ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 11 (November 2026)

Practices and Challenges of Medium-Sized Agricultural Cooperatives in the Province of Albay

Harley Kevin P. Embido
Bicol University College of Business Economics and Management
eharleykevin@gmail.com

Date Submitted:
September 12, 2026

Date Accepted:
October 22, 2026

Date Published:
November 05, 2026

DOI:
10.5281/zenodo.23984255

ABSTRACT

This study assessed the characteristics, organizational and managerial status, financial conditions, credit operations, best practices, and challenges of three medium-sized agricultural cooperatives in the Province of Albay, Philippines, and developed a corresponding action plan. A descriptive, multi-method approach combined cooperative document analysis, a researcher-developed survey questionnaire, interviews with key cooperative officers, client-based validation, descriptive means, and thematic analysis. The three cooperatives varied in longevity, membership, lending services, and products. Their organizational and management evaluations were very good for Cooperative A (mean rating = 1.0) and good for Cooperatives B (1.9) and C (2.1). Audited statements reported average total assets of PHP 26,497,834.24 and average members' equity of PHP 16,933,565.26, while the average loan portfolio reached PHP 8,884,287.76. Qualitative findings highlighted work commitment, compensation and benefits, policy development, monitoring, financial reporting, and lending procedures as practices, alongside employee competency, delayed records, loan delinquency, and dishonesty as challenges. An action plan was proposed covering cooperative training, digital tools, credit monitoring, financial management, member participation, and institutional linkages. The study indicates that, although the selected cooperatives maintained generally sound organizational performance, continued improvement in governance, financial recording, and credit administration was necessary. The action plan was proposed, not evaluated for effectiveness.

Keywords: *agricultural cooperatives, cooperative governance, financial performance, credit operations, cooperative sustainability, Albay*

INTRODUCTION

Agricultural cooperatives organize individual producers around shared economic and social objectives, helping members access finance, markets, information, and services that are difficult to obtain independently. Under Philippine cooperative governance, these organizations are recognized as member-owned and democratically controlled enterprises that support inclusive local development (Cooperative Development Authority [CDA], 2024; International Cooperative Alliance [ICA], 2024). Their institutional relevance extends beyond financial transactions: cooperative participation can strengthen the ability of agricultural households to pool resources, coordinate supply, and share operational risks (Oakeshott, 2016; Mhembwe & Dube, 2017).

In the Philippine setting, the CDA classifies cooperatives by asset size; the medium-size classification considered in the thesis covered assets above PHP 15 million up to PHP 100 million (National Tax Research Center, 2021). Agricultural cooperatives must balance democratic member governance with financial sustainability, effective credit operations, and regulatory accountability. Previous Philippine studies have

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 11 (November 2026)

associated cooperative performance with management practices, financial controls, member participation, and institutional relationships (Daan, 2014; Geroso & Maguate, 2023; Launio & Sotelo, 2021).

Albay provides an important context for investigating these concerns because livelihoods depend on agricultural commodities while producers face market constraints and environmental risks. National evidence has identified structural challenges in access to agricultural services, infrastructure, and financing (World Bank, 2023). Cooperative-level research has also highlighted organizational capacity, credit recovery, and business continuity as recurring concerns (Lapuz et al., 2022; Dimas et al., 2022). However, these accounts do not establish the specific institutional conditions of the medium-sized agricultural cooperatives registered in Albay.

The study therefore examined the characteristics of three medium-sized agricultural cooperatives, assessed their organization and management, financial conditions, and credit operations, documented their best practices and challenges, and developed a locally responsive action plan. The research contributes detailed, cooperative-level financial and operational evidence to guide managers, members, local partners, and agencies supporting agricultural cooperative development.

Literature Review

Cooperative Characteristics, Membership, and Governance

The defining feature of a cooperative is the shared ownership and governance of an enterprise established to meet members' needs (ICA, 2024). Membership composition, organizational committees, access to services, and duration of operation are therefore more than descriptive variables: they influence opportunities for participation and organizational continuity. Pönkä (2019) argued that cooperative membership should be understood in relation to the enterprise's distinctive legal and democratic identity, while Nwankwo et al. (2012) identified financing and member education as important conditions for cooperative support to small enterprises.

Philippine studies have associated cooperative stability with accountable governance, board attention to members, and professional administrative practice. Daan (2014) examined financial-management determinants of sustainability, and Del Rosario et al. (2023) documented planning and personnel-management practices within selected credit cooperatives. Similarly, Sarsale and Kilongkilong (2020) emphasized strategy, culture, and structure in cooperative management. These findings support the present study's examination of committee functions, staffing, member participation, and compliance as linked aspects of institutional performance.

Financial Conditions and Resource Sustainability

Capital formation, adequate liquidity, appropriate asset allocation, and disciplined financial controls are necessary to sustain cooperatives' services. Geroso and Maguate (2023) examined interrelationships among organizational, social, economic, and financial performance, while Gatawa (2024) focused on working-capital management in Philippine cooperatives. The literature demonstrates that reported assets and surpluses must be considered alongside liabilities, operating expenses, and the capacity to translate financial resources into member services.

Financial vulnerability also arises when cooperatives rely on insufficient internal capital or lack effective planning and reporting. Dimas et al. (2022) identified institutional constraints affecting the financial performance of rice cooperatives, and Mhembwe and Dube (2017) described financial and managerial challenges in rural cooperative livelihoods. Localized analyses therefore benefit from audited statements together with information about operational practices, rather than reliance on a single financial indicator.

Credit Operations and Member Services

Credit facilities are among the principal ways cooperatives translate pooled resources into agricultural livelihood support. Oluyombo (2013) examined cooperative finance and household income, while Zheng et al. (2023) showed how the terms of digital credit and farmers' motivations were associated with different patterns of

cooperative performance. In Albay, Lorenzana (2022) investigated borrowed capital among rice farmers, underscoring the importance of identifying credit terms and loan uses within the province.

Nevertheless, loan services introduce repayment and governance risks. Takele and Mengesha (2018) documented challenges among rural savings and credit cooperatives, including participation and institutional constraints. Fulong and Ramos (2024) emphasized delayed or unpaid member obligations, while Dimas et al. (2022) considered arrangements that may improve financial performance. These accounts explain why loan portfolios, outstanding balances, repayment arrangements, and internal monitoring are necessary indicators in a comprehensive cooperative assessment.

Management Practices, Challenges, and Intervention Planning

Evidence on cooperative practices connects planning, member communication, transparent processes, and monitoring with operational resilience. Jumawan (2022a) discussed management practices as a pathway toward organizational sustainability, while Kyazze et al. (2020) identified associations between cooperative ownership, accountability, communication, and nonfinancial performance. The experience of cooperatives during COVID-19 also illustrated the importance of continuity measures and adaptive service arrangements (Lapuz et al., 2022).

Other studies described insufficient funds, limited management capacity, low member participation, weak linkages, and market pressures as constraints on cooperative growth (Katwesigye et al., 2022; Jumawan, 2022b; Zakaria et al., 2022). Gabriel et al. (2021) further examined the role of local government relationships in supporting cooperative participation and development. Together, these findings motivate a tailored action plan grounded in the conditions of the specific cooperatives, rather than a uniform intervention for all institutions.

Theoretical and Conceptual Synthesis

The thesis drew on Olson's Collective Action Theory (Olson, 1965) and Bourdieu's Social Capital Theory (Bourdieu, 1986). Collective action frames how members coordinate resources and respond to free-riding and participation incentives, while social capital emphasizes the relational resources produced through trust and durable associations. The framework is consistent with cooperative governance research that positions relationships and shared accountability alongside material incentives (Pönkä, 2019; Kyazze et al., 2020).

As shown in Figure 1, the original conceptual paradigm connects cooperative characteristics to current organizational, financial, and credit status; from this assessment, best practices and challenges inform the proposed action plan. The diagram is presented as the source thesis's organizing framework, not as evidence that the resulting plan had already been implemented or tested.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 11 (November 2026)

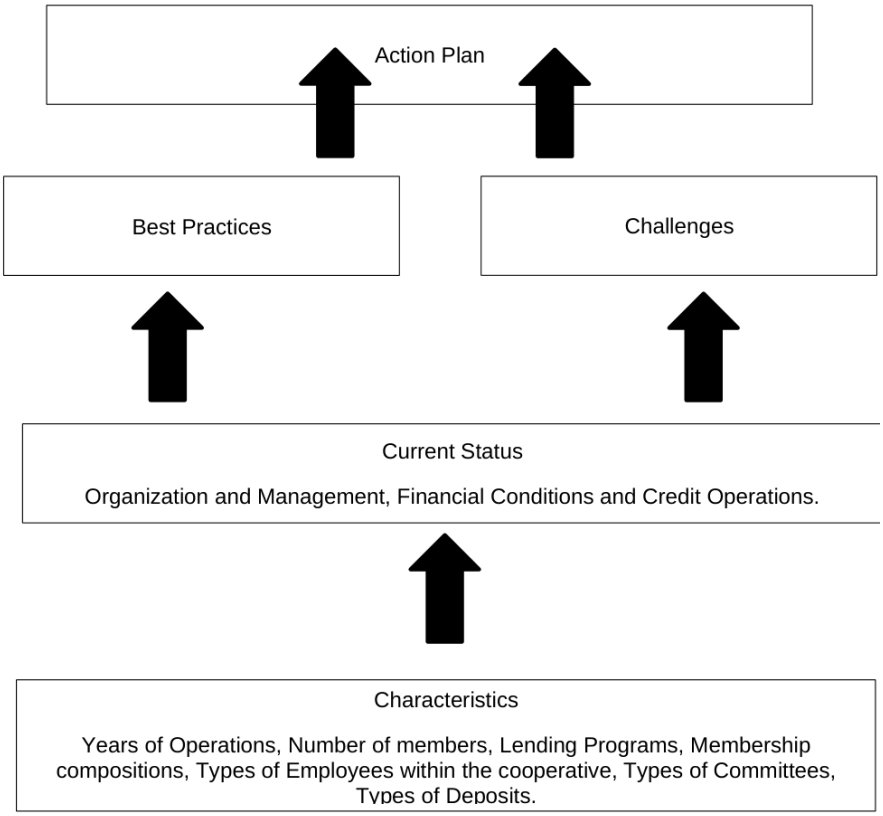


Figure 1. *Conceptual Paradigm*

METHODS

Research Design

The study employed a descriptive, multi-method approach. Document analysis and a researcher-developed questionnaire described cooperative characteristics and assessed organizational and management status, financial conditions, and credit operations. Interviews elicited accounts of operational practices and challenges; descriptive ratings and thematic analysis were used to synthesize the quantitative and qualitative information (Kelkar, 2024; Caulfield, 2023).

Research Locale

The research was conducted among registered medium-sized agricultural cooperatives in the Province of Albay, Philippines. The source thesis focused on the three agricultural cooperatives meeting its inclusion scope among the 14 medium-sized cooperatives identified in the province. The institutions are identified as Cooperatives A, B, and C in the results.

Participants and Sampling Technique

The study included three medium-sized agricultural cooperatives. Key informants were cooperative secretaries, general managers, board chairpersons, and related committee officers who held direct knowledge of governance, credit administration, and operational records. The thesis described four secretaries, four general managers, and four chairpersons or committee representatives as participants; because those role counts exceed the three cooperative cases, the numbers are reproduced as reported rather than assumed to represent unique

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 11 (November 2026)

individuals per institution. For cross-validation, the researcher obtained feedback from 10 clients per cooperative (30 client responses overall). The cooperative cases and officials were selected for their direct relevance and access to institutional information.

Research Instrument

A researcher-developed survey questionnaire and interview guide served as the primary instruments. The survey covered cooperative profiles (operations, membership, programs, staffing, committees, deposits, branches, and commodities) and their current status in governance, financial conditions, and credit operations. The interview guide explored management practices and challenges. Cooperative reports, financial statements, and credit records provided secondary documentary evidence. The thesis did not report a numerical content-validity or reliability coefficient, and none is assigned in this article.

Data Gathering Procedure

The researcher requested authorization from cooperative chairpersons and administered questionnaires to the selected officers after approval. Participants attended an orientation on the study, and permission was sought for photographs and audio recording. Interviews were documented, transcribed, coded, and categorized. Relevant cooperative reports and audited financial documents were obtained for the quantitative description and comparisons across the three cases. Client feedback was used to cross-check selected assessments.

Data Analysis

Cooperative records were summarized using descriptive statistics, including means and the source thesis's five-level management-performance rating. The rating ranged from 1 (very good; underlying performance range 96–100) to 5 (very poor; below 70), with 2 classified as good (90–95), 3 as fair (80–89), and 4 as poor (70–79). Interview transcripts were read repeatedly, open coded, grouped into related meaning units, and refined into themes across practices and challenges (Caulfield, 2023). The study did not report an inferential test or a causal model.

Ethical Consideration

The documented procedures included written permission requests to cooperative chairpersons, an orientation for interviewees, and requests for permission to record interviews and take photographs. Institutional cases are presented under the identifiers A, B, and C. The source thesis did not specify formal ethics-review approval, retention periods, or a detailed data-protection protocol; these details have therefore not been asserted.

RESULTS AND DISCUSSION

Characteristics of the Selected Agricultural Cooperatives

The three cooperatives differed markedly in institutional history, membership size, services, and commodities. Cooperative B had been operating for 55 years and had 650 regular members, Cooperative A had 26 years of operations and 71 members, and Cooperative C had 10 years of operations and 238 members. Cooperative A focused on palay and palay seeds and reported no formal lending program; B offered credit/lending services, whereas C used an Agricultural Lending Program and Farm Assistance (ALPFA). None reported a branch or satellite office. This diversity supported the need to interpret each cooperative's financial and managerial conditions in relation to its service portfolio.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 11 (November 2026)

Table 1. *Selected Cooperative Characteristics*

Profile	Cooperative A	Cooperative B	Cooperative C
Year established / years operated	1999 / 26	1970 / 55	2015 / 10
Regular members	71	650	238
Lending program	None	Credit/lending services	ALPFA
Main commodities	Palay / palay seeds	Crops and animals	Sweet potato and swine
Savings / time deposits	Savings, checking	Savings, time deposits	Savings, time deposits
Branches / satellites	0 / 0	0 / 0	0 / 0

The membership and service differences are consistent with the view that cooperative identity is mediated through the characteristics and needs of members (Pönkä, 2019). Cooperatives B and C combined financial and agricultural services; Cooperative A concentrated more directly on trading and agricultural support. Such variation also helps explain differences in credit activity and resource requirements.

Organization and Management Status

Across the organizational indicators in the original thesis, Cooperative A recorded an average rating of 1.0 (very good), while Cooperative B recorded 1.9 (good) and Cooperative C recorded 2.1 (good). Stronger indicators included federation alliances and reports, but weaknesses appeared in areas such as inter-cooperative collaboration, qualified management, capital accumulation, and savings mobilization, with the pattern varying by case. These results indicate generally sound management with specific areas that warrant targeted support.

Table 2. *Organization and Management Assessment*

Cooperative	Mean rating	Interpretation	Selected improvement concern
A	1.0	Very good	Sustain compliance and member services
B	1.9	Good	Business alliance with other cooperatives; qualified management
C	2.1	Good	Capital build-up, savings mobilization, qualified management

Note. Lower numerical ratings indicate better performance.

These organizational findings parallel the emphasis on accountable management, planning, and member participation in the cooperative literature (Daan, 2014; Sarsale & Kilongkilong, 2020). The findings should not be generalized beyond the three participating cases.

Financial Condition and Operational Income

Audited financial records reported total assets of PHP 30,035,076.00 for Cooperative A, PHP 24,621,787.00 for B, and PHP 24,836,639.72 for C. The corresponding members' equity was PHP 22,237,666.00, PHP 13,794,805.00, and PHP 14,768,224.78, respectively. The thesis gave an average total asset figure of PHP 26,497,834.24 and mean members' equity of PHP 16,933,565.26. Cooperative B had a particularly high concentration of current assets, whereas A and C maintained substantial noncurrent assets.

Table 3. *Reported Statement of Financial Condition (PHP)*

Item	Coop. A	Coop. B	Coop. C
Current assets	10,577,452.00	24,273,284.00	6,545,171.14
Noncurrent assets	19,457,624.00	348,503.00	18,291,468.58
Total assets	30,035,076.00	24,621,787.00	24,836,639.72
Total liabilities	7,797,410.00	10,826,982.00	10,068,414.94
Members' equity	22,237,666.00	13,794,805.00	14,768,224.78

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 11 (November 2026)

Reported operational revenue also varied. Cooperative A recorded the largest revenue and net surplus, followed by Cooperative B and Cooperative C. These differences suggest that size of assets alone does not capture the full pattern of operational income or cooperative services. In evaluating the three cases, financial performance therefore needs to be read with management practices, financing structure, and capacity to maintain member-oriented activities (Gatawa, 2024; Geroso & Maguate, 2023).

Table 4. *Reported Operational Income (PHP)*

Indicator	Coop. A	Coop. B	Coop. C
Operating revenue	6,824,057.00	3,071,747.00	848,539.08
Operating expenses	3,082,208.00	2,244,133.00	473,373.06
Net surplus (as reported)	3,741,849.00	827,614.00	105,166.02

Credit Operations and Agricultural Lending

The original records reported a mean loan portfolio of PHP 8,884,287.76 across the three cooperatives, with the largest portfolio at Cooperative B (PHP 19,454,129.00). The average approved-loan amount was PHP 8,132,611.42, and the average outstanding-loan amount was PHP 7,925,476.16. Cooperative C had substantial lending tied to agricultural production, whereas Cooperative A reported no formal agricultural lending program despite a recorded amount in the overall loan-portfolio table.

Table 5. *Reported Lending Indicators (PHP)*

Indicator	Coop. A	Coop. B	Coop. C
Loan portfolio	1,518,875.00	19,454,129.00	5,679,859.27
Approved loans	1,518,875.00	17,199,100.00	5,679,859.27
Outstanding loans	897,469.20	17,199,100.00	5,679,859.27
Agricultural production	0	1,909,000.00	5,679,859.27

For agricultural and fishery-specific loans, Cooperative B offered crop and animal production financing of up to PHP 100,000 at 1.5% monthly interest over three months. Cooperative C reported financing for hog fattening and breeding, with different loan periods and interest conditions; it also listed service, insurance, and notarial charges. Cooperative B deducted interest in advance, whereas C did not. These differences illustrate the importance of disclosing loan terms clearly and maintaining suitable loan-monitoring policies (Takele & Mengesha, 2018; Zheng et al., 2023; Fulong & Ramos, 2024).

Best Practices in Cooperative Management and Finance

Thematic analysis identified five areas of organization and management practices: commitment to work, monetary compensation, employee or member benefits, strengthening policies, and contributory factors in program success. Financial practices grouped around use of tools for financial statements, frequency of financial-statement preparation, and audit frequency. Cooperatives varied between manual and software-assisted financial records, with regular reports and internal controls identified as important procedures. The findings reflected the managerial functions emphasized in previous cooperative research (Del Rosario et al., 2023; Jumawan, 2022a).

Credit-related practices included role allocation, checking and validation of borrower information, security measures, membership duration, evaluator qualifications, loan types, and successful lending programs. For example, the thesis recorded the use of reminders and demand letters to monitor borrowing. These findings show how procedural controls and continuing member engagement operate together in cooperative credit management (Kyazze et al., 2020; Dimas et al., 2022).

Challenges Affecting Governance, Financial Reporting, and Credit

The management challenges involved employee competency and professional development, including health-related staff limitations and job mismatch. The main recorded financial-condition challenge was delayed

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 11 (November 2026)

transaction recording, which hindered timely financial reporting. Credit-operation challenges concerned inability to repay loans, delinquency, and dishonesty toward the cooperative. These are distinct risks and should not be treated as a single undifferentiated problem.

Table 6. *Thematic Synthesis of Practices and Challenges*

Domain	Reported practices	Identified challenges
Organization and management	Work commitment; honoraria and benefits; policy reinforcement; program monitoring	Employee competency; professional development; job mismatch
Financial conditions	Financial software/manual records; periodic statements; audits	Delayed recording and transmission of financial data
Credit operations	Defined roles; borrower checks; security; loan evaluation; lending programs	Loan delinquency; inability to pay; dishonesty

These constraints echo cooperative-sector evidence on insufficient managerial capacity, imperfect systems, and loan repayment difficulties (Katwesigye et al., 2022; Zakaria et al., 2022; Jumawan, 2022b). At the same time, the thesis contains evidence of strengths such as active boards, member services, and monitoring; recommendations should therefore preserve existing effective practices while addressing the weaknesses documented in each institution.

Proposed Action Plan for Improvement

The thesis developed an action plan to improve governance, information dissemination, member participation, service access, financial systems, and loan administration. The proposals included pre-membership seminars, digital promotion, information campaigns through cooperative Facebook pages, ongoing use of accounting software, loan monitoring policies, member capitalization and savings seminars, agency partnerships, benchmarking, staff development, leadership training, and budget-management workshops. The plan responds to the observed needs rather than representing an intervention whose outcomes have already been evaluated (Gabriel et al., 2021).

Table 7. *Condensed Proposed Action Plan Derived from The Thesis*

Priority	Proposed activities	Responsible units / intended result
Member participation	Pre-membership and monthly ownership seminars; member service information campaigns	BOD, management, education committee / participation and capital build-up
Digital service delivery	Cooperative social media; maintain eKoop, POS, and accounting applications	Management and staff / accessible services and accurate records
Credit management	Board policy for farmer loans; standard loan monitoring and review; credit consultants	Credit committee, BOD / stronger collection and transparent loan decisions
Institutional capacity	Leadership and budget workshops; benchmarking with medium-sized cooperatives	BOD and staff / governance and management competence
Resources and networks	Sourcing from agencies, federations, and financial institutions; consider new satellites	BOD and management / partnerships and expanded member reach
People and inclusion	Sustain staff compensation; budget for gender and development activities	BOD and management / employee welfare and inclusive programs

CONCLUSION

The three medium-sized agricultural cooperatives in Albay demonstrated different levels of institutional maturity and service diversification but generally attained good to very good organization and management ratings. Their audited financial statements indicated meaningful asset and equity bases, although access to capital,

asset allocation, and operational differences continued to shape financial opportunities. Credit programs supported member needs but faced risks related to delinquency, repayment capacity, and institutional controls. The qualitative evidence identified effective practices in governance, reporting, staff support, and lending procedures alongside difficulties in employee development and timely financial documentation. These findings support a case-specific, integrated approach to cooperative improvement that strengthens accountability, member services, and organizational resilience without assuming that the proposed action plan has already been validated.

Recommendation

Cooperative boards and managers should institutionalize periodic assessment of member needs, strengthen internal controls, document loan decisions, and adopt timely financial reporting and credit-monitoring procedures. Targeted staff training and professional development should address job-role competence and support succession planning, while regular ownership seminars may reinforce member participation and capital accumulation. Cooperatives should review the feasibility of digital accounting and member-service tools, expand appropriate partnerships with federations and financial institutions, and consider benchmarking activities suited to their resources. The CDA, local government units, and related agricultural agencies may use the identified needs to prioritize technical assistance and cooperative capacity-building. Future researchers should validate the proposed action plan through implementation studies, expand the number of cooperative cases, and check the financial figures against their underlying audited schedules.

References

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), Handbook of theory and research for the sociology of education (pp. 241–258). Greenwood.

Caulfield, J. (2023, June 22). How to do thematic analysis: Step-by-step guide and examples. Scribbr. https://www.scribbr.com/methodology/thematic-analysis/

Cooperative Development Authority. (2024). What is a cooperative? https://cda.gov.ph/frequently-asked-questions/

Daan, A. A. (2014). Determinants of financial management and sustainability among consumer cooperatives. Liceo Journal of Higher Education Research, 10(1), 161+. https://link.gale.com/apps/doc/A512868759/AONE

Del Rosario, C. L. E., Mendrez, J. G. D., & Abug, N. B. (2023). Understanding management practices of selected credit cooperatives in Cavite: A microanalysis study. International Journal of Multidisciplinary Applied Business and Education Research, 4(4), 1154–1164. https://doi.org/10.11594/ijmaber.04.04.13

Dimas, B., Lyne, M., & Bailey, A. (2022). Identifying and addressing institutional problems constraining the financial performance of rice cooperatives in the Philippines. Asian Journal of Agriculture and Rural Development, 12(3), 148–156. https://doi.org/10.55493/5005.v12i3.4527

Fulong, L., & Ramos, B. (2024). Socioeconomic impact of a credit and development cooperative on the life of members in the province of Isabela. Science Journal of Business and Management, 12, 18–26. https://doi.org/10.11648/j.sjbm.20241201.13

Gabriel, A., Sarmiento, R., & Viernes, M. (2021). Registered cooperatives and local government units in the province of Nueva Ecija, Philippines: Status, participation, and the way forward. Research Square. https://doi.org/10.21203/rs.3.rs-531925/v1

Gatawa, G. (2024). The implementation of working capital management in cooperatives: A case study of cooperatives in the municipality of La Trinidad, Benguet, Philippines. Sage Advance. https://advance.sagepub.com/users/718738/articles/704963

Geroso, P. J. M., & Maguate, G. (2023). Organizational, social, economic, and financial management performance of cooperatives. International Journal of Scientific Research and Management, 11(10), 5263–5282. https://doi.org/10.18535/ijsrm/v11i10.em08

International Cooperative Alliance. (2024). What is a cooperative? https://ica.coop/en/cooperatives/what-is-a-cooperative

Jumawan, A. (2022a). Management practices of cooperatives: Roadmap towards improved performance and sustainability. International Journal of Multidisciplinary Applied Business and Education Research. https://ijmaberjournal.org/index.php/ijmaber/article/download/514/271/

Jumawan, A. R. (2022b). Issues and challenges among cooperatives in Zamboanga del Norte in pursuit of survival and sustainability during the COVID-19 pandemic. International Journal of Scientific Research and Management. https://ijsrm.net/index.php/ijsrm/article/download/4309/2785/12925

Katwesigye, L., Edward, S., & Kalibwani, R. (2022). Challenges and opportunities of agricultural cooperatives in coffee production and marketing in Bushenyi and Sheema districts in Uganda. International Journal of Agriculture, Environment and Bioresearch, 7(6), 165–177. https://doi.org/10.35410/ijaeb.2022.5782

Kelkar, G. (2024, February 26). What is descriptive design and why is it important? Emeritus. https://emeritus.org/blog/product-design-and-innovation-what-is-descriptive-design/

Kyazze, L. M., Nsereko, I., & Nkote, I. (2020). Cooperative practices and non-financial performance of savings and credit cooperative societies. International Journal of Ethics and Systems, 36(3), 411–425. https://doi.org/10.1108/IJOES-06-2020-0087

Lapuz, C., Policarpi, J. E., Manzon, R. D., & Santos, M. (2022). Evaluation of agricultural cooperatives in Cabanatuan City, Nueva Ecija, Philippines, during the COVID-19 pandemic. International Journal of Progressive Research in Science and Engineering, 3(5), 147–152. https://journal.ijprse.com/index.php/ijprse/article/view/580

Launio, C., & Sotelo, M. C. (2021). "Concern for community": Case of cooperatives in the Cordillera region, Philippines. Journal of Co-operative Organization and Management, 9(1), 100130. https://doi.org/10.1016/j.jcom.2021.100130

Lorenzana, E. A. (2022). Borrowed capital and factors affecting its utilization among rice farmers in the Province of Albay, Philippines. Journal of Public Affairs and Development, 9(1), Article 7. https://www.ukdr.uplb.edu.ph/jpad/vol9/iss1/7

Mhembwe, S., & Dube, E. (2017). The role of cooperatives in sustaining the livelihoods of rural communities: The case of rural cooperatives in Shurugwi District, Zimbabwe. Jàmbá, 9(1). https://doi.org/10.4102/jamba.v9i1.341

National Tax Research Center. (2021). Profile and taxation of cooperatives in the Philippines and in the ASEAN region. https://www.ntrc.gov.ph/images/journal/2021/j20210910a.pdf

Nwankwo, F., Ewuim, N., & Asoya, N. (2012). Role of cooperatives in small and medium scale enterprises (SMEs) development in Nigeria: Challenges and the way forward. African Research Review, 6(4). https://doi.org/10.4314/afrrev.v6i4.10

Oakeshott, J. A. (2016). Sustainable smallholder farming clusters in the Philippines. Acta Horticulturae, 1128, 109–115. https://doi.org/10.17660/ActaHortic.2016.1128.52

Olson, M. (1965). The logic of collective action: Public goods and the theory of groups. Harvard University Press.

Oluyombo, O. O. (2013). Impact of cooperative finance on household income generation. https://www.dlsu.edu.ph/wp-content/uploads/2019/10/5oluyombo-051413.pdf

Pönkä, V. (2019). The legal nature of cooperative membership. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3349047

Sarsale, M., & Kilongkilong, D. A. (2020). Management practices of multipurpose cooperatives operating in a Philippine province. Asia Pacific Journal of Multidisciplinary Research. http://www.apjmr.com/wp-content/uploads/2020/02/APJMR-2020.8.1.03.pdf

Takele, E. A., & Mengesha, A. H. (2018). Challenges and prospects of rural saving and credit cooperatives in Sekota Woreda, Amhara, Ethiopia, 7(1), 14–21. https://doi.org/10.11634/216826311706923

World Bank. (2023). Philippines—Agriculture public expenditures review: With a special focus on the implications of the Mandanas ruling for the agri-food system. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099170002212314528/p16652105c152a0fd0a82c0eeaf0b185134

Zakaria, M., Noraswaniaty, N., Ahmad, W., Tumiran, S. D., Hasan, S. J., & Arifin, M. A. (2022). Challenges faced by Malaysian consumer cooperatives in pursuit of survival and sustainability during the COVID-19 pandemic. International Journal of Academic Research in Business and Social Sciences, 12(4). https://doi.org/10.6007/ijarbss/v12-i4/12316

Zheng, Y., Lou, J., Mei, L., & Lin, Y. (2023). Research on digital credit behavior of farmers' cooperatives—A grounded theory analysis based on the "6C" family model. Agriculture, 13(8), 1597. https://doi.org/10.3390/agriculture13081597