

**ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) PRACTICES AND FINANCIAL PERFORMANCE OF COOPERATIVES: NEXUS FOR A UNIFIED SUSTAINABILITY FRAMEWORK**

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**ABSTRACT**

This quantitative study determined the cooperatives' level of practice of Environment, Social, and Governance (ESG) standards and their financial performance using PISO and STEPS frameworks while investigating the relationship of these practices with profile and financial performance. This study involved large multi-purpose cooperatives in Nueva Vizcaya where majority are in operation for 21 years and with members of 5,000 above. Data gathered were treated using frequency, percentage, mean, standard deviation, while Pearson r and Spearman rho were utilized to determine relationships. Results revealed that even though cooperatives are aware of ESG principles, implementation remains at moderate. Further, while the cooperatives are making commendable progress in governance, there is a clear need to strengthen the environmental and social dimensions of ESG to achieve balanced and impactful sustainability outcomes. Most cooperatives face challenges in their financial performance using both PISO (pre-pandemic) and STEPS (post-pandemic) criteria, which is due to unstable economic condition during the pandemic and the CDA's changing thresholds in the financial evaluation criteria after the pandemic, making it a challenging time for cooperatives. In addition, older and larger cooperatives in membership size have had more opportunities to integrate ESG standards into their governance structures and community engagement strategies, while those that actively implement ESG principles tend to perform better financially. With the above, the cooperatives may adopt and implement a sustainability framework that incorporates ESG standards anchored on the sustainable development goals, while efficiently complying to the financial indicators mandated by CDA.

**Keywords:** *CDA, financial efficiency, performance audit, sustainable development goals, sustainable operations*

**INTRODUCTION**

To find value in the industry, sustainability is the mark to hit. In line with this, almost all industries in the current times work for upholding market value leading to competitive advantage which can only be achieved through quality practices which include but not limited to quality management and sustainability of operations. These key processes permit for a highly sought organization that is true to its vision, mission, and objectives through ingenious implementation of process and operational activities.

Working comprehensively for quality and sustainability, organizations of all types design initiatives complying with management systems accreditations and compliances to certain standards to evaluate operational sustainability.

DomiEarth (2024) emphasized that companies focused on sustainable development can solve global challenges, such as those outlined in the United Nations' (2015) Sustainable Development Goals (SDGs), by leveraging product and service innovation. This shift has led to the development and implementation of various frameworks, culminating in the Environmental, Social, and Governance (ESG) Framework. The SDGs and Environmental, Social, and Governance (ESG) factors are two of the most important concepts in the modern world which are closely related. The SDGs are a set of 17 goals adopted by the United Nations in 2015 to end poverty, protect the planet, and ensure prosperity for all while ESG factors are a set of criteria used to measure the sustainability and responsible business practices of companies.

Developed for organizations, the ESG framework is proven to record impact on the corporate value and environmental performance (Hoepner et.al, 2020; Martin & Moser, 2016), social responsibility performance (Albuquerque et al., 2018) and corporate governance performance (Drakos & Bwkdiris, 2010). The framework is a set of organizational practices that consider environmental, social and governance factors, holistically implemented and observed to achieve long-term sustainability (Sultana et al., 2018), economic transparency, ethical precepts, ensuring competitiveness and the perdurability of a company (Onciouiu et al., 2020) which includes environmental, social and governance.

The *environmental dimension* involves assessing the corporation's carbon footprint, natural resource usage (energy consumption and efficiency), recycling policies, waste management, and efforts to minimize environmental impacts (Rajesh, 2020). The *social dimension* encompasses the company's relationships with employees, suppliers, partners, clients, and communities promoting diversity, non-discrimination, gender pay equality, equal opportunities, employee education, and community protection (Li & Wu, 2020). Lastly, the *governance dimension* focuses on leadership, internal controls, executive compensation, audits, shareholder rights, anti-corruption policies, and transparency and accountability practices (Cek & Eyupoglu, 2020).

As an organization bound by organizational sustainability and operational efficiency, cooperatives foster a long-term vision for sustainable economic growth, social development and environmental responsibility through self-help and empowerment, reinvestment in their communities and concern for the well-being of people and the world. As reported by ICA (2018), cooperatives stabilize regional economic cycles and create jobs. As a result, they are considered an essential tool for advancing both local and global economies and societies through their unique purpose and potential (Pagaddut, 2023).

In the Philippines, as of 2020, there are 18, 848 cooperatives employing almost 600,000 individuals bringing over 11.5 million members, providing 364, 700 and owning up to 511, 800,000,000 worth of assets (Cooperative Development Authority, 2021), of which, 1,426 cooperatives are registered in Region II. Locally, in the record of the CDA (2024), Nueva Vizcaya has 102 compliant cooperatives as of 2024 in which these organizations significantly contribute to social integration, job growth, and poverty reduction due to their political structure and economic orientation.

ESG regulations are becoming more stringent globally and by proactively embracing ESG principles, cooperatives can ensure compliance with existing and future

regulations, avoiding legal and financial penalties, advocating environmental and social responsibility to enhance employee satisfaction and engagement leading to higher morale and productivity. In view of the foregoing, the CDA (2020) encourages cooperatives to adopt a sustainable model reporting by which they could revisit processes and systems for resiliency and sustainability to serve the members and their communities.

After review of previous studies and literature, only a few research was found on the implementation and adherence of cooperatives with the ESG Standards aligned with the global and local frameworks in the evaluation of their operational performance and sustainability reporting. Hence, this study seeks to fill the knowledge gap.

For cooperatives to achieve sustainable operations, it is essential that they evaluate their processes to ensure compliance with legal and regulatory standards. This alignment with Environmental, Social, and Governance (ESG) factors will help them become both locally and globally competitive and sustainable.

This study aimed to determine the level of practice of the multi-purpose cooperatives in Nueva Vizcaya on the ESG standards which was further confirmed by looking into the different practices experienced and observed by the cooperatives along each indicator. Moreover, it will also look into the financial performance of the cooperatives and the relationship to the membership size and the years of operation. The results of the study shall become the basis for crafting a unified ESG framework that are applicable to all types of cooperatives in their preparation of sustainability reporting.

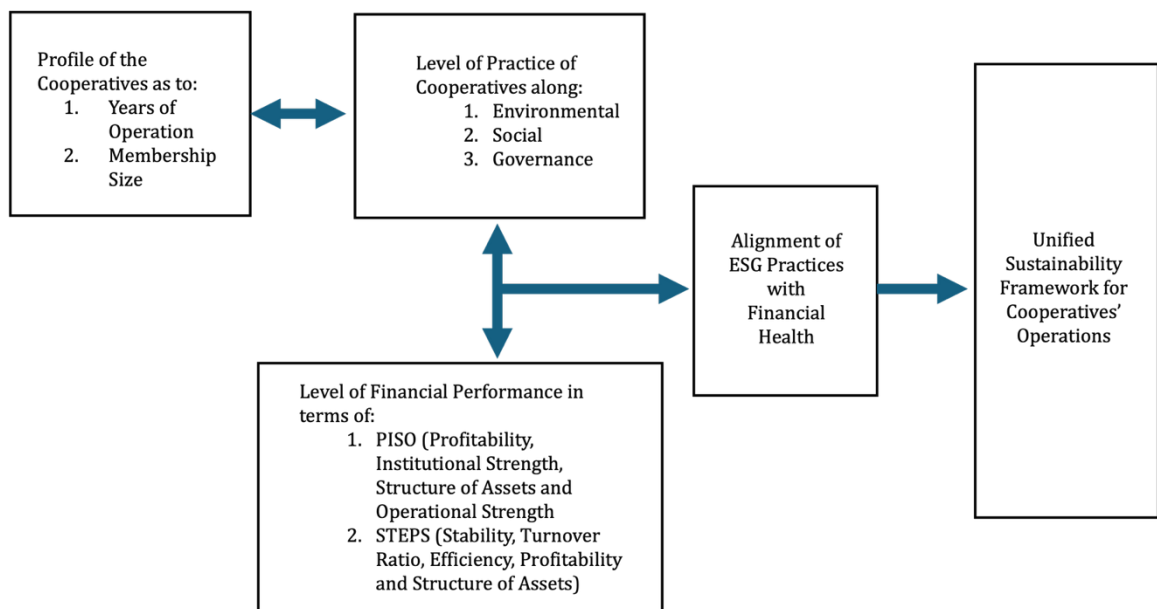


Figure 1. *Research paradigm*

## **METHODS**

The study employed a mixed-method design, combining quantitative (descriptive and descriptive-correlational) and qualitative approaches. The quantitative design described cooperatives' level of practice of environmental, social, and governance (ESG) standards and their financial performance using PISO and STEPS criteria, while

correlational analysis determined relationships between ESG practices, profile variables, and financial performance. Qualitative data, gathered through written interviews and document scanning, validated and enriched the quantitative findings.

The research was conducted in Nueva Vizcaya, Philippines, focusing on 13 registered large multi-purpose cooperatives operating for at least five years. These cooperatives were chosen as they are considered more sustainable, combining various business activities while adhering to legal standards. The respondents were 133 employees from the 13 cooperatives, occupying both management and staff positions. Inclusion criteria required at least three years of service to ensure familiarity with organizational culture and practices. A purposive sampling technique was applied, targeting only employees of large multi-purpose cooperatives who met the inclusion criteria.

Quantitative data were processed using frequency counts, percentages, mean, and standard deviation to describe ESG practices. Spearman rho tested the relationship between ESG practices and profile variables, while Pearson r assessed the relationship between ESG practices and financial performance. Qualitative data from interviews and document scanning were subjected to thematic analysis for triangulation.

The study was reviewed by the Saint Mary's University Research Ethics Board. Ethical safeguards included: no conflict of interest declared, respondents' identities kept anonymous, with secured storage of data; voluntary participation, with respondents free to withdraw anytime; no vulnerable participants were involved; no anticipated harm; benefits include contributions to cooperative sustainability. Results of the study were shared via flyers to cooperatives, academic journals, and research presentations.

## **RESULTS AND DISCUSSION**

### **Section 1. Demographic Profile of the Cooperatives**

**Table 1**

*Profile of the Cooperatives in Terms of Years of Operation*

<b>Profile</b>	<b>Frequency</b>	<b>Percent</b>
<b>Operational Years</b>		
11-20	3	23%
21 and above	10	77%
<b>Total</b>	<b>13</b>	<b>100%</b>
<b>Membership size</b>		
201-1000 members	1	8%
1001-5000 members	4	31%
5001 and above	8	61%

As to operational years, among the large multi-purpose cooperatives in Nueva Vizcaya, there are only 3 or 23 percent operating within 11-20 years while the remaining 10 or 77% operates at 21 and more years. This only means that most of the respondent cooperatives are established and have been existing for a decade which connotes a more experienced operation. The CDA may offer targeted support to help these cooperatives scale and stabilize to achieve longer years of operations.

As to membership size, of the 13 respondent cooperatives, most of them have 5001 and more members (61%) which means that the cooperatives, along with their years of operation, have gathered more members to join the organization throughout

their years of existence. On the other hand, there are also 4 out of 13 cooperatives (31%) that have members that are within 1001-5000 (31%) and 1 out of 13 (8%) has 201-1000 members. This manifests that in general, the cooperatives grow their organization through the trust of people who want to invest their money to the cooperative. This is a manifestation that cooperatives are one of the people's ways of investing and saving for their present and future use.

**Section 2. Level of Environmental, Social, and Governance Practice of the Cooperatives**

**Table 2**

*Overall Level of ESG Practice Among Cooperatives*

<b>Practices</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Qualitative Description</b>
Environmental Practices	2.72	.70455	Practiced to a Moderate Level
Social Practices	3.33	.47964	Practiced to a Moderate Level
Governance Practices	3.63	.52239	Practiced to a Great Level
<b>Overall ESG Practices</b>	<b>3.23</b>	<b>.45587</b>	<b>Practiced to a Moderate Level</b>

*Note. 1.00-1.49-Not Practiced At All; 1.50-2.49- Practiced at a Low level; 2.50-3.49-Practiced at a Moderate Level; 3.50-4.00- Practiced at a Great Level*

The overall ESG mean score of 3.23 suggests that even cooperatives are aware of ESG principles, implementation is at moderate level particularly in environmental dimensions. Further, while the cooperatives are making commendable progress in governance, there is a clear need to strengthen environmental and social dimensions of ESG to achieve balanced and impactful sustainability outcomes.

Specifically, results revealed that environmental practices among the cooperatives are generally practiced to a moderate level (M=2.72, SD=.70455) which suggests that while the cooperatives demonstrate an awareness of environmental issues and have engaged in several related activities, the implementation of these practices remains partial and inconsistent which further implies that many cooperatives may operate without structured environmental frameworks, suggesting a need to integrate these practices into long-term strategic planning, governance documents, and regular operational procedures.

Moreover, social practices among the cooperatives in Nueva Vizcaya is at a moderate level (M=3.33, SD=.47964) which implies that while there are commendable efforts in certain areas, there remains a significant opportunity for improvement, particularly in broadening the scope of social responsibility initiatives beyond internal operations.

Lastly, the governance practices of cooperatives and found that they are generally “practiced at a great level” with an overall mean score of 3.63 (SD=.52239) which suggests that cooperatives have established foundational mechanisms for good governance and that these practices are fully practiced, observed and compliant to standards.

Among the indicators, environmental indicator had the lowest mean, indicating that cooperatives had a challenge in promoting environmental sustainability initiatives to be embedded in their operations. While the cooperatives comply with CDA’s mandated

environmental initiatives required in their operations, some cooperatives were complying but not to the full extent.

### **Section 3. Financial Performance of the Cooperatives**

**Table 3**

*Summary of the Financial Performance of the Cooperatives*

Cooperatives	Financial Performance							
	PISO (Pre-pandemic)				STEPS (Post-pandemic)			
	2018		2019		2022		2023	
	%	QD	%	QD	%	QD	%	QD
Coop 1	60	NI	60	NI	57	NI	51	NI
Coop 2	56	NI	67	F	67	NI	66	NI
Coop 3	55	NI	58	NI	61	NI	65	NI
Coop 4	54	NI	56	NI	53	NI	51	NI
Coop 5	53	NI	55	NI	58	NI	62	NI
Coop 6	61	F	62	F	50	NI	51	NI
Coop 7	61	F	61	F	49	NI	49	NI
Coop 8	64	F	65	F	61	NI	64	NI
Coop 9	63	F	61	F	53	NI	56	NI
Coop 10	73	S	76	S	59	NI	59	NI
Coop 11	65	F	68	F	60	NI	68	NI
Coop 12	71	S	72	S	57	NI	57	NI
Coop 13	52	NI	54	NI	48	NI	51	NI
<b>Average</b>	<b>61</b>	<b>F</b>	<b>63</b>	<b>F</b>	<b>56</b>	<b>NI</b>	<b>58</b>	<b>NI</b>

*Note. For 2018-2019: 60 and below- Needs Improvement (NI); 61-70-Fair (F); 71-80-Satisfactory (S); 81-90-Very Satisfactory (VS); 91-100- Excellent €. For 2022-2023: 80 and below- Needs Improvement (NI); 81-85-Fair (F); 86-90-Satisfactory (S); 91-95-Very Satisfactory (VS); 96-100- Excellent €*

The table presents the summary of the financial performance of the large multi-purpose cooperatives. It reveals that during the pre-pandemic (from 2018-2019) and post pandemic (from 2022-2023), the cooperatives' financial performance increased. There was a recorded 3.41% increase (from 61 to 63) during pre-pandemic while there was a 2.32% (from 56 to 58) increase during post-pandemic. While there is a decline in the ratio from pre-pandemic to post-pandemic, it is inappropriate to compare them horizontally, as the indicators of financial performance changed in accordance with the mandate of the CDA, to cite, from PISO to STEPS framework.

During the pre-pandemic era, specifically from 2018 to 2019, the financial performance of the cooperatives showed a generally positive trend. The average score across all cooperatives increased from 61 in 2018 to 63 in 2019, indicating a period of modest growth and financial strengthening. Most cooperatives experienced slight improvements in their performance, suggesting that the sector was benefiting from

stable economic conditions, effective governance, and possibly increased member engagement or access to financial resources.

Moreover, during the post-pandemic era (from 2022 to 2023), the overall financial performance of the cooperatives showed a modest but encouraging recovery. After the significant disruptions caused by the COVID-19 pandemic, the average financial score across cooperatives rose from 56 in 2022 to 58 in 2023. While this increase may seem small, it signals a gradual stabilization and a cautious return to pre-pandemic financial health.

#### **Section 4. Test of Relationship Between the Level of ESG Practices and the Profile Variables of Cooperatives**

**Table 4**

*Test of Relationship Between the Level of Environmental, Social and Governance Practices of Cooperatives and Their Operational Years and Membership Size*

		<b>Operational Years</b>	<b>Membership Size</b>
<b>Level of ESG Practices</b>	Spearman rho	.178*	.442**
	p-value	.040*	<.001***
	QD	Very weak positive relationship	Strong positive relationship

\* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$

Table 4 presents the test of relationship between the level of environmental, social and governance practices of cooperatives and their operational years and membership size. It reveals that there is a statistically significant relationship between the level of Environmental, Social, and Governance (ESG) practices of cooperatives and both their operational years and membership size.

Assessing operational years ( $r=.178$ ,  $p=.040$ ), there is very weak but statistically significant positive relationship, suggesting that cooperatives with more years of operation tend to have slightly more developed ESG practices. This may reflect the gradual institutionalization of ESG values over time. Older cooperatives may have had more opportunities to integrate sustainability into their governance structures and community engagement strategies.

De Matteis et al. (2024) analyzed agri-food cooperatives and found that sustainability practices were more prevalent in cooperatives with longer operational histories, although these practices did not always translate into improved performance which led to their recommendation of aligning sustainability with performance goals while enhancing internal communication.

In contrast, membership size ( $r=0.431$ ,  $p=0.000$ ) indicates a strong positive relationship which implies that cooperatives with larger membership bases are more likely to implement robust ESG practices. This result suggests that scale plays a more influential role. Larger cooperatives often have more resources, more complex governance structures, heightened stakeholder expectations, and greater visibility, all of which can drive the adoption of ESG frameworks.

### Section 5. Test of Relationship Between the Level of ESG Practices and the Financial Performance of Large Multi-Purpose Cooperatives

**Table 5.**

*Test of Relationship Between the Level of Environmental, Social and Governance Practices of Cooperatives and Their Financial Performance before (2018 and 2019) and After (2022 & 2023) the Pandemic*

		Financial Performance of Cooperatives			
		2018	2019	2022	2023
Overall Level of ESG Practice	Pearson r	.425**	.369**	.075	.105
	p-value	<.001***	<.001***	0.394	.229
	QD	Moderate Positive Correlation	Low Positive correlation	No significant correlation	No significant correlation

Note. \* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$

The table shows the significant relationship between the level of environmental, social and governance practices of cooperatives and their financial performance before (2018 and 2019) and after (2022 & 2023) the pandemic.

There was a moderate positive correlation between ESG practices and financial performance in 2018 ( $r=.425$ ,  $p<.001$ ) and a low positive correlation in 2019 ( $r=.369$ ,  $p<.001$ ). This suggests that cooperatives that actively implemented ESG principles tended to perform better financially. These practices likely enhanced stakeholder trust, reduced operational risks, and improved access to capital.

However, in 2022 ( $r=.075$ ,  $p=.394$ ) and 2023 ( $r=.105$ ,  $p=.229$ ), the correlation weakened and became statistically insignificant. This shift may reflect the economic and operational disruptions caused by the pandemic, which forced cooperatives to prioritize survival and liquidity over long-term sustainability investments. The diminished relationship suggests that ESG benefits were overshadowed by immediate financial pressures and market volatility.

Fonseca et al. (2024) have similar findings as they discovered that while ESG practices reduced financial distress in normal periods, they did not significantly enhance resilience during the pandemic. Hwang et al. (2021) likewise concluded that companies with stronger ESG performance experienced smaller earnings declines during the pandemic. However, the protective effect was modest and context-dependent, suggesting that ESG alone could not fully buffer financial shocks.

In contrast, Wong (2023) reported that ESG scores were not statistically significant predictors of financial performance during the pandemic years (2019–2022), reinforcing the idea that ESG benefits may be diluted in crisis contexts.

### Section 6. Recommended Unified Sustainability Framework for Cooperatives

A unified sustainability framework for cooperatives was crafted which serves as a strategic model to align cooperative operations with long-term financial health and responsible ESG (Environmental, Social, and Governance) practices. It aligns cooperative principles with the Sustainable Development Goals (SDGs) and provides tools for

measuring and improving impact across multiple dimensions. Considering the above findings, this study recommends the adoption of the framework for sustainability of operations of cooperatives

With the aim to unify practices among large multi-purpose cooperatives to be globally aligned, this sustainability framework is crafted in reference with the United Nations 2030 Agenda for Sustainable Development, the 17 Sustainable Development Goals (SDGs). Each indicator has strategic actions to be implemented along with the cooperative's operations aligned with said SDGs (see Figure 2).

The framework presents a comprehensive strategy to achieve sustainable reporting for cooperatives using the ESG Framework. Global organizations have been encouraged to adopt different frameworks to assess how they manage the risks and opportunities created by changing conditions, such as shifts in environmental, economic, and social systems.

Anchoring to the results of the study, the environmental indicator should focus on how an organization impacts and manages natural resources and ecosystems to achieve environmental stewardship focusing on tree-planting and reforestation, alternative farming and green gardening, waste management and disposal and energy usage and conservation. These practices were aligned with the SDG 6 (Clean Water), 7 (Clean Energy), 11 (Sustainable Cities), 13 (Climate Action), 14 (Life Below Water), 15 (Life on Land).



*Figure 2. Sustainability Framework for Cooperatives.*

The social indicator includes local community engagement, employment benefits and development, diversity and equal opportunity, grievance mechanisms and product and service responsibility. These practices aligned with SDG 1(No Poverty), 2 (Zero Hunger), 3 (Good Health and Well-being), 4 (Quality Education), 5 (Gender Equality), 8 (Decent Work and Economic Growth), 10 (Reduced Inequalities), 11 (Sustainable Cities and Communities), and 17 (Partnership for the Goals).

Lastly, the governance indicator addresses leadership, ethics, operational management, and stakeholder engagement exercising organizational philosophy, governance structure, stakeholders' engagement, disclosure and transparency and self-regulation. Moreover, these practices were aligned with the SDG 12 (Responsible Consumption), and 16 (Peace, Justice and Strong Institutions).

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusion**

The respondent cooperatives are largely long-established, with many operating for over two decades, reflecting deep-rooted experience and strong community trust. Their sizable membership—often exceeding 5,000 individuals—has enabled them to accumulate substantial assets and maintain operational stability. Governance practices are generally robust, marked by transparency and accountability, while ESG (Environmental, Social, and Governance) efforts show moderate integration of sustainability principles. Although governance stands out, there remains room for growth in environmental and social impact initiatives, especially among cooperatives with larger memberships that tend to embrace ESG more actively due to greater stakeholder engagement and resource availability.

Financial performance showed improvement during 2018–2019 and 2022–2023, albeit under different evaluation frameworks (PISO and STEPS, respectively). In earlier years, cooperatives were operationally sound but faced challenges in strategic planning and institutional development. More recently, while some maintained continuity, many struggled with profitability, asset utilization, and long-term financial sustainability. ESG's influence on financial outcomes appeared stronger pre-pandemic but waned in recent years due to shifting market dynamics, evolving cooperative strategies, and stricter financial performance benchmarks set by the CDA. These trends underscore the need for enhanced financial strategies, capacity building, and deeper ESG integration to ensure resilience and sustained growth.

### **Recommendations**

To enhance sustainability and operational effectiveness, cooperatives are strongly encouraged to adopt ESG standards, which offer a comprehensive framework for evaluating governance, environmental responsibility, and social impact. Key recommendations include targeted interventions such as capacity-building, environmental education, and partnerships with organizations that support eco-friendly initiatives like solar panel installations and energy-efficient technologies. The CDA may require cooperatives to integrate a Social Development Plan (SDP) into their annual strategies, conduct regular training on social program design and evaluation, and collaborate with civil society and government agencies. Governance can be strengthened through internal and third-party audits aligned with Republic Act 9520, continuous board education, and increased member participation in decision-making processes.

To ensure long-term viability, cooperatives should invest in leadership development, adopt digital financial tools, and implement performance audits. ESG onboarding programs, especially for newer cooperatives, can be supported through starter toolkits and mentorship from more experienced organizations. The CDA should mandate ESG integration into strategic planning and provide technical assistance to align ESG with financial and risk management goals. Cooperatives may also benefit from ESG dashboards and annual impact reports to boost transparency and accountability. Recognition and incentives for ESG-compliant cooperatives can further motivate adoption.

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