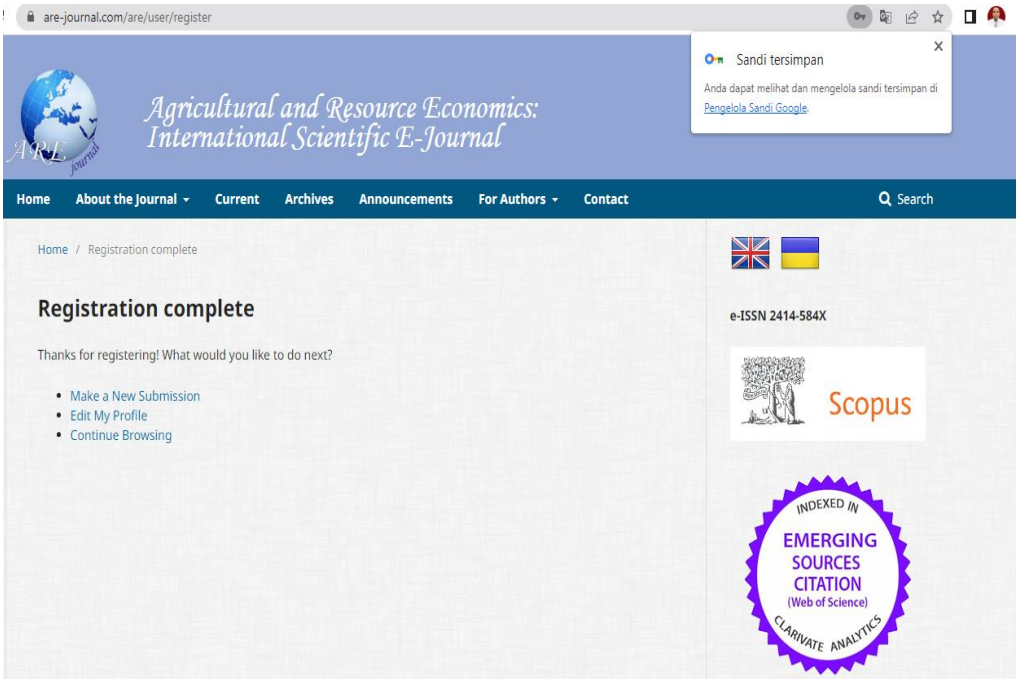
Judul artikel	: Conventional vs modern: Which approach is better for the success of agricultural cooperatives?
Nama jurnal	: Agricultural and Resource Economics: International Scientific E-Journal
Vol., No., Hal.	: Vol. 9, No. 4, hal. 26-49
Penerbit	: Institute of Eastern European Research and Consulting, Ukraine
Penulis	: Raden Priyo Utomo, Yohanes Kuleh, Dio Caisar Darma
Corresponding	: Yohanes Kuleh
Tahun terbit	: 2023
Indeks	: Scopus Q2 (SJR 0.31)
ISSN	: 2414-584X

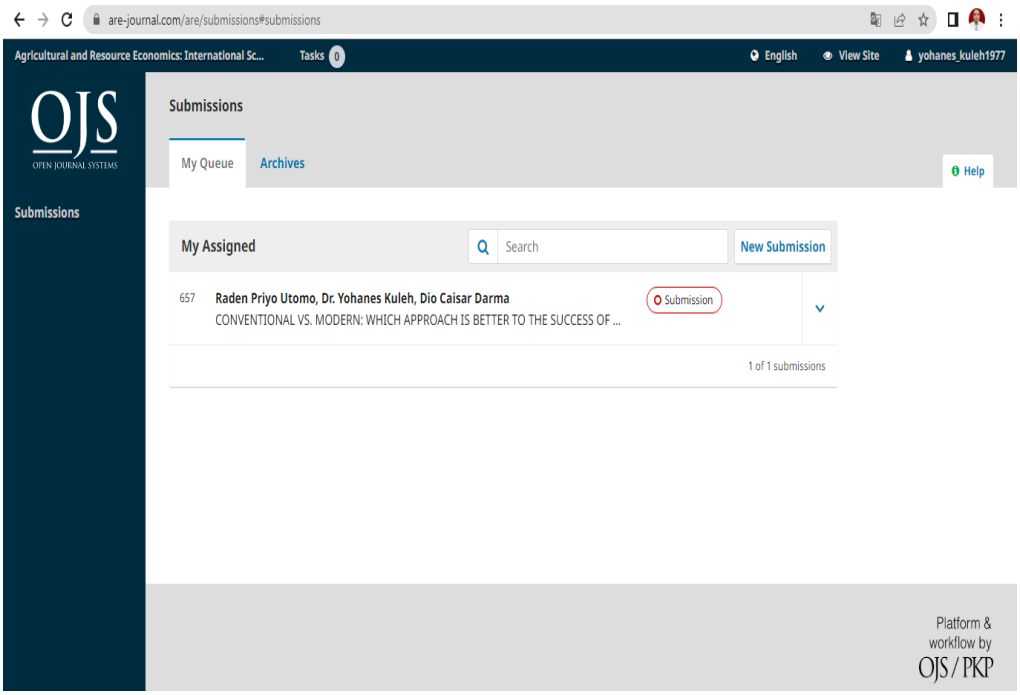
Lampiran 1. Lini masa penerbitan

Alur	Informasi	Tanggal
1.	Registrasi *open journal system* (OJS) & *submission*	9 Juni, 2023
2.	Submit ulang via *e-mail*	9 Juni, 2023
3.	Konfirmasi pencatatan artikel	9 Juni, 2023
4.	Penegasan komitmen kepengarangan & aturan main	10 Juni, 2023
5.	*Preliminary review* (tahap satu)	14 Agustus, 2023
6.	Revisi dari penulis (tahap satu)	20 Agustus, 2023
7.	Komentar editor terhadap revisi tahap satu	22 Agustus, 2023
8.	*Peer-review* lanjutan dari dua pengulas (tahap dua)	20 November, 2023
9.	Respon penulis & persetujuan editor mengenai *peer-review*	25-26 November, 2023
10.	Revisi dari penulis (tahap dua) & informasi editor seputar revisi (tahap dua)	4 Desember, 2023
11.	Pengumuman penerimaan naskah & pembayaran	8-9Desember, 2023
12.	Pelampiran bukti penerimaan (LoA & *invoice*)	10 Desember, 2023
13.	Tindak lanjut pengarang tentang pembayaran	11 Desember, 2023
14.	Penilaian revisi akhir editor & komentar penulis	14 Desember, 2023
15.	Permintaan editor terhadap pengecekan artikel (versi	20 Desember,

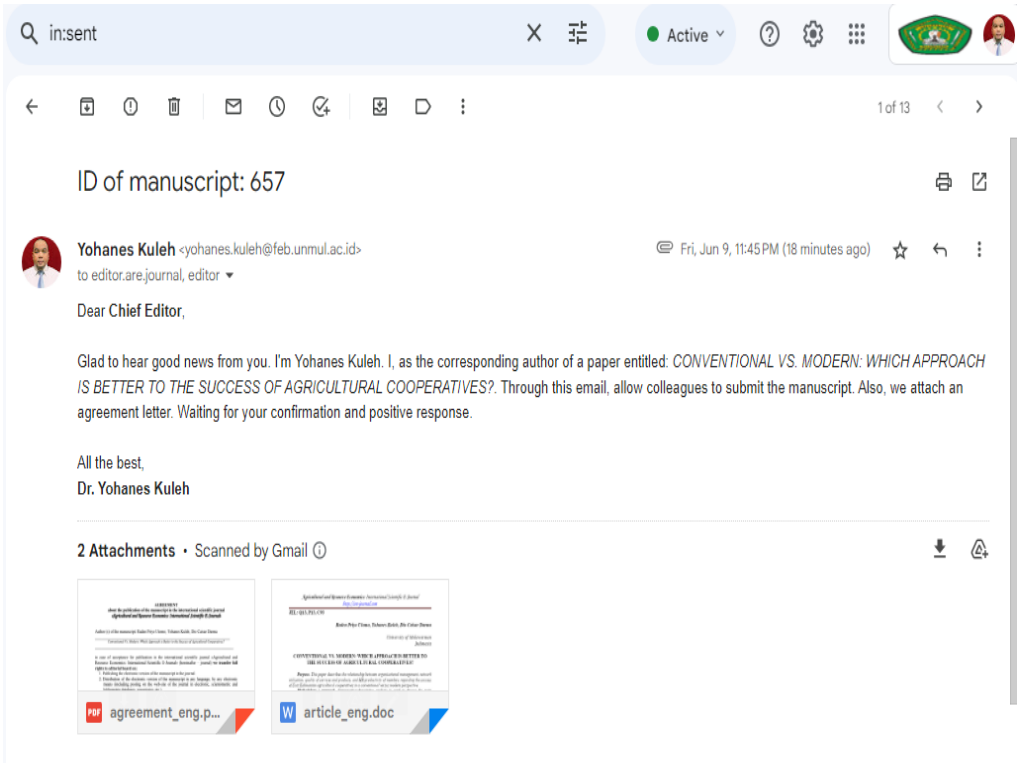
	akhir) & balasan penulis	2023
16.	Publikasi final di laman jurnal	20 Desember, 2023

Alur 1: Registrasi *open journal system* (OJS) & *submission*

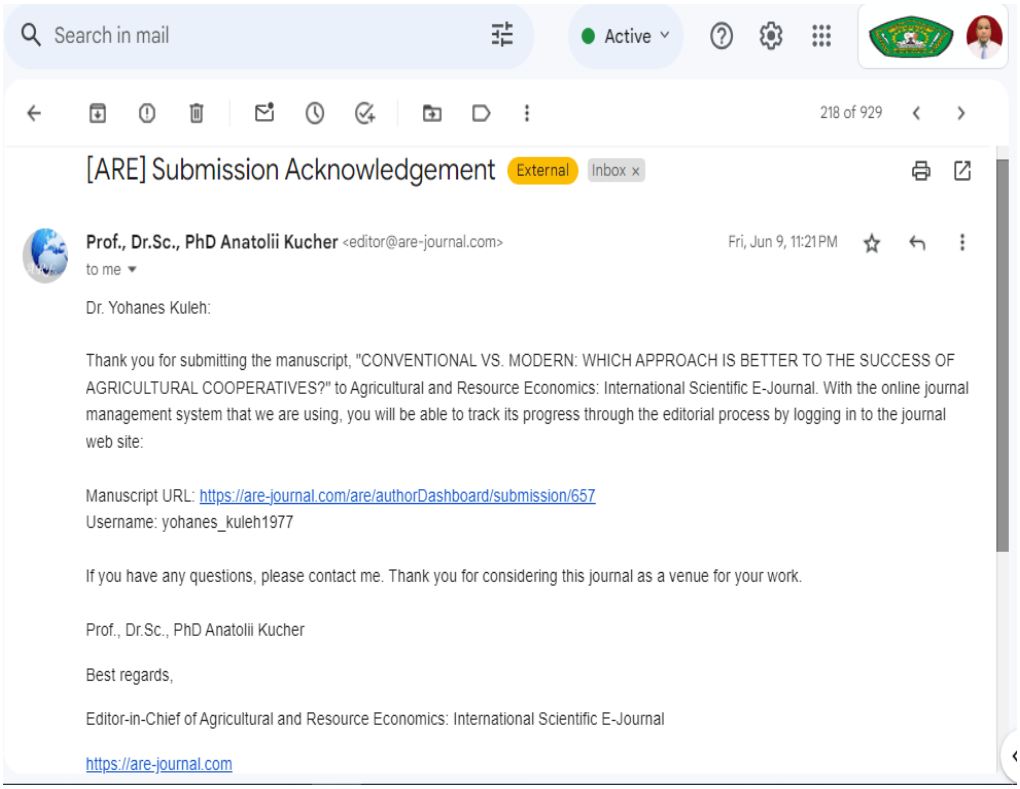




Alur 2: Submit ulang via *e-mail*



Alur 3: Konfirmasi pencatatan artikel



Alur 4: Penegasan komitmen kepengarangan & aturan main

Agricultural and Resource Economics E-Journal Sat, Jun 10, 1:52 AM (1 day ago)
to me

Dear authors,
Warm Greetings!

Thank you for submitting the article!

The following points were confirmed during submission:

1. Agricultural and Resource Economics is an open access journal with publishing fees of 300 EUR for an accepted paper. This manuscript, if accepted, will be published under an open access Creative Commons CC BY license (https://creativecommons.org/licenses/by/4.0/), and I agree to pay the Article Processing Charges as described on the journal webpage.

2. I understand that my manuscript is submitted on the understanding that it has not been published in or submitted to another peer-reviewed journal. Exceptions to this rule are papers containing material disclosed at conferences. I confirm that I will inform the journal editorial office if this is the case for my manuscript. I confirm that all authors are familiar with and agree with submission of the contents of the manuscript. The journal editorial office reserves the right to contact all authors to confirm this in case of doubt. I will provide email addresses for all authors and an institutional e-mail address for at least one of the co-authors, and specify the name, address and e-mail for invoicing purposes.

For an article to be considered for publication in the E-Journal you need to:
1). Send (on this email) ***form for the author***.

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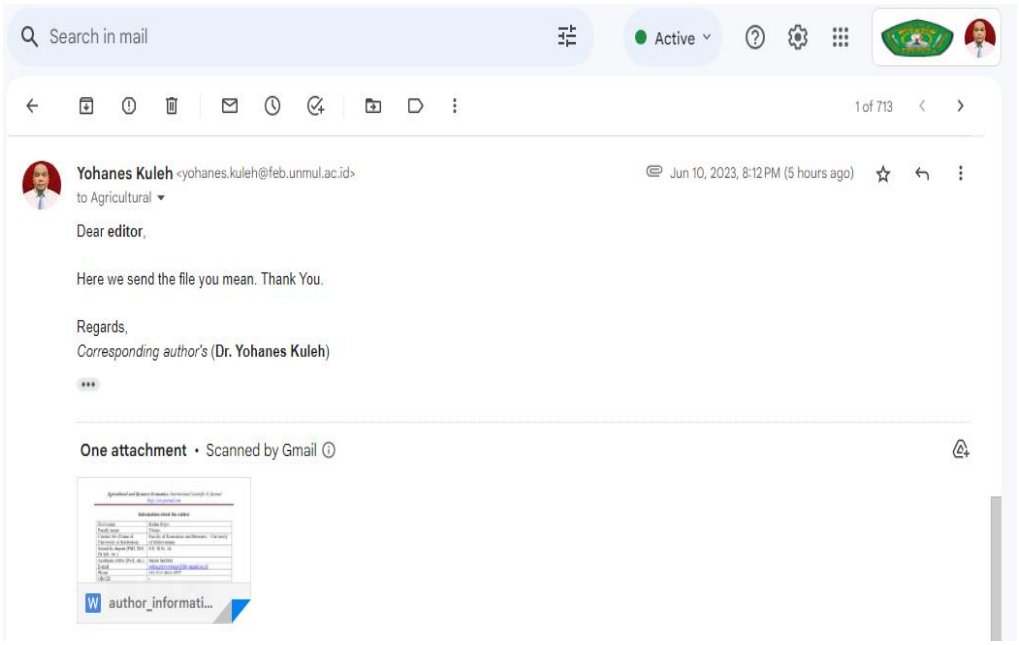
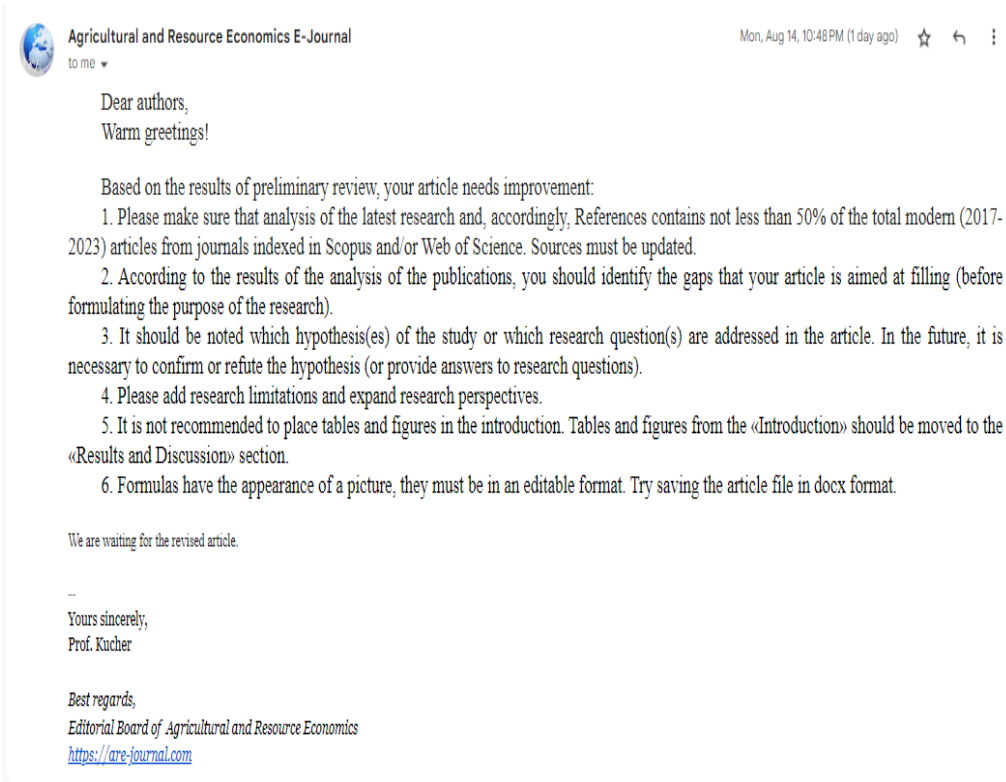
Yours sincerely,
Prof. Kucher

Best regards,
Editorial Board of Agricultural and Resource Economics



Alur 5: *Preliminary review* (tahap satu)



Agricultural and Resource Economics E-Journal
to me
Mon, Aug 14, 10:48 PM (1 day ago)

Dear authors,
Warm greetings!

Based on the results of preliminary review, your article needs improvement:

1. Please make sure that analysis of the latest research and, accordingly, References contains not less than 50% of the total modern (2017-2023) articles from journals indexed in Scopus and/or Web of Science. Sources must be updated.
2. According to the results of the analysis of the publications, you should identify the gaps that your article is aimed at filling (before formulating the purpose of the research).
3. It should be noted which hypothesis(es) of the study or which research question(s) are addressed in the article. In the future, it is necessary to confirm or refute the hypothesis (or provide answers to research questions).
4. Please add research limitations and expand research perspectives.
5. It is not recommended to place tables and figures in the introduction. Tables and figures from the «Introduction» should be moved to the «Results and Discussion» section.
6. Formulas have the appearance of a picture, they must be in an editable format. Try saving the article file in docx format.

We are waiting for the revised article.

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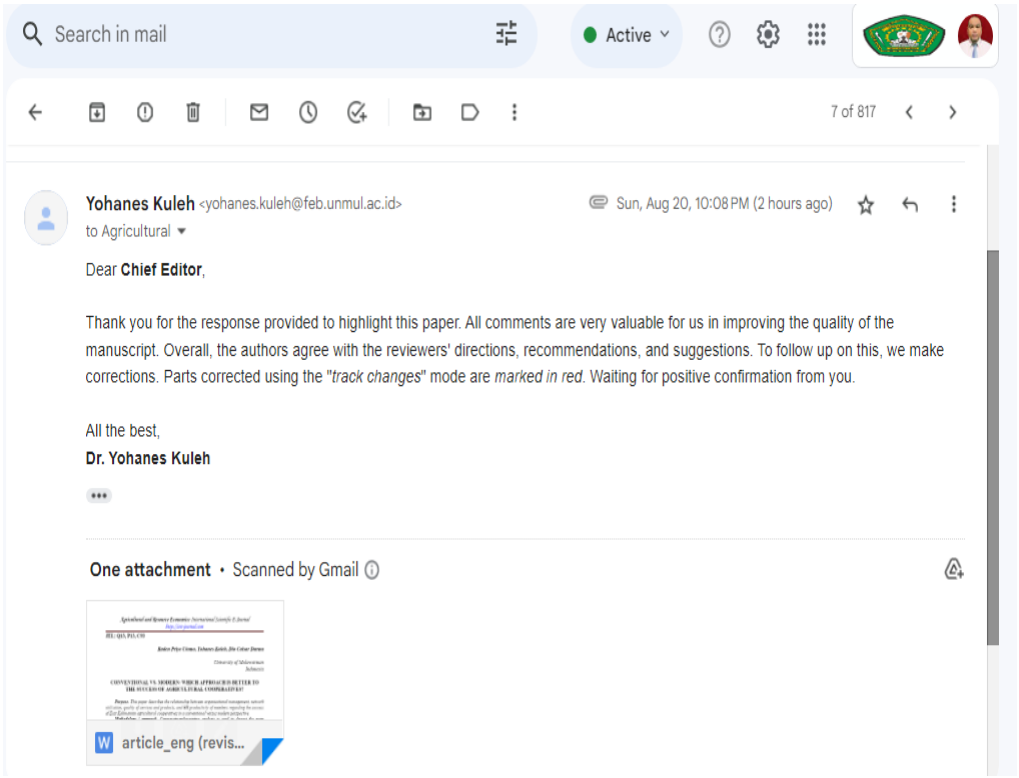
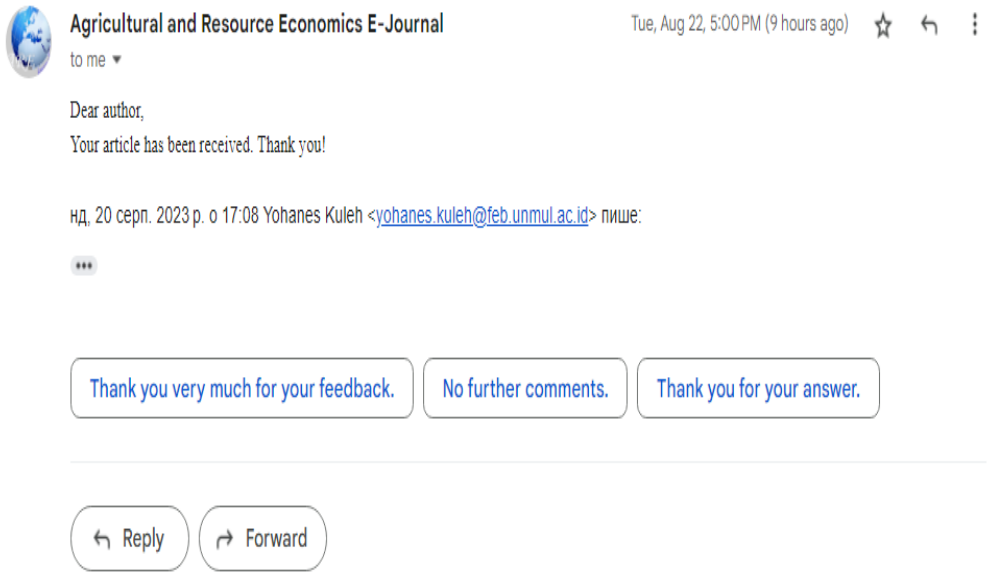
Yours sincerely,
Prof. Kucher

Best regards,
Editorial Board of Agricultural and Resource Economics
https://are-journal.com

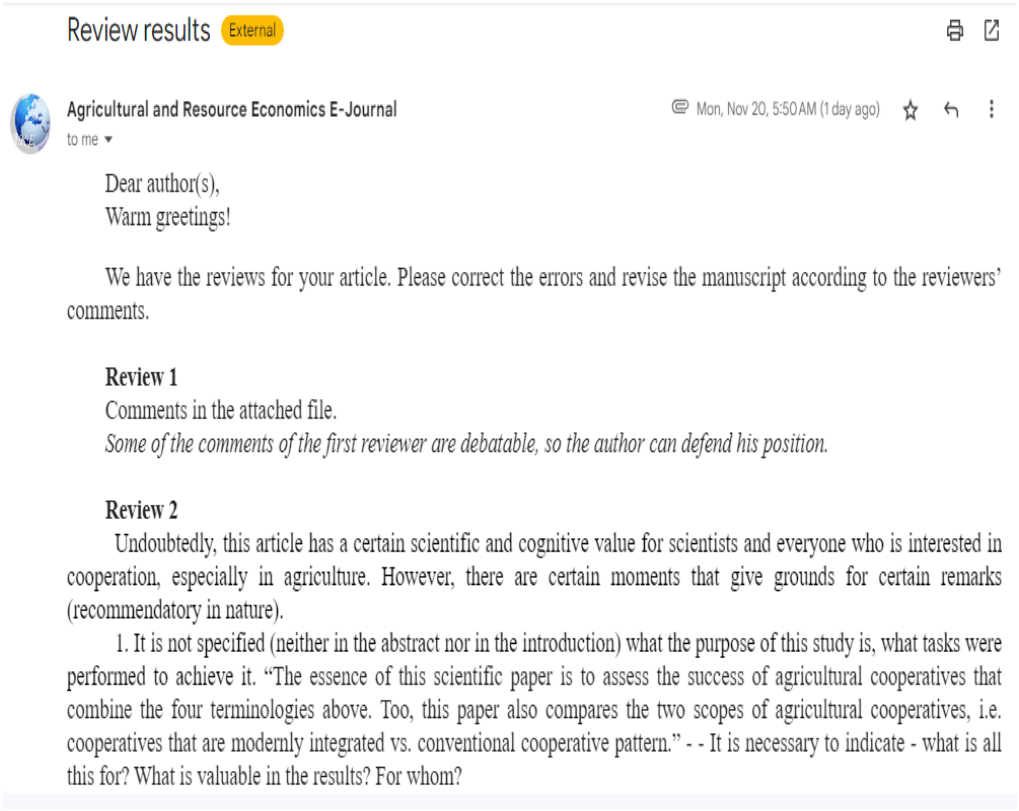
Alur 6: Revisi dari penulis (tahap satu)



Alur 7: Komentar editor terhadap revisi tahap satu



Alur 8: *Peer-review* lanjutan dari dua pengulas (tahap dua)



Review results External

Agricultural and Resource Economics E-Journal
to me
Mon, Nov 20, 5:50 AM (1 day ago)

Dear author(s),
Warm greetings!

We have the reviews for your article. Please correct the errors and revise the manuscript according to the reviewers' comments.

Review 1
Comments in the attached file.
Some of the comments of the first reviewer are debatable, so the author can defend his position.

Review 2
Undoubtedly, this article has a certain scientific and cognitive value for scientists and everyone who is interested in cooperation, especially in agriculture. However, there are certain moments that give grounds for certain remarks (recommendatory in nature).

1. It is not specified (neither in the abstract nor in the introduction) what the purpose of this study is, what tasks were performed to achieve it. "The essence of this scientific paper is to assess the success of agricultural cooperatives that combine the four terminologies above. Too, this paper also compares the two scopes of agricultural cooperatives, i.e. cooperatives that are modernly integrated vs. conventional cooperative pattern." - - It is necessary to indicate - what is all this for? What is valuable in the results? For whom?

"agricultural cooperative supervisory commission which is still active in East Kalimantan" - what will it do with the materials transferred to it?

2. The essence and purpose of the creation and task of a cooperative as an enterprise created by many participants is presented quite generally and vaguely. "From the micro landscape, a cooperative is a legal entity formed on the principle of kinship which targets the welfare of its members." - this is very general. "In macro contemplation, the existence of agricultural cooperatives is inseparable from the urgency of the agricultural economy which encourages farmers' intuition to join a group that aims to achieve collective benefits" - even more general. In its premise, the meaning of an agricultural cooperative is a cooperative that drives business for certain agricultural commodities. - not specific.

3. CONVENTIONAL VS. MODERN: WHICH APPROACH IS BETTER TO THE SUCCESS OF AGRICULTURAL COOPERATIVES? - after all, finally - WHICH APPROACH IS BETTER?

4. The language of the article should be improved.

Review 3

In his article, the author uses 2 concepts which are "conventional cooperatives" and "modern cooperatives". At the same time, the article does not indicate the main differences between these two types of cooperatives. Therefore, it would be appropriate to briefly describe these differences (at least the main ones). This would make the article more understandable. However, this remark does not reduce the scientific value of the work and does not affect its positive assessment.

Any revisions should be clearly highlighted in a certain color.

Please provide answers to all reviewers' comments in the Table

Reviewer Comments	Response to Reviewer Comments
Reviewer 1	
1.	
2.	
…	
Reviewer 2	
1.	
2.	
…	
Reviewer 3	

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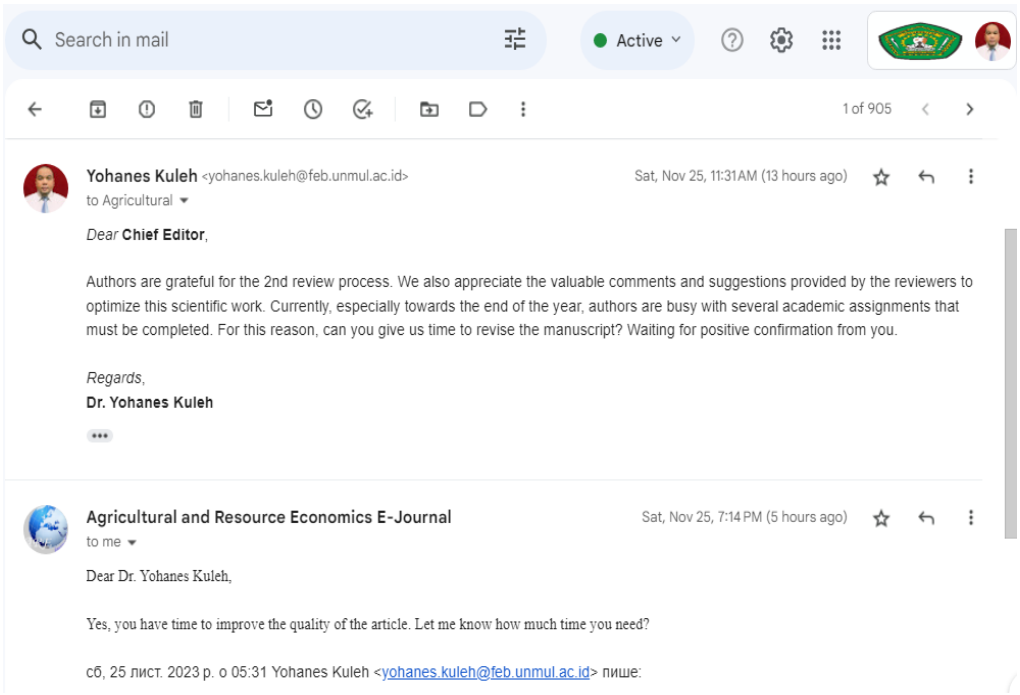
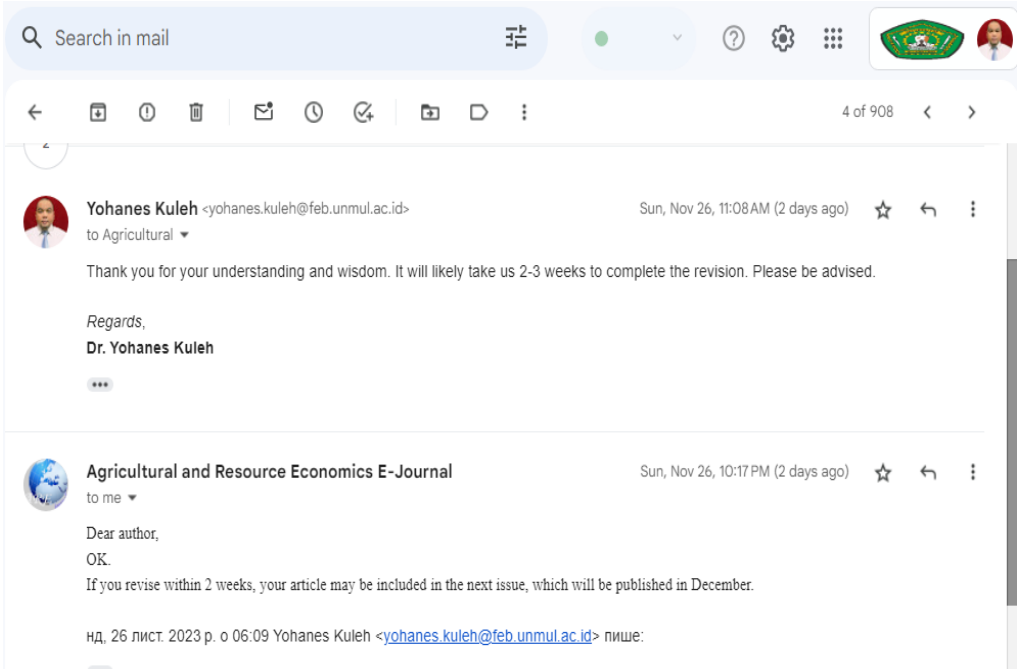
Yours sincerely,
Prof. Kucher

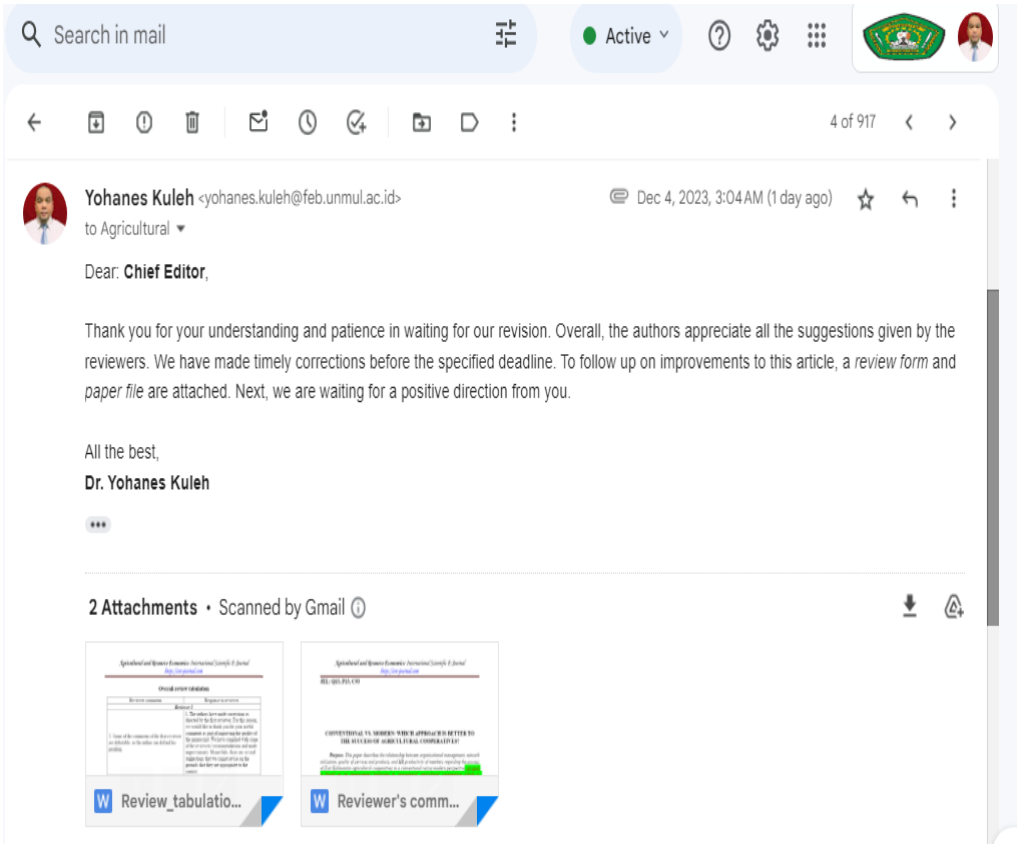
Best regards,
Editorial Board of Agricultural and Resource Economics
https://are-journal.com

Alur 9: Respon penulis & persetujuan editor mengenai *peer-review*

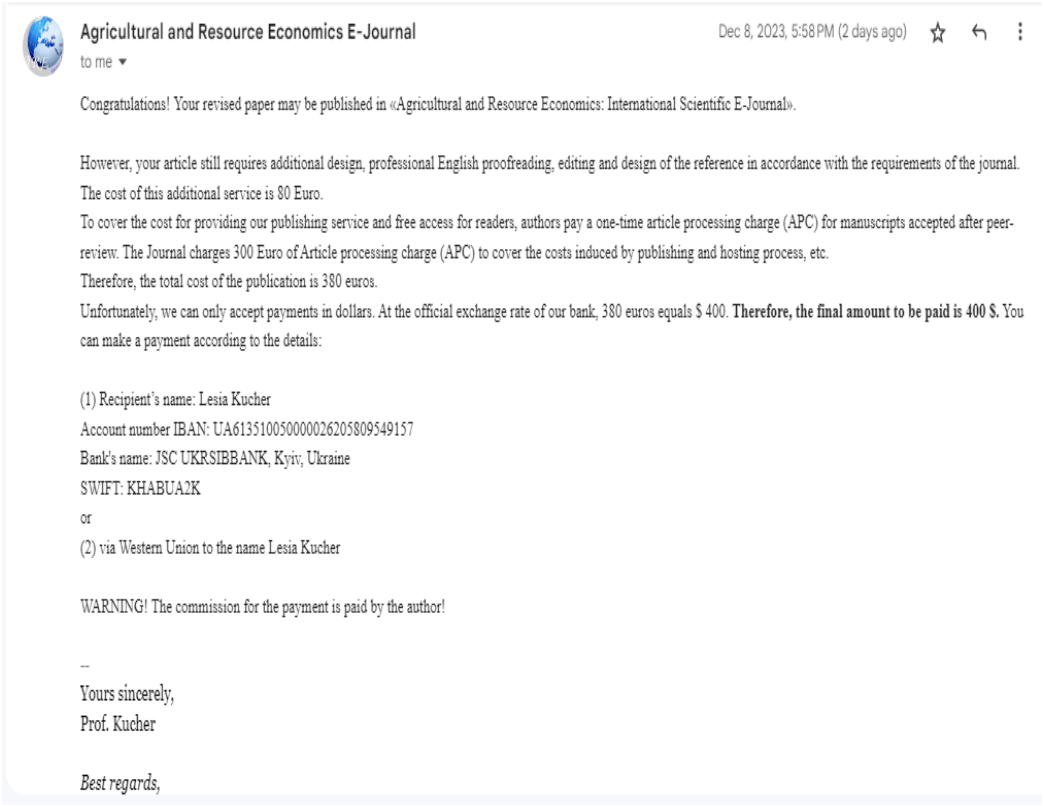




Alur 10: Revisi dari penulis (tahap dua) & informasi editor seputar revisi (tahap dua)



Alur 11: Pengumuman penerimaan naskah & pembayaran



Agricultural and Resource Economics E-Journal Dec 8, 2023, 5:58 PM (2 days ago)

to me

Congratulations! Your revised paper may be published in «Agricultural and Resource Economics: International Scientific E-Journal».

However, your article still requires additional design, professional English proofreading, editing and design of the reference in accordance with the requirements of the journal. The cost of this additional service is 80 Euro.

To cover the cost for providing our publishing service and free access for readers, authors pay a one-time article processing charge (APC) for manuscripts accepted after peer-review. The Journal charges 300 Euro of Article processing charge (APC) to cover the costs induced by publishing and hosting process, etc.

Therefore, the total cost of the publication is 380 euros.

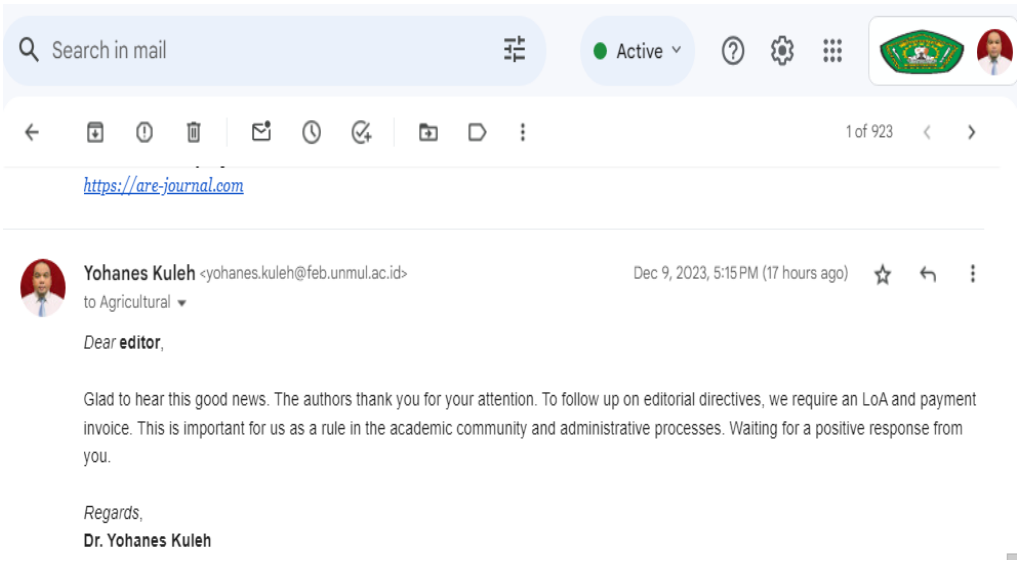
Unfortunately, we can only accept payments in dollars. At the official exchange rate of our bank, 380 euros equals $ 400. **Therefore, the final amount to be paid is 400 $.** You can make a payment according to the details:

(1) Recipient's name: Lesia Kucher
Account number IBAN: UA613510050000026205809549157
Bank's name: JSC UKRSIBBANK, Kyiv, Ukraine
SWIFT: KHABUA2K
or
(2) via Western Union to the name Lesia Kucher

WARNING! The commission for the payment is paid by the author!

--
Yours sincerely,
Prof. Kucher

Best regards,



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https://are-journal.com

Yohanes Kuleh <yohanes.kuleh@feb.unmul.ac.id> Dec 9, 2023, 5:15 PM (17 hours ago)

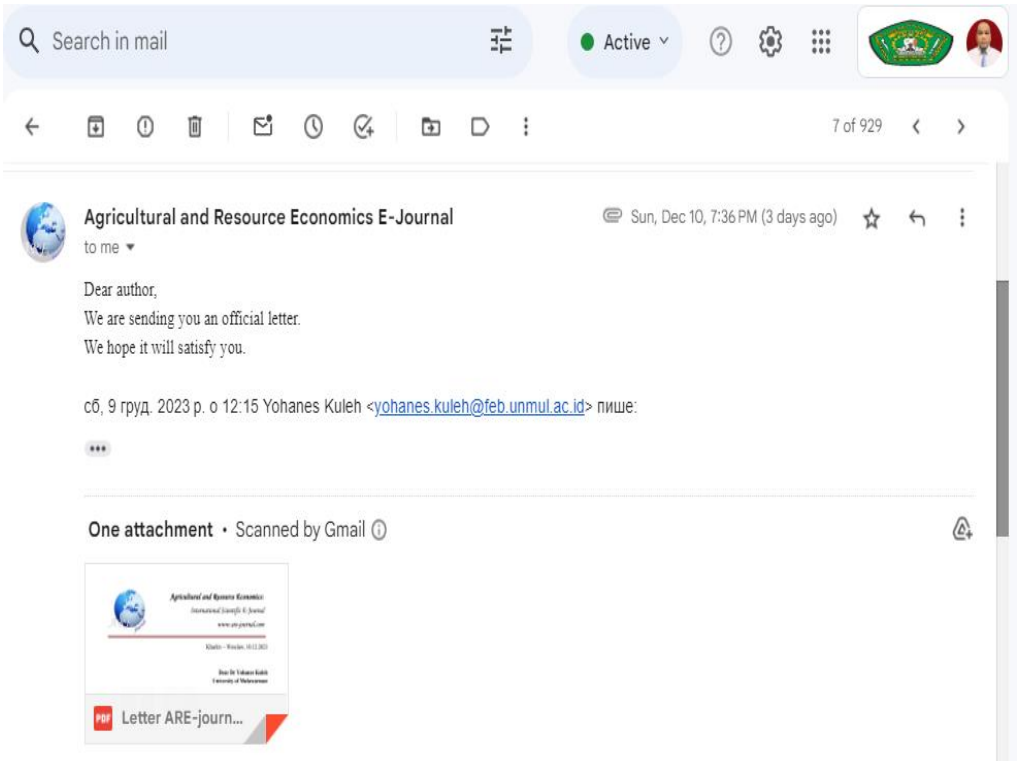
to Agricultural

Dear **editor**,

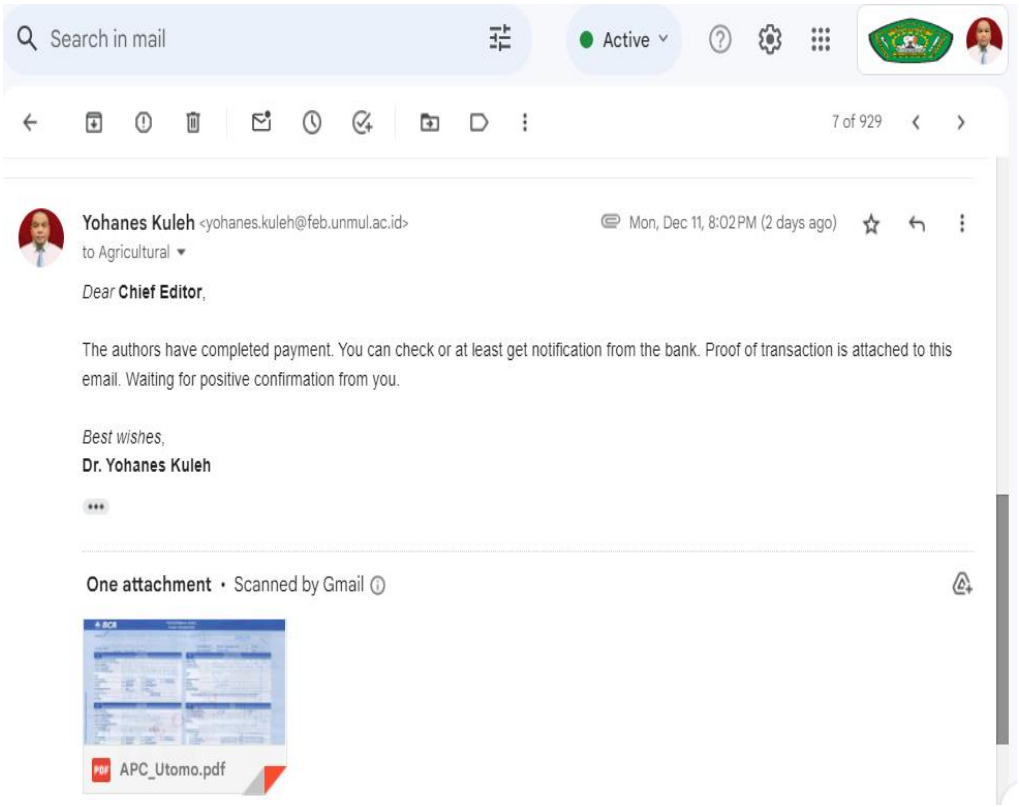
Glad to hear this good news. The authors thank you for your attention. To follow up on editorial directives, we require an LoA and payment invoice. This is important for us as a rule in the academic community and administrative processes. Waiting for a positive response from you.

Regards,
Dr. Yohanes Kuleh

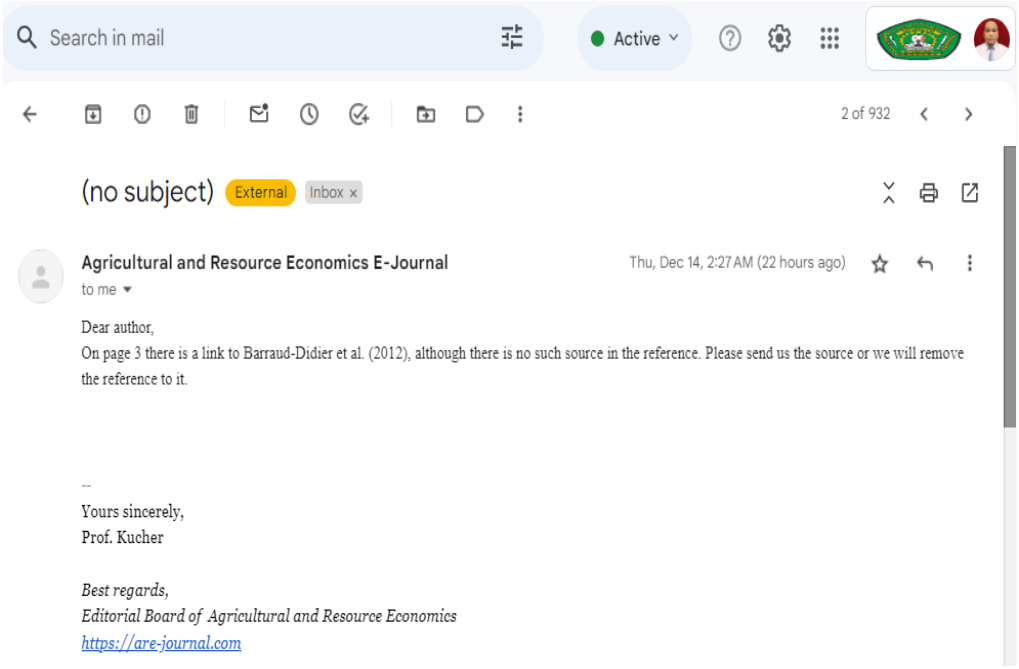
Alur 12: Pelampiran bukti penerimaan (LoA & *invoice*)

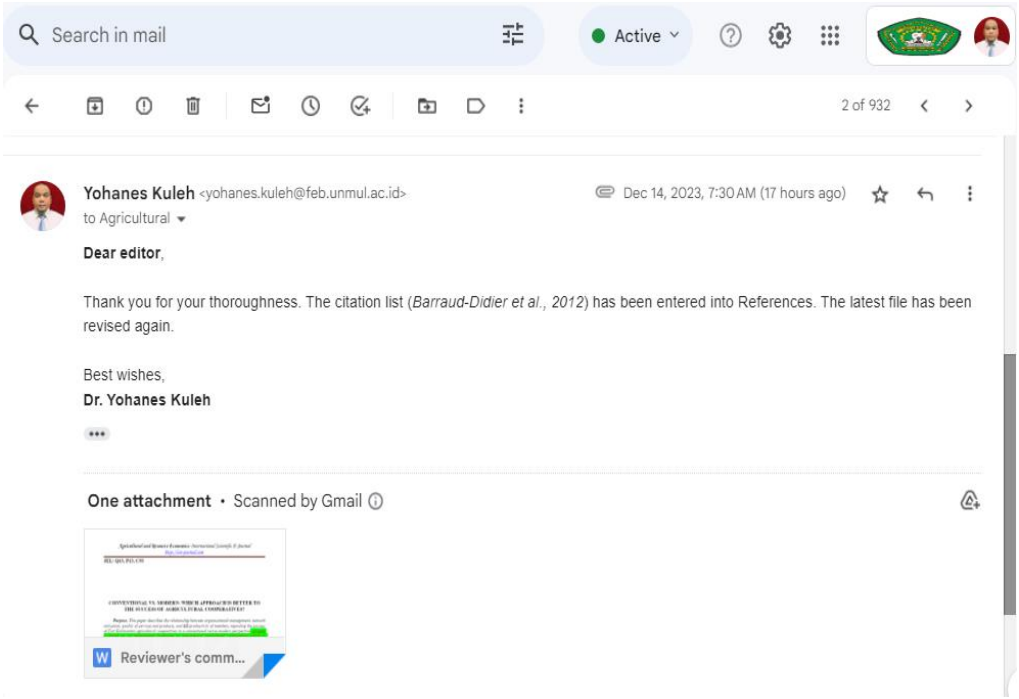


Alur 13: Tindak lanjut pengarang tentang pembayaran

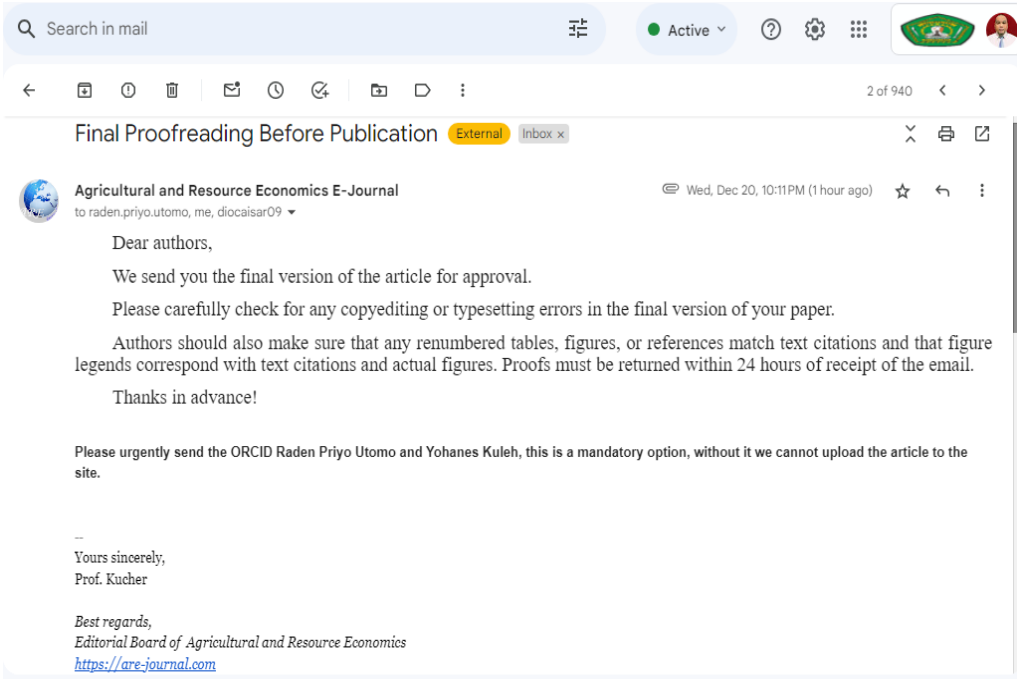


Alur 14: Penilaian revisi akhir editor & komentar penulis





Alur 15: Permintaan editor terhadap pengecekan artikel (versi akhir) & balasan penulis



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2 of 940

Final Proofreading Before Publication External Inbox ×

Agricultural and Resource Economics E-Journal Wed, Dec 20, 10:11 PM (1 hour ago)

to raden.priyo.utomo, me, diocaisar09

Dear authors,

We send you the final version of the article for approval.

Please carefully check for any copyediting or typesetting errors in the final version of your paper.

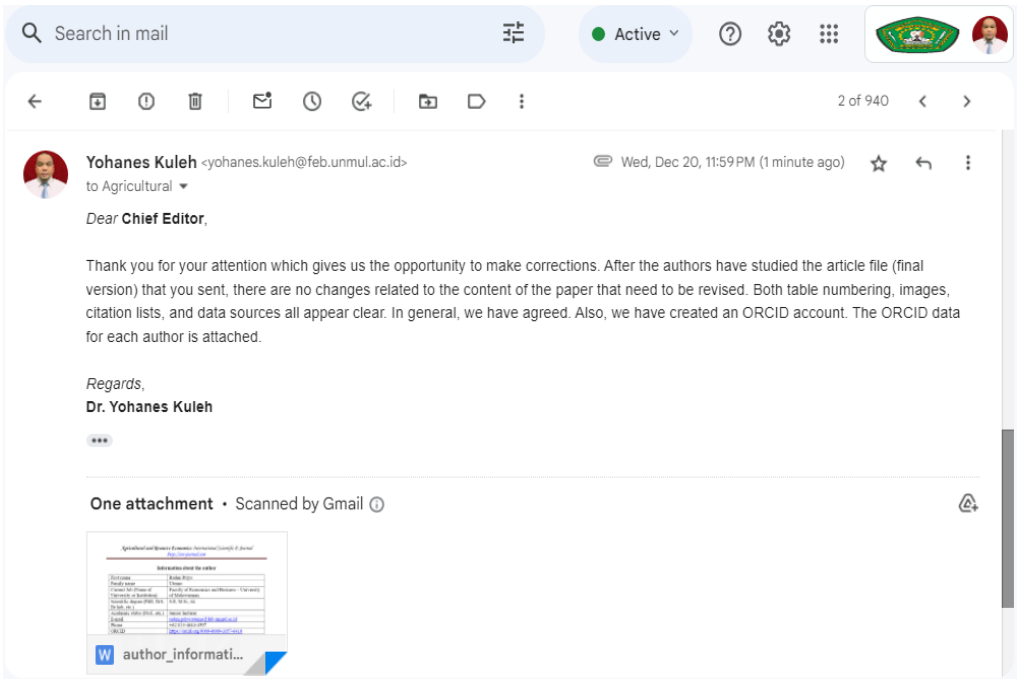
Authors should also make sure that any renumbered tables, figures, or references match text citations and that figure legends correspond with text citations and actual figures. Proofs must be returned within 24 hours of receipt of the email.

Thanks in advance!

Please urgently send the ORCID Raden Priyo Utomo and Yohanes Kuleh, this is a mandatory option, without it we cannot upload the article to the site.

--
Yours sincerely,
Prof. Kucher

Best regards,
Editorial Board of Agricultural and Resource Economics
https://are-journal.com



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Active

2 of 940

Yohanes Kuleh <yohanes.kuleh@feb.unmul.ac.id> Wed, Dec 20, 11:59 PM (1 minute ago)

to Agricultural

Dear **Chief Editor**,

Thank you for your attention which gives us the opportunity to make corrections. After the authors have studied the article file (final version) that you sent, there are no changes related to the content of the paper that need to be revised. Both table numbering, images, citation lists, and data sources all appear clear. In general, we have agreed. Also, we have created an ORCID account. The ORCID data for each author is attached.

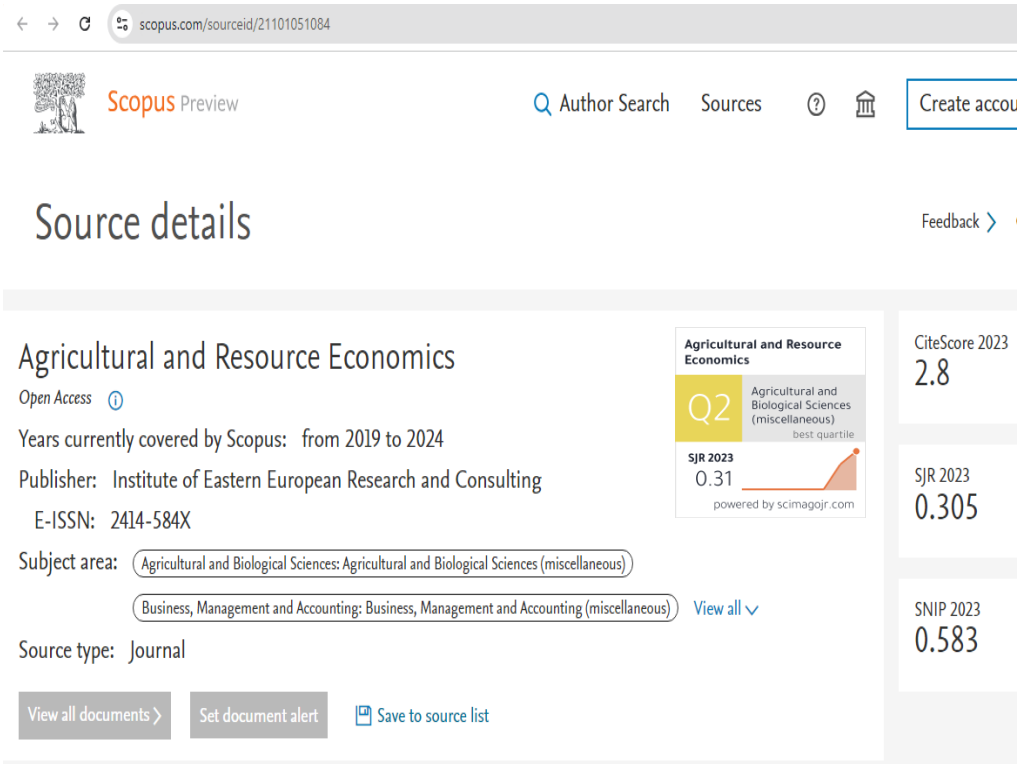
Regards,
Dr. Yohanes Kuleh

One attachment • Scanned by Gmail

author_informati...

Alur 16: Publikasi final di laman jurnal

Lampiran 2. Index



Lampiran 3. LoA/*invoice*

Agricultural and Resource Economics:
International Scientific E-Journal
www.are-journal.com

Kharkiv – Wroclaw, 10.12.2023

Dear Dr Yohanes Kuleh
University of Mulawarman

This letter is to notify that you article "CONVENTIONAL VS. MODERN: WHICH APPROACH IS BETTER TO THE SUCCESS OF AGRICULTURAL COOPERATIVES?" (authors: Raden Priyo Utomo, Yohanes Kuleh, Dio Caisar Darma) is accepted for publication in the journal "Agricultural and Resource Economics: International Scientific E-Journal". The Article Processing Charges is 400 USD.

Bank account (international bank details):
Recipient's name: Lesia Kucher
Account number IBAN: UA383510050000026209808156224
Bank's name: JSC UKRSIBBANK, Kyiv, Ukraine
SWIFT: KHABUA2K

Editor-in-Chief:
Corresponding Member of AESU
Anatolii Kucher

Lampiran 4. Rekomendasi & arahan pengulas

Overall review tabulation

Reviewer comments	Response to reviewer
Reviewer 1	
1. Some of the comments of the first reviewer are debatable, so the author can defend his position	1. The authors have made corrections as directed by the first reviewer. For this reason, we would like to thank you for your useful comments as part of improving the quality of the manuscript. We have complied with some of the reviewers' recommendations and made improvements. Meanwhile, there are several suggestions that we cannot revise on the grounds that they are appropriate to the context.
Reviewer 2	
1. It is not specified (neither in the abstract nor in the introduction) what the purpose of this study is, what tasks were performed to achieve it. “The essence of this scientific paper is to assess the success of agricultural cooperatives that combine the four terminologies above. Too, this paper also compares the two scopes of agricultural cooperatives, i.e. cooperatives that are modernly integrated vs. conventional cooperative pattern.” - - It is necessary to indicate - what is all this for? What is valuable in the results? For whom? “Agricultural cooperative supervisory commission which is still active in East Kalimantan” - what will it do with the materials transferred to it?	1. The research objectives and practical value (implications) that appear weak are strengthened by sentences that emphasize the implicit objectives that are integrated with the transformation and shift in the management of agricultural cooperatives. Also, the idea of a research contribution was developed for modern cooperatives as a follow-up to the analysis output which found that there were internal problems, i.e organizational management.
2. The essence and purpose of the creation and task of a cooperative as an enterprise created by many participants is presented quite generally and vaguely. "From the micro landscape, a cooperative is a legal entity formed on the principle of kinship which targets the welfare of its members." - this is very general. "In macro contemplation, the existence of agricultural cooperatives is inseparable from the urgency of the	2. The definition of a cooperative is a legal entity formed based on the principle of kinship that targets welfare in the macro and not micro landscape. Meanwhile, the articulation of agricultural cooperatives is a more specific micro landscape. It is necessary to explain at the beginning the meaning of cooperatives and agricultural cooperatives, even though agricultural cooperatives are part of the scope of cooperatives. Apart from that,

agricultural economy which encourages farmers' intuition to join a group that aims to achieve collective benefits" - even more general. In its premise, the meaning of an agricultural cooperative is a cooperative that drives business for certain agricultural commodities. - not specific.	in Indonesia, reviews of agricultural cooperatives are different from case studies in other countries. The authors have changed it. Furthermore, agricultural cooperatives with two different versions (modern and conventional) have also been clarified in detail.
3. CONVENTIONAL VS. MODERN: WHICH APPROACH IS BETTER TO THE SUCCESS OF AGRICULTURAL COOPERATIVES? - after all, finally - WHICH APPROACH IS BETTER?	3. Concretely, in many cases in past studies, modern approaches seem to have more significant implications for the sustainability of agricultural cooperatives. Interestingly, this research actually shows different findings. Of the four components that reflect the success of agricultural cooperatives, the advantage that modern agricultural cooperatives in East Kalimantan lack is organizational management, where internal performance mechanisms are not fully exposed to the public. Although the other three aspects have a significant impact on the success of the two types of cooperatives, only organizational management in modern agricultural cooperatives is relatively weak. The reason for the insignificance of organizational management in agricultural cooperatives is the limited human resource capabilities of members in building data systems.
4. The language of the article should be improved.	4. In general, we have made optimal efforts to improve the quality of the language. The authors followed up on the reviewer's suggestions by correcting unclear words and sentences in some paragraphs.
Reviewer 3	
1. In his article, the author uses 2 concepts which are "conventional cooperatives" and "modern cooperatives". At the same time, the article does not indicate the main differences between these two types of cooperatives. Therefore, it would be appropriate to briefly describe these differences (at least the main ones). This would make the article more understandable. However, this remark does not reduce the scientific value of the work	1. We understand and realize that both types of agricultural cooperatives must be discussed at the beginning. The author has made additional corrections to briefly explain the main differences between the two types of agricultural cooperatives. Basically, this paper carries out an empirical assessment and comparison of modern and conventional agricultural cooperatives based on the same four aspects (but each aspect has different

and does not affect its positive assessment.	indicators according to the types mentioned above).

Lampiran 5. Revisi-revisi

JEL: Q13, P13, C93

CONVENTIONAL VS. MODERN: WHICH APPROACH IS BETTER TO THE SUCCESS OF AGRICULTURAL COOPERATIVES?

Purpose. *This paper describes the relationship between organizational management, network utilization, quality of services and products, and HR productivity of members regarding the success of East Kalimantan agricultural cooperatives in a conventional versus modern perspective. An goal is based on an improvement landscape in conventional agricultural cooperatives which is analogous to lagging behind the four factors above.*

Methodology / approach. *Comparative–descriptive analysis is used to dissect the main objectives. Enumerators collect data via interviews with owners or executives who oversee 2,748 active cooperatives. Specifically, the sample focuses on active cooperatives from ten branches in East Kalimantan which are divided into two types: 1,860 modern agricultural cooperatives and 888 conventional agricultural cooperatives.*

Results. *The empirical results present the following four ~~findings~~outputs: (1) in terms of success, there is no significant difference between conventional agricultural cooperatives and modern agricultural cooperatives even though the operating techniques ~~units~~ are also different; (2) network utilization, quality of services and products, and HR productivity of members play a superior role in the sustainability of conventional agricultural cooperatives or modern agricultural cooperatives; (3) on another measure, i.e organizational management is proven to be able to fight for conventional agricultural cooperatives in a positive way; (4) in the case of modern agricultural cooperatives, organizational management does not support success.*

Originality / scientific novelty. *This paper proposes a thematic study in a new direction that compares the performance of modern agricultural cooperatives with conventional agricultural cooperatives based on a measure that represents the level of success.*

Practical value / implications. *Today, the presence of technology is a practical solution that controls the majority of jobs, such as operating cooperatives. Recognizing crucial changes, one that must be addressed by agricultural cooperatives is the latest adjustments. However, focusing on the innovation aspect alone is not enough, but also improving the internal organization of the cooperative which enables collaboration among cross-generations of members in order to foster ethics, awareness and commitment. This findings offer valuable education to supervisory commissions, especially modern agricultural cooperatives, to modify organizational management mechanisms according to the capacity of members.*

Key words: *agricultural commodity cooperatives, modern working methods, conventional working methods, comparative–descriptive methods, East Kalimantan.*

Introduction and review of literature. Apart from small and medium enterprises/SMEs, cooperatives are also the foundation of the domestic economy (Haryono et al., 2021; Lavie, 2023). Literally, the growth of cooperatives is followed by progress across sectors. In ~~macro~~–micro contemplation, the existence of agricultural cooperatives is inseparable from the urgency of the agricultural economy which encourages farmers' intuition to join a group that aims to achieve collective benefits (Abhar et al., 2023; Tran et al. al., 2022; Zhang et al., 2021). Conceptually,

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agricultural cooperatives are built to support the institutional structure and become a strength for small farmers as an economic movement based on the principles of kinship, justice and welfare related to agricultural product commodities, for example the business of procuring fertilizers, seeds, agricultural tools and selling agricultural products together. Implicitly, Darma et al. (2020) argue that synergies for pioneering agricultural business cooperatives are often dynamic, where the initial motive is to bridge social ties and bring preferences that open up business to be further improved. In the end, institutions in agricultural cooperatives will embrace a wider range of parties, accommodate members, channel agricultural needs, and build skills.

From the ~~micro~~ macro landscape, a cooperative is a legal entity formed on the principle of kinship which targets the welfare of its members. It can be understood that cooperatives are associations of people voluntarily fighting for prosperity. The contained regulations refer to the Law of the Republic of Indonesia No.: 17 of 2012 about "Cooperatives" which explains the definition of cooperatives. In these rules (Article 1), cooperatives are articulated as entities established by legal entities or individuals which separate the wealth of its members to become capital for running a business that emphasizes shared responsibility, aspirations and enthusiasm, as well as mastery in the cultural, social and economic fields which does not contradict cooperative principles (Kusmiati et al., 2023; Maria et al., 2019). Specifically, there are many variations on cooperatives, for example:

- Cooperatives based on function: (1) production cooperatives, (2) service cooperatives, and (3) consumption cooperatives;
- Cooperatives based on regional work area and hierarchy: (1) primary cooperatives, (2) secondary cooperatives, and (3) tertiary cooperatives;
- Cooperatives based on their membership: (1) school cooperatives, (2) Republic of Indonesia employee cooperatives (2) scout cooperatives, (3) women's participation cooperatives, (4) employee cooperatives, (5) market traders cooperatives, (6) batch cooperatives land, (7) student cooperatives, (8) Islamic boarding school cooperatives, and (9) village unit cooperatives;
- Commodity-based cooperatives: (1) service cooperatives, (2) mining cooperatives, (3) industrial and handicraft cooperatives, (4) livestock cooperatives, and (5) agricultural cooperatives.

Specifically in Indonesia, the most popular type of cooperative is the agricultural cooperative. In its premise, the meaning of an agricultural cooperative is a cooperative that drives business for certain agricultural commodities. Agricultural cooperatives concentrate on the Law of the Republic of Indonesia No.: 25 of 1992 (Article 16) which contains "Interests and Economic Equality of Cooperative Members". So far, East Kalimantan, which is part of a province in Indonesia and vital planning for the agenda for moving the center of government in 2024, is known for its abundant wealth of resources (Jiuhardi et al., 2023). Yet, the regional economic situation is not as solid as other regions that highlight local wisdom, including agriculture. Natural resources such as mining for natural gas, minerals, coal and oil creates a dilemma that is contrary to the essence of autonomy. In practice, natural

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Comment [L1]: Is this information useful for your study? **Reply:** Yes, obviously. Because the cooperative trend for the case study in East Kalimantan is more directed towards resource commodities, specifically in the agricultural secto At the same time, the transfer of the center of government from Jakarta to East Kalimantan provides an illustration of the potential for local wisdom that can be developed based on agricultu

resource exploitation activities have an impact on the depletion of green open space, so that agricultural land is decreasing. In other words, the project to explore the agricultural sector is also disrupted. Take the example of the farming profession which relies on agricultural diversification for the benefit of the household. At the same time, agricultural cooperatives depend on donations from farmers. External obstacles referring to the case above are far greater than internal problems.

More fundamentally, the frameworks in agricultural cooperatives often overlap. Technically, ~~organizational management, networks, quality of service and product, and incompatibility among members~~four internal factors further weaken agricultural cooperatives. Many narratives highlight these ~~four internal factors~~ organizational management, networks, quality of service and product, and incompatibility among members influencing the future of agricultural cooperatives. ~~One of them is described by~~ Barraud-Didier et al. (2012), Keerati-angkoon (2022), Violinda & Sunjian (2018), and Yu et al. (2023) described~~,~~ that the behavior, tradition, doctrine, and implementation of the actions contained in the guidelines for agricultural cooperatives will determine the direction of farmer entrepreneurship. In the long term, competitive agricultural co-operative management is closely related to member commitment. ~~To creating talent, boards~~ Boards in agricultural cooperatives must take the initiative through selective career priorities to creating regeneration and develop talent. Collaboration among members with controlled agricultural cooperative managers has the opportunity to maximize incentives. The key, cooperative management places interpersonal interaction among members to exchange ideas. Farmers' trust in agricultural cooperative governance is mediated by psychological elements, such as affective traits and cognitive effects. With mutually synergistic trust, members can be motivated to fully increase the productivity of agricultural cooperatives.

Regarding the topic of network utilization on the success of agricultural cooperatives, Alimohammad et al. (2022) and Alotaibi & Kassem (2022) illustrated that rational improvements to handle agricultural cooperatives start with revitalizing the network. Sequentially, advanced scenarios are prepared by assigning actors who are in charge of alliance affairs such as cooperatives. From here, the final step is to provide an investment channel via an agreement between farmers and agricultural cooperative stakeholders. Interestingly, some consensus from the literature predicts that the failure of cooperatives is caused by gaps in network knowledge (Wang et al., 2019). Due to limited network facilities, the competency of cooperative administrators is weak in operating tools or systems that support the performance of agricultural cooperatives.

In agricultural cooperative chains, developing of service and product quality is claimed as the right alternative to study market anomalies. Every consumer has different tastes. The main reason is that the level of customer insight also varies, level of income/purchasing power, interest, nominal price, and so on. Establishment of agricultural cooperatives to increase the bargaining power of farmers. Not only commercial, social capital participation allows farmers to share experiences. Unequal

Comment [L2]: Not relevant information in th paragraph. **Reply:** Dear reviewer. Thank you for your response. However, for us this is important because currently East Kalimantan still depends o natural resources that are not being renewed. In other words, the existence of agricultural cooperatives is greatly influenced by external aspects. Also, because agricultural cooperatives r on the supply of agricultural commodities, it is urgent for this study to identify the factors behin the progress of agricultural cooperatives.

Comment [L3]: Overlapping in terms of what **Reply:** The overlap in question is an internal problem related to cooperative management.

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Comment [L4]: It seems that the four factors [organizational management, networks, quality of service and product, and incompatibility among members]. Authors should mention 'factor' earlie so that readers can follow easily. **Reply:** Correcte according to the author's suggestions and directions.

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Comment [L5]: It is not clear 'One of them' refers to what?. **Reply:** We realized there was an error in the word phrase, so a revision was made.

Comment [L6]: Wrong gammar. **Reply:** clear.

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Comment [L7]: This paragraph must improve the clarity of writing. **Reply:** Revised.

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Comment [L8]: The paragraph is wordy such a 'the topic of', 'Sequemtially', 'Interestingly'. Auth may invite professional English editor to improve the writing. **Reply:** The authors appreciate the reviewer's comments, including using a professio English editor to optimize this paragraph. To follo up on your request, this has been fulfilled. We str to write in a rigorous scientific style in accordanc with journal standards.

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understanding in finding product and service differentiation has a negative correlation with the image of agricultural cooperatives. Ideally, maintainers should maintain, protect, and control service attributes. To addressing the weak service criteria, agricultural cooperatives implemented a new transformation to incorporate more cooperative standards. Furthermore, agricultural cooperatives also consider the external environment or outside of the organization's ecosystem, where everyone can pay attention to the service mechanism. In addition to services, added value/final product is reflected in the quality of the inputs sent. Agricultural cooperatives are required to strengthen service procedures and ensure product safety (Li et al., 2021; Liu et al., 2023; Pham, 2022; Rosyadi et al., 2023). To optimize product durability and service techniques, decisions are needed that depend on internal management strategies. Decision making involves the head of the agricultural cooperative and members who are oriented towards the designed targets. Concretely, fixing problems in the field is carried out by implementing performance monitoring and evaluation.

Comment [L9]: This sentence should not be t last one. Maybe authors should add more references to this paragraph to support the claim **Reply:** Adding supporting references to complem the previous sentence.

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One of the restructuring of agricultural cooperatives is productivity among members. The productivity of human resources is not only related to competitiveness, but also awareness in responding to work styles, adapting to technological changes, being rational, and synergizing in parallel. Issues raised by Feisali & Niknami (2021), Hernández-Espallardo et al. (2021), Kenkel & Crossan (2019), Majid et al. (2020), Marsh (2023), and Pokharel et al. (2020) covers the specialization and compliance of cooperative members. Towards a conducive agricultural cooperative, a holistic program is needed. Extension and guidance can attract new members to continue solidarity. Another option is also to motivate the conscience of the members to be involved in the democratic change of cooperative leaders. Besides that, rotation in cooperatives is set since the human resource recruitment phase, wider assistance, and goal career assessment modes. In the cycle of agricultural cooperatives, farmers can voice, dialogue, choose, and supervise the process of planting, harvesting, processing, and marketing their creations. Behind it all, the nuances of mutual cooperation in cooperatives are attached to each member. Gains or losses shared together give a signal if trust among members is growing. Often, farmers in cooperatives buy farming equipment or seeds at low cost to distribute them among members. At another level, for example, a more systematic sensitivity, where agricultural cooperatives can buy or rent tractors for use by all members or get agreements on relatively cheap seed prices from farmers by purchasing them in bulk to share them with other members. Automatically, this method saves capital expenditure while increasing production capacity including: animal feed, grain, irrigation, fertilizer, and a series of other production costs. Normally, the segmentation of agricultural cooperatives refers to asset entities (Ndlovu & Masuku, 2021; Wossen et al., 2017; Zwane & Kekana, 2014). The fragility of consolidation by polemics over financial variability causes cooperative assets to shrink.

Comment [L10]: Authors may add in-text citation here. **Reply:** Additional suggested citatio are followed. We added three citations that were relevant to the content.

In the midst of a shift in era, technological sophistication offers instant ways for various jobs. When it comes to technology, work designs that operate adaptively can spur and evoke performance, thereby reducing errors. But, the risk of still choosing

the old format has consequences. In the context of agricultural cooperatives, when ignoring contemporary workflows, it indicates poor discretion. Preferably, cooperatives that leave the traditional scheme, will guarantee a comfortable level of work and boost creativity. Unfortunately, there is still little academic foundation. With that in mind, this study offers a way to fill the gaps in agricultural cooperatives that operate in the old way and switch to the adoption of technology to ensure quality performance. Besides that, the role of technology is expected to be an important capital for the sustainability of agricultural cooperatives. By prioritizing the technological aspect, it will guarantee performance productivity and reduce uncertainty. Past studies from Khan et al. (2022), Manda et al. (2020), Yang et al. (2021), and Zhang et al. (2020) concluded that agricultural cooperatives with adequate access to technology are increasingly beneficial to the profits of members in Pakistan, Zambia, and China. On the other hand, past studies have revealed that agricultural cooperatives that do not prioritize technology further reduce their success rate. This happens to the majority of rural farmers in China, especially in Sichuan Province (Ma & Abdulai, 2017; Jia et al., 2023; Liu et al., 2022). In other words, the failure or success of agricultural cooperatives is also determined by the technology used. Agricultural cooperatives need to prioritize technological facilities to complement managerial competencies.

The purpose of the article. Following up on the existing phenomenon, the debate about the issue of agricultural cooperatives in East Kalimantan–Indonesia which is reflected in the construction of organizational management, network utilization, quality of service and product, and HR productivity of members needs to be identified. The essence of this scientific paper is to assess the success of agricultural cooperatives that combine the four terminologies above. Too, this paper also compares the two scopes of agricultural cooperatives, i.e. cooperatives that are modernly integrated vs. conventional cooperative pattern. The fundamental difference between the two lies in management techniques, where modern cooperatives utilize relatively sophisticated technology, so that operating strategies are more practical with broad market access. Meanwhile, conventional cooperatives still focus on old patterns, such as decision-making processes for production, marketing and sales that are not integrated with digital. To confirm the research question, the following hypothesis building was made:

- Hypothesis 1 (H_1). Conventional approaches in organizational management, network utilization, quality of services and products, and HR productivity of members can advance agricultural cooperatives;

- Hypothesis 2 (H_2). Modern approaches in organizational management, network utilization, quality of services and products, and HR productivity of members can advance agricultural cooperatives. *Materials and methods*. This scientific work focuses on four variables that support the sustainability of agricultural cooperatives: (1) organizational management, (2) network utilization, (3) quality of services and products, and (4) HR productivity of members. The success model in cooperatives is measured by these four components which are divided into the following two

Comment [L11]: Authors made a lot of claims here. **Reply:** This paragraph is important to write because it focuses on the role of technology to increase performance productivity and reduce uncertainty in agricultural cooperatives. Apart fro that, the function of these sentences is to emphasize a phenomenon in the field related to t sustainability of agricultural cooperatives which a depends on the adoption of technology.

Comment [L12]: It seems that this is the research gap that the authors would like to fill, bu there is no clear articulation of success or failures among to Agricultural cooperatives who prioritize compared to the one without. **Reply:** A research gap has been filled around technological facilities support agricultural cooperatives.

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Comment [L13]: Authors should explain the different properties of the two ACs. **Reply:** In accordance with the reviewer's suggestions and directions, the authors detailed the implicit definitions of modern agricultural cooperatives a conventional agricultural cooperatives.

instruments:

- ~~Cooperative~~ Cconventional version of cooperatives: organizational management (6 points), network utilization (4 points), quality of services and products (5 points), and HR productivity of members (5 points).
- Modern version of cooperatives: organizational management (6 points), network utilization (4 points), quality of services and products (5 points), and HR productivity of members (5 points).

Comment [L14]: The writing can be improved not writing two bullet points. **Reply:** Here, the authors only describe the specifications of two agricultural cooperatives (modern and conventional). We do not focus on other types of agricultural cooperatives.

Each instrument has the same dimensions which total twenty materials, but in each dimension the questions are set differently based on cooperative identity (conventional and modern). The composition of the data comes from the first party (primary) which is converted via a questionnaire. To tabulate questionnaire data expressed in five formats: very relevant = 5; relevant = 4; sometimes = 3; irrelevant = 2; and very irrelevant = 1. The data collection mechanism uses an experimental technique that invites the population to be interviewed. In its application, the case study chose active cooperatives in East Kalimantan as a cluster sample. During 2020, the number of active cooperatives is 2,748 (n = 89.42%) of all cooperatives (N = 3,073 units). The number of cooperatives that were not active was 325 units (10.58%) as confirmed in Table 1. The accuracy of the investigation depended on the relations and insights of key informants (internal cooperatives) who had the status of supervisory commissions in ten cooperative branches: 242 units from Bontang (95 .65%), 68 units from Samarinda (94.44%), 436 units from Balikpapan (78.28%), 23 units from Mahakam Ulu (95.83%), 59 units from Penajam North Paser (93.65%), 228 units from Berau (76.51%), 660 units from East Kutai (98.22%), 520 units from Kutai Kartanegara (88.89%), 353 units from West Kutai (98.06%), and 213 units from Paser (87.3%).

Table 1

Selected sample, n = 89.42%

Cooperative branch	Units	Active	Not active	Proportion
Bontang	253	242	11	95.65%
Samarinda	72	68	4	94.44%
Balikpapan	557	436	121	78.28%
Mahakam Ulu	24	23	1	95.83%
Penajam North Paser	63	59	4	93.65%
Berau	298	228	70	76.51%
East Kutai	617	606	11	98.22%
Kutai Kartanegara	585	520	65	88.89%
West Kutai	360	353	7	98.06%
Paser	244	213	31	87.3%
East Kalimantan	*3,073*	*2,748*	*325*	*89.42%*

Source: online publication released by BPS of East Kalimantan (2023).

Of the 89.42% active cooperatives, they are divided into two types of cooperatives, namely conventional and modern. Figure 1 compiles identical cooperatives with a modern approach totaling 1,860 units (67.69%). The details for each branch are as follows: 178 units in Bontang (9.57%), 59 units in Samarinda

(3.17%), 402 units in Balikpapan (21.61%), 16 units in Mahakam Ulu (.86%), 43 units in Penajam North Paser (2.31%), 185 units in Berau (9.95%), 417 units in East Kutai (22.42%), 300 units in Kutai Kartanegara (16.13%), 139 units in West Kutai (7.47%), and 121 units in Paser (6.51%). In the conventional category, cooperative data totaled 888 units (32.31%) which were grouped into ten branches: 64 units from Bontang (7.21%), 9 units from Samarinda (1.01%), 34 units from Balikpapan (3. 83%), 7 units from Mahakam Ulu (.79%), 16 units from Penajam North Paser (1.8%), 43 units from Berau (4.84%), 189 units from East Kutai (21.28%), 220 units from Kutai Kartanegara (24.77%), 214 units from West Kutai (24.1%), and 92 units from Paser (10.36%). Samples from conventional cooperatives are visualized in Figure 2.

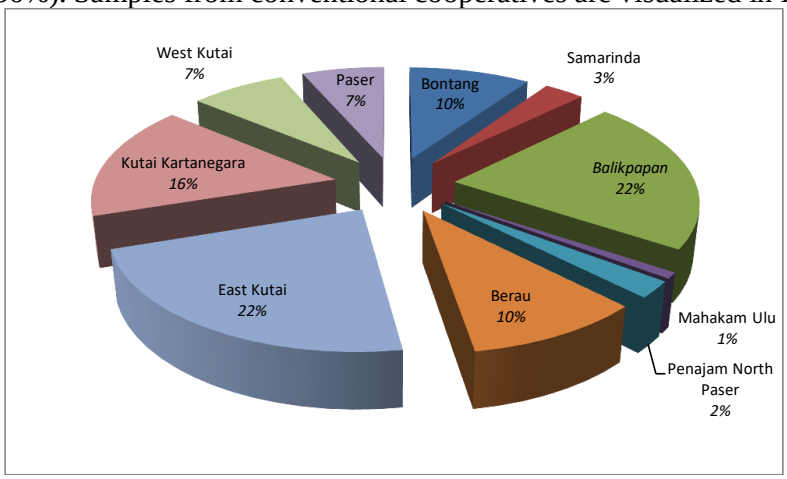

Figure 1. Modern agricultural cooperatives, n = 67.69%

Source: online publication released by BPS of East Kalimantan (2023).

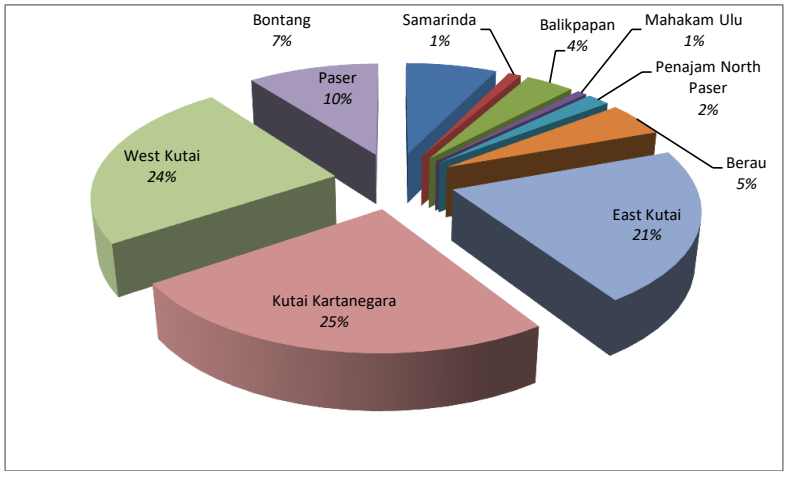

Figure 2. Conventional agricultural cooperatives, n = 32.31%

Source: online publication released by BPS of East Kalimantan (2023).

Sample data was extracted using descriptive comparative analysis. In econometrics, comparative–descriptive analysis is intended to verify all questionnaire

items taken from informants. The stages in the test are the mean, standard deviation (SD), and Chi–square. The mean formulation is written as follows:

$$\bar{X} = \frac{\Sigma f_i . X_i}{\Sigma f_i} \quad \textbf{(1)}$$

Where: $\bar{X}$ = mean; X_i = midpoint of class i; f_i = frequency of class i; Σ = sigma notation.

The function of the equation on the standard deviation based on two elements (population and sample) is illustrated below:

$$\sigma_1 = \sqrt{\frac{\sum_{i=1}^{N} f_i . (X_i - \bar{X})^2}{\sum_{i=1}^{N} f_i}} \quad \textbf{(2)}$$

$$\sigma_2 = \sqrt{\frac{\sum_{i=1}^{N} f_i . (X_i - \bar{X})^2}{(\sum_{i=1}^{N} f_i) - 1}} \quad \textbf{(3)}$$

Where: σ_1 = the standard deviation in the population; σ_2 = standard deviation in the sample; N = population; i = natural numbers (1, 2, 3,...N); X_i = the middle value of class i; f_i = frequency of class i; $\bar{X}$ = mean value.

In the last parameter, Chi–square is formulated as follows:

$$\chi^2 = \sum_{j=1}^{r} \sum_{i=1}^{k} \frac{(o_{ij} - e_{ij})^2}{e_{ij}} \quad \textbf{(4)}$$

Where: χ^2 = Chi–square; r and k = contingency table (row x column); o = observation frequency; e = frequency of expected/theoretical; ij = degrees of freedom (k – 1).

Results and discussion. Table 2 illustrates the comparison of cooperatives of all groups in East Kalimantan with Indonesia. Overall, the volume of cooperatives from East Kalimantan is not as fantastic as other regions in Indonesia, such as: Java, Sulawesi and Sumatra. Throughout 16 years, the peak period was 2010 with a contribution of 2.84% to the number of national cooperatives. With an average contribution of 2.54%, cooperative units in East Kalimantan are not worth the sacrifices that are draining attention. In 2016, East Kalimantan cooperatives played a much less national role at 2.33%. ~~Concretely~~Additionally, there is a contradictory growth of East Kalimantan cooperatives. In aggregate, the average growth is 1.44%. This is evidenced by the transition in growth from 2007–2010 which accumulated 29.01%. If we take a deeper look, growth stagnation occurred in 2011–2013 reaching 1.02%. Then, it rose again in 2014 (14.23%) and the worst thing was that it dropped dramatically in 2019–2020, namely -22.09%. Even though cooperative achievements in 2017–2018 grew again by 5.23% and 2021–2022 reached 5.69%, in 2015–2016 growth with a negative slope (-11.44%).

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Table 2

Comparison of cooperative units between East Kalimantan and Indonesia

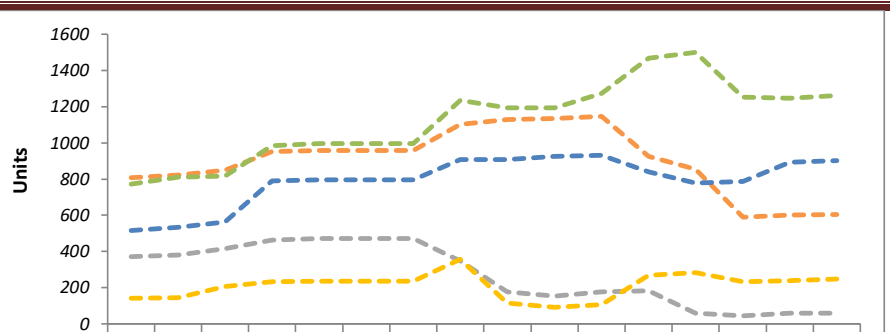
Year	East Kalimantan	Growth	Indonesia	Growth	Contribution
2007	2,613	-	98,944	-	2.64%
2008	2,691	2.99%	104,999	6.12%	2.56%
2009	2,849	5.87%	108,930	3.74%	2.62%
2010	3,423	20.15%	120,473	10.60%	2.84%

2011	3,458	1.02%	124,855	3.64%	2.77%
2012	3,458	0%	133,666	7.06%	2.59%
2013	3,458	0%	139,321	4.23%	2.48%
2014	3,950	14.23%	143,117	2.72%	2.76%
2015	3,524	-10.78%	147,249	2.89%	2.39%
2016	3,501	-.65%	150,223	2.02%	2.33%
2017	3,632	3.74%	151,170	.63%	2.40%
2018	3,686	1.49%	152,174	.66%	2.42%
2019	3,478	-5.64%	126,343	-16.97%	2.75%
2020	2,906	-16.45%	123,048	-2.61%	2.36%
2021	3,036	4.47%	127,124	3.31%	2.39%
2022	3,073	1.22%	127,846	.57%	2.40%

Source: annual document released by BPS of Indonesia (2023).

Likewise with the average growth in cooperatives at the national level which shows 1.91%. Even so, the surge in the decline in cooperative units in Indonesia is not as bad as the conditions in East Kalimantan. In reality, for one decade, from 2007–2018 to be precise, Indonesian cooperative units were so resilient, that their accumulation grew beyond 44.31%. Surprisingly, it is also consistent with what is experienced in East Kalimantan, where in 2019–2020, cooperative growth has fallen sharply by -19.58%. Uniquely, growth will start to return to normal in 2021–2022 which will reach 3.88%. Generally, both in Indonesia and in East Kalimantan, the effect of quarantine on human life (Fitriadi et al., 2022; Paramita et al., 2020; Wahyuhadi et al., 2022). According to Besley & Stern (2020), Donthu & Gustafsson (2020), Evgeniou et al.(2022), and Onyeaka et al.(2021), the lockdown policy actually extended the isolation in various strategic pillars. Ironically, the Coronavirus disease outbreak at the end of 2019 also hindered the activities of agricultural cooperatives (Haque et al., 2022; Rivera-Ferre et al., 2021).

Figure 3 displays East Kalimantan cooperatives referring to commodity basis. In its realization, for 16 periods, agricultural cooperatives were more dominant among other commodity cooperatives. Proportionally, agricultural cooperatives are in first position with an average number of 1,125 units, while in second position are service-focused cooperatives (900 units), and industrial and craft cooperatives in third position (791 units). On the one hand, cooperatives in mining and farming commodities are in fourth position (269 units) and fifth position (211 units). The advantage of agricultural cooperatives also lies in their contribution to total commodity cooperatives on the East Kalimantan scale, which averages 34.1%. The figure above detects that the average contribution to service commodity cooperatives: 27.29%, mining commodity cooperatives: 8.16%, industrial and craft commodity cooperatives: 24.01%, and farming commodity cooperatives: 6.41%. Furthermore, the four cooperatives grew an average of 1.88%, 15.7%, 3.3% and 10.68%. In the medium term, the most superior average growth will be mining commodity cooperatives.



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Services	809	821	848	952	959	959	959	1,101	1,129	1,135	1,146	926	855	591	600	604
Mining	372	380	415	464	471	471	471	349	178	154	177	182	60	43	58	59
Industry & crafts	516	534	563	789	795	795	795	907	909	926	931	841	779	786	894	901
Farming	143	145	206	233	237	237	237	358	114	93	105	269	283	234	238	248
Agriculture	773	811	817	985	996	996	996	1,235	1,194	1,193	1,273	1,468	1,501	1,252	1,246	1,261

Figure 3. Classification of cooperatives in East Kalimantan based on their commodity
Source: annual document released by BPS of Indonesia (2023).

What is special, although it also experiences ups and downs and stagnation like other commodity cooperatives, aggregate growth in agricultural cooperatives is relatively stable at 3.8%. This positive growth was not matched by serious institutional optimization and renovation by stakeholders, especially the directors of cooperative management. Surprisingly, the majority of problems in agricultural cooperatives are managerial professionalism. This is at the same time the biggest challenge that is difficult to actualize and understand comprehensively.

Basically, active agricultural cooperatives in East Kalimantan have varied demographics. Judging from the category, cooperative centers engaged in agricultural commodities tend to be dominated by consumer cooperatives of 950 units (34.57%). Consumer cooperatives are a favorite for farmers to elaborate agri-food products along with the increasing demand for diversity, health safety, and food quality compared to marketing cooperatives, which total 674 units (24.53%) or savings and loan cooperatives, which total 315 units (11.46%). The remaining 809 producer cooperative units (29.44%) are for service and goods producers. Agricultural cooperatives in this category sell goods produced by their members. Referring to the ownership structure, 1,269 units (46.18%) of agricultural cooperatives in East Kalimantan were developed through a joint determination in a profit sharing system. In fact, the initial formation of cooperatives was driven by farmers. As many as 738 units (26.86%) of agricultural cooperatives owned by partnerships or generally affiliated with SMEs in the concept of sharing the remaining business results/SHU, 447 units (16.27%) of agricultural cooperatives with franchises in the form of agreements between managers and investors with share royalties, and 294 units (10.7%) are individual ownership patterns or often called "Central Cooperatives" whose operations are set up autonomously through limited contract licensing. For example, the majority of individual ownership is supported by government licenses,

Comment [L15]: Why you want to report uni and %?. **Reply:** Percentage (%) reflects unit data. Also, it can make it easier to interpret and articul data in a statistical description.

but not unionized with non-governmental organizations (NGOs) or other associations outside the government

The interview output revealed that 1,553 units (56.51%) of agricultural cooperative capital were obtained from grants provided by BUMD and 581 units (21.14%) were channeled by government grants. These two grants are initiatives or subsidy programs, an example of which is Corporate Social Responsibility (CSR). Agricultural cooperative capital collected from bank credit loans amounted to 452 units (16.45%) with a debt scheme for a certain period. Other facts from Table 3 show that 1,706 units (62.08%) of agricultural cooperatives are profit-oriented. Universally, cooperative profits are obtained from the interest charged to borrowers. Besides, profit receipts also include administrative costs for every transaction and investment outside the cooperative's routine. Apart from profit, agricultural cooperatives are also non-profit oriented with an emphasis on social functions. In East Kalimantan, this type of agricultural cooperative reached 1,042 units (37.92%).

Table 3

Characteristics of the sample

Label	Indicators	n	Percentage
Category	Marketing cooperative	674	24.53
	Saving and loan cooperative	315	11.46
	Producers cooperative	809	29.44
	Consumer cooperative	950	34.57
Ownership structure	Individual	294	10.7
	All members	1,269	46.18
	Franchise	447	16.27
	Partnership	738	26.86
Capital	Regional Owned Enterprises (BUMD)	1,553	56.51
	Empowerment	162	5.9
	Government	581	21.14
	Credit loan	452	16.45
Orientation	Profit	1,706	62.08
	Non–profit	1,042	37.92
Establishment	1985–1993	799	29.08
	1996–2004	1,115	40.57
	2005–2013	346	12.59
	2014–2022	488	17.76
Asset	Under IDR 500 million	569	20.71
	IDR 500 million–IDR 1 billion	1,599	58.19
	Above IDR 1 billion	580	21.22
Membership	Under 20	272	9.9
	20–50	643	23.4
	51–80	192	6.99
	81–110	1,374	50
	Above 110	267	9.72

Source: compilation of interview results.

Like most other business entities, the duration or "golden age" reflects the

independence of the business. Of the 2,748 agricultural cooperative offices located in ten East Kalimantan branches, including 1,115 units (40.57%) of cooperatives aged around 18–26 years or established since 1996–2004, 799 units (29.08%) of agricultural cooperatives were established since 1985–1993 or at least 29–37 years old, 488 units (17.76%) of agricultural cooperatives established since 2014–2022 or a maximum of 8 years old, and 346 units (12.59%) of agricultural cooperatives established since 2005–2013 or aged at intervals of 9–17 years. In terms of quantity, the average nominal assets of 1,599 units (58.19%) of agricultural cooperatives in East Kalimantan range between IDR 500 million–IDR 1 billion, 580 units (21.22%) of agricultural cooperatives with average assets >IDR 1 billion, and 569 units (20.71%) of agricultural cooperatives have an average asset of <IDR 500 million. On scope of personnel, half of agricultural cooperatives in East Kalimantan or 1,374 units have an average of 81–110 members. Then, 643 units (23.4%) of agricultural cooperatives were attended by 20–50 members, 272 units (9.9%) of cooperatives were filled by <20 members, 267 units (9.72%) of agricultural cooperatives were represented by >110 members, and 51–80 participating members for 192 units (6.99%) of agricultural cooperatives.

Comment [L16]: It is repetitive when quoting both numbers and percentages. These numbers a already in the Table. Authors may quote a few important numbers and give more explanation.
Reply: Dear editor, we appreciate your comment on the data display. However, it is important to describe the specifics of each label and indicator Table 1. The logical reason is that you can examin the highest to lowest data ranking.

Table 4 calculates the relationship between the four variables to predict the success of agricultural cooperatives using conventional tactics. Using probability assumptions of 0.1%, 1%, and 5%, it is projected that organizational management, network utilization, product service quality, and HR productivity of members have implications for the success of agricultural cooperatives. Each causality is recapitulated below: organizational management ($\rho = .020 < .05$), network utilization ($\rho = .013 < .05$), quality of services and products ($\rho = .000 < .001$), and HR productivity of members ($\rho = .004 < .01$). Nonetheless, quality of services and products act as the most conspicuous instruments in enhancing agricultural success. Table 4 also calculates the mean and SD of each item per variable. The order from the highest score to the lowest is as follows:

- The average mean score and mean SD for organizational management are *3.71* and *.962*. In the classification of the mean, the largest: dimension no. 5 ($\bar{X} = 3.85$) and smallest: dimension no. 1 ($\bar{X} = 3.54$). Especially for SD, the biggest: dimension no. 6 ($\sigma = 1.055$) and smallest: dimension no. 2 ($\sigma = .821$).

- The average mean score and mean SD for network utilization are *3.69* and *.910*. In the classification of the mean, the largest: dimension no. 2 ($\bar{X} = 3.72$) and smallest: dimension no. 3 ($\bar{X} = 3.67$). Especially for SD, the biggest: dimension no. 4 ($\sigma = .954$) and smallest: dimension no. 2 ($\sigma = .881$).

- The average mean score and mean SD for quality of services and products are *3.7* and *.900*. In the classification of the mean, the largest: dimension no. 3 ($\bar{X} = 3.74$) and smallest: dimension no. 2 ($\bar{X} = 3.66$). Especially for SD, the biggest: dimension no. 2 ($\sigma = .935$) and smallest: dimension no. 4 ($\sigma = .862$).

- The average mean scores and the average SD for the HR productivity of members are *3.67* and *.906*. In the classification of the mean, the largest: dimension no. 1 ($\bar{X} = 3.76$) and smallest: dimension no. 2 ($\bar{X} = 3.58$). Especially for SD, the

biggest: dimension no. 5 (σ = *.973*) and smallest: dimension no. 3 (σ = *.854*).

Table 4

Cooperatives use conventional instruments

Dimensions	Variables/items	Mean ($\bar{X}$)	SD (σ)	Chi–square (χ^2)
	Organizational management	*3.71*	*.962*	*18.107* (.020)*
1	Information about the organization can only be tracked by internal administrators	3.54	.821	-
2	Exposing internal communications goes against the direction of the organization	3.73	.935	-
3	Work execution is more logical than wasting time seeking clarification	3.77	.965	-
4	Organizational reputation is determined by independence	3.67	1.023	-
5	System reform (including digitization) can trigger arguments that are too wild	3.85	.974	-
6	The public can find out the profile of the organization if they visit the cooperative directly	3.72	1.055	-
	Network utilization	*3.69*	*.910*	*12.693* (.013)*
1	Manual data collection	3.7	.904	-
2	Data leaks are anticipated through closed authorities	3.72	.881	-
3	Complementary infrastructure such as the internet, computers and other devices can make cooperative spending more wasteful	3.67	.900	-
4	Network openness will only reveal organizational secrecy	3.68	.954	-
	Quality of services and products	*3.7*	*.900*	*25.909*** (.000)*
1	Advertise products by word of mouth	3.69	.864	-
2	Does not involve the wider community	3.66	.935	-
3	Market penetration is not determined by consumer intervention	3.74	.934	-
4	Limited modification	3.73	.862	-
5	Prioritize popular products and services	3.68	.906	-
	HR productivity of members	*3.67*	*.906*	*20.029** (.004)*
1	Selection of members is the authority of the leadership	3.76	.928	-
2	Substitution of heads of cooperatives based on seniority	3.58	.888	-
3	Certain positions within the organization are negotiable	3.65	.854	-
4	Outside of certain leaders and divisions, experienced members have priority rights as instructors to conduct training and guide new	3.69	.888	-

Comment [L17]: Readers may want to know fewer statistical values with more explanation, fo there is a Table that reports all of these values. Th same comments applied to Table 5. **Reply:** Thank you for your instructions. However, the data contained in tables and figures requires a clearer presentation so that it can be understood in a complex way. If we remove part of the explanatio of the data, it will give rise to multiple interpretations.

	members			
5	Counseling, mentoring, and coaching facilities use the classical method	3.66	.973	-

Notes: *ρ <5%; **ρ <1%; ***ρ <.1%.

Through three probability estimates (0.1%, 1%, and 5%), the success of agricultural cooperatives via a modern approach is concluded if network utilization, quality of services and products, and HR productivity of members influence organizational success. Meanwhile, one variable, namely organizational management, was concluded to hinder the success of agricultural cooperatives. Statistical interpretation shows that organizational management ($\rho = .171$), network utilization ($\rho = .000 < .001$), quality of services and products ($\rho = .034 < .05$), and HR productivity of members ($\rho = .006 < .01$). Therefore, the use of the network as the smartest step to grow agricultural cooperatives than others. Table 5 summarizes the mean and SD of the four variables and each item based on the largest value to the following smallest value:

- The average mean value and average SD for organizational management are *2.41* and *.989*. In the mean class, the highest: dimension no. 6 ($\bar{X} = 2.98$) and lowest: dimension no. 4 ($\bar{X} = 2.07$). Specifically for SD, the highest: dimension no. 1 ($\sigma = 1.145$) and lowest: dimension no. 3 ($\sigma = .918$).

- The average mean value and average SD for network utilization are *3.69* and *.904*. In the mean class, the highest: dimension no. 2 and no. 3 ($\bar{X} = 3.7$) and lowest: dimension no. 4 ($\bar{X} = 3.6$). Specifically for SD, the highest: dimension no. 2 ($\sigma = .942$) and lowest: dimension no. 4 ($\sigma = .872$).

- The average mean value and average SD for quality of services and products are *3.46* and *.601*. In the mean class, the highest: dimension no. 4 ($\bar{X} = 3.55$) and lowest: dimension no. 1 ($\bar{X} = 3.01$). Specifically for SD, the highest: dimension no. 1 ($\sigma = .725$) and lowest: dimension no. 2 ($\sigma = .516$).

- The average mean value and the average SD for the HR productivity of members are *3.86* and *.825*. In the mean class, the highest: dimension no. 2 ($\bar{X} = 3.97$) and lowest: dimension no. 4 ($\bar{X} = 3.79$). Specifically for SD, the highest: dimension no. 2 ($\sigma = .868$) and lowest: dimension no. 2 ($\sigma = .754$).

Table 5

Cooperatives use modern instruments

Dimensions	Variables/items	Mean ($\bar{X}$)	SD (σ)	Chi–square (χ^2)
	Organizational management	*2.41*	*.989*	*6.406 (.171)*
1	Website building capabilities	2.66	1.145	-
2	Data-driven decision making	2.36	1.009	-
3	Processing and inputting organizational data on a regular basis	2.15	.918	-
4	Prioritizing the principles of transparency, accountability, and documented work professionalism	2.07	.938	-
5	Organizational evaluation based on data	2.26	.999	-

	center			
6	Organizational planning that adopts the platform	2.98	.929	-
	Network utilization	*3.69*	*.904*	*68.799*** (.000)*
1	High internet speed	3.62	.876	-
2	Accessibility of work via tools	3.7	.942	-
3	Computer programming reliability	3.7	.929	-
4	Complex network development	3.6	.872	-
	Quality of services and products	*3.46*	*.601*	*41.429* (.034)*
1	Upgrading information literacy	3.01	.725	-
2	Communicative in responding to complaints that are connected by electronics	3.54	.516	-
3	Problem solving accuracy	4.15	.525	-
4	Access promotions and sales via social media	3.55	.548	-
5	Follow market trends/tastes	3.07	.689	-
	HR productivity of members	*3.86*	*.825*	*30.155** (.006)*
1	Coordinated participation	3.82	.868	-
2	Inclusive training facilities	3.97	.754	-
3	Certified expertise competency in the technology department	3.89	.818	-
4	Flexible work mobility	3.79	.885	-
5	E-recruitment in finding, selecting and processing new members	3.85	.802	-

Notes: *ρ <5%; **ρ <1%; ***ρ <.1%.

Given the important organizational management, agricultural cooperatives need to plan as detailed as possible. If this is not done, mistakes in governance often lead to multiple interpretations, including administrative management. Imperfections in market fragmentation provide practical lessons for family farms in Madagascar, Kenya, Tanzania, Gabon, Scotland, Vietnam, Cambodia, and Ghana about the "incentive trap" (Bell et al., 2023; Heyl et al., 2022; Ragasa et al., 2018). As a comparison, a survey in Greece examined the differences in profitability performance between two cooperative identities, namely capital-seeking cooperatives in the food sector and traditional agricultural cooperatives (Kontogeorgos et al., 2018). In summary, management inefficiencies are a limiting factor in traditional agricultural cooperatives. The bottleneck in the management of agricultural cooperatives in Brazil is relatively caused by a relatively conservative work environment. To restore the system, a new protocol is scheduled to compile a list of feasible solutions (de Oliveira & Wander, 2022). Although initially gender issues were doubted in driving entrepreneurial enthusiasm in agricultural women's cooperatives in some cases, expectations were unexpectedly surprising (Balconi et al., 2023). The head of a cooperative chaired by a woman actually shows an anti-discriminatory role, where the close ties between cooperative members are multiplied.

Currently, network strength does not only rely on individual humans or machines, but also combines the two to expand services and products at the same time. Technology-mediated work pattern repair can save costs and a lot of things. To avoid uncertainty in the availability of raw materials in the market. Most of the agro-industrial cooperatives in Bangladesh changed marketing management. The intensity begins with inviting and involving farmers in producer organizations, thereby improving food stocks in warehouses, reducing intermediary fraud in the supply chain, and ensuring fair prices for consumers (Widadie et al., 2021). Since the emergence of a new economic paradigm in the Western Europe in 1800s, the atmosphere surrounding Portuguese agricultural cooperatives about the stigma of transactional marketing can be overcome through the placement of agro-food chains (Luo et al., 2020). Friedel & Dufays (2023) observes that in all fields of food agribusiness in Flanders–Belgium, early prevention of the "social capital crisis" is carried out by instilling three typologies, i.e: rules and ethics, networks, and trust.

For small farmers in Kampong Speu and Pursat Province (Cambodia), apart to channeling livelihoods, agricultural cooperatives also contribute to reducing the impact of drought (Chhinh et al., 2023). From Cibodas Village (Bandung–Jakarta), apart from property matters, the intangible benefits of agricultural cooperatives have not fully contributed to the internal market, so referral marketing did not last long (Melati & Sadeli, 2017). In fact, in developed and emerging countries, the mindset, rewards, and heterogeneity of members imply the track record of agricultural cooperatives (Candemir et al., 2021). As a leading entity in the agri-food distribution network, cooperatives in Wakayama Prefecture–Japan provide two-way consultations to farmers to solve commercial problems, facilitate sales channels with low operational costs, and give great control in strengthening relationships (Hati et al., 2021).

Soetriono et al. (2019) analyzed three positive values contained in agribusiness cooperative clusters, such as: healthy business performance, efficient financial budgetary resources, and increased service provision to support the sovereignty of agribusiness chains in East Java–Indonesia. The contrast occurred in Shandong Province–China. The prospects for cooperatives are shrinking due to loss of member loyalty, so they do not have a significant impact on profitability (Zhang et al., 2023). Accordingly, there is a weak correlation between farmers' opportunities to channel services and the supply of cooperative services in China (Wu & Ding, 2018).

Over the past decade, productivity growth for agricultural cooperatives in the United States has slowed slightly. Pokharel & Featherstone (2021) examine technical changes based on the size of agricultural cooperatives that neglect investment in technology and managerial efficiency. The big leap actually happened in Sichuan–West China and coffee farmers in Mexico. As an agribusiness company, cooperatives in the agricultural sector with mismanaged governance qualities are able to be mediated by legitimacy that respects individual turnover (Trejo-Pech et al., 2023; Zhang et al., 2023). Collectively, functional management has a positive effect on member entrepreneurship. Within the discipline of personnel management, labor

remaining on the farm in proportion to wages is discussed by Hailu (2023). Explicitly, thinking of labor factors as a subject of HR practice is a useful inspiration for Canadian agricultural production and complements the "Grand Theory syllabus". In Ethiopia, cooperatives are seen as a vehicle for connecting small farmers to markets, but member commitment is reduced due to moral concerns i.e: participation, satisfaction, and loyalty (Awoke, 2021). Even more striking, the push for substantial resolution in agricultural cooperatives is helping the economic development of Thai Binh–Vietnam Province in the coming years (Tiep et al., 2020). Finally, in the "stochastic boundary" modeling, Qu et al. (2021) diagnosed that the technical efficiency of apple farmers who are members of agricultural cooperatives from four provinces in China (Gansu, Shandong, Shaanxi and Shanxi) have higher marketing opportunities than those who are not members.

Conclusions. The quantitative review indicated that the more network utilization, quality of services and products, and HR productivity of members are improved, the more significant the impact on the success of agricultural cooperatives of all types will be. The findings detect a significant effect between organizational management and the success of conventional agricultural cooperatives. A serious problem is seen in modern agricultural cooperatives, where it is detected that the organizational management does not affect the success of the cooperative. Exclusively, although the seven branches of agricultural cooperatives are located in ~~rural areas~~Mahakam Ulu, Penajam North Paser, Berau, East Kutai, Kutai Kartanegara, West Kutai, and Paser, their instincts in developing cooperatives are not inferior to the competitiveness of the three branches of agricultural cooperatives in ~~urban areas~~Bontang, Samarinda, and Balikpapan.

Looking back, the valuable dedication of agricultural cooperatives to economic development, especially in absorbing labor, has been a history that has been embedded since Indonesian independence. In order to save the position of agricultural cooperatives in the midst of industrialization projects that are accelerating further, multi-stakeholders must pay attention to manufacturing in agricultural cooperatives which are supported by logistics. Also, the symptoms of poor organizational management in modern agricultural cooperatives can be recovered through independent leadership in preparing strategic planning. The reason is, not all the basic principles of the organization can be freely actualized. In turn, the simple management of agricultural cooperatives will make it easier for members to work as a team.

This scientific work highlights the success of agricultural cooperatives which are influenced by four factors: organizational management, network utilization, quality of services and products, and HR productivity of members. Field experiment techniques via interviews were distributed to the agricultural cooperative supervisory commission which is still active in East Kalimantan. The analysis mapping out two types of agricultural cooperatives: (1) cooperatives with conventional status and (2) cooperatives with modern status. All informants were asked to answer a list of questionnaires based on their respective perceptions into five scales. Academic

Comment [L18]: The paper failed to compare conventional and modern agricultural cooperativ as stated in the research objective. **Reply:** We pa attention to reviewers' opinions. However, the existing conclusions are slightly contradictory to t proposed hypothesis. The findings of this study attempt to answer according to statistical results Even though it detects an anomaly that is differer from cases in other places, the current reality is true.

Comment [L19]: This is not in hypothesis testing?. **Reply:** Technically, agricultural cooperatives (modern and conventional) are aim at 10 samples in East Kalimantan Province. The sample units are 7 districts and 3 cities. Agricultu cooperatives in rural areas are agricultural cooperatives located in the Regency area, while agricultural cooperatives in urban areas are locat in the City. For this reason, we have made editori improvements based on regional names.

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Comment [L20]: These are not from the findi of the study. It may move to diiscusion section. **Reply:** This sentence is a practical implication and suggestion aimed at strengthening the conclusion

Comment [L21]: Maybe use the term 'paper' in earlier section to keep consistancy. **Reply:** revised.

advice is recommended to consider a more reliable methodology for further investigation. With the existing limitations, further experimental research will highlight more exclusive insights, for example, perspectives outside organizational management, network utilization, quality of services and products, and HR productivity of members. That way, other studies can develop the aspects that influence the success of agricultural cooperatives.

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