

Cooperatives and Sustainable Development in Southwest Nigeria: A Triple Bottom Line, Institutional and Stakeholder Theory Conceptual Framework

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Abstract

Cooperative societies are widely credited with advancing sustainable development, yet the claim is usually made in aggregate, without an account of the institutional mechanisms through which cooperatives generate economic, social and environmental outcomes together, or of the conditions under which they fail to. This conceptual, theory-building paper integrates the triple bottom line, institutional theory and stakeholder theory, applies them to Southwest Nigeria and maps outcomes to the Sustainable Development Goals. Using a purposive, theory-driven synthesis of the literature, it defines eleven constructs and derives ten propositions with boundary conditions, indicative measures, suggested tests and the results that would count against each. The framework proposes that institutional arrangements (member governance, financial intermediation, capacity building and external partnerships) shape outcomes in the three domains; that institutional alignment and regional context, defined generically as financial depth, infrastructure and competition, moderate these relationships; and that stakeholder balance bears on durability. Environmental outcomes are expected to be the least developed domain. Existing regional evidence is largely cross-sectional, partly from the authors' own group and descriptive, so the propositions are hypotheses, and those lacking independent grounding (P6, P9 and P10) are treated as exploratory. The paper concludes that institutional alignment, rather than legal form, is the variable most worth testing. It recommends that researchers test the propositions with multilevel and configurational designs and that policymakers and cooperative boards, conditional on those tests, prioritise alignment, partnerships for environmental practice and outcome reporting across all three domains.

Keywords: Cooperative Governance, Institutional Alignment, Stakeholder Balance, Environmental Outcomes, Sustainable Development Goals, Theory Building.

Introduction

Sustainable development, in the classic formulation, meets present needs without compromising the ability of future generations to meet theirs (World Commission on

Environment and Development [WCED], 1987). The 2030 Agenda translated this into seventeen goals that span poverty, hunger, gender equality, decent work, inequality and climate action (United Nations, 2015). Cooperatives are often named as institutions that can contribute across these goals because they are member-owned, serve member needs and are guided by principles that include concern for community (Birchall, 2003; International Co-operative Alliance [ICA], 2015).

In Southwest Nigeria, which comprises Lagos, Ogun, Oyo, Osun, Ondo and Ekiti states, relatively advanced economic infrastructure coexists with persistent poverty and inequality. The National Bureau of Statistics (2022) reports that 63 per cent of Nigerians are multidimensionally poor, with 72 per cent of rural residents poor against 42 per cent of urban residents, and that 65.1 per cent of children in the South-West are multidimensionally poor. Nwachukwu et al. (2024) examined how cooperative societies, having matured over decades, have contributed to sustainable development in the region, focusing on poverty reduction and community development and on skill acquisition programmes that enable members to start small businesses. Using a survey of 384 cooperative members across the six state capitals, the study reported significant positive relationships between cooperative societies and both poverty reduction and community development. A related study by Nwachukwu et al. (2025) analysed cooperative societies, entrepreneurial business growth and poverty alleviation in the same region, using a descriptive survey with 352 valid responses from cooperative members in the six state capitals, and reported positive associations between cooperative societies and both poverty alleviation and entrepreneurial business growth.

The present paper asks a single guiding question that follows from these studies: through which institutional arrangements and mechanisms do cooperatives generate integrated sustainable development outcomes, how does regional context condition them, and under what conditions do they fail to? Answering it requires a framework that goes beyond a list of cooperative contributions. The paper integrates three theoretical lenses, the triple bottom line, institutional theory and stakeholder theory, and draws on related work by members of the team and colleagues on social capital and financial inclusion (Abdulahi et al., 2024c), collective entrepreneurship (Abdulahi et al., 2024a, 2024b), capacity building (Emejulu et al., 2019), collective marketing (Anigbogu et al., 2016), insurance (Abdulahi et al., 2019) and mechanisation and food security (Abdulahi et al., 2023).

Empirical and Institutional Context

Cooperative societies were introduced in Nigeria under colonial policy in the 1930s, following a 1934 report that recommended them (Akanji, 2024), so cooperatives in Southwest Nigeria have operated for over nine decades, and Nwachukwu et al. (2024) describe them as having matured over that period. This paper frames the region's sustainability questions as concerning poverty, inequality, informal enterprise and the resilience of livelihoods (National Bureau of Statistics, 2022; Nwachukwu et al., 2025) rather than acute hunger, which the Cadre Harmonisé analysis tracks at state level (Cadre

Harmonisé, 2025). Cooperatives may also operate in a more competitive financial setting than in many rural regions, which would shape where their comparative advantage lies.

Problem Statement

The problem: Cooperatives are widely credited with contributing to poverty reduction, enterprise growth and community development in Southwest Nigeria, yet the claim that they advance sustainable development is made in aggregate, without an account of which institutional arrangements produce which outcomes, whether environmental outcomes are produced at all, and where the economic, social and environmental domains conflict.

What previous studies have established: Surveys of cooperative members in the region report positive associations between cooperatives and poverty reduction, community development and enterprise growth (Nwachukwu et al., 2024, 2025), and an independent study of agribusiness cooperatives in Oyo State likewise reports that membership raised members' living standards (Ibrahim et al., 2025). A survey of cooperative farmers in southern Nigeria associates stronger cooperative membership with climate adaptation (Braithwaite & Sharomo, 2026). Beyond Nigeria, a review finds that agricultural cooperatives contribute to farm economic sustainability and to the adoption of environmentally friendly practices, while studies of social sustainability are scarce and the trade-off between economic and environmental sustainability needs more research (Candemir et al., 2021). Recent work shows that the mechanism gap persists: a systematic review reports that the literature on environmental, social and governance practices in cooperatives is still limited (Schlenker et al., 2026), and a study of Spanish cooperatives finds that they disclose social and governance topics more often than economic and environmental ones (Castilla-Polo et al., 2025). Section 2 reviews the evidence in detail.

Research Gaps

The gap. The theory and evidence reviewed in Section 2 leave three conceptual gaps and one limitation of the evidence base.

Gap 1 (mechanism): The studies test whether cooperatives are associated with outcomes. They do not specify the institutional mechanisms through which the outcomes arise, so they cannot explain variation among cooperatives or predict failure.

Gap 2 (integration across domains): The focus has been on economic and social outcomes, namely poverty, enterprise growth and community development. The environmental domain, and the trade-offs among the three domains of the triple bottom line, are not theorised.

Gap 3 (regional conditions): How regional context, meaning the financial depth, infrastructure and competition that cooperatives face, conditions where they have a comparative advantage has not been specified. Southwest Nigeria, where poverty and informal enterprise coexist with relatively developed infrastructure and a competitive financial setting, is one application of that question.

Limitation of the evidence base (motivating the research design): The regional analyses are descriptive and cannot support claims about mechanism or causation; their design limits are set out once, in Section 3.2. This is a limitation of earlier studies and not a gap that this paper closes. It motivates the falsification criteria in Table 3 and the research design in Section 5.5, which state what would count against each proposition and how it could be tested.

Objectives and Research Questions

The paper pursues four objectives, each framed as a research question and aligned with Gaps 1 to 3 and with the propositions in Section 4.4. Its theoretical contribution is an integrated framework (Section 4) that combines the triple bottom line, institutional theory and stakeholder theory, maps outcomes to the Sustainable Development Goals, and specifies constructs, relationships, underlying logic and boundary conditions (Whetten, 1989). The guiding question stated in Section 1 is addressed through the four research questions below.

Objective 1 (Gap 1; P1 to P4 and P9): To specify the institutional arrangements and mechanisms through which cooperatives generate economic and social outcomes. RQ1: Which arrangements, acting through which mediating and moderating mechanisms, produce which outcomes?

Objective 2 (Gap 2; P5 and P6): To theorise how economic, social and environmental outcomes relate. RQ2: When do the three domains reinforce one another, and why are environmental outcomes expected to lag?

Objective 3 (Gap 3; P7 and P8): To specify how institutional alignment and regional context condition the arrangement–outcome relationships. RQ3: Does institutional alignment explain more than legal form, and how does regional context shape comparative advantage?

Objective 4 (Gap 1, durability; P10): To explain the durability of cooperatives as development actors. RQ4: Does attention to non-member stakeholders sustain legitimacy and support over time?

The paper addresses the theoretical gaps and makes the limitation of the evidence tractable through falsification criteria and a research design; the empirical questions themselves still require the tests it specifies.

Organisation of the Paper

The remainder of the paper is organised as follows. Section 2 clarifies the key concepts, reviews the theories and the empirical evidence, and summarises the remaining gaps. Section 3 sets out the methodology of the conceptual synthesis, the source-selection statement and the limits of the evidence base. Section 4 presents the conceptual framework, its mapping to the Sustainable Development Goals, the propositions and their boundary conditions. Section 5 discusses the theoretical implications, positions the framework against existing ones, considers rival explanations, and sets out the research

agenda with an illustrative design for testing the propositions. Section 6 presents recommendations, conditional on testing. Section 7 states the limitations and concludes.

Literature Review

Conceptual clarifications

Sustainable development: Development that integrates economic, social and environmental objectives across generations (WCED, 1987; United Nations, 2015).

Cooperative society: An autonomous association of persons united voluntarily to meet common economic, social and cultural needs through a jointly owned and democratically controlled enterprise (ICA, 2015).

Triple bottom line: The idea that organisational performance should be assessed on economic prosperity, social equity and environmental quality, not profit alone (Elkington, 1997; Slaper & Hall, 2011).

Institutions: The rules, norms and organisational forms that structure human interaction (North, 1990; Scott, 2014).

Precise definitions keep the propositions testable. Table 1 is the single place where each of the eleven constructs is defined and distinguished from related ideas.

Table 1. Constructs, definitions and distinctions

Construct	Definition used here	Not to be confused with	Anchor source
Economic outcomes	Income, enterprise growth and poverty reduction among members	Society surplus	Nwachukwu et al. (2024, 2025)
Social outcomes	Inclusion (including financial inclusion), gender equity and community development	Membership size	Abdulahi et al. (2024c)
Environmental outcomes	Sustainable practices, efficient resource use and climate resilience	Agricultural output	No established measure for cooperatives (indicators proposed in Section 5.5); cf. Candemir et al. (2021)
Member governance	Democratic control, transparency and accountability	Formal registration; institutional alignment (external fit) and stakeholder balance (scope of accountability)	ICA (2015); cf. Ostrom (2009)
Financial intermediation	Savings mobilisation and credit provision to members (the supply of services by the society)	Lending by microfinance banks; members' use of services (financial inclusion)	Abdulahi et al. (2024a, 2024b)
Capacity building	Skills, training and entrepreneurship support provided by the society	Formal education	Emejulu et al. (2019)

Construct	Definition used here	Not to be confused with	Anchor source
External partnerships	Links with government, insurers, markets and development agencies	Donor funding alone	Abdulahi et al. (2019); Anigbogu et al. (2016)
Institutional alignment	Fit among the regulative, normative and cultural-cognitive pillars, including the responsiveness of rules and practices to local needs	Volume of regulation; member governance (internal control)	Scott (2014)
Stakeholder balance	Attention to the interests of members and non-members alike (the scope of whose interests the society takes into account)	Board size; member governance (who controls the society)	Freeman (1984)
Collective entrepreneurship	Joint pursuit of opportunities through shared ownership and risk, over and above ordinary use of the society's services	Individual entrepreneurship; ordinary cooperative membership	Abdulahi et al. (2024a)
Regional context	Financial depth, infrastructure and competition that cooperatives face in a given region; Southwest Nigeria is treated as one application	National averages	Develtere et al. (2008), on supportive conditions

Source: Authors' construction, drawing on the works cited in the final column.

Triple Bottom Line

Elkington (1997) argued that organisations create value across three dimensions. Cooperatives are a natural case because their purposes are multi-dimensional by design: they pursue members' economic interests and social solidarity (Novkovic, 2008; Birchall & Ketilson, 2009) and, as Section 2.7 shows, to a more limited and less evidenced extent environmental stewardship. The framework does not assume these dimensions always align. Trade-offs can arise, for example between short-term member returns and investment in environmentally sound practices; measuring the dimensions separately is what allows this to be examined (Slaper & Hall, 2011), and a recent review calls for research on exactly this trade-off between economic and environmental sustainability in cooperatives (Candemir et al., 2021). Recent applications show how the three domains are operationalised for cooperatives: an analysis of 168 cooperative sustainability reports shows which economic, environmental and social indicators cooperatives most often disclose (Yakar Pritchard & Çaliyurt, 2021), and ESG-based indices and integrative frameworks have been proposed for cooperatives (Castilla-Polo et al., 2025; Schlenker et al., 2026).

In this paper, the triple bottom line supplies the three outcome domains against which cooperative performance is judged (defined in Table 1). Its value is that it makes the

neglected environmental domain visible. Its limit is that the three domains are not commensurable, so the framework treats them as separate outcomes whose relationships are themselves propositions (P5, P6) and does not combine them into one index.

Institutional Theory

North (1990) treated institutions as the rules of the game that shape incentives. DiMaggio and Powell (1983) described how organisations adopt similar forms under coercive, mimetic and normative pressures, which can lead to isomorphism rather than responsiveness to local needs. Scott (2014) distinguishes regulative, normative and cultural-cognitive pillars. In Nigeria, cooperative law, registration practices and promotional policy form the regulative pillar, cooperative principles and community norms the normative pillar, and shared understandings of mutual help the cultural-cognitive pillar. Where these pillars align, cooperatives are more robust; where they conflict, for example where state promotion crowds out member ownership, cooperatives may become formal but weak (Wanyama et al., 2009). Recent work on African cooperatives as institutional bricoleurs suggests that cooperatives secure outcomes when they combine new arrangements with existing social and economic institutions rather than follow a standard organisational model (Mangnus & Schoonhoven-Speijer, 2020), and the cooperative identity has been proposed as a normative yardstick for social sustainability indicators (Novkovic, 2022). Institutional theory supplies the moderator of alignment (P7). Where the regulative, normative and cultural-cognitive pillars reinforce member ownership, societies are expected to be more durable. The theory describes pressures and not outcomes, so the framework pairs it with measures of what societies deliver.

Stakeholder Theory

Freeman (1984) argued that organisations must balance the interests of all groups affected by their actions. Cooperative stakeholders include members, employees, local communities, government, financiers and, indirectly, the environment. Cooperatives are distinctive in that members are both owners and users, which reduces some stakeholder conflicts but can create others, such as between members and non-member employees or community groups (Hansmann, 1996; Borzaga & Defourny, 2001). Multistakeholder governance has been argued to be the model most likely to account for the interests of the wider community, even where members are self-interested (Altman, 2025). Stakeholder theory supplies the lens for the durability proposition (P10), which extends the theory beyond its original scope (see Section 3.2 on the status of the propositions): societies that take account of non-member stakeholders, such as employees and the surrounding community, are expected to keep legitimacy and support over time. The theory does not rank stakeholders, so which stakeholders to include is an empirical question for each society.

Social Capital, Finance and Collective Entrepreneurship as Mechanisms

Related work by members of the team provides micro-level mechanisms. Social capital among cooperative members is linked to financial inclusion outcomes: among 864 members of a cooperative investment and credit society, social capital was positively related to the use and quantity of savings facilities (Abdulahi et al., 2024c). Collective entrepreneurship, the joint pursuit of opportunities through shared ownership and risk, is linked to financial inclusion and to savings habits among members: collective ownership of the enterprise was positively associated with members' use of loan facilities (Abdulahi et al., 2024a), and the amount invested in collective enterprise was strongly correlated ($r = 0.74$) with use of savings facilities (Abdulahi et al., 2024b). These mechanisms connect the member level to the development outcomes at community level that the triple bottom line measures.

These micro-level findings are used in the framework as mechanisms and not as proof. Social capital is expected to mediate the effect of financial intermediation on inclusion (P₃), and collective entrepreneurship to strengthen the link between participation and enterprise growth (P₄), although the cited collective-entrepreneurship studies concern financial inclusion and savings and not enterprise growth, so the P₄ link is an extension of the cited findings. All three Osun State studies concern cooperative members in one state, and at least two concern one type of society, so extending them to the six Southwest states, and to outcomes beyond finance, is an assumption that the framework makes explicit.

Social and Solidarity Economy Perspectives

Utting (2015) situates cooperatives within a broader social and solidarity economy that seeks to combine economic activity with social purpose. Develtere et al. (2008) document how African cooperatives have contributed to poverty reduction under supportive conditions. These perspectives support the premise that cooperatives can be development actors but also show that outcomes depend on institutional environments. Recent work on cooperatives and other social and solidarity economy organisations reaches a similar conclusion: they can advance decent work and sustainable development, but better data and supportive legal frameworks are needed (Filippi et al., 2023).

Develtere et al. (2008) report contributions under supportive conditions, which implies that the same cooperative form may produce different results under different regulatory and market conditions. This is the basis of the regional proposition (P₈). Most of this literature is descriptive and comparative, so it generates propositions better than it tests them.

Empirical Evidence on Cooperatives and Sustainable Development

Evidence of benefit: A recent review indicates that agricultural cooperatives play a significant role in farm economic sustainability and in the adoption of environmentally friendly practices (Candemir et al., 2021), and a survey in Fujian, China, found that cooperative membership increased farmers' interest in green production (Yu et al., 2023). Earlier work found that African cooperatives have contributed to poverty reduction under

supportive conditions (Develtere et al., 2008; Birchall, 2003) and that the cooperative business model has shown resilience in times of crisis (Birchall & Ketilson, 2009). Cooperatives are named as institutions that can contribute across the Sustainable Development Goals because they are member-owned and guided by principles that include concern for community (International Co-operative Alliance, 2015; United Nations, 2015), and their role in the goals continues to attract discussion (Lafont et al., 2023).

Evidence of limits: The same review finds that studies of cooperatives and social sustainability are scarce and that the trade-off between economic and environmental sustainability needs more research (Candemir et al., 2021). Reporting studies suggest that cooperatives disclose social and governance topics more often than economic and environmental ones (Castilla-Polo et al., 2025) and that what they report differs by type and size (Yakar Pritchard & Çaliyurt, 2021). The risk that state promotion displaces member ownership is discussed in Section 2.3.

Nigerian evidence and its design limits: Nwachukwu et al. (2024) surveyed 384 cooperative members across the six state capitals of Southwest Nigeria and reported significant positive relationships between cooperative societies and both poverty reduction and community development. Nwachukwu et al. (2025), using 352 valid responses from members in the same capitals, reported significant positive associations between cooperatives and both poverty alleviation and entrepreneurial business growth. At the member level, the Osun State studies by members of the team relate social capital and collective entrepreneurship to financial inclusion and savings (Abdulahi et al., 2024a, 2024b, 2024c). An independent study of agribusiness cooperatives in Oyo State reports that membership significantly raised members' living standards (Ibrahim et al., 2025), and a survey of cooperative farmers in southern Nigeria associates stronger cooperative membership with adaptation measures such as crop diversification and improved varieties (Brimah & Sharomo, 2026), the closest environmentally oriented Nigerian evidence identified in the search described in Section 3.2. The environmental domain is not measured in the Southwest studies above. The design limits of the regional analyses are set out once, in Section 3.2.

Where the Theories Converge and Diverge

The theories agree that cooperatives are multi-purpose organisations. They disagree about whether cooperative form converges on a common template or adapts to local needs, and about how far the three bottom lines can be pursued together. The triple bottom line treats economic, social and environmental performance as jointly measurable (Elkington, 1997; Slaper & Hall, 2011). Institutional theory predicts that organisations facing similar pressures adopt similar forms, which can produce formal conformity without responsiveness to local needs (DiMaggio & Powell, 1983). Stakeholder theory directs attention to balancing the interests of those affected (Freeman, 1984); the framework extends it to the expectation that doing so sustains legitimacy. Work on the cooperative difference argues that member

ownership gives cooperatives distinctive social and economic aims (Novkovic, 2008; Birchall & Ketilson, 2009).

The key divergence concerns conformity. As Section 2.3 notes, isomorphism predicts that societies built to the statutory model will look alike. The authors extend stakeholder and cooperative-difference accounts to expect that societies that adapt their rules to local needs will deliver wider outcomes. The framework therefore proposes that institutional alignment (P7) matters more than legal form, and that environmental outcomes will lag wherever societies follow the statutory model without local adaptation (P6). Testing this contrast across societies in the same state is a direct way to separate legal form from institutional alignment.

Summary of the Evidence and Remaining Gaps

The evidence shows that cooperatives are associated with poverty reduction, community development and enterprise growth, and that their outcomes depend on institutional conditions. It does not show through which arrangements the outcomes arise, how the economic, social and environmental domains trade off, or how regional context conditions the result. Recent independent reviews point to the same gaps (Candemir et al., 2021; Schlenker et al., 2026). These are the three gaps set out in Section 1.3, and the framework in Section 4 addresses them. The limitation of the evidence base is taken up in Section 3.2, in the falsification criteria in Table 3 and in the design in Section 5.5.

Methodology

Research Approach

This is a conceptual, theory-building paper. Following typologies of conceptual articles (Jaakkola, 2020), it uses a theory-synthesis design: it integrates the triple bottom line, institutional theory, stakeholder theory and cooperative theory to explain how cooperatives produce sustainable-development outcomes, and applies them to Southwest Nigeria. It aims to satisfy the usual criteria for a theoretical contribution: the constructs (what), their relationships (how), the underlying logic (why) and the boundary conditions (who, where and when) (Whetten, 1989).

Source Selection and Evidence Base

Selection statement: Source selection was purposive and theory-driven, not systematic (Snyder, 2019). Three groups of sources were used: (i) anchor studies, namely published work on cooperatives in Nigeria by members of the team and colleagues, including the Southwest study of cooperatives and sustainable development; (ii) foundational theoretical works in sustainability, institutional and stakeholder theory; and (iii) studies of African and social-economy cooperatives, chosen to inform boundary conditions. To reduce reliance on the anchor studies, a supplementary search for independent recent literature was run in October 2026 through web-based searches of publisher platforms and open repositories (including Wiley Online Library, Springer, MDPI, SAGE and ScienceDirect). The search

terms combined “cooperatives” with “Sustainable Development Goals”, “sustainability performance”, “environmental sustainability”, “ESG”, “multistakeholder”, “institutional” and “Nigeria”. The period was 2021 to 2026 for cooperative-specific work, and foundational theory sources were retained irrespective of date. Sources were included if they were peer-reviewed or edited scholarly work, independent of the author team, and addressed the economic, social or environmental outcomes or the governance of cooperatives; reviews and empirical studies were both eligible. Statements about the anchor studies are limited to the scope their authors report. No primary data were collected, and no systematic database search with a registered protocol was conducted. A conceptual paper of this kind develops ideas and propositions and does not report empirical findings (Gilson & Goldberg, 2015).

Frameworks considered: Four competing approaches were considered and are used as comparators or sources of measures rather than as the organising lens. Ostrom’s (2009) social-ecological systems framework addresses the governance of shared resources and does not specify cooperative-specific arrangements or the three outcome domains. ESG-based disclosure indices and frameworks (Castilla-Polo et al., 2025; Schlenker et al., 2026) and GRI-based reporting (Yakar Pritchard & Çalıyurt, 2021) describe what cooperatives report and not why outcomes arise. The cooperative-identity approach (Novkovic, 2022) offers a normative benchmark for what should be measured and disclosed and not a testable account of mechanisms. Social and solidarity economy and decent-work approaches (Filippi et al., 2023; Utting, 2015) situate cooperatives in a wider field but are not specific to the outcome mechanisms studied here. They were excluded as the primary lens for these reasons, and Section 5.1 compares the proposed framework with them.

Evidence base and its limits: Nwachukwu et al. (2025) used single-predictor regressions on 352 valid responses from six state capitals ($R^2 = 0.584$ for poverty alleviation and 0.743 for entrepreneurial business growth), and its Durbin–Watson statistics of 0.095 and 0.103 were noted by its own authors, who include members of the present team, as raising concern about autocorrelation. Nwachukwu et al. (2024) reported R^2 values of 0.937 and 0.909 for poverty reduction and community development from 384 members. Very high single-predictor fits in cross-sectional survey data call for caution, and a single-predictor specification cannot support claims about mechanism or causation, so these figures are used to motivate the framework and not as causal effect sizes. The Osun State studies drew on multistage samples of 864 cooperative members and report associations (Abdulahi et al., 2024a, 2024b, 2024c). The regional evidence also comes largely from the research group’s own studies, and the independent studies added in Section 2 (Ibrahim et al., 2025; Braimah & Sharomo, 2026) are few and cover different outcomes. This paragraph is the single statement of these caveats, and other sections cross-refer to it. The framework is therefore offered as a structured set of testable claims, not as a summary of settled findings.

Status of the propositions: The propositions are falsifiable, directional and tied to observable constructs, but they are hypotheses and not findings. They differ in how far they rest on prior evidence. P₁, P₃, P₇ and P₈ follow from the cited theory and from the cited studies. P₂, P₄ and P₅ extend cited findings to outcomes that the cited studies did not measure. P₆, P₉ and P₁₀ rest on independent theoretical grounding or on studies from outside the Southwest, and are treated as exploratory. This paragraph is the single statement of that status, so the propositions in Section 4.4 do not repeat it, and Table 2 records it for each proposition.

Conceptual Framework and Propositions

Framework Overview

The framework has four parts. Institutional arrangements (member governance, financial intermediation, capacity building and external partnerships) are the inputs. They produce outcomes in three domains, economic, social and environmental, which are mapped to the Sustainable Development Goals in Section 4.3. Institutional alignment and regional context moderate the relationships between arrangements and outcomes, while stakeholder balance bears on the durability of a society over time (P₁₀). Collective entrepreneurship, a further construct, conditions the link between participation and enterprise growth (P₄). Social capital, meaning the trust, networks and norms of reciprocity among members, is treated as a mediating mechanism (P₃) and not as an outcome. The framework does not assume that the domains move together (Figure 1). Propositions P₅ and P₆ state when economic and social outcomes reinforce each other and why environmental outcomes are expected to lag.

Constructs

The eleven constructs are defined once, in Table 1 (Section 2.1), and are not redefined here. Three of them overlap conceptually and are distinguished as follows. Member governance concerns internal control: who decides in the society and how decision-makers are held to account. Institutional alignment concerns external fit: how far the society's rules and practices match the regulative, normative and cultural-cognitive environment in which it operates and the needs of its locality. Stakeholder balance concerns the scope of accountability: whether the society takes account of the interests of non-members as well as members. A society can therefore have strong member governance and weak alignment, for example where a democratic society follows a statutory template that does not suit its locality, and can be well aligned yet attend only to members' interests. The three should be measured separately (Section 5.5).

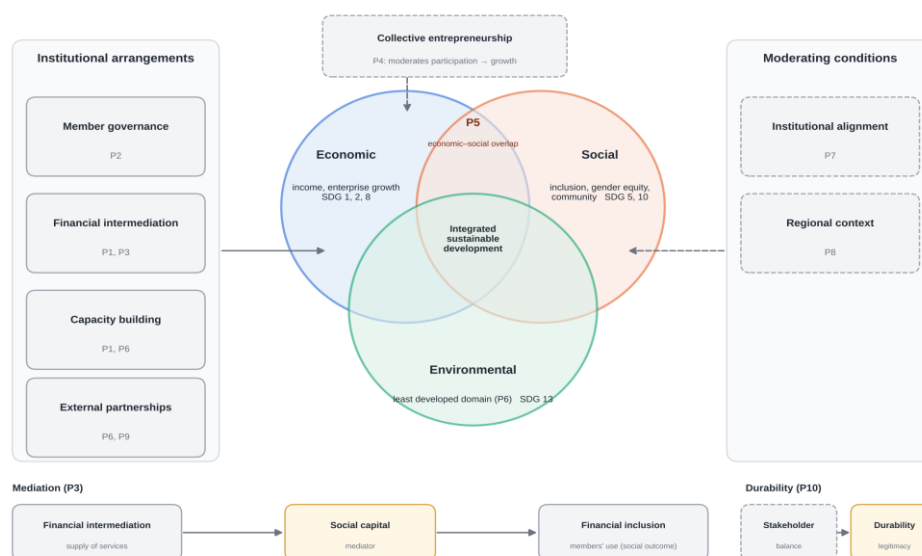
Mapping to the Sustainable Development Goals

- **SDG 1 (No poverty) and SDG 8 (Decent work and economic growth):** enterprise growth and poverty reduction, to which savings and skill acquisition are expected

to contribute through financial intermediation and capacity building (Nwachukwu et al., 2024, 2025).

- **SDG 2 (Zero hunger):** mechanisation, storage and marketing that raise food availability and stability (Abdulahi et al., 2023; Anigbogu et al., 2016); these studies were conducted in Anambra and Benue States, outside the Southwest, so applying them to the region is an extension.
- **SDG 5 (Gender equality) and SDG 10 (Reduced inequalities):** inclusive participation and financial inclusion (Abdulahi et al., 2024a, 2024c).
- **SDG 13 (Climate action):** risk-management and resilience measures such as insurance, which the insurance study treats as risk reduction and not as an environmental outcome (Abdulahi et al., 2019, a Delta State study). The environmental domain is therefore only thinly mapped: no cited study measures resource efficiency or other environmental goals such as SDG 12 or SDG 15.
- **SDG 17 (Partnerships for the goals):** cooperative networks and external partnerships, which act as an enabler of the other goals and not as an outcome domain.

Figure 1: Integrated framework of cooperatives and sustainable development, applied to Southwest Nigeria.



Source: Authors' conceptualisation, adapted from Elkington (1997), Scott (2014) and Freeman (1984).

Figure 1 shows institutional arrangements (left) feeding three outcome domains, drawn as overlapping circles to show where outcomes coincide. The overlap between economic and social outcomes is the subject of P5, and the least developed environmental domain is the subject of P6. The overlap is a visual device only: the domains remain separate outcomes and are not combined into one index (Section 2.2). Dashed boxes show the conditions that moderate the arrangement–outcome relationships: institutional alignment (P7), regional

context (P8) and collective entrepreneurship, which moderates the link between participation and enterprise growth (P4). The lower strips show social capital as a mediator between financial intermediation and financial inclusion (P3) and stakeholder balance as bearing on the durability of the society, not as a moderator of outcomes (P10).

Propositions

The propositions are stated below. Their status (theory-derived, extension of cited work, or exploratory) is explained in Section 3.2 and recorded in Table 2.

P1: Cooperatives that combine financial intermediation with capacity building produce stronger economic outcomes than those offering either alone, because finance without skills is under-used and skills without finance are not implemented (Emejulu et al., 2019; Nwachukwu et al., 2024).

P2: Member governance quality is positively associated with economic and social outcomes, because democratic control and accountability align the cooperative's actions with members' and community interests (ICA, 2015, on democratic member control; the extension to outcomes is flagged in Section 3.2). Its relationship with environmental outcomes is conditional on the partnerships and capacity described in P6.

P3: Social capital within the cooperative mediates the effect of financial intermediation, the society's supply of savings and credit services, on financial inclusion, that is, members' use of those services (cf. Abdulahi et al., 2024b, 2024c, who report positive associations of social capital and collective entrepreneurship with savings behaviour; the mediating role of social capital remains to be tested).

P4: Collective entrepreneurship, meaning joint ventures with shared ownership and risk over and above ordinary use of the society's services, strengthens the link between cooperative participation and entrepreneurial business growth, because shared ownership and risk allow members to undertake ventures they could not finance alone (cf. Abdulahi et al., 2024a, who relate collective ownership to members' use of loan facilities; Nwachukwu et al., 2025, on cooperatives and business growth).

P5: Economic and social outcomes are positively related in cooperatives with inclusive membership, but the relationship weakens where membership is stratified, and benefits concentrate among few members (on multi-goal enterprise forms see Borzaga & Defourny, 2001).

P6: Environmental outcomes are expected to be the least developed domain in Southwest Nigerian cooperatives. They are expected to depend on external partnerships and capacity building that embed environmental practices; absent these, trade-offs with short-term member returns are expected to dominate. The domain is expected to lag further where societies follow the statutory model without local adaptation (Section 2.8). Independent evidence that cooperative membership is associated with environment-friendly practices and climate adaptation (Candemir et al., 2021; Yu et al., 2023; Braimah & Sharomo, 2026) supports the dependence on cooperative capacity but not the claim that the domain lags in the Southwest, so P6 is treated as exploratory.

P7: Institutional alignment moderates the relationships between institutional arrangements and outcomes: where regulative, normative and cultural-cognitive pillars support member ownership and rules respond to local needs, the arrangements are expected to deliver stronger outcomes, and legal form alone is expected to explain less than alignment does; where state promotion displaces member ownership, outcomes are expected to be weaker (Scott, 2014; Wanyama et al., 2009). P2 and P7 differ empirically: P2 is a main-effect claim about the association between governance quality and outcomes, tested with governance entered as a predictor, whereas P7 is an interaction claim, tested by whether the arrangement–outcome relationships vary with alignment and whether alignment explains more of the variation than legal form.

P8: Regional context moderates' outcomes: where financial markets are deeper and infrastructure denser, cooperatives compete with formal providers, so their comparative advantage is expected to lie in social capital, small-ticket finance and community-based services rather than in access alone (cf. Develtere et al., 2008, on the dependence of outcomes on context). Regional context is defined generically (Table 1), and Southwest Nigeria, where the authors expect relatively deep financial markets and dense infrastructure, is one application; the proposition can be tested across the six states and between urban and rural settings, and across regions outside the Southwest (Section 5.5).

P9: External partnerships raise outcomes by providing services cooperatives cannot supply alone, including insurance, extension and market access (Abdulahi et al., 2019; Anigbogu et al., 2016; Abdulahi et al., 2023). Independent work finds that African cooperatives secure market access by combining new arrangements with existing institutions (Mangnus & Schoonhoven-Speijer, 2020) and that public policies and private cooperative initiatives may complement each other (Candemir et al., 2021). Because the cited partnership studies were conducted outside the Southwest, P9 is treated as exploratory.

P10: Stakeholder balance is expected to bear on durability: cooperatives that explicitly consider non-member stakeholders, such as communities and employees, are expected to sustain legitimacy and support over time (Freeman, 1984, on the stakeholder approach; Altman, 2025, on multistakeholder cooperatives and the interests of the wider community). The link to durability itself is untested, so P10 is treated as exploratory.

Boundary Conditions

The framework applies to cooperatives that are functioning member-owned enterprises with real member control. It is less applicable to dormant societies, to societies that are registered but inactive, and to organisations that have drifted toward investor-oriented models or that are controlled by a dominant outside party. It assumes a minimally enabling legal and macroeconomic environment in which cooperatives can register, hold assets and contract.

It also assumes that members face real developmental constraints that cooperative services can address; where members are already well served by other institutions, the marginal

contribution of cooperatives shrinks. Finally, because the framework was developed for Southwest Nigeria, its claims about regional context (P8) should not be carried to regions with different financial depth, infrastructure or traditions of mutual help without adaptation.

Summary Of Propositions, Indicative Measures and Suggested Tests

Table 2 summarises the propositions with their expected relationships, indicative measures and suggested tests.

Table 2: Propositions, expected relationships, indicative measures and suggested tests

Proposition	Expected relationship	Indicative measures	Suggested test	Status (Section 3.2)
P1	Finance combined with capacity building outperforms either alone	Savings and credit access; training and skill acquisition; enterprise income and survival	Interaction terms; comparison of societies offering one, both or neither	Theory-derived
P2	Member governance is positively associated with economic and social outcomes.	Index of democratic control, transparency and accountability	Regression or structural equation model with governance as predictor (main effect)	Extension of cited work
P3	Social capital mediates the link from financial intermediation to financial inclusion.	Trust and network scales; members' use of savings and credit services	Mediation analysis	Theory-derived
P4	Collective entrepreneurship strengthens the link to business growth	Jointly owned enterprises; shared risk; business growth	Moderated regression	Extension of cited work
P5	Economic and social outcomes are positively related, more strongly where membership is inclusive.	Concentration of benefits by member type; inclusion measures	Heterogeneity analysis	Extension of cited work
P6	Environmental outcomes depend on partnerships and capacity	Adoption of environmentally sound practices; partnerships	Comparison across societies; interaction terms	Exploratory
P7	Institutional alignment moderates the arrangement–outcome relationships	Regulatory quality; member ownership; norms of mutual help; responsiveness of rules to local needs	Multilevel model with arrangement × alignment interactions; qualitative comparative analysis contrasting	Theory-derived

Proposition	Expected relationship	Indicative measures	Suggested test	Status (Section 3.2)
			alignment with legal form	
P8	Regional context shapes comparative advantage	Local financial depth; infrastructure; competition from formal providers	Comparison across the six states and urban and rural settings, and across regions outside the Southwest	Theory-derived
P9	External partnerships raise outcomes	Number and depth of links with insurers, extension and markets	Regression of outcomes on partnership intensity	Exploratory
P10	Stakeholder balance sustains legitimacy	Non-member stakeholder engagement; survival and growth over time	Longitudinal comparison	Exploratory

Source: Authors' construction from the propositions in Section 4.4; status as explained in Section 3.2.

Table 3 states, for each proposition, a pattern of results that would count against it, so that the framework can be rejected as well as supported.

Table 3: Results that would count against each proposition

Proposition	Result that would count against it
P1	Societies offering both finance and capacity building do not outperform those offering either alone (interaction near zero or negative)
P2	Member governance is unrelated to economic or social outcomes.
P3	Social capital shows a direct association with financial inclusion but no mediating role.
P4	Collective entrepreneurship does not strengthen the link between participation and business growth.
P5	Economic and social outcomes are equally related in stratified and inclusive societies.
P6	Environmental outcomes are not weaker than economic and social outcomes, or are unrelated to partnerships and capacity building.
P7	Relationships do not vary with institutional alignment, or legal form explains outcomes as well as alignment does

Proposition	Result that would count against it
P8	The pattern of comparative advantage is the same across regions with different financial depth and infrastructure.
P9	Partnership intensity is unrelated to outcomes.
P10	Societies with more non-member stakeholder engagement are no more durable.

Source: Authors' construction from the propositions in Section 4.4.

Discussion and Implications

Theoretical Implications

The framework moves the discussion from listing cooperative contributions to explaining mechanisms and conditions. Three contributions follow. First, it proposes that institutional alignment, and not cooperative form alone, shapes whether sustainable outcomes are realised, which would shift attention from registration counts to the alignment of rules and norms with each other and with local needs (see DiMaggio & Powell, 1983, on isomorphism; Scott, 2014).

Second, it proposes that environmental outcomes are the weakest link and offers reasons, namely limited partnerships and capacity, that can be tested (P6). Third, it links member-level mechanisms such as social capital, finance and collective entrepreneurship to broader outcomes through the Sustainable Development Goals, which gives research on Nigerian cooperatives a common frame of reference in the goals and targets of the 2030 Agenda (United Nations, 2015), against which indicators agreed after the agenda can be applied.

Positioning against existing frameworks: Four existing approaches address parts of the same ground. First, the cooperative-identity approach proposes the Statement on the Cooperative Identity as a normative benchmark for social sustainability indicators, such as fair income distribution, economic democracy and community investment, that should be measured and disclosed (Novkovic, 2022). Second, ESG-based work offers an integrative framework of ESG aspects for cooperatives, concluding that ESG practices should support cooperatives' dual economic and social goals (Schlenker et al., 2026), and a disclosure index built from Spanish cooperatives' reporting (Castilla-Polo et al., 2025). Third, a review of agricultural cooperatives and farm sustainability links economic, environmental and social sustainability to theory, especially the heterogeneity of members (Candemir et al., 2021). Fourth, GRI-based reporting studies document which indicators cooperatives disclose (Yakar Pritchard & Çalıyurt, 2021).

What is new: These approaches specify what cooperatives should measure, disclose or report, or review the evidence on outcomes. They do not specify which institutional arrangements generate which outcomes, and none, as far as the search described in Section 3.2 could establish, separates institutional alignment from legal form, treats stakeholder balance as a condition of durability, or states the result that would count against each claim. The present framework adds these: mediated and moderated mechanisms linking arrangements to outcomes in three domains (P1 to P9), an

institutional-alignment account of why societies of the same legal form differ (P7), a generic treatment of regional context (P8) that can be applied beyond the Southwest, and explicit falsification criteria (Table 3). Its novelty is therefore one of explanation and testability, not of measurement, and it should be read as complementary to the identity and ESG approaches, whose indicators can serve as measures of its outcome constructs.

Implications for Cooperative Management

If P₁ holds, cooperative boards could integrate skill acquisition with finance, since the proposition is that either alone underperforms. If P₂ holds, publishing governance practices, including accounts and decision records, could strengthen member governance. Simple environmental practices, such as efficient use of inputs and storage, could be introduced through partnerships with extension services if P₆ and P₉ are supported.

If P₉ holds, partnerships with insurers, markets and development agencies could extend what the society can offer. If P₁₀ holds, attention to non-member stakeholders, including employees and communities, could help sustain legitimacy. Reporting outcomes by domain, even in simple form, would help boards see where they are strong and where they lag, and does not depend on any proposition. Section 6 sets out the corresponding recommendations.

Implications for Policy

If the governance mechanisms assumed in P₂ operate, policy would need to strengthen the enabling legal and regulatory environment while protecting member ownership from over-intervention, because those mechanisms depend on members' control. If P₇ holds, promotion would be better aimed at institutional alignment than at registration alone (see Section 2.3 on the risk of societies that are formal but weak). Support programmes could reward outcome delivery across all three domains and not only enterprise counts, using Sustainable Development Goal indicators where possible. If the Southwest's financial setting is as competitive as the framework assumes and P₈ holds, policy could recognise that cooperatives' comparative advantage may lie in social capital, small-ticket finance and community-based services, and direct support there rather than at duplicating what formal providers supply.

Audit and training capacity in state cooperative departments may help build trust in the sector, although this expectation is not tested here. If P₇ holds, support for federations and apex bodies that help societies adapt by-laws and practices to local needs would be the route by which institutional alignment is built.

Research Agenda

Five lines of work follow. First, multi-state surveys in the Southwest, using multi-predictor and multilevel analysis of members nested in societies in place of single-predictor regressions so that variation among societies can be explained, with outcome measures

aligned to Sustainable Development Goal indicators, can test most of the propositions. Second, comparative studies with other regions are needed to test the regional-context proposition (P8), because variation in financial depth within the Southwest may be limited. Third, longitudinal designs would address durability (P10). Fourth, environmental outcome measures for cooperatives are underdeveloped, and the existing regional studies lack them, so measurement is a priority for methodological work. Fifth, independent studies of environmental practice, partnerships and non-member stakeholders in Southwest cooperatives are needed to move P6, P9 and P10 from exploratory to tested status. A longer-term agenda is to compare, within the same state, societies that follow the statutory template with societies that have adapted their rules locally, to separate form from alignment (Section 2.8).

Illustrative Empirical Design

Design: A multi-state survey of members nested in cooperative societies across the six Southwest states, with comparison regions outside the Southwest for testing P8, stratified by society type and size, supports multilevel modelling of outcomes as a function of member-level and society-level variables (Raudenbush & Bryk, 2002). Because the propositions concern configurations of institutional arrangements, set-theoretic methods such as fuzzy-set qualitative comparative analysis can identify which combinations of governance, finance, capacity and partnerships are associated with strong outcomes in all three domains (Ragin, 2008).

Measurement: Outcomes should be aligned with Sustainable Development Goal indicators: income and enterprise survival for the economic domain; inclusion, gender equity and community development for the social domain; and adoption of resource-efficient and climate-resilient practices for the environmental domain. Institutional alignment can be assessed from legal documents, by-laws and interviews with officers and members. Stakeholder balance can be assessed through engagement with employees, communities and partners.

Durability: Follow-up waves over several years allow the durability claim (P10) to be tested.

Threats to validity: Selection into cooperatives, heterogeneity across states and macroeconomic shocks should be handled with controls, state effects and time effects.

Robustness checks: Planned analyses should be specified before data collection and registered where possible (Nosek et al., 2018). Standard errors should be clustered at the society level and not at the state level, because six states are too few clusters for reliable state-level inference; state should enter as a fixed effect (Cameron & Miller, 2015). For the configurational analysis, report calibration thresholds, consistency, and coverage, and re-run the results under alternative thresholds (Schneider & Wagemann, 2012). Measurement invariance of the governance, inclusion and outcome scales should be checked across the six states before comparisons are made (Putnick & Bornstein, 2016).

Ethics: Institutional approval, informed consent and compliance with the Nigeria Data Protection Act 2023 (Federal Republic of Nigeria, 2023) are required.

Rival Explanations and Alternative Perspectives

Five rival accounts should be considered. First, a state-instrument account holds that Nigerian cooperatives originated in government policy and may act as programme-delivery channels rather than member-controlled enterprises (Akanji, 2024), which would weaken the governance mechanisms assumed here. Second, a competition account holds that where financial markets are deeper, microfinance banks, commercial banks and digital providers may substitute for cooperative finance, so cooperatives' contribution may be narrower than the framework assumes; this account is not itself evidenced in the cited literature, since Develtere et al. (2008) report only those contributions depend on supportive conditions. Third, a selection account holds that more enterprising or better-off individuals join cooperatives, so observed gains reflect who joins. Fourth, macroeconomic conditions, including inflation and policy shocks, may drive poverty and enterprise outcomes irrespective of cooperative membership. Fifth, the three triple-bottom-line dimensions are difficult to measure on a common footing and to integrate (Slaper & Hall, 2011, describe the measurement choices involved), so apparent balance across domains may be difficult to verify. Empirical tests should control for selection and macro conditions and use explicit indicators for each domain.

Recommendations

Table 4 translates the implications of the propositions into recommendations for each stakeholder group. Each recommendation is linked to the proposition that motivates it and is conditional on that proposition being supported by testing (Section 3.2); none is a finding of this paper.

Table 4: Recommendations (conditional on testing), linked propositions and indicators to monitor

Stakeholder	Recommendation	Linked proposition	Indicator to monitor
Cooperative boards	If supported: integrate skill acquisition with finance, publish governance practices and adopt simple environmental practices.	P1, P2, P6	Outcomes reported by domain
State cooperative departments	If supported: strengthen audit and the legal environment while protecting member ownership.	P2, P7	Societies audited; disputes resolved.
Government and development partners	If supported: reward results across all three domains and support partnerships with insurers and extension services.	P6, P9	SDG-aligned indicators reported
Federations and apex bodies	If supported: share practices across societies and help adapt by-laws to local needs.	P7	Practices documented and adopted

Stakeholder	Recommendation	Linked proposition	Indicator to monitor
Researchers	Build SDG-aligned indicators, test the exploratory propositions and follow societies over time (not conditional).	P6, P9, P10	Waves of data; indicators validated

Source: Authors' construction from Sections 4 and 5; recommendations are conditional on the linked propositions being supported (Section 3.2).

Conclusion

Limitations

The framework is conceptual and untested, and it aggregates diverse cooperative types, such as thrift and credit, agricultural and multipurpose societies, that may behave differently. Six limitations deserve emphasis. First, the three triple-bottom-line dimensions are difficult to measure on a common footing and to integrate (Slaper & Hall, 2011, describe the measurement choices involved), and the propositions inherit this limitation. Second, regional generalisations may not transfer to other Nigerian regions. Third, the claim that environmental outcomes are the weakest link is a proposition and not an established finding, and it needs direct measurement. Fourth, the mapping to the Sustainable Development Goals is indicative and thin for the environmental domain, and a cooperative's contribution to any goal is difficult to separate from other influences. Fifth, selection into cooperatives and macroeconomic conditions complicate causal inference. Sixth, the empirical studies the framework draws on are largely cross-sectional, self-reported surveys, and members of the present team authored several, so their independence as evidence is limited and independent replication is needed (the design caveats are stated once, in Section 3.2). The propositions should be read as a basis for testing, and P6, P9 and P10 as exploratory, not as settled conclusions.

Concluding Remarks

Cooperatives can contribute to sustainable development, but they do so through specific institutional mechanisms and under specific conditions. By combining the triple bottom line, institutional theory and stakeholder theory, this paper offers a structured, testable account of how the cooperative contributions identified for Southwest Nigeria may arise, where they may be weakest and what management and policy might do about it. It defined the constructs, derived ten propositions, mapped outcomes to the Sustainable Development Goals, positioned the framework against existing ones and outlined a multilevel and configurational design for testing.

The main message for practice is provisional: if the propositions are supported, combining finance with capacity building, protecting member governance and attending to the environmental domain are the arrangements most worth testing and promoting. The main message for research is that institutional alignment, not legal form, is the variable the framework proposes to measure, and that P6, P9 and P10 need independent grounding.

These points offer a basis for empirical testing and, only once that testing is done, for the design of cooperative support in the region.

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