European Journal of Sustainable Development Research
2025, 9(4), em0335
e-ISSN: 2542-4742
https://www.ejosdr.com/

MODESTUM

Research Article

OPEN ACCESS

Impact of sustainable management, and ESG performance on small and community performance in India in the current scenario

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Citation: Yadav, U. S., Yadav, A. K., Ghosal, I., Yadav, S. K., & Verma, A. K. (2025). Impact of sustainable management, and ESG performance on small and community performance in India in the current scenario. *European Journal of Sustainable Development Research, 9*(4), em0335. https://doi.org/10.29333/ejosdr/16897

ARTICLE INFO

Received: 27 Feb. 2025

Accepted: 22 Jul. 2025

ABSTRACT

The study aimed to examine how sustainable management affected the sustainable financial performance (SFP) and environmental, social, and governance (ESG) performance of the handmade craft industry and agricultural organizations in India, how segregation of duties affected the small and community-owned cooperatives (SACCO) performance, and how Sustainable management (SM) affected that SFP. The State of Uttar Pradesh investigated the effectiveness of Indian SACCO's internal controls for data collection. The primary takeaway from this research is that the effectiveness of SRM, the separation of functions, ESG performance and SM significantly impact the performance of India's SACCO. The structured questionnaire administered to participants served as the primary data source. It was anticipated that a certain proportion of respondents might not complete the questionnaire because the researcher no longer has access to it once it has been sent out, which could compromise the validity and Reliability of the results. Task division, independent auditing, and risk control should receive more attention if India SACCO is to increase its loan portfolio, profitability, and market share in Uttar Pradesh. For this study, we used *stakeholder theory*. Sustainable management, SFP and ESG performance are the dimensions of stakeholders.

Keywords: ESG performance, zero hunger, sustainable management, SDG-16, India, digital age, COVID-19, stakeholder theory

INTRODUCTION

Small communities in agricultural sectors were founded all over India after the colonial era had ended. These organizations kept the vast population outside of the formal economy. People were encouraged to cultivate cash crops to supply the demands of the expanding market, which resulted in the expansion of small communities. Small communities state that financial assistance is provided to those marginalized in rural and remote areas. Extreme poverty results from the lack of extra financial services sources for the impoverished in rural areas. This is the outcome of poor economic management by the rural poor, ultimately leading to bankruptcy. To effect positive change in the world, Sacco today must abide by a predetermined set of rules, norms, and aims (Pal et al., 2020). There is a lot of pressure on businesses to satisfy their goals and those of participants, including the public, the government, and their clients (Argandoña, 1998; Sepehri & Sarrafzadeh, 2018).

Implementing sustainable plans and strong governance systems has been necessary in recent years due to the dynamic and frequently chaotic business environment, particularly in grassroots financial institutions (Arjaliès & Mundy, 2013; Gupta et al., 2022; Sepehri & Sarrafzadeh, 2019). Small and community-owned cooperatives (SACCOs) are essential for rural development, financial inclusion, and poverty reduction in India. Economic instability, non-compliance with regulations, inadequate internal controls, and a lack of flexibility regarding environmental, social, and governance (ESG) principles are significant obstacles these cooperatives frequently encounter.

Particularly in community-driven organisations, sustainable risk management (SRM) has become a key framework for reducing operational and financial risks (Debnath et al., 2024; Gangwani & Kashiramka, 2024).

Effective internal control systems (ICSs) guarantee responsibility, efficiency, and transparency in collaborative operations. Furthermore, as stakeholders and authorities emphasise sustainability and moral business practices, the incorporation of ESG practices has grown in importance.

The combined effects of ESG performance, internal control effectiveness, and risk-sustainable management on the overall performance of SACCOs in India are experimentally investigated in this study (Al-Thuneibat et al., 2013). The objective is to offer a comprehensive viewpoint on how these components interact and support cooperative societies' sustainability and resilience in the current socioeconomic environment (Gangwani & Kashiramka, 2024).

Sustainable Development and Small Communities

Sustainable development, refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is rooted in three interlinked pillars: economic growth, social inclusion, and environmental protection. SACCOs are uniquely positioned to contribute to all three pillars of sustainability;

Sustainability of the economy: SACCOs, especially in underprivileged rural regions, offer reasonably priced loans, encourage saving practices, and lessen reliance on predatory lending. They make it easier for small farmers, craftspeople, and business owners to obtain finance by promoting the growth of microenterprises (Debnath et al., 2024; Gangwani & Kashiramka, 2024; Sepehri & Sarrafzadeh, 2019). SACCOs contribute to reducing income inequality and stimulating regional economic development by fostering financial inclusion. According to Saxena and Yadav (2025), SACCOs are vital for enhancing rural economies' resilience by providing access to credit and savings services.

Sustainability in society: The democratic tenets of equality, mutual aid, and cooperative ownership guide SACCO operations. By allowing them to participate in and take control of financial decision-making, they empower marginalised communities, particularly women, smallholder farmers, and informal labourers. Additionally, SACCOs foster community-based social capital and financial literacy. By promoting inclusive growth in rural India, SACCOs help to reduce poverty and promote social empowerment (Arjaliès & Mundy, 2013; Gupta et al., 2022; Nuwagaba, 2012).

Sustainability of the environment: Although less well-known, SACCOs can facilitate green finance for eco-friendly microbusinesses, clean energy sources (biogas and solar lights), and sustainable agriculture. SACCOs can help rural communities adopt sustainable practices and adapt to climate change by coordinating their lending with environmental objectives using suitable ESG frameworks. According to Yadav et al. (2022a), financial institutions—including SACCOs–must incorporate ESG considerations to guarantee long-term environmental resilience.

SACCOs as SDG facilitators: Several sustainable development goals (SDGs) of the UN are directly impacted by SACCOs, including SDG 1: No poverty, SDG 5: Equality of gender, SDG 8: Economic growth and decent work, SDG 11: Sustainable communities, and SDG 13: Addressing climate change (when associated with ESG). According to the Yadav and Rena (2025a) and Saxena et al. (2025), cooperatives' people-centric, democratic governance and localised impact make them ideal partners in accomplishing the SDGs.

Importance of Sustainabilty

As per Sepehri et al. (2020), this study highlights the potential of symbiotic algae-bacteria systems in enhancing nutrient removal and producing biomass with reuse potential. Inspired by this, we suggest SACCOs can support community-level adoption of algae-based bio-treatment units that not only improve sanitation but also generate bio-fertilizers and contribute to a circular rural economy. So, SAACO performance can enhanced sustainability in current scenario.

As per Sepehri and Sarrafzadeh (2018), the findings from this research demonstrate how enhancing nitrifier communities can improve operational efficiency and longevity of wastewater treatment infrastructure. Drawing on this, we propose SACCO-led initiatives could promote micro-financing for membrane-based decentralized treatment systems that lower maintenance needs and serve marginalized rural settlements efficiently.

As per Sepehri and Sarrafzadeh (2019), this work provides critical evidence on how microbial management can lead to greenhouse gas mitigation. We have linked this with the broader environmental objectives of SACCOs, suggesting that integrating such microbial systems can allow communities to address climate goals, improve local ecosystems, and meet ESG standards.

These insights not only enrich the theoretical framework of our study but also demonstrate how SACCOs, through ESG-focused financing, can support biotechnological innovations that are low-cost, environmentally beneficial, and community empowering.

What are SACCOs, and why should they be digitized?: Over 1.7 billion people worldwide, according to World Bank estimates, do not have a bank account. The most critical factors contributing to this staggering number include a lack of education, accessibility, convenience, reliable income, and trust; according to the world census on cooperatives conducted in 2014, there are over 2.6 Million SACCOs located in 145 countries, and these organizations serve more than 1 Billion customers and members.

SACCOs, occasionally called cooperatives or credit unions, initially existed in Germany in 1846. Since that time, they have kept on growing in favor in Canada, the United States, Europe, and most importantly, on the continent of India as given in **Figure 1**.

Figure 1 illustrates a decentralized community finance model, typical of SACCO operations, where financial resources (depicted as a central stack of money) are collectively pooled and redistributed among members. Arrows point from individual members toward the central fund and vice versa, symbolizing the reciprocal flow of contributions and financial support. The diverse individuals surrounding the fund represent heterogeneous stakeholders–including borrowers, savers, and administrators–highlighting cooperative finance's inclusive and participatory nature. The background of interconnected nodes suggests a networked governance

Figure 1. Structure and expansion of SACCO members in the different financial areas (NCDC, 2020)

structure, emphasizing transparency, shared responsibility, and the interdependence of members within the SACCO ecosystem. This visual metaphor supports the study's emphasis on stakeholder theory, collective risk management, and the democratization of financial access in community-owned institutions.

Putting away money and using credit, the acronym "SACCO" is commonly used to refer to small and community-owned cooperatives. Cooperatives are a type of financial institution whose operations are guided by social responsibility, transparency, and mutual aid. They operate on a membership basis. It is a form of mutual aid society in which members pool their money to lend to one another (Yadav et al., 2022b). The original motivation for creating SACCOs was to help the poor get the knowledge and skills necessary to manage their finances better and alleviate their poverty (Muchiri et al., 2017). Therefore, Muchiri et al. (2017) have used the term "small communities" to refer to cooperatives governed democratically by their members to benefit all members. For example, they may all be part of the same labour union, work for the same company, attend the same church or social club, or live in the same town. In line with Mengich and Njiru (2015), Pal et al. (2020) and Mugo et al. (2019) noted that SACCOs should emphasize maintaining sustainability over profit, which motivates loan default.

The financial services SACCOs provide are comparable to those offered by conventional banks. Even the process of making use of those services is essentially identical. On the other hand, there are several significant distinctions between the two. Let's look at how these two things differ the differences and benefits of SACCO on banks (**Table 1**).

Digitizing SACCOs in the current scenario: Three main arguments are made in favour of SACCO going digital. To begin, there is the undeniable fact that people worldwide, and in India in particular, are very at ease when using mobile and digital banking services (Yussif & Gujral, 2024). This is especially true in India. India is a significant market for mobile payment, using QR codes where artificial intelligence detects much of the data from banking and makes it easy to pay the money, as well as similar services. Also, banking penetration is lower there, making SACCOs even more critical for meeting the loan and savings needs of those who do not have access to traditional financial institutions. So, it makes the most sense to get married to both of them.

Importance of Communities

One of the most important contributors to the success of SACCO is the fact that it uses the power and Reliability of the community in which it operates. Two factors have contributed significantly to the remarkable success that SACCOs have enjoyed across the Asian continent. First and foremost is the ease of use it affords its members. Second, the company's business model is based on the support of the communities in which it operates.

The success of India's microfinance institutions can be attributed partly to customers' understanding of what they want and need from their financial providers. Microfinance institutions are in a competitive market because they must offer clients superior financial services (Pal et al., 2020). Most of these financial organizations were established before most commercial banks. While they provide comparable or identical services to banks, their performance falls short of the competition (Gathurithu, 2011). The search for methods to boost operational, financial performance, and profitability has been a priority for SACCOs (Nuwagaba, 2012).

Research Questions

From previous studies about SACCO and its affecting factors, several research questions (RQs) arise:

RQ1. How do ICSs influence the financial performance and operational efficiency of SACCOs in India?

RQ2. How do ESG performance and SRM impact sustainable growth and stakeholder value in Indian SACCOs?

RQ3. How do the functional separation of duties and implementation of independent checks (ICs) affect transparency, accountability, and financial health in SACCOs?

RQ4. What kind of integrated governance-performance framework can best enhance the effectiveness of SACCOs in emerging market contexts like India?

Researchers have studied previous research articles to resolve these questions, compared them with this study quantitatively, and found some research gaps. As a

Table 1. Differences and benefits of SACCO on banks

Categories	Bank	SACCO
Ownership	All investors are not a member	All are members and owners
Profitability	These are profit entity	Non-profit entity
Cost-efficient financial assistance	This is not cost-efficient for all	Cost efficient
Civic group or neighborhood association	They do not support all community members	They support all communities to increase business along with literacy
Forking that is shared	ATM with charges	Shared branching and community-based organization
Enhanced provision of service to customers	Not always support consumers	Always support consumers

consequence of this, the researcher needs to figure out the Effect that internal controls have had on the sustainable financial performance (SFP) of SACCO. The study's results will help India's SACCO make informed judgments about improving its internal control. The results may encourage SACCO's executive teams to reevaluate and develop new internal control methods to improve efficiency. This would be helpful because it would allow SACCO to serve its customers better.

Research Gap

The conclusions of this study's operational analysis may offer adequate information to assist management in determining what actions to take to increase SACCO's internal control. The research may bring to light any flaws in the existing control systems of the SACCOs. This new study may bring new information to what we already know about SACCOs' performance and system of internal control. The current understanding of SACCO's performance and system internal control could be improved with the help of this research. There is a limited study about SACCO in India and its role in development, especially in the agriculture and banking sectors. There is a lack of study regarding SACCO's goal. In previous research, there was a lack of knowledge in enterprise risk management; it's possible that this could neglect your industry's current economic and business climate. This could lead to contradictory information, an overly cautious, missed opportunity and an approach to risk to capitalize on potential opportunities (Christensen et al., 2021). For enterprise SRM to be effective, assessing the risks associated with particular business objectives found on important value drivers is necessary. A hole was left in the researchers' investigation when they failed to demonstrate how implementing SRM in business plans would improve the SFP of SACCO.

Second, it was not indicated who is accountable for monitoring the implementation of this plan throughout SACCO's operations to improve the organization's financial performance. This research will help SACCOs enhance their SFP by investigating options that may be used for business risk management (Pal et al., 2020).

Third, there is a dearth of empirical study on SACCOs in the Indian context, particularly in light of sustainable and ESG-focused frameworks, even though the literature currently in publication has thoroughly examined risk management and ICSs in the corporate and banking sectors (Tripathi et al., 2022; Yadav et al., 2022b). Earlier research has either analyzed these constructs separately or isolated them. Additionally, little is known about the connections among SRM, the efficacy of internal control, and ESG performance in SACCOs, especially when seen from an integrated viewpoint. Furthermore, even though ESG has drawn attention worldwide, little is known about how it affects local, neighbourhood-based financial institutions in developing nations like India. It is necessary to understand how these cooperative models may embrace and profit from ESG frameworks in their particular sociocultural and economic contexts.

This gap will be closed as a result of this research.so the following objective is given.

Objective of Study

1. To evaluate how internal control mechanisms affect the financial performance and operational efficiency of SACCOs in India.
2. To assess the influence of ESG performance on SACCOs' sustainable growth and stakeholder value.
3. To analyze the role of SRM practices in enhancing SACCOs' ability to manage uncertainty and ensure long-term resilience.
4. To investigate the effect of functional separation of duties and ICs on transparency, accountability, and financial health within SACCOs.
5. To propose a comprehensive governance-performance framework suitable for small-scale cooperative financial institutions operating in emerging markets.

Importance of Study

This study plays a significant role in the agriculture-based handicraft sector in India, especially where most farmers are not educated or unaware of advanced digital financial technology. They have no bank account, especially marginalized farmers and agricultural entrepreneurs in India, ferry wala, street vendors, fishermen, and some handmade artists.s so this study will be significant in that sense that it will help to create a society among the farmers and sharing of their income among the society as per requirement. It will also study the different Poplauer factors, such as the role of ESG performance, SRM, and internal control variables, that affect the SACCO system development in India.

Contribution of Study

This study is unique in the sense that we should have to focus on a functional separation of responsibility or segregation, independent auditing, and SRM with performance if India SACCO is to enhance its loan portfolio, improve its profitability, and raise its market share in Uttar Pradesh, all of which are essential measures of success. It has significance in financial inclusion and awareness for Indian rural, tribal, and semi-urban people unaware of the banking system.

Novelty of the Study

This study is unique in several important ways.

Contextual relevance: Despite their significant socioeconomic importance, Indian SACCOs are a subject mainly ignored in academic research.

Integrated approach: It examines how ESG performance, ICSs, and SRM affect SACCO performance.

Empirical contribution: The study provides empirical evidence supporting academic literature and the development of valuable policies by utilising real-time data from Indian cooperatives.

Current focus: It depicts the post-pandemic situation, regulatory changes, and the mounting pressure on cooperatives to comply with ESG regulations and the SDGs.

THEORETICAL BACKGROUND, REVIEW OF THE LITERATURE AND PROPOSED MODEL

Stakeholder Theory

For instance, stakeholder theory emphasizes enterprises' preservation of stakeholder interests. The focus is structuring a firm to maximize stakeholder interests for long-term success. An agency theory examines principal-agent relationships. The conflict of interest arises from the work done. This idea suggests that a competent corporate governance framework can reduce agency costs. According to the legitimacy theory, corporations must maintain their social credibility to continue operating. Companies use several image or reputation strategies.

Legitimacy-preserving activities. These theories offer varied perspectives on ESG performance, but this study uses a Holistic framework. Stakeholder theory facilitates the examination of ESG- linkages. A stakeholder is any group or people that can influence or be influenced by an organization's actions in pursuit of its objectives (Freeman, 1984). Stakeholder theory delineates a firm's responsibilities to its managers, consumers, employees, finance and partners communities (Rushita et al., 2023; Sepehri & Sarrafzadeh, 2018; Yadav et al., 2025; Yadav & Rena, 2025b). The stakeholder theory opposes the notion that a corporation should prioritize maximizing shareholder profit with full awareness.

In ESG audit of accounting research, stakeholder theory is prominent. This idea expands the manager's duties to include all classes' needs beyond dividend maximization. This is because all stakeholders must work together for a corporation to survive. Managers and stakeholders communicate using ESG and CSR to assist this (Sepehri et al., 2020; Yadav & Tripathi, 2025).

Sustainable Financial Performance of Organizations

Several indications, both monetary and otherwise, are considered while assessing a company's performance. This analysis examines a corporation's loan portfolio, asset management, market expansion, and profitability. Academics have recently found the SFP of SACCOs to be an essential topic for studying employee growth and business success. The significance of the discussed issue justifies the spotlight being cast upon it. People invested in the company's success are consistently encouraged to see that it is a financial success for everyone involved (Harash, 2017; Neolaka et al., 2024). A company's economic success is indicative of its capacity to generate profits while efficiently using the resources afforded by its core business model.

When discussing the success of a business, "financial performance" refers to how well it achieves its goals in terms of money spent, percentage of work done, and other benchmarks (Kaur et al., 2023a; Kumar et al., 2022a). Corporate management studies frequently discuss financial success, but the definition and organization of the term are rarely defended; instead, it is taken for granted that it is appropriate in all circumstances. SFP is a hot topic (Singh et al., 2020; Yadav & Tripathi, 2025). The company's market-focused aims and financial goals are both attainable thanks to the tactics it employs to build its financial success. A banking firm's degree of achievement in its industry can be gauged by analyzing its SFP over a specific period. The term "success" is commonly used in business studies to define a company's level of financial success.

Researchers have examined a company's SFP indicators, including monetary variables, revenue, and market share. Profitability measures, such as return on sales and investment, show how effectively a company works. In contrast, growth indicators, like sales growth, demonstrate a company's willingness to expand into new markets or penetrate existing ones. A monetary value must be assigned to the company's operational outcomes, policies and activities to provide an accurate picture of the company's SFP (Sivathanu, 2018). Cash flows, operating income, internal control and total unit sales are all ways to gauge success. The success of this research will be measured by the growth in loan volume, income, and market share that it facilitates.

PROPOSED HYPOTHESIS AND MODEL

Internal Control System and Sustainable Financial Performance

Merchant and Otley (2007) define ICSs as the set of policies and procedures in place at an organization to safeguard its resources and detect and prevent fraud and error. Merchant and Otley (2007) agree that ICSs have a significant impact on business success. Rather than looking at the past for explanations, traditional management typically attributes positive performance shifts in profit-driven businesses and industrial-era corporations to new investments in ICSs as part of value-delivering. Profitability, cash flow, and return on investment were only some financial metrics that lent credence to this outlook (Kaur et al., 2023b; Kumar et al., 2022b).

In the modern corporate climate, which is highly competitive and challenging, managers are required to focus their attention on the factors that will be applicable to long-term success. The traditional use of profit-based performance metrics by many different types of businesses has recently come under scrutiny for a variety of fundamental reasons, including the fact that these metrics are relatively incomplete, inaccurate, promote thinking that is only focused on the short term, and do not provide a sense of balance (Kaplan & Norton, 1996; Kaur et al., 2023a; Kumar et al., 2022a). An organization's internal controls should include incentives for management and the business to develop instead of just keeping things the same (Inman & Green, 2018; Thakur & Srivastava, 2014). Yet, a system that can measure performance using several variables is required. So, the hypothesis is as follows.

H1. ICS positively and significantly affects SFP.

Functional Separation of Responsibility and Sustainable Financial Performance

Although SACCOs rely on loan distribution to predict future financial success, this function is often plagued by a high default rate due to a lack of functional separation of accountability and responsibility throughout review, payout and approval (Munyiri & Wekesa, 2017). There is a correlation between the number of loan options a SACCO provides and its financial success. Its large selection of products allows it to maintain a diversified credit portfolio, reducing the proportion of defaulted loans. Easy repayment terms are a significant factor for borrowers when deciding on a loan (Muchiri et al., 2017; Singh & Srivastava, 2018). However, when there are many loan products, there is a high chance of risk exposure. This necessitates careful yet effective risk management.

Many SACCOs are based and conduct their business in rural areas, where shifts in agricultural pricing can significantly impact the safety of the loans they provide. This shows that even though SACCOs widely use sustainable credit risk management, these companies' success still depends on external factors. Agricultural loans are hazardous, except for guaranteed financing, which is uncommon in SACCO loans. (Magali, 2014).

Since no leader can or desires to hold others responsible for their deeds, delegating responsibilities is essential (Saxena & Yadav, 2025). Because of this, no leader can effectively do so. Some folks don't have enough courage to muster even the tiniest bit. Managers risk taking the full blame if they don't clarify which skills are needed for which positions. Combining opacity and responsibility is unacceptable (Thakur & Srivastava, 2014). The only way to ensure that your expectations will be met is to have your desires clearly articulated. Some of the methods he suggests for effective responsibility are as follows:

H2. Functional separation of responsibility significantly affects SFP.

ESG Performance and Sustainable Financial Performance

Past research has indicated that ESG performance is used by organizations to emphasize management excellence. High-quality firms provide ESG performance and financials, while low-quality firms provide little accounting data. High-quality ESG performance boosts a firm's reputation among shareholders and stakeholders (Kaur et al., 2023b; Saxena et al., 2025). Corporations send investors good signals through financial reporting. However, ESG performance boosts a business's reputation and depends on digital elements. Previous studies denote the likelihood of negative consequences associated with using a product (Saxena et al., 2025). Rationally, users seek to lessen any potential undesirable consequences of using a product (Tripathi et al., 2022). The current study draws on stakeholder and dynamic capability theories with a gender transformation approach to explore the moderating impact of ESG on SACCO among female artisan entrepreneurs. This claim is backed by stakeholder capacity to support social and governance and enhance behavioural intentions towards digital technology for firm efficiency (Kumar et al., 2024; Tripathi et al., 2022). Even prior studies project the significance of ESGA in delivering social and government efficiency among family firms (Singla et al., 2023). Still, these studies failed to adequately address the use of ESG for the Quality of financial reporting among farmers and artisan entrepreneurs.

H3. ESG performance significantly affects SFP.

Independent Checks of India SACCO's Financial Performance

SACCO, an employee of an Indian company, believes that employers ought to focus on motivating their employees before making them responsible for their conduct; unmotivated workers will put their interests first, even if it means hurting the company. Employees sometimes compare themselves to the engine oil in a vehicle because they know both might become faulty but will not be held liable for the vehicle's lousy performance. Allow an employee to achieve some of their goals before you ask them to justify their presence in the workplace. These goals may include the purchase of corporate property such as cars, the payment of more allowances and salaries, and the provision of equal payment for products in the workplace (Bashaija, 2022)

Board directors related to ISACCO's board have developed a strategy to ensure the continued financial health of the organization, and management has committed to delivering results in line with these projections. ISACCO's management has already addressed the following accountability performance indicators in the organization's strategic plan for 2019-2024. The following are examples of such indicators. At the end of 2022, the loan portfolio is expected to grow to Rs.3 58 470 crores.

In-depth research revealed that SACCO held member meetings regularly (either annually or quarterly, depending on the branch), with the objectives of enhancing communication with existing and potential members (annual general meeting, SACCO performance, and products services and product), investing in new products that are related to agricultural business (potential unique selling propositions), and investing in farming and financial training capacity (potential unique selling propositions for expansion). As a result, an objective evaluation of SACCO's strategy for maximizing shareholder value is required.

H4. ICs significantly affect the SFP of India SACCO's.

The Impact of Sustainable Risk Management on SACCOs Sustainable Financial Performance

Changes to your company's operations, systems, or procedures necessitate a special kind of SRM called business risk management. It provides guidelines for an organization to follow in the event of an unexpected expansion in financial needs due to an emergency or other unforeseen circumstances. The ability to respond systematically to different threats and the confidence to make risk-based educated decisions will boost SFP at all organisational levels, enhanced by effective business risk management.

According to Ciampi et al. (2021), business SRM aims to systematically identify and respond to events that could compromise the achievement of a company's strategic objectives or present an opportunity to benefit from microfinance competitors. The goal of this procedure is to

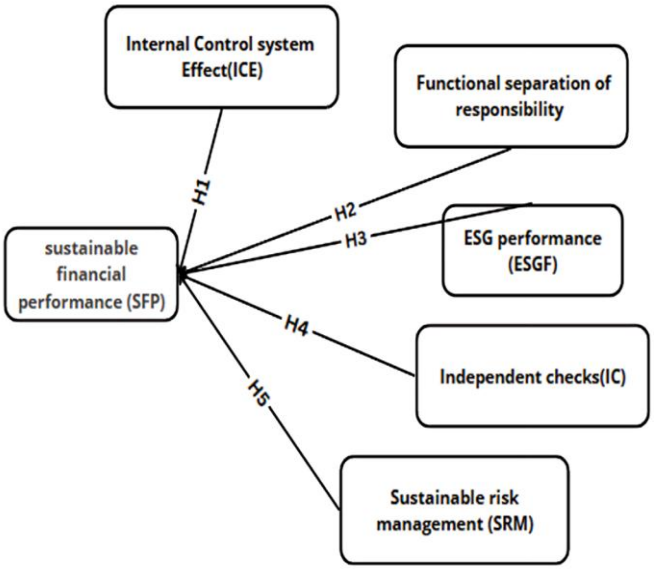

Figure 2. Conceptual framework linking governance and sustainability factors to SACCO financial performance (the authors compilation)

reduce the potential for failure. Tolerance for risk and openness to opportunity is reflected in this score (Sankaran & Chakraborty, 2022). Accepting strategic risks wisely can increase profits and help you stay in compliance with laws, rules, and reports. These advantages become a reality when the dangers are controlled (Damayanti et al., 2024).

H5. SRM positively affects SFP.

The proposed model is given in **Figure 2**.

From **Figure 2** it has been proposed that the conceptual framework presents a multi-dimensional model designed to examine the determinants of SFP in SACCOs. The model posits that five independent constructs significantly influence SFP: the internal control system effect, functional separation of responsibility, ESG performance (ESGF), ICs, and SRM. Each factor is hypothesized to impact SFP, as denoted by the directional arrows positively labelled H1 through H5.

1. **H1** hypothesizes a direct relationship between the effectiveness of ICSs and improved financial outcomes in SACCOs, suggesting that robust internal monitoring enhances efficiency and reduces operational risk.
2. **H2** and **H3** explore governance-related constructsfunctional separation of responsibility and ESG performance highlighting their roles in promoting ethical conduct, transparency, and long-term stakeholder trust.
3. **H4** evaluates the contribution of ICs, such as audits or third-party assessments, in ensuring accountability and regulatory compliance.
4. **H5** addresses the role of SRM practices, proposing that proactive risk identification and mitigation improve SACCO's resilience and continuity.

This framework integrates principles from stakeholder theory, governance models, and sustainable finance, creating a comprehensive structure for empirically assessing how well-governed, socially responsible practices drive the financial sustainability of cooperative financial institutions in emerging markets.

METHODOLOGY

Research Design

In this particular study, a research method known as the cross-sectional analysis was used. We have even used a cross-sectional study. While it is true that the study employs a cross-sectional design, this approach was chosen due to practical constraints such as time, resources, and the exploratory nature of the research. Cross-sectional studies are adequate for identifying associations and providing a snapshot of current conditions, which can serve as a foundation for future longitudinal research. Nonetheless, we acknowledge that a longitudinal design would offer more profound insights into temporal dynamics and encourage subsequent studies to build upon our findings using longitudinal methods. The researcher obtained information about the internal control and performance level at India SACCOs in Allahabad, India (Chand & Saxena, 2014; Turyasingura et al., 2022). The investigation utilized both quantitative and qualitative approaches in equal measures. The qualitative method helped clarify the workforce's views regarding India SACCO's strong internal control procedures, internal control obstacles, and potential improvements to internal control procedures. At the same time, quantitative analysis was used to establish the connection between SFP and a system of internal control. The research was conducted using a combination of the two methods.

Sample Size

Out of 112 there were 98 respondnet who were employees in India overall, 14 members of the Board of RBI report panel were selected as the study's representatives to learn more about the correlation between performance and internal control in SACCOs in the country. This was done to ensure that sufficient data would be collected. As a result, the sample size for this research project was decided to be 112 people in total. The sample size was determined by applying the Yamane formula. We have selected a purposive sampling method for the population category of (center managers, management executives, credit officers, and banking officers RBI reports). Even the targeted population was 3,200, and the sample size was also 300 for that population. The population sampling method was simple random sampling for the delegate members. Using the Yamane formula, we can determine the actual sample size:

$$n = \frac{N}{1+(N\times e^2)} = \frac{3{,}200}{1+3{,}200\times 0.05^2} = 112, \quad (1)$$

where N is the target population and we can apply for accepting sample error at 0.05.

Data Collection Methods

For the study, we have collected data using mixed methods. Both information primary and secondary data collection were used. The research was mainly a survey. However, it did make use of interviews as well as questionnaires. For this study,

relevant information regarding the location, operations, and organizational structure of ISACCO was gathered through surveys, interviews, and direct observation. In addition to monitoring ISACCO's performance for several years, the researcher reviewed the organization's paperwork (Bayat et al., 2014; Yadav & Tripathi, 2025).

Respondent Profile

SACCO employees correctly completed and returned fifty-three of the sixty distributed surveys. This indicated a 95.65% successful response rate. 60.6% of the respondents were at the management level, making up the majority of the respondents. The remaining 39.4% were speakers. As a result, most research participants were directly in charge of or involved in managing risk and implementing the ICS. As a result, their answers are believed to represent what occurs within the company accurately.

On a five-point Likert scale, the respondents were asked to rate the degree of functionality of internal control processes and monitoring in their company. The assertions were sorted according to their means and standard deviations to extract significance from the data. From a considerable extent to none at all was the range. The value was assigned to a great extent.

However, the value 1 was not allocated to any extent. A standard deviation of more than 1.5 indicated a considerable variation in the answers given by study participants.

ANALYSIS OF THE DATA AND RESULT

Research Tool Validation

The calculation of content validity for different speakers is given in **Table 2**.

According to the findings in **Table 2**, research techniques could be utilized to determine who is liable to pay for the services provided. According to Turyasingura et al. (2022), instruments' content validity index (CVI) should be at least 0.7 on average. The CVI of 0.93 may be higher than the maximum allowed. Given the same set of reasons, instruments would be considered to be within the bounds of the law (Saxena & Yadav, 2025).

Table 2. Calculation of content validity

Speaker	Score	Valid
Speaker 1	36 out of 40	0.90
Speaker 2	38 out of 40	0.95
Speaker 3	37out of40	0.93
Speaker 4	38 out of 40	0.96
Total		3.74
Average CVI		0.93

Internal Control System

The study aimed to ascertain how much the institution's internal control structure affects the SFP of SACCOs in India. The collected findings are displayed in **Table 3**.

Model Assumption and Significance Test

The linear regression model was tested to ensure the ordinary least squares assumptions are accurate and the model is appropriate. The experiments listed below were performed:

Normality Test

The study used descriptive statistics to evaluate if the sample data were standard. A normal distribution of the data facilitates drawing trustworthy and correct conclusions. The mean was used to average the standard deviation, and the deviation was used to measure the divergence from the mean. The skewness goodness of fit test was used to determine whether the data were standard. Skewness measures how much the distribution's frequency curve deviates from a symmetric bell-shaped curve, stretching the data from normality to one side and toward the other (Chatterjee & Lefcovitch, 2021). When the skewness statistic falls within the range of ±3, the data is considered normal and objective.

According to **Table 4**, both variables' skewness values were within the ±3 range, indicating that the data was impartial and expected for both variables.

Table 3. ICS

Internal control system	Frequency	Mean	Standard deviation
Roles in our organization are well-defined.	112	2.76	1.113
	112	4.27	1.111
Each worker has their job reviewed by others.	112	4.00	.690
	112	3.65	.098
Senior employees appropriately supervise the work that their juniors do.	112	3.43	1.809
	112	3.15	.973
We constantly take corrective action when we find flaws.	112	4.59	.932
	112	4.35	1.122
A staff person cannot possibly have access to all	112	4.23	.914
	112	4.43	1.211
Accessible information without senior staff approval	112	3.56	.991
Valid N (listwise)	112		

Table 4. Result of skewness of data of the model

Variable	Skewness	
	Statistics	Standard error
Functional separation of responsibilities	.890	.765
Non-interference tests	.867	.690
Management of risk arises	1.203	.678

Table 5. Checking the statistics of reliability

List of variables	Cronbach's alpha	Item numbers (N)
Functional separation of responsibilities	.801	8
Non-interference tests	.739	7
Management of sustainable risk arises	.812	8
ESG performance	.781	6
Overall	.780	29

Table 6. Sampling method and sample population

Population category	Expected respondents	Sample method
Bank leader	10	Focused sample
Executive management	2	Focused sample
Loan sale officer	16	Focused sample
Branch head	11	Focused sample
Bank board team	17	Focused sample
Reporting member to RBI	21	Focused sample
Member on special request	15	Simple random
Government and social NGO	17	
Total	112	

Table 7. Correlation analysis for separation of responsibility

		Performance	Functional separation of responsibility
Performance	Significance (2-tailed)	1	.771**
	Pearson correlation		.000
	N	53	53
Functional separation of responsibility	Significance (2-tailed)	.771**	
	Pearson correlation	.000	
	N	112	112

Note. **The significance level of correlation was at the 0.01 level (2-tailed)

Reliability of Test of Construct

According to the findings, research techniques could be utilized to determine who a service provider is. We used a deep preliminary study to investigate the relationship between the internal control methods of India SACCO and the organization's performance. It was looked into whether or not the answers provided by the many participants in the study were consistent with one another. After that, Cronbach's alpha coefficient was calculated, as can be seen in **Table 5**.

Table 5 shows that If the reliability test results are 0.70 or above, the instrument can be considered dependable as the foundation for making decisions.

Before entering into SPSS for processing, the collected data underwent editing and coding to ensure it derives meaningful conclusions. Descriptive and inferential statistics required this procedure.

The study used SPSS for quantitative data analysis to examine the link between small communities internal control procedures and their effectiveness. The author gathered observational and inferential information on internal control procedures and SACCO efficiency. Graphs and tables depicted the descriptive data to paint a comprehensive picture of the current internal control processes and performance. We'll employ inferential statistics like correlation, linear regression, and hypothesis testing to assess how much India's SACCOs' ICSs contribute to their success or failure. Sample population estimates and sampling methods can be found in **Table 6**.

The results presented in **Table 6** show that all categories received a response rate of a perfect one hundred percent of the respondents. This was because all study participants were available during the data collection process. According to (Damayanti et al., 2024), a research project needs to have a response rate of at least 70% to be considered viable. This finding is supported by (Turyasingura et al., 2022).

Testing of hypothesis

H1. ICS positively and significantly affects SFP.

The research tested hypotheses and analyzed the results to generalize the findings from the population samples. This goal was accomplished by using statistical inference. The correlation and regression studies aimed to test the null and alternative hypotheses regarding the presence, strength, and direction of the relationship between both dependent and independent variables.

The degree of correlation between the performance of India SACCO and the division of duties was evaluated using Pearson's product-moment Pearson correlation coefficient (the null hypothesis). This was done to test an opposing theory. You may find a summary of the results in **Table 7**.

Table 7 includes a correlation coefficient. The significance 0.771 suggests a positive correlation between the functional separation of responsibilities and performance. For testing the Correlation between performance and duty separation, that means the extent to which the independent variable affects the dependent variable. Then, a regression analysis was conducted for this (**Table 8**).

In **Table 8**, the coefficient of the determining factor is given, and the evidence presented in 825 indicates that the functional separation of responsibility enhances the value of

Table 8. Functional model of functional separation of responsibility (model summary)

Item model	R	R^2	Adjusted R^2	Estimated standard error
1	.782[a]	.810	.913	.15130

Note. [a]Predictors: (Constant) & segregation of duty

Table 9. ANOVA

Model		Some of squares	Mean square	F	Significance
1	Regression	3.872	.865	8.981	.023[b]
	Residual	.528	.201		
	Total	4.400			

Table 10. Summary of regression output on a functional separation of responsibility

Model	Unstandardized coefficients		Standardized coefficients	t	Significance
	B	Standard error	Beta		
(Constant)	.384	.135		2.873	.005
One functional separation of responsibility	.922	.030	.771	30.961	.000

Note. Dependent variable: Performance

Table 11. Correlation analysis-1

		Performance	Independent checks
Performance	Significance (2-tailed)	1	.671**
	Pearson correlation		.000
	N	112	112
Non-interference tests	Significance (2-tailed)	.673**	
	Pearson correlation	.000	.000
	N	112	112

Note. **The significance level of correlation was at the 0.01 level (2-tailed)

Table 12. Model summary ICs

Item model	R	R^2	Adjusted R^2	Estimated standard error
1	.670[a]	.098	.086	.32035

Note. [a]Predictors: (Constant) & ICs

performance. So, a positive and significant impact on this variable has been observed.

ANOVA test

Analysis of variance was used in the study to examine the association between SFP and the ICS in India, as well as monitoring (**Table 9**).

Table 9 showed that the whole model was significant (F = 9.161, p-value = $0.023^{0.05}$), indicating that the independent factors constitute strong joint variables that account for SACCOs' financial performance.

This suggests that performance improves proportionately to the degree to which different responsibilities are delineated. Because of this, the separation of roles is responsible for 81.4% of India SACCO's performance (**Table 10**).

Table 10 shows that the results demonstrated a regression coefficient of .771 at a level of significance of 0.01, which indicated a significantly positive difference between the two groups. The findings indicate that the distribution of responsibilities impacts the performance of SACCO, as indicated by a Beta value of 0.771 at a confidence level of 95%. The researcher has proposed an alternative hypothesis: "Segregation of duties has a significant effect on performance at the India SACCO in Uttar Pradesh."

H2. Functional separation of responsibility significantly affects SFP.

Pearson's product-moment correlation coefficient was utilized to quantify the strength of the association between the various forms of performance verification. The tabulated outcomes of this computation are shown in **Table 11**.

Table 11 shows that the correlation coefficient is .673, which is significant at the 0.01 level and shows an influential significant positive association. This information can be found on **Table 11**. In light of this, a regression analysis was carried out to determine the extent to which ICs influence the performance of India SACCOs. This demonstrates how much the independent variable's volatility may affect the dependent variable (**Table 12**).

ICs appear to affect performance at India SACCO based on the correlation coefficient of .670, a link of substantial importance. This indicates that there would be an increase in performance at India SACCO due to the increased number of ICs. The results of independent audits, therefore, have a 67.0% bearing on the success of India SACCO (**Table 13**).

Table 13 shows that ICs have affected India's performance, and this beta coefficient is .671. It shows that it increases the result of performance. Based on this, we came to hypothesis 3.

H3. ESG performance significantly affects SFP.

Pearson's product-moment correlation coefficient supported the alternative hypothesis that SRM and India SACCO performance are significantly related (**Table 14**).

Table 13. Regression output summary of independent checks

Model	Abnormal coefficients		Normalized coefficients	t	Significance
	B	Standard error	Beta		
(Constant)	2.679	.506		5.272	.000
One independent checks	.361	.125	.673	2.974	.004

Note. Dependent variable: Performance

Table 14. Correlation analysis of sustainable risk management

		Performance	Risk management
Performance	Significance (2-tailed)	1	.699**
	Pearson correlation		.000
	N	112	112
Risk management	Significance (2-tailed)	.699**	
	Pearson correlation	.000	.000
	N	53	53

Note. **The significance level of correlation was at the 0.01 level (2-tailed)

Table 15. Effect of sustainable risk management model summary

Item model	R	R^2	Adjusted R^2	Estimated standard error
1	.694	.156	.153	.14756

Table 16. Correlation analysis-2

		Performance	Independent checks
ESG performance	Significance (2-tailed)	1	.651**
	Pearson correlation		.000
	N	112	112
Non-interference tests	Significance (2-tailed)	.643**	
	Pearson correlation	.000	.000
	N	112	112

Note. **The significance level of correlation was at the 0.01 level (2-tailed)

Table 17. Model summary: ESG performance

Item model	R	R^2	Adjusted R^2	Estimated standard error
1	.650	.096	.086	.32000

Note. [a]Predictors: (Constant) & ICs

Table 14 shows that a correlation coefficient of .695, which is statistically significant at the 0.01 level and implies a powerful and considerable positive association. We used regression analysis to check the impact of SRM on Financial performance. As we know, this gives the level of volatility about the effects of independent on the dependent variable. So, SRM and SFP in India were determined using regression.

From **Table 15**, which describes that the coefficient of determination for this relationship is .695, we can deduce that SRM has a 64.5% impact on performance at India SACCO. For regression output, please follow **Table 14**.

H4. ICs significantly affect the SFP of India SACCO's.

Pearson's product-moment correlation coefficient was utilized to quantify the strength of the association between the various forms of *ESG performance*. The tabulated outcomes of this computation are shown in **Table 16**.

Table 16 shows that the correlation coefficient is .643, which is significant at the 0.01 level and shows an influential significant positive association. This information may be found on **Table 15**. In light of this, a regression analysis was carried out to determine the extent to which ICs influence ESG performance. This demonstrates how much the independent variable's volatility may affect the dependent variable (**Table 17**).

ICs appear to affect ***ESG performance*** based on the correlation coefficient of .670, a link of substantial importance. This indicates that there would be an increase in performance at India SACCO due to the increased number of ICs. The results of independent audits, therefore, have a 67.0% bearing on the success of India SACCO. We can follow **Table 17**.

DISCUSSION

Some conclusions have been drawn from our data analysis. The principal aim of the research was to evaluate the impact of duty segregation on the efficiency of small communities in India. The findings verified the presence of a statistically significant and positive link between the two variables. This confirms the results of Muchiri et al. (2017), who discovered that borrowers tend to choose loans that are simple to repay. This study confirms earlier research showing that in the Indian state of Uttar Pradesh, monitoring enhances deposit money institutions' liquidity and solvency (Chan, 2019; Nabukwangwa et al., 2023; Singla et al., 2023; Tripathi et al., 2022). A strong and positive correlation has been found

between SFP and oversight control for SACCO performance (Nanzala & Ingabo, 2021).

Similarly, it has been observed that ESG performance also enhances SFP (**H4**). Previous studies also support this hypothesis (Gidage & Kumar, 2024; He & Zhang, 2024; Otoo et al., 2023). This finding validates the findings of the earlier study. It has also been demonstrated that revenue collection at Indian farmers' markets and food product organizations is positively and statistically insignificantly impacted by monitoring and control measures (He & Zhang, 2024). In addition, Asiligwa and Rennox (2017) found that Indian commercial banks' efforts to monitor and control their finances had a negative and insignificant effect on those finances. The influence of monitoring operations on the safety of India's commercial (Gidage & Kumar, 2024).

CONCLUSION

The findings of this study lead one to the conclusion that the separation of duties has a role in determining how successfully India SACCOs operate in the state of Uttar Pradesh. This information can support the findings. It has been discovered that SRM and ICs can affect India SACCO's performance in Uttar Pradesh. Regarding financial matters, SACCOs have become a sign of trust and faith for tens of millions worldwide. It was only a matter of time until SACCOs went through this digital transition. With the most recent digital technology causing a disruption in the banking industry and the pandemic compelling people to stay indoors and maintain social isolation, it was inevitable that SACCOs would go through this. Significant progress may be made towards digitizing SACCOs in the next few years. This digitization may broaden the scope of FinTech in ways we could never have envisioned before.

The Implication of Research

This study has several implications for the research, many social, economic, managerial, and policy implications. We know that India is an agriculture-based country. Most of the population lives in rural areas, so there is less awareness of banking among the farmers, so they form small savings and credit societies at the community level. This study will focus on population welfare, especially rural farmers and small industry workers who need instant money. With the help of SACCO, they can be satisfied and do the work they need.

Theoretical contribution

This study contributes meaningfully to theory by integrating stakeholder governance, risk management, and ESG frameworks within the operational context of SACCOs in India a domain that remains underexplored in the existing literature

The study applies stakeholder theory not only to traditional corporate settings but also to community-based financial institutions. It reconceptualizes SACCOs as multi-stakeholder entities, balancing economic, social, and environmental imperatives–rather than serving only member financial interests.

This broadens the application of stakeholder theory to the microfinance and cooperative sector, emphasizing inclusive governance and accountability integration of internal control and ESG into performance. While ESG and internal controls have been studied in isolation in corporate finance, your study theoretically links them to performance outcomes in a cooperative context. It proposes that ESG performance and internal controls are compliance tools and strategic enablers of sustainable financial outcomes in SACCOs. This helps fill a theoretical gap by showing how internal control and ESG interact with performance metrics in non-corporate, community-owned financial settings.

Managerial level implication

Many small organizations can, for a good and robust society, give some small finance to small businesses and farmers easily without any load and also can employ some educated youngsters who are aware of this, reducing the bank loads. *Policy Implication*: Policymakers can make policies that easily boost the SACCO performance and minimise risk performance. Government and industry owners also make strong and effective policies in which ESG should be followed.

Social implication

This student has a lot of social motivation as this will help people be aware of India's saving credit cooperative society. They will be motivated to learn about this system, be involved, and earn money by using some capital in their profession.

Suggestion

The assignment of responsibilities needs to take precedence if the SACCO is successful in its mission. Under the human resources policy of the SACCO, the board of directors is responsible for being aware of and carrying out its responsibilities, in addition to those of management and shareholders. According to the study, all parties involved in a SACCO should do independence checks to ensure that it continues expanding and maintaining profitable operations. There is a need for autonomy at those levels of management inside the SACCO because everyone has a stake in the cooperative's growth. The study's conclusions include that SACCO's management and board of directors should ensure that risks are adequately handled to avert fraud and guarantee loan repayment to shield themselves from monetary loss. There is a need for proper study of the little credibility serving society and for the government to help these societies with the idea. The commercial bank should be given appropriate funding with the help of NABARD to these SACCO. So they can easily share their findings with society owners. Easy loans in rural tribal areas will proceed without hesitation and guarantee as tribal people are unaware of the financial system. Each state should try to open these societies in rural forest areas for better financial literacy and to give responsibility to agricultural farmers and local people. Digitalization should be spread in the local area.

Limitation and Future Scope

Even though there has been work on SACCO and its control impact on performance in India's small business and agriculture sector, there is a limited study, so there is a sizeable future scope for research to work in this sector. Some

respondents were afraid to offer truthful financial information because they believed it would expose them to information bias. The study was only conducted in one District, a relatively unimportant part of the country. Hence, the results should not be exempted from the whole country.

The participant-administered structured questionnaire was the primary source of information. Because the researcher no longer has access to the questionnaire once it has been sent out, it was expected that a certain percentage of respondents might not fill it out, which could affect the Reliability and validity of the results.

Author contributions: USY: writing – original draft, implications; **AKY:** literature review; **IG:** discusions; **SKY:** literature review, writing – review & editing; **AKV:** writing – review & editing, introduction. The authors have agreed with the results and conclusions.

Funding: No funding source is reported for this study.

Ethical statement: The authors stated that the study was approved by the Committee of Institutional Research Ethics committee (Chandigarh University, Uttar Pradesh) dated on June 17, 2024 (Approval code: MN/RP-2024). Written informed consents were obtained from the participants.

AI statement: The authors stated that during drafting this research paper no AI generated material has been used.

Declaration of interest: No conflict of interest is declared by the authors.

Data sharing statement: Data supporting the findings and conclusions are available upon request from the corresponding author.

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