

Assessment of KADIWA Financial Grant Assistance to Farmers Cooperatives and Associations in Kalinga Province

Hazel Gay Guiawan-Batuyong¹, Ruby Orange B. Agyao, DVM²

¹MS Rural Development Student, College of Advanced Studies, Kalinga State University, Bulanao, Tabuk City, Kalinga, Philippines

²Adviser, College of Advanced Studies, Kalinga State University, Bulanao, Tabuk City, Kalinga, Philippines

Abstract

This study assessed the KADIWA Financial Grant Assistance provided to Farmers Cooperatives and Associations in Kalinga Province as a rural development intervention. It examined the status of KADIWA-funded projects in terms of implementation, operational status, and sustainability; determined the perceived impact of the program on beneficiaries in terms of economic and social outcomes; tested the relationship between project status and beneficiary impact; and identified problems encountered during project implementation. A descriptive mixed-methods design with a convergent approach was used. Data were gathered from 242 officers and directly involved member-beneficiaries of seven KADIWA-assisted FCAs through a validated survey questionnaire, key informant interviews, and open-ended responses. Weighted mean and composite mean were used to assess project status and impact, while Friedman test and Pearson product-moment correlation were used for inferential analysis. Findings showed that the KADIWA-funded projects were generally perceived as implemented, operational, and sustainable, with composite means of 4.017, 3.735, and 3.936, respectively. The program also produced positive economic and social impacts, with a grand mean of 4.016. The strongest gains were reduced post-harvest losses, easier access to buyers, wider access to FCA services, better cooperation, and improved transparency. A moderate positive and significant relationship was found between project status and beneficiary impact ($r = 0.524$, $p = 0.001$). However, weak market demand, inadequate product supply, delivery delays, coordination problems, limited technical follow-up, and weak skills development remained concerns. The study concludes that the KADIWA grant contributed positively to rural enterprise development, but sustained benefits require stronger monitoring, market linkage, capability-building, internal policies, and project management.

Keywords: KADIWA Financial Grant Assistance, Farmers Cooperatives and Associations, Rural Development, Project Implementation, Sustainability, Economic and Social Outcomes, Kalinga Province

1. Introduction

Agriculture remains an important foundation of rural livelihood in the Philippines because it provides food, employment, and income for many communities outside urban centers. However, small farmers continue to face high production costs, climate exposure, limited capital, weak postharvest facilities, and

fragile farm-to-market linkages. These constraints reduce the capacity of farmers to transform production into stable household income and enterprise growth [8, 9, 10].

The marketing side of agriculture is especially critical. Smallholders may produce marketable commodities but still receive weak returns when selling is fragmented, product volume is low, buyers are irregular, transport costs are high, and market information is limited. Recent studies on aggregation and agri-enterprise development show that collective action can reduce transaction costs, consolidate produce, improve bargaining position, and connect farmer groups to input, credit, information, and product markets [11, 12, 13].

Farmers Cooperatives and Associations, hereafter referred to as FCAs, are therefore important institutional vehicles for rural development. Through FCAs, farmers can pool products, coordinate deliveries, share facilities, access government programs, negotiate with buyers, and participate in value-adding or direct-selling activities. Literature on cooperatives also emphasizes that these advantages are realized only when organizations have capable leadership, transparent records, active member participation, and sustainable market linkages [16, 17, 18, 19].

The KADIWA Financial Grant Assistance Program of the Department of Agriculture was designed within this policy and development context. Department of Agriculture Memorandum Circular No. 22, Series of 2023, provides that the program is intended to capacitate farmers and fisherfolk to become reliable food commodity suppliers, increase FCA participation in KADIWA selling activities, and encourage partnerships with private sector or institutional buyers. The grant may support procurement of produce, working capital, aggregation, packaging, processing, transport, distribution, establishment or improvement of KADIWA Stores, and enterprise-upscaling activities [1].

The program is relevant to rural development because it seeks to reduce market inefficiencies while strengthening organized farmer enterprises. National updates show the continuing expansion of KADIWA as a market-linkage and food-accessibility intervention, including cooperative-led KADIWA ng Pangulo stores and broader food-distribution models [2, 3]. The same approach supports sustainable development concerns because stronger local food distribution, inclusive markets, reduced losses, and partnerships with public and private actors are aligned with poverty reduction, food security, responsible production and consumption, and partnership goals [25].

Kalinga Province provides an appropriate setting for evaluating KADIWA because agriculture remains highly visible in its economy and community life. The 2022 Census of Agriculture and Fisheries reported that Kalinga had the largest agricultural population in the Cordillera Administrative Region, with 166,439 individuals aged 18 years and over engaged in agricultural activities [4]. Provincial statistics also show that only a portion of the agricultural population had ownership or secure rights over agricultural land [5]. In the 2023 Provincial Product Accounts, agriculture, forestry, and fishing accounted for 13.2 percent of the provincial economy, even while the sector posted a slight negative growth [6]. More recently, DA-CAR reported the turnover of PhP 96 million worth of agricultural interventions to Kalinga farmers, including KADIWA financial grants [7].

Despite the clear policy intent of the KADIWA grant, there remains a local evaluation gap. Grant release records do not automatically show whether funded projects became functional, operational, sustainable, and beneficial at the FCA level. The present study addressed this gap by assessing seven KADIWA-assisted FCAs in Kalinga Province in terms of project implementation, operational status, sustainability, economic and social impact, relationship between status and impact, and problems encountered during implementation.

2. Related Research Work

Rural development literature emphasizes that agricultural transformation is not only about increasing farm production. It also requires market-oriented systems that link producers with storage, transport, processing, market information, and distribution channels. When small producers remain disconnected from buyers and enterprise services, their ability to raise income remains limited even when production is sufficient [10, 14, 15].

Government assistance to agriculture commonly includes grants, infrastructure, machinery, logistics support, technical assistance, and market facilitation. Such support is necessary because many rural producers and small farmer organizations lack the capital base needed to acquire enterprise assets independently. However, public support has stronger developmental value when it strengthens productive public goods, market systems, logistics, enterprise capability, and institutional capacity rather than remaining a short-lived transfer of resources [8, 9, 10].

KADIWA fits this broader policy direction because it is designed to link producer groups more directly with buyers and consumers while improving food accessibility. The revised guidelines specify eligible uses, proponent qualifications, grant limits, counterpart requirements, proposal evaluation, and the expectation that the project should remain operational for at least five years after grant receipt [1]. This makes KADIWA not merely an asset-transfer program but a rural enterprise intervention requiring implementation quality, financial accountability, market coordination, and sustainability planning.

Collective marketing is central to the expected value of the program. Studies on aggregation, agri-enterprise, and cooperative participation show that farmer organizations can reduce transaction costs, consolidate products, improve access to buyers, and strengthen members' participation in value chains [11, 12, 13]. At the same time, collective action is not automatically successful. The benefits of cooperatives depend on governance, management quality, inclusiveness, participation, information access, and the ability to maintain market relationships after initial support [16, 17, 18, 19].

Evaluation literature further suggests that public programs should be assessed through both process and results. Logic models and evaluation criteria help trace how inputs, activities, outputs, outcomes, and sustainability relate to one another. These approaches are useful for grant evaluation because resources released to organizations must be translated into functioning projects and durable beneficiary gains [20, 21]. Audit and accountability literature also emphasizes the need for proper documentation, monitoring, and compliance in the use of public funds [23].

The present study adopted this evaluation orientation. It treated implementation, operational status, and sustainability as indicators of project status, and it treated economic and social outcomes as indicators of beneficiary impact. This allowed the study to determine not only whether the projects existed, but also whether they were operating, perceived as sustainable, and associated with concrete benefits to FCA members.

3. Research Methods

The study used a descriptive mixed-methods design with a convergent approach. Quantitative and qualitative data were gathered during the same phase, analyzed separately, and integrated during interpretation. This design was appropriate because the study aimed to describe the actual condition of KADIWA-assisted projects while also explaining the experiences, problems, and recommendations of beneficiaries [22].

The study was conducted among seven KADIWA-assisted FCAs located in Tabuk City, Pinukpuk, and

Rizal, Kalinga Province. The respondents were officers and directly involved member-beneficiaries who had actual knowledge of the funded project through planning, implementation, operation, monitoring, marketing, or use of project-supported services. Total enumeration was used for the officers and directly involved member-beneficiaries within the participating FCAs. A total of 242 respondents participated in the study.

The main quantitative instrument was a structured questionnaire based on the study objectives, the KADIWA program guidelines, the conceptual framework, and DA Memorandum Circular No. 22, Series of 2023. The instrument had five parts: respondent and FCA project information; project status in terms of implementation, operational status, and sustainability; program impact in terms of economic and social outcomes; problems encountered; and open-ended responses on challenges, positive changes, and recommendations.

The scaled sections used a five-point Likert response format where higher scores indicated stronger agreement, better condition, or stronger perceived benefit. The questionnaire and interview guide were reviewed and validated by panel members before field administration. The instrument was pre-tested among 15 members and officers of a non-participating FCA that had recently received a KADIWA grant. Cronbach's alpha for the scaled sections was 0.81, indicating good internal consistency.

Data were gathered through personally administered questionnaires, key informant interviews, and open-ended responses. Participation was voluntary, and the results were reported in aggregate or thematic form. Completed questionnaires were checked, coded, tabulated, and analyzed. Frequency and percentage were used for respondent profiles and problems encountered. Weighted means and composite means were used for implementation, operational status, sustainability, economic outcomes, and social outcomes. The Friedman test was used because the normality assumption was not met for related composite scores. Pearson product-moment correlation was used to determine the relationship between overall project status and overall beneficiary impact. Thematic analysis was used to organize open-ended responses.

4. Results and Discussion

4.1 Profile of Respondent FCAs and KADIWA Project Components

The study covered seven KADIWA-assisted FCAs with different project components. Six FCAs had KADIWA Store components, three had combined KADIWA Truck and KADIWA Store components, and one had Trading Capital. These components reflected the program's support for direct selling, transport and logistics, and working capital for buying, consolidating, and selling agricultural produce.

The participating FCAs had 608 members and officers directly involved in KADIWA-funded projects, from which 242 respondents participated. The largest group came from Binongsay Malin-awa Savings and Loan Cooperative with 115 respondents, while the smallest group came from Taggay Upland Farmers Association with 12 respondents. This distribution reflected the actual size of the directly involved respondent pool in each FCA.

Table 1: Respondent Farmers Cooperatives and Associations and Project Components

Farmers Association	Cooperative or	Location	KADIWA Project Component	Directly Involved / Respondents
Binongsay Malin-awa Savings and Loan Cooperative		Malin-awa, Tabuk City	KADIWA Truck and KADIWA Store	290 / 115

Guimpong Credit Cooperative	Amlao, Tabuk City	KADIWA Store	50 / 20
St. John the Evangelist Agricultural Cooperative	Nambaran, Tabuk City	KADIWA Truck and KADIWA Store	40 / 16
Rio Chico Agricultural Cooperative	Tuga, Tabuk City	KADIWA Truck and KADIWA Store	63 / 25
Men Gawisan Nan Igorot Ed Calaligan Farmers Association	Masablang, Tabuk City	KADIWA Store	62 / 25
Taggay Upland Farmers Association	Taggay, Pinukpuk	Trading Capital	30 / 12
Kinama High Value Crops Farmers Association	Kinama, Rizal	KADIWA Store	73 / 29
Total			608 / 242

4.2 Project Status in Terms of Implementation, Operational Status, and Sustainability

The project status findings show that the KADIWA-funded projects were generally perceived positively. Implementation obtained a composite mean of 4.017, interpreted as Agree. The strongest indicators were the match between the approved project and FCA needs, and the maintenance of records. This suggests that the assistance was generally relevant to participating organizations and that many FCAs maintained basic documentation. However, monitoring and reporting, although still rated Agree, received the lowest implementation rating and therefore require strengthening.

Operational status obtained a composite mean of 3.735, interpreted as Agree. The projects were generally reported to be operating and visible in their communities. However, the lowest indicator was whether the project operated under generally favorable business conditions. This shows that the everyday performance of a KADIWA Store, truck, or trading activity depends not only on the presence of assets but also on demand, location, product movement, competition, fuel cost, staffing, and buyer access.

Sustainability obtained a composite mean of 3.936, interpreted as Agree. Respondents agreed that FCAs had capacity to maintain or repair grant-supported equipment, vehicle, or facility and that projects could be sustained for at least the next five years. However, buyer or market demand had the lowest sustainability rating. This means that long-term continuity cannot depend on maintenance capacity alone; it also requires steady buyers, predictable product supply, and active member participation.

The Friedman test showed a significant difference among implementation, operational status, and sustainability. Implementation had the highest mean rank, followed by sustainability, while operational status had the lowest mean rank. This indicates that the projects were perceived to have performed better in carrying out approved activities and in maintaining continuity potential than in sustaining regular daily operation under actual field and market conditions. The result supports the need for post-award monitoring, buyer mapping, operational planning, and market linkage assistance [20, 21, 23].

Table 2: Summary of Project Status Ratings

Project Dimension	Status	Highest Rated Indicator	Lowest Rated Indicator	Composite Mean	Interpretation
Implementation		Project matched FCA and member needs (4.318)	Monitoring and reporting activities were carried out (3.595)	4.017	Agree
Operational Status		Project was currently operating (3.946)	Project operated under generally favorable business conditions (3.446)	3.735	Agree
Sustainability		FCA could maintain and repair equipment, vehicle, or facility (4.133)	Buyer or market demand was enough to keep the project running (3.483)	3.936	Agree

Table 3: Friedman Test Result for Project Status Dimensions

Status Dimension	Mean Rank	p-value	Interpretation
Implementation	2.15	< 0.001	Significant
Operational Status	1.75	< 0.001	Significant
Sustainability	2.11	< 0.001	Significant

4.3 Impact of the KADIWA Financial Grant Assistance on Beneficiaries

The grand mean for the impact of KADIWA Financial Grant Assistance was 4.016, interpreted as Agree. This indicates that respondents generally perceived positive impact in terms of economic and social outcomes. The economic outcome sub-mean was 4.121, while the social outcome sub-mean was 3.910. Both were positive, but economic outcomes were rated slightly higher.

The strongest economic effects were the reduction of post-harvest losses or unnecessary costs and easier access to buyers or selling outlets. These findings suggest that the KADIWA Store and Truck components addressed practical marketing constraints by supporting product movement, direct selling, and access to outlets. However, sales or service income received the lowest economic rating, showing that better market access did not automatically translate into strong income increases for all members. FCAs still need product consolidation, pricing strategy, regular supply, and stable buyer relationships.

The strongest social effects were wider access to FCA services or opportunities, improved transparency and accountability, and stronger cooperation among officers and members. These findings suggest that the project strengthened organizational access and trust. However, skills development in marketing, processing, record keeping, and project operation received a Disagree rating. This is a critical concern because members may benefit from the project without acquiring the technical and managerial skills needed for sustainability. Literature on cooperative performance emphasizes that enterprise support should be matched with training, information access, and organizational capacity-building [16, 17, 19, 26].

The Friedman test comparing economic and social outcomes was significant at $p = 0.001$. Economic outcomes had the higher mean rank. This confirms that the program's effects were felt more strongly in economic terms, which is understandable because the grant directly supports market access, transport, logistics, and enterprise operation. Nevertheless, the weaker skills-development result shows that future KADIWA implementation should include more structured post-award coaching and member training.

Table 4: Impact of the KADIWA Financial Grant Assistance on Beneficiaries

Outcome Area	Indicator	Weighted Mean	Interpretation
Economic	Income or income opportunity from farming or related activities improved	4.041	Agree
Economic	Sales or service income of farmer-members increased	3.855	Agree
Economic	Post-harvest losses or unnecessary costs were reduced	4.380	Strongly Agree
Economic	Higher income return received for products increased	4.025	Agree
Economic	Access to buyers or selling outlets became easier	4.306	Strongly Agree
Economic Sub Mean		4.121	Agree
Social	Members became more involved in project-related meetings and decisions	4.153	Agree
Social	Cooperation among officers and members improved	4.264	Strongly Agree
Social	Members gained new skills in marketing, processing, record keeping, or project operation	2.289	Disagree
Social	More members accessed services or opportunities through the FCA	4.562	Strongly Agree

Social	Transparency and accountability inside the FCA improved	4.281	Strongly Agree
Social Sub Mean		3.910	Agree
Grand Mean		4.016	Agree

Table 5: Friedman Test Result for Economic and Social Outcomes

Outcome Dimension	Mean Rank	p-value	Interpretation
Economic Outcomes	1.73	0.001	Significant
Social Outcomes	1.27	0.001	Significant

4.4 Relationship Between Project Status and Beneficiary Impact

Pearson product-moment correlation showed a moderate positive and significant relationship between overall project status and overall beneficiary impact. The r value of 0.524 and p value of 0.001 indicate that respondents who gave higher ratings to implementation, operational status, and sustainability also tended to report stronger economic and social benefits.

This result means that project status is not merely an administrative concern. It is closely connected with the value that beneficiaries receive from the program. Projects that are properly implemented, regularly operated, monitored, supplied with working capital, supported by members, and linked to markets are more likely to generate meaningful gains. The finding does not prove that project status alone causes all outcomes, but it shows that improving project management and sustainability conditions is likely to strengthen the program's impact.

Table 6: Pearson Correlation Between Project Status and Beneficiary Impact

Variables Compared	Pearson r	p-value	N	Interpretation
Overall Project Status and Overall Beneficiary Impact	0.524	0.001	242	Moderate positive and significant relationship

4.5 Problems Encountered and Recommended Improvements

The most common problem was low market demand or inadequate product supply, reported by 102 respondents or 42.15 percent. This indicates that the operation of KADIWA projects was affected by the ability of FCAs to maintain enough products, attract buyers, and compete with nearby sellers. Open-ended responses also pointed to competition, weak demand, poor location, distance from buyers, and irregular supply as serious issues.

Procurement or delivery delays ranked second, while weak member participation or leadership and coordination problems ranked third. These problems show that project success depends on timely implementation, logistics coordination, clear responsibility, active leadership, and member support. Insufficient working capital or high maintenance cost, limited technical support, and weather-related disruptions were also reported.

The most common recommended improvement was stronger monitoring, evaluation, and accountability. Respondents also recommended clearer policies on project use, pricing, and credit collection; dedicated project personnel; better site validation and operational planning; more training and implementation guidance; more member orientation; increased member participation; and stronger market linkage. These recommendations are consistent with the weaker indicators found in the quantitative results, particularly monitoring, business conditions, market demand, and skills development.

Table 7: Problems Encountered in KADIWA Project Implementation

Problem Encountered	Frequency	Percentage	Rank
Low market demand or inadequate product supply	102	42.15	1
Procurement or delivery delays	51	21.07	2
Weak member participation or leadership/coordination problems	49	20.25	3
Insufficient working capital or high maintenance cost	22	9.09	4
Insufficient technical support or follow-up from implementing agency	20	8.26	5
Natural disasters or weather-related disruptions	20	8.26	6

Table 8: Recommended Improvements for the KADIWA Program

Recommended Improvement	Frequency	Percentage
Stronger monitoring, evaluation, and accountability	99	41.08
Clearer policies on project use, pricing, and credit collection	82	34.02
Dedicated and capable project personnel	35	14.52
Better site validation and operational planning	28	11.62

More training and implementation guidance	27	11.20
More member orientation and information, education, and communication	16	6.64
Increase member participation	7	2.90
Market linkage and production support	4	1.66

5. Conclusion

The KADIWA Financial Grant Assistance in Kalinga Province was generally effective as a rural development intervention for participating FCAs. Respondents agreed that the funded projects were implemented, operational, and sustainable. The highest relative strength was implementation, while the lowest was operational status. This means that project approval and initial implementation were generally positive, but regular day-to-day operation remained more vulnerable to market, logistics, staffing, and management concerns.

The program also produced positive economic and social impact. The most visible economic gains were reduced post-harvest losses or unnecessary costs and easier access to buyers or selling outlets. The most visible social gains were improved access to FCA services, better cooperation, and improved transparency and accountability. However, the program was weaker in developing new technical and managerial skills among members.

The significant positive relationship between project status and impact confirms that stronger implementation, operation, and sustainability conditions are associated with stronger beneficiary benefits. In practical terms, the value of KADIWA grant assistance increases when the FCA has clear project management systems, active member participation, reliable market linkage, adequate monitoring, and a credible sustainability plan.

The main threats to continued project success were weak market demand, inadequate product supply, procurement or delivery delays, weak participation or coordination, working-capital and maintenance concerns, limited technical follow-up, and weather-related disruptions. These concerns show that KADIWA projects should not be treated as complete once funds or assets are released. Post-award support is essential for converting assistance into lasting rural enterprise gains.

6. Recommendations

The Department of Agriculture, LGUs, and participating FCAs should strengthen post-award monitoring through a simple monitoring calendar, periodic validation of project operation, and documented follow-up of implementation issues. Monitoring should focus not only on compliance but also on problem solving. Market linkage support should be intensified. FCAs should conduct buyer mapping, product demand review, production scheduling, product consolidation, and coordination with institutional buyers such as schools, offices, traders, and community outlets. This is necessary to address weak demand and inadequate product supply. Internal FCA policies should be clarified and documented. Policies on project use, pricing, credit sales, collection, inventory, truck scheduling, fuel monitoring, maintenance reserve, income reporting, and responsibility of project personnel should be adopted and explained to members.

Capability-building should be strengthened after grant release. Training should cover store management, truck operation, marketing, bookkeeping, inventory control, pricing, credit collection, reporting, equipment maintenance, and sustainability planning. Skills development should be treated as a continuing component of the program rather than an assumed by-product of assistance.

Member participation should be improved through regular orientation, consultation, open reporting, and assignment of committees or focal persons. Active participation is needed to sustain trust, transparency, accountability, and ownership of the KADIWA project.

Future studies may compare KADIWA projects across provinces or across different types of project components. Longitudinal research may also be conducted to determine whether economic and social benefits are sustained beyond the initial five-year operating expectation.

Acknowledgement

The authors gratefully acknowledge Kalinga State University, the participating Farmers Cooperatives and Associations, and the respondents and key informants who shared their time, experiences, and insights for this study.

References

1. Department of Agriculture, Memorandum Circular No. 22, Series of 2023: Revised Implementing Guidelines of the KADIWA Financial Grant Assistance Program, 2023. https://www.da.gov.ph/wp-content/uploads/2023/06/mc22_s2023.pdf
2. Department of Agriculture Press Office, "DA-AMAS Ties Up with Farmers Cooperatives to Expedite KADIWA ng Pangulo Expansion", Department of Agriculture, October 2024. <https://www.da.gov.ph/da-amas-ties-up-with-farmers-cooperatives-to-expedite-kadiwa-ng-pangulo-expansion/>
3. Office of the President of the Philippines, The President's Report to the People, 2022-2024, Office of the President of the Philippines, 2025. <https://pbbm.com.ph/wp-content/uploads/2025/08/PRP-2022-2024.pdf>
4. Philippine Statistics Authority-Cordillera Administrative Region, "Agricultural Population 18 Years Old and Over: 2022 Census of Agriculture and Fisheries", Philippine Statistics Authority, May 2025. <https://rssocar.psa.gov.ph/content/agricultural-population-18-years-old-and-over-2022-census-agriculture-and-fisheries>
5. Philippine Statistics Authority-Kalinga Provincial Statistical Office, "2022 Census of Agriculture and Fisheries: Agricultural Population with Ownership or Secure Rights Over Agricultural Land", Philippine Statistics Authority, February 2025. <https://rssocar.psa.gov.ph/content/2022-census-agriculture-and-fisheries-agricultural-population-ownershipsecure-rights-over>
6. Philippine Statistics Authority-Cordillera Administrative Region, "Kalinga's Economy Posts a 6.0 Percent Growth in 2023", Philippine Statistics Authority, November 2024. <https://rssocar.psa.gov.ph/statistics/ppa/node/1684058290>
7. Department of Agriculture-Cordillera Administrative Region, "Kalinga Farmers Benefit from PhP 96-M Agricultural Interventions", Department of Agriculture-Cordillera Administrative Region, February 2026. <https://car.da.gov.ph/?p=7503>
8. Ronald M. Briones, "Philippine Agriculture: Current State, Challenges, and Ways Forward", Philippine Institute for Development Studies Policy Notes No. 2021-12, 2021. <https://doi.org/10.62986/pn2021.12>

9. Ronald M. Briones, "Modernizing Agriculture and Fisheries: Overview of Issues, Trends, and Policies", Philippine Institute for Development Studies Discussion Paper No. 2022-05, 2022. <https://doi.org/10.62986/dp2022.05>
10. World Bank, Philippines Agriculture Public Expenditures Review: With a Special Focus on the Implications of the Mandanas Ruling for the Agri-Food System, World Bank, 2023. <https://openknowledge.worldbank.org/entities/publication/218929b1-6c85-4d2a-91a8-a3c527406b89>
11. Mathew Abraham, Laura J. Verteramo Chiu, Esha Joshi, M. A. Ilahi, Prabhu Pingali, "Aggregation Models and Small Farm Commercialization: A Scoping Review of the Global Literature", Food Policy, 2022, 110, Article 102299. <https://doi.org/10.1016/j.foodpol.2022.102299>
12. Kenneth F. S. Adriano, Luis S. Adriano, "Is Agriculture and Fisheries Ascending the Value-Added Ladder? The State of Agricultural Value Chains in the Philippines", Philippine Institute for Development Studies Discussion Paper No. 2022-18, 2022. <https://doi.org/10.62986/dp2022.18>
13. Arlene B. Inocencio, Arvie Baulita, Adoracion D. Inocencio, "To What Extent Has Philippine Agriculture Undergone Integration and Consolidation? State of Agri-Enterprise Development in the Philippines", Philippine Institute for Development Studies Discussion Paper No. 2022-13, 2022. <https://doi.org/10.62986/dp2022.13>
14. Food and Agriculture Organization of the United Nations, The State of Food and Agriculture 2021: Making Agrifood Systems More Resilient to Shocks and Stresses, Food and Agriculture Organization of the United Nations, 2021. <https://doi.org/10.4060/cb4476en>
15. International Fund for Agricultural Development, Rural Development Report 2021: Transforming Food Systems for Rural Prosperity, International Fund for Agricultural Development, 2021. <https://www.ifad.org/en/w/publications/rural-development-report-2021>
16. Cooperative Development Authority, Agri Handbook, Cooperative Development Authority, 2025. <https://cda.gov.ph/updates/agri-handbook/>
17. Michael Christian, Ajuruchukwu Obi, Simbarashe Zantsi, Lelethu Mdoda, Phindile Jiba, "The Role of Cooperatives in Improving Smallholder Participation in Agri-Food Value Chains: A Case Study of One Local Municipality in Eastern Cape, South Africa", Sustainability, 2024, 16 (6), Article 2241. <https://doi.org/10.3390/su16062241>
18. Ming Jiang, Jiali Li, Yutong Mi, "Farmers' Cooperatives and Smallholder Farmers' Access to Credit: Evidence from China", Journal of Asian Economics, 2024, 92, Article 101746. <https://doi.org/10.1016/j.asieco.2024.101746>
19. Xiaoyan Yu, Wenlong Liu, Lihua Qing, Dongmei Zhang, "Improving Farm Cooperatives' Performance and Sustainability: A Study of Agricultural Managers' Competencies Based on the Grounded Theory and the fsQCA Methods", Sustainability, 2023, 15 (2), Article 1263. <https://doi.org/10.3390/su15021263>
20. Organisation for Economic Co-operation and Development, Applying Evaluation Criteria Thoughtfully, OECD Publishing, 2021. <https://doi.org/10.1787/543e84ed-en>
21. Centers for Disease Control and Prevention, "CDC Program Evaluation Framework, 2024", Morbidity and Mortality Weekly Report, 2024, 73 (RR-6), 1-37. <https://www.cdc.gov/mmwr/volumes/73/rr/rr7306a1.htm>
22. John W. Creswell, Vicki L. Plano Clark, Designing and Conducting Mixed Methods Research, 3rd Edition, SAGE Publications, 2021.

23. Commission on Audit, Annual Audit Report on the Department of Agriculture, Commission on Audit, 2022. <https://www.coa.gov.ph/>
24. Alice R. Marsden, Kerstin K. Zander, Jonatan A. Lassa, "Smallholder Farming during COVID-19: A Systematic Review Concerning Impacts, Adaptations, Barriers, Policy, and Planning for Future Pandemics", *Land*, 2023, 12 (2), Article 404. <https://doi.org/10.3390/land12020404>
25. United Nations Department of Economic and Social Affairs, The Sustainable Development Goals Report 2024, United Nations, 2024. <https://doi.org/10.18356/9789213589755>
26. Mark Campo Jr., Val S. Montano, "Agricultural Cooperatives' Impact on Its Members' Socio-Economic Status: The Case of the Binhian ng Timog Kutabato Multi-Purpose Agricultural Cooperative", *Journal of Economy and Enterprise Studies*, 2024, 1 (1), 26-37. <https://www.ieesjournals.com/index.php/jees/article/view/56>