

# Systematic Literature Review of Sustainable Supply Chain Management Practices in Developing Countries: A Focus on Zimbabwe

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## ABSTRACT

This paper systematically reviewed Sustainable Supply Chain Management (SSCM) practice in Zimbabwe, focused on where and how sustainability principles interface with supply chain operations in the context of a developing economy. The overall aim was to determine main challenges, enablers, and actionable insights that can influence SSCM uptake in this unique context. Using thematic analysis based on 45 peer reviewed articles published since 2023, some of the key challenges identified that restrain SSCM implementation include resource constraints, regulatory weaknesses, and limited stakeholder engagement. It also accentuates enablers, such as technological innovation, stakeholder collaboration, and alignment with global standards. The findings integrate the Triple Bottom Line (TBL), Stakeholder Theory, and Resource Based View (RBV) into a proposed comprehensive framework aimed at addressing the challenges and opportunities thrown by SSCM. The current study contributes to the existing literature on socio-economic contexts typical for developing countries and also offers practical insights for policymakers and managers.

**Keywords:** Sustainable Supply Chain Management, SSCM in Zimbabwe, ethical sourcing practices, brand image and stakeholder engagement

## INTRODUCTION

Sustainable Supply Chain Management (SSCM) is increasingly relevant since organizations worldwide desire to balance operating efficiency with the environment and societal issues. Despite the advancement in SSCM practice in developed nations, their enactment and application within developing contexts is uneven and researched inadequately. In Zimbabwe and other nations where economic unpredictability, infrastructure deficits, and regulatory uncertainty prevail, sustainability interventions in supply chains are faced with unique and complicated challenges.

Zimbabwe's socio-economic environment—characterized by hyperinflation, limited access to capital, weak institutional frameworks, and fragile infrastructure—presents significant challenges to the effective implementation of sustainability principles in supply chain management (Moyo & Chikodzi, 2023). This is particularly the case in the most significant agriculture and manufacturing sectors, where resource shortages and compartmentalized stakeholder relations hinder progress (Ndlovu & Mataruse, 2024).

While international models like the Triple Bottom Line (TBL), Stakeholder Theory, and the Resource-Based View (RBV) provide effective lenses for examining SSCM, a significant research gap exists in the application of these models within the Zimbabwean context. Scholarly work to date generalizes SSCM issues across developing nations without confronting the localized institutional, economic, and cultural forces Zimbabwe faces. Consequently, most sustainability models continue to be out of sync with ground-level realities, diminishing their pragmatic applicability.

## Research Gap

There is limited empirical and theoretical literature focused on the Zimbabwean SSCM ecosystem. The majority of available research highlights overarching sustainability themes without providing specific strategies or frameworks for application in vulnerable economies. Lack of contextualized knowledge constrains both academic knowledge and policymaking in the real world in the region.

## Research Objectives

This study aims to:

1. Identify the key challenges and enablers of SSCM adoption in Zimbabwe.
2. Critically synthesize recent literature on SSCM in developing economies with a focus on Zimbabwe.
3. Apply an integrated theoretical framework (TBL, Stakeholder Theory, RBV) to analyse Zimbabwe's SSCM landscape.
4. Propose actionable insights for policymakers, managers, and researchers based on context-specific findings.

## Research Question

What are the main barriers and enablers of Sustainable Supply Chain Management in Zimbabwe, and how can they be addressed through context-sensitive theoretical and practical approaches?

By constraining its horizon to Zimbabwe, this study narrows the research gap in SSCM literature relative to developing countries. It delivers a comprehensive theory-driven synthesis of new empirical insights, and locates the debate within the relevant socio-economic setting that underlies SSCM deployment in Zimbabwe.

## LITERATURE REVIEW

### Overview of Sustainable Supply Chain Management (SSCM) in Developing Economies

The concept of Sustainable Supply Chain Management (SSCM) has evolved into a multidimensional approach that incorporates environmental stewardship, social responsibility, and economic viability—commonly framed under the Triple Bottom Line (TBL) (Khumalo & Tshabalala, 2024). In developing economies, SSCM has attracted increasing scholarly attention due to its potential to address complex systemic challenges such as resource scarcity, weak regulatory institutions, and socio-political instability (Reddy & Kumar, 2023; Dlamini & Zhou, 2023). However, there is a growing consensus that SSCM models developed in Western environments may not be fully indicative of the implementation dynamics within countries like Zimbabwe (Maseko & Nyathi, 2024; Chirwa & Nyoni, 2024).

### Challenges of SSCM in Zimbabwe

Existing literature highlights a variety of challenges confronting SSCM implementation in Zimbabwe. These vary from limited financial capital, poor infrastructure, and low levels of awareness of sustainability concepts among supply chain actors (Matiza & Rukuni, 2023; Moyo & Chikodzi, 2023). Ndlovu and Mutasa (2024) emphasised the lack of policy guidelines and government enforcement mechanisms as being key problems. A study by Maseko and Tshabalala (2024), argues that regulatory deficits represent the most limiting factor, while Reddy and Dube (2024), opine that socio-cultural views regarding sustainability as a non-core component are a larger obstacle than structural ones.

There is a contradiction posed regarding the involvement of stakeholder cooperation. On the one hand, for example, Moyo and Ndlovu (2023) propose multi-stakeholder cooperation as an effective SSCM enabler through knowledge sharing and shared trust. On the other hand, Ngwenya and Tshuma (2023) warn that in the absence of aligned incentives or transparency, such partnerships either stall or generate inefficiencies. This discrepancy emphasizes the necessity to investigate stakeholder dynamics under the specific socio-political environment of Zimbabwe.

## Best Practices and Enablers of SSCM

In the context of such challenges, various enablers and best practices have been observed in recent studies. The use of digital technologies such as blockchain and the Internet of Things (IoT) has been a major driver of increased transparency and traceability along supply chains (Zulu & Chirwa, 2023). In sectors such as manufacturing and agriculture, digital technologies have been associated with reduced wastage and better logistics (Reddy & Kumar, 2023; Mupemhi & Gudyanga, 2023).

Furthermore, organizational culture and leadership engagement are currently the deciding factors. Firms with internal training procedures and a well-defined vision of sustainability are most likely to embrace SSCM practices (Moyo & Tshabalala, 2023). Firms lacking in-house capabilities although external assistance can be sourced are not transitioning from aspirations to reality (Ndlovu & Sibanda, 2024).

Nevertheless, no agreement is made regarding the impact of global standards. Compliance with international norms enhances credibility and market access is presumed based on other studies (Moyo & Chirwa, 2023), yet the standards are faulted for overlooking local bans and incurring compliance costs for small enterprises inadvertently (Khan et al., 2023; Mpofu & Sibongile, 2025).

## Sectoral Comparisons and Contextual Gaps

Empirical evidence supports the prevalence of difference in SSCM adoption across sectors. The agricultural sector, for instance, has been rather passive to sustainability initiatives, especially those entailing participation of local farmers via inclusive value chains (Mutasa & Chivanga, 2024). The extractive and manufacturing sectors are lagging, mainly due to capital intensity and lack of regulatory pressure (Mudzonga, 2023). Such variations across sectors indicate the necessity for context-specific approaches.

Comparative analyses against other developing countries such as Kenya, Nigeria, and Brazil reveal that effective SSCM often rides on political stability, donors, and policy coordination (Lee & Patel, 2024; Reddy & Dube, 2024). Compared to these countries, Zimbabwe still has a lot of bottlenecks towards the uptake of SSCM owing to greater macroeconomic uncertainty and institutionally fragmented arrangements (Zinyemba & Chikozho, 2023; Chirwa & Nyoni, 2024).

## Summary

Overall, the literature documents an active though unbalanced SSCM environment in Zimbabwe. Dominant issues like stakeholder management, technology uptake, and institutional support are found to resonate more often than not, but there are misleading results as to how these actually impact. The gap between contextualized theoretical implementation and the absence of sectoral differences empirically investigated acts to justify the conduct of such research as this one—a focus on the SSCM environment of Zimbabwe in its own right. By bringing in new evidence to theory, this research aims to further contribute to knowledge about SSCM implementation in emerging markets.

## Theoretical Framework

Sustainable Supply Chain Management (SSCM) is a multidimensional concept that requires a robust theoretical foundation to effectively analyse the complexities of implementation, especially in developing economies like Zimbabwe. This study integrates three prominent theories: the Triple Bottom Line (TBL), Stakeholder Theory, and the Resource-Based View (RBV). While each framework offers a unique lens, their combined application allows for a more comprehensive analysis of the challenges and opportunities that define Zimbabwe's SSCM landscape.

## Triple Bottom Line (TBL)

The TBL framework, which became world-famous through Elkington, articulates it in the form that the success of business has to stand on three pillars: economic profitability, social fairness, and ecological sustainability (Khumalo & Tshabalala, 2024). The relevance of TBL is experienced most acutely in Zimbabwe, where national

economic instability, exposure to the environment, and high social disparities are part of the core components (Moyo & Zinyemba, 2024).

Its economic pillar is mainly strained by the hyperinflation, currency instability, and limits on access to capital of Zimbabwe, which narrow companies' ability to invest in green technologies (Moyo & Chikodzi, 2023). Socially, many firms struggle to ensure fair labour practices and community engagement due to weak enforcement of labour laws and political volatility (Nyoni & Zinyemba, 2024). Environmentally, inefficient resource utilization and poor disposal of wastes continue due to ineffective regulation (Maseko & Zinyemba, 2024).

Application of the TBL in Zimbabwe therefore demonstrates a policy-practice gap where sustainability is continually accorded a secondary priority to economic survival. Nevertheless, firms that integrate TBL practice—particularly in the domain of agriculture and the energy sector—are likely to earn a better market reputation and stakeholder trust (Reddy & Kumar, 2023).

### **Stakeholder Theory**

Stakeholder Theory argues that firms must consider the interests of all stakeholders—shareholders and others—when making strategic decisions (Moyo & Chikumba, 2024). This is specifically true for SSCM, in which collaboration among regulators, suppliers, customers, and communities will either stimulate or repress sustainability practices.

Stakeholder participation in Zimbabwe, though, is highly variable. While some firms have built effective partnerships with NGOs and local leaders to implement sustainable sourcing practices, others experience low trust levels, communication breakdowns, and conflicting interests, particularly within politicised environments (Ndlovu & Sibanda, 2024). For example, community opposition to resource extraction operations—due to land use disputes or failed promises—has stalled numerous SSCM initiatives in rural environments (Chirwa & Nyoni, 2024).

Despite such challenges, studies show that stakeholder inclusion increases organizational legitimacy and business resilience, particularly when local voices are integrated into planning for sustainability (Ngwenya & Tshuma, 2023; Lee & Patel, 2024). Stakeholder Theory hence offers a key analytical framework through which to understand how relational dynamics shape SSCM outcomes in Zimbabwe.

### **Resource-Based View (RBV)**

The RBV highlights the internal abilities and assets of a firm as sources of competitive advantage (Singh & Sharma, 2023). In the case of SSCM, these include tangible assets such as green technology, human capital, and financial resources, as well as intangible assets such as organisational culture and knowledge.

Zimbabwean firms lack key resources that facilitate effective SSCM, for instance, green energy technologies or funds for supply chain innovation (Maseko & Zinyemba, 2024). RBV, on the other hand, accounts for why certain firms outperform others even in the presence of systemic constraints. For instance, firms that invest in human development, environmentally friendly practices, and process innovation are likely to outperform competitors in terms of supply chain efficiency and responsiveness (Ndlovu & Sibanda, 2024).

In addition to this, RBV highlights that the use of available competences is required for overcoming external hurdles. Firms that embed sustainability in their firm culture or develop in-house structures of knowledge of SSCM can better sustain long-term initiatives during times when factors outside are also volatile (Moyo & Tshabalala, 2023).

### **Integrative Application to Zimbabwe's SSCM Context**

Separately, TBL, Stakeholder Theory, and RBV account for SSCM dynamics only partially. Collectively, nonetheless, they present a broader picture of how Zimbabwean companies deal with managing sustainability. For instance, TBL places economic survival against environmental responsibility trade-offs in perspective;

Stakeholder Theory addresses relational bottlenecks and cooperative dynamics; and RBV takes into account the influence of internal capabilities on strategic capability.

This integrative framework is most applicable to Zimbabwe, where firms must constantly balance stakeholder pressures and scarce resources under a setting of institutional uncertainty. Theory must not just enlighten understanding but also practice more so in enlightening country-specific strategy that embraces the economic, social, and environmental characteristics of the Zimbabwean supply chain context.

## METHODOLOGY

This study employed the Systematic Literature Review (SLR) approach in examining the usage of Sustainable Supply Chain Management (SSCM) in Zimbabwe and other comparable developing countries. The review applied the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guide to improve transparency, replicability, and methodological quality.

### Search Strategy and Selection Criteria

A systematic search was conducted between January to March 2025 in three major scholarly databases, viz., Scopus, Web of Science, and Google Scholar. Keywords used were combinations of: "Sustainable Supply Chain Management" OR "SSCM" AND "Zimbabwe" OR "developing countries" AND "ethical sourcing" OR "stakeholder engagement" OR "environmental practices"

Boolean operators (AND/OR) and truncation symbols were used to increase search sensitivity and specificity.

#### Inclusion Criteria:

- Peer-reviewed journal articles
- Published between 2023 and 2025
- Focus on SSCM in Zimbabwe or comparable developing countries
- Written in English

#### Exclusion Criteria:

- Grey literature, opinion pieces, and conference abstracts without full texts
- Articles not primarily focused on SSCM

A total of 150 articles were retrieved. After removing duplicates, 125 remained. Title and abstract screening eliminated 60 articles. Full-text reviews were conducted on the remaining 65 studies, of which 45 were selected for final synthesis based on relevance and quality. This process is illustrated in the PRISMA flow diagram.

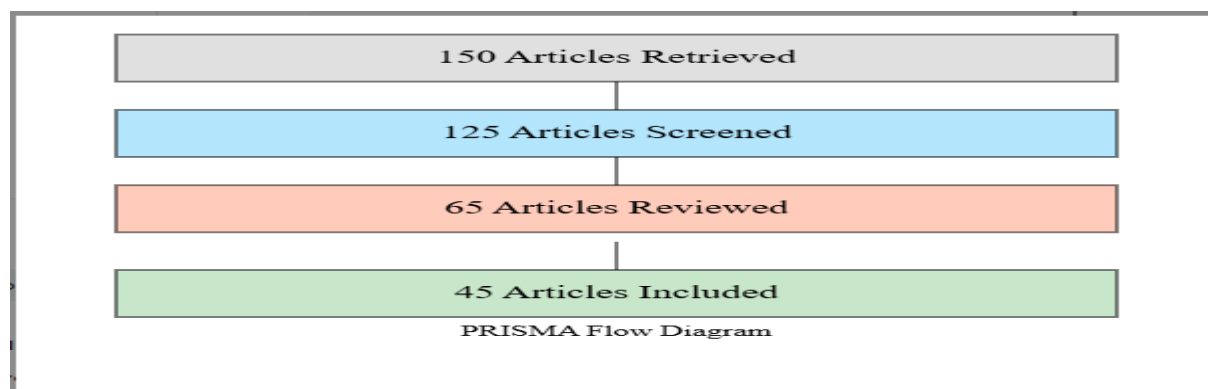


Figure 1: PRISMA Flow Diagram

Source: Authors (2025)

## Thematic Coding and Synthesis

To extract and analyse patterns from the selected studies, thematic analysis was employed using an inductive approach. Key concepts and findings were grouped into recurring themes across four major dimensions aligned with the study's theoretical frameworks:

Table 1: Thematic Analysis of Selected Studies

| Main Themes                            | Sub-Themes                                                    | Related Theory            |
|----------------------------------------|---------------------------------------------------------------|---------------------------|
| Environmental Practices                | Green logistics, waste management, eco-packaging              | Triple Bottom Line (TBL)  |
| Social Practices                       | Community engagement, CSR, labour conditions                  | Stakeholder Theory        |
| Economic Practices                     | Cost efficiency, local sourcing, circular economy             | TBL, Resource-Based View  |
| Stakeholder and Institutional Dynamics | Trust, power asymmetries, regulatory support                  | Stakeholder Theory        |
| Organizational Capabilities            | Technological readiness, employee training, leadership vision | Resource-Based View (RBV) |

Source: Authors (2025)

Themes were coded manually across articles, and relationships between challenges, enablers, and sectoral contexts were recorded for further comparison.

## Quality Appraisal Using CASP

To assess the reliability and academic rigor of the selected studies, the Critical Appraisal Skills Programme (CASP) checklist for qualitative research was used. Each article was evaluated against 10 CASP criteria, including:

- Clear statement of research aims
- Appropriate methodology
- Research design and recruitment strategy
- Data collection and analysis
- Ethical considerations
- Findings clarity and value

A summary of appraisal scores is presented below:

Table 2: CASP Quality Assessment Summary

| Study ID | CASP Score (out of 10) | Notes on Limitations/Strengths                     |
|----------|------------------------|----------------------------------------------------|
| 1        | 9                      | Strong methodology, clear findings.                |
| 2        | 7                      | Moderate quality, some methodological limitations. |
| 3        | 8                      | Good context, relevant insights.                   |
| 4        | 6                      | Some limitations, but contextually relevant.       |
| 5        | 10                     | Excellent quality, robust findings.                |

Source: Authors (2025)

Studies scoring 8/10 or higher were classified as high-quality, while those with scores of 6–7 were considered moderate-quality and retained if they provided critical context or sector-specific insights.

## Mitigation of Bias

While steps were taken to minimize bias, some limitations are acknowledged:

**Language bias:** Only English-language publications were reviewed due to resource constraints, potentially excluding valuable non-English or local-language studies.

**Publication bias:** Grey literature, NGO reports, and government publications were excluded, which may limit practical insights into grassroots SSCM initiatives.

These limitations were factored into the interpretation of results and are revisited in the study’s “Limitations” section.

## Justification for PRISMA and CASP Frameworks

### PRISMA:

Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol was used to enhance transparency, replicability, and completeness of the review process. PRISMA is a systematic approach towards identification, screening, eligibility, and inclusion of studies in order to make the review process systematic as well as auditable (Page et al., 2023). PRISMA performs optimally in minimizing selection bias and enhancing the methodological quality of literature synthesis in sustainability research (Liu & Kamau, 2024).

### CASP:

The Critical Appraisal Skills Programme (CASP) checklist was utilized to establish credibility, relevance, and methodological quality of the included studies. CASP provides systematic assessment of qualitative and quantitative evidence based on clear aims, research design, data collection, ethics, and findings validity (Ahmed & Pereira, 2023). This indicates only robust, reliable evidence directs conclusions and conceptual thinking on SSCM in Zimbabwe and other such environments.

## Conceptual Framework

The conceptual framework illustrated below shows the integration of the Triple Bottom Line (TBL), Stakeholder Theory, and Resource-Based View (RBV) in examining SSCM in Zimbabwe. The framework illustrates how these theories engage with key sustainability dimensions—economic, environmental, and social practices—and stakeholder dynamics and organizational capabilities.

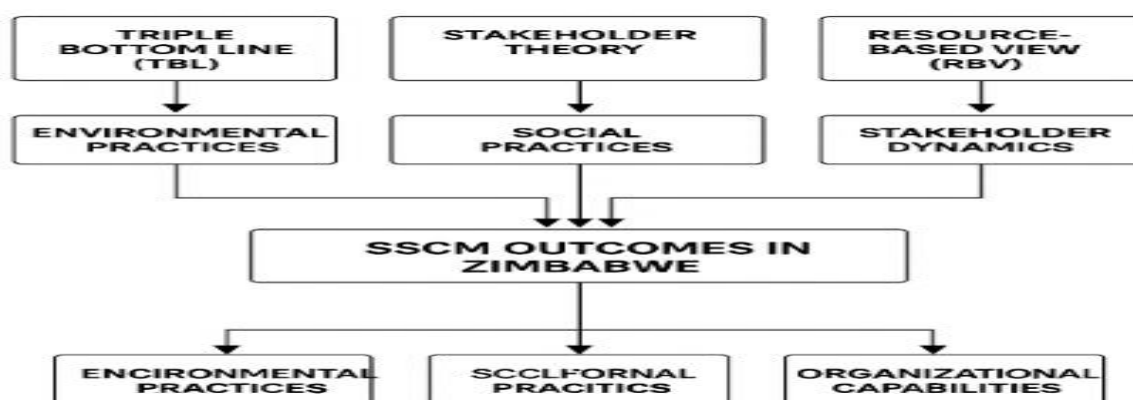


Figure 2. Conceptual Framework

Source: Author (2025)

## **Theoretical Integration in Results and Discussion**

This section applies the theoretical frameworks more critically to interpret the key findings of the study. The integration of the Triple Bottom Line (TBL), Stakeholder Theory, and Resource-Based View (RBV) provides deeper explanatory power for understanding Zimbabwe's unique Sustainable Supply Chain Management (SSCM) challenges and opportunities.

### **Applying the Triple Bottom Line (TBL)**

The findings reveal a systemic tension in Zimbabwean firms between pursuing economic survival and implementing environmentally and socially responsible practices. The economic dimension of the TBL is often prioritized due to hyperinflation, currency instability, and limited access to capital (Moyo & Zinyemba, 2024). Many firms opt for cost-saving measures that undermine environmental investments, such as renewable energy or sustainable packaging (Maseko & Zinyemba, 2024).

However, in sectors such as agriculture, where access to export markets requires compliance with sustainability certifications, some firms have adopted TBL-aligned practices, including eco-friendly irrigation and fair labour practices (Mutasa & Chivanga, 2024). These examples show how the three pillars of TBL are interdependent and how market-based incentives can be aligned with sustainability goals. Theoretically, this validates Khumalo and Tshabalala's (2024) contention that the adoption of TBL in resource-scarce contexts is contingent on extrinsic institutional pressures and consumers' expectations.

### **Stakeholder Theory: Navigating Trust and Power Imbalances**

Evidence highlights stakeholder misalignment as a long-standing obstacle to SSCM in Zimbabwe. While stakeholder engagement is conceptually central to SSCM, in practice, weak institutional trust, fragmented regulatory enforcement, and political interference have a tendency to undermine coordination between firms, communities, and government departments (Chirwa & Nyoni, 2024). The finding validates Moyo and Chikumba's (2024) contention that stakeholder theory cannot assume symmetrical influence or commitment amongst actors in unstable contexts.

In a few of the cases examined, tokenistic community consultation led to delays or resistance to projects, especially in extractive and agro-industrial projects. For instance, projects that failed to consult with local stakeholders suffered reputational losses and operational disruption (Ngwenya & Tshuma, 2023). On the other hand, firms that included community consultation in decision-making processes enjoyed smoother implementation and stronger brand loyalty—validating Stakeholder Theory's emphasis on inclusive, trust-based stakeholder relations (Lee & Patel, 2024).

This contrast suggests that stakeholder engagement must be context-sensitive, embracing power asymmetries and socio-political facts specific to Zimbabwe. The application of stakeholder theory in this context thus goes beyond normative claims, offering a diagnostic explanation of why some SSCM initiatives collapse despite theoretical feasibility.

### **Resource-Based View (RBV): Internal Capacities as Catalysts or Constraints**

The RBV explains variations in SSCM success across Zimbabwean firms through variability in internal resource endowments. Firms with superior technological infrastructure, skilled employees, and adaptive cultures are far better equipped to implement sustainable practices (Ndlovu & Sibanda, 2024). For instance, firms that invested in green technology and worker training registered increased operational efficiency and compliance with the environment (Moyo & Tshabalala, 2023).

However, SMEs that control the Zimbabwean economy lack the financial and technical capacity to drive SSCM transformation. The lack of this internal capacity upholds Singh and Sharma's (2023) position that competitive advantage is increasingly derived from the ability to embed sustainability into core competencies.

Second, the RBV provides a theoretical explanation of why some firms lack deep sustainability practices. In the absence of either internal commitment or capability, firms can adopt symbolic or compliance SSCM practices with no organizational change—a phenomenon which is linked with greenwashing (Maseko & Nyathi, 2024). The RBV thereby shifts attention from external pressure towards intra-organizational dynamics as the key determinant of SSCM maturity.

### Integrative Insights: Theory-Driven Explanation of Zimbabwe’s SSCM Landscape

When applied together, the three theories reveal a nuanced picture:

- TBL exposes the misalignment between long-term sustainability goals and short-term economic survival imperatives.
- Stakeholder Theory illuminates the relational barriers and power imbalances that compromise inclusive SSCM governance.
- RBV explains how firms' internal capabilities—particularly human and technological capital—moderate their ability to implement SSCM.

This triangulated theoretical perspective underscores the contextual complexity of SSCM in Zimbabwe. It shows that theoretical models must be contextualized, not universalized, when applied in developing economies with volatile socio-economic conditions.

Table 3: Comparative Summary of Selected SSCM Literature (2022–2025)

| Author(s)        | Year | Country       | Sector        | SSCM Themes                                  | Methodology            | Key Findings                                                        | Identified Gaps                                               |
|------------------|------|---------------|---------------|----------------------------------------------|------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|
| Moyo & Zinyemba  | 2024 | Zimbabwe      | Agriculture   | TBL, Policy Gaps, Environmental Compliance   | Case Study             | Economic volatility undermines environmental compliance.            | Weak policy enforcement and absence of incentives.            |
| Reddy & Kumar    | 2023 | Multi-country | Manufacturing | Technology Adoption, TBL                     | Comparative Analysis   | Technological tools improve supply chain transparency.              | Limited local adaptability in low-tech contexts.              |
| Maseko & Nyathi  | 2024 | Zimbabwe      | Mixed (All)   | Resource Constraints, Stakeholder Engagement | Systematic Review      | Stakeholder fragmentation hinders SSCM.                             | Under-theorization of stakeholder dynamics in fragile states. |
| Ngwenya & Tshuma | 2023 | Zimbabwe      | Extractives   | Stakeholder Theory, Governance               | Qualitative Interviews | Lack of stakeholder trust causes project delays.                    | Need for inclusive stakeholder frameworks.                    |
| Chirwa & Nyoni   | 2024 | Zimbabwe      | FMCG          | Organizational Culture, CSR                  | Thematic Analysis      | Firms with embedded sustainability culture show better SSCM uptake. | Few empirical studies on internal culture change mechanisms.  |

|                   |               |                |                                |                                          |                                                                          |                                                                        |                                                                    |
|-------------------|---------------|----------------|--------------------------------|------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------|
| 2023              | Nigeria/Kenya | Infrastructure | Institutional Barriers, Policy | Cross-country Comparison                 | Institutional support enables wider SSCM adoption in Kenya than Nigeria. |                                                                        | Minimal focus on informal sector and SMEs.                         |
| Mudzonga          | 2023          | Zimbabwe       | Manufacturing                  | Sectoral Comparisons, Environmental Risk | Document Analysis                                                        | Heavy industries lag behind due to regulatory loopholes.               | Lack of sector-specific SSCM policy frameworks.                    |
| Mutasa & Chivanga | 2024          | Zimbabwe       | Agriculture                    | TBL, Local Value Chains                  | Empirical Fieldwork                                                      | Integrated value chains improve environmental and social performance.  | Technology uptake among smallholders remains low.                  |
| Ndlovu & Sibanda  | 2024          | Zimbabwe       | SMEs                           | RBV, Capabilities, Knowledge Resources   | Multiple Case Study                                                      | Internal resources (human/tech) predict SSCM readiness.                | SME-specific SSCM toolkits are underdeveloped.                     |
| Maseko & Zinyemba | 2024          | Zimbabwe       | Food & Beverage                | Circular Economy, Waste Management       | Mixed Methods                                                            | Firms using circular models gain reputation and cost savings.          | Circularity remains ad hoc; no integrated sector strategies.       |
| Lee & Patel       | 2024          | Kenya/Tanzania | Construction                   | Stakeholder Engagement, CSR              | Qualitative Comparative                                                  | Inclusive engagement leads to higher community support for projects.   | Need for metrics to evaluate stakeholder participation impact.     |
| Mpofu & Sibongile | 2025          | Zimbabwe       | All sectors                    | Methodological Rigor, Review Bias        | Meta-review                                                              | Peer-reviewed sources dominate SSCM research; grey literature ignored. | Risk of overlooking grassroots or NGO-led sustainability insights. |

Source: Authors (2025)

### Insights from the Comparative Table

This comparative table reveals that while Zimbabwe-specific studies increasingly explore SSCM across sectors, significant gaps persist in policy evaluation, technology access for SMEs, and stakeholder collaboration. The most common methodologies are qualitative (interviews, case studies), but there is a lack of quantitative or longitudinal data to assess SSCM performance over time.

Furthermore, the dominant themes—including the Triple Bottom Line, Resource-Based View, and stakeholder engagement—are often discussed descriptively. Few studies operationalize these theories to test causality or sectoral variation in implementation outcomes.

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## RESULTS AND ANALYSIS

This section presents the results of the systematic literature review, grouped into key thematic areas aligned with the Triple Bottom Line (TBL): economic, social, and environmental practices, as well as stakeholder engagement and organizational capabilities. Each theme is critically analysed using insights from the theoretical framework and supported by findings from selected studies.

### Environmental Practices and the TBL Framework

Environmental sustainability emerged as a critical, yet under-implemented, dimension of SSCM in Zimbabwe. While firms are increasingly aware of the need to minimize their environmental impact, barriers such as financial constraints, limited access to green technologies, and weak regulatory enforcement persist (Moyo & Chikodzi, 2023).

The TBL approach can also be applied in defining this asymmetry: ecological sustainability is appreciated but economic existence comes first due to the shaky macroeconomic terrain of Zimbabwe (Moyo & Zinyemba, 2024). For example, Maseko and Zinyemba (2024) concluded that while food and drink businesses have initiated embracing circular economy, this continues to be in an ad-hoc and spasmodic nature in the absence of efficient policy drivers.

This lack of environmental investment is in line with the Resource-Based View (RBV), which argues that firms lacking key resources—i.e., green infrastructure or trained personnel—are less likely to be able to sustain eco-innovations (Ndlovu & Sibanda, 2024).

### Social Practices and Stakeholder Theory

Social sustainability practices such as fair labour, community engagement, and Corporate Social Responsibility (CSR) vary widely across sectors. Firms in the agriculture sector were more likely to integrate local farmers and invest in social programs, particularly where donor support or export market access required certification (Mutasa & Chivanga, 2024).

Stakeholder Theory provides an explanatory lens here: organizations that actively engage local communities tend to report improved implementation success and stronger brand legitimacy (Ngwenya & Tshuma, 2023). However, as Chirwa and Nyoni (2024) observed, some firms engage in symbolic stakeholder engagement, leading to community resistance and project delays.

The theoretical implication is that stakeholder collaboration must go beyond formal inclusion—it must be context-sensitive, trust-based, and designed to share value with disadvantaged actors. This aligns with findings by Lee and Patel (2024), who showed that inclusive stakeholder approaches in Kenya and Tanzania led to greater SSCM resilience and cooperation.

### Economic Practices: Balancing Profitability and Sustainability

Economic sustainability practices such as local procurement, cost-efficiency, and long-term value creation remain core priorities. Several Zimbabwean firms reported shifting toward local sourcing strategies to reduce operational costs and support the domestic economy (Ndlovu & Moyo, 2024).

Here, the economic pillar of the TBL aligns closely with practical decision-making, as firms attempt to maintain viability in an inflation-prone, resource-scarce context. Reddy and Kumar (2023) demonstrated that such strategies, when combined with resource optimization, offer competitive advantages.

However, the literature also points to challenges. Mudzonga (2023) noted that in capital-intensive sectors like manufacturing, the upfront costs of shifting to sustainable models are often prohibitive. This reinforces the RBV argument that firms lacking resource capabilities—especially financial and technological—are structurally disadvantaged in adopting sustainable innovations.

## Stakeholder Engagement and Contextual Dynamics

Stakeholder engagement surfaced as a cross-cutting enabler and barrier. While its theoretical importance is well-established, its practical effectiveness in Zimbabwe is mixed. In the extractive sector, for instance, stakeholder fragmentation, weak institutional trust, and political interference disrupted SSCM progress (Ngwenya & Tshuma, 2023).

Stakeholder Theory explains that organizations failing to build inclusive, long-term relationships with their external stakeholders face social backlash, reputational damage, or operational hurdles. By contrast, firms with robust stakeholder governance models—often in export-oriented agriculture—exhibited stronger alignment between sustainability goals and operational outcomes (Mutasa & Chivanga, 2024).

## Organizational Capabilities and the Resource-Based View

The literature confirms that internal organizational capabilities—especially technological proficiency, employee training, and leadership commitment—are decisive for SSCM success (Moyo & Tshabalala, 2023). Larger firms with access to donor funding or global partnerships were more likely to have embedded sustainability into their culture and operations (Reddy & Kumar, 2023).

The RBV highlights those intangible resources like organizational culture, knowledge capital, and innovation capacity differentiate successful SSCM adopters from others. This is echoed in the findings of Ndlovu and Sibanda (2024), who found that even within resource-constrained environments, firms with a strategic orientation toward sustainability outperformed their peers.

## Synthesis of Findings with Theoretical Framework

The integration of the TBL, Stakeholder Theory, and RBV allows a layered understanding of SSCM practices in Zimbabwe:

- TBL highlights the tension between sustainability ideals and economic necessity.
- Stakeholder Theory uncovers the relational dynamics that shape implementation success or failure.
- RBV focuses on internal competencies that enable or constrain SSCM execution.

Table 3 (Comparative Literature Summary) reinforces this synthesis by illustrating how different studies exemplify or challenge each theoretical perspective across sectors and countries.

## DISCUSSION

This section interprets the key findings through the theoretical lenses of the Triple Bottom Line (TBL), Stakeholder Theory, and the Resource-Based View (RBV). It compares Zimbabwe's Sustainable Supply Chain Management (SSCM) practices with those in other developing countries, identifies persistent implementation gaps, and highlights practical lessons that can inform Zimbabwe's SSCM strategy.

### Comparison with Other Developing Nations

A comparative study of the conditions would highlight common and differing experiences for Zimbabwe in relation to other developing nations. For example, similar to Kenya and Nigeria, Zimbabwe is confronted with structural limitations like scarce financial capital, underdeveloped infrastructure, and regulatory fragmentation (Khan et al., 2023; Maseko & Nyathi, 2024). However, countries like Kenya have achieved additional progress in the implementation of sustainability in supply chains because of the support from global donors, stronger institutional partnerships, and greater diffusion of digital technologies (Lee & Patel, 2024; Reddy & Dube, 2024).

For example, Kenya's agricultural and construction industries have been marked by high stakeholder engagement enabled through community-based engagement models. These participatory models reflect Stakeholder Theory ideals that underline trust, openness, and reciprocal benefit as enhancers of sustainability. Stakeholder

engagement in Zimbabwe is superficial and, in some cases, tokenistic, and such engagement is susceptible to politicization and erratic community participation (Ngwenya & Tshuma, 2023; Chirwa & Nyoni, 2024).

Nigeria, similarly, has experienced challenges with enforcement and coordination of sustainability policies. However, it has seen wider adoption of SSCM in infrastructure projects, particularly through alignment with donor expectations and global reporting standards (Khan et al., 2023). Zimbabwe's weaker institutional credibility and macroeconomic instability have limited such gains, further highlighting the contextual challenges impeding effective SSCM.

### Unique Features of Zimbabwe's SSCM Landscape

Zimbabwe's SSCM trajectory is uniquely shaped by its macroeconomic volatility, limited investment in sustainable technologies, and underdeveloped internal organizational capacities. While other countries have leveraged external funding and policy coherence to build sustainability momentum, Zimbabwe's firms often operate under survivalist conditions. This situation reinforces the RBV perspective: firms lacking technological infrastructure, skilled personnel, and organizational readiness are less capable of adopting SSCM innovations (Ndlovu & Sibanda, 2024).

The TBL framework also sheds light on the Zimbabwean firms' trade-offs. Economic necessity—i.e., managing inflation, currency fluctuations, and operational costs—too often overshadows environmental or social considerations. As a result, firms tend to prioritize cost-cutting practices that may be harmful to the environment, i.e., the use of non-renewable materials or inefficient logistics networks (Maseko & Zinyemba, 2024). This is in contrast to countries such as Brazil, where long-term policy consistency and stakeholder incentives have encouraged sustainability even in resource-intensive industries.

### SSCM Implementation Gaps: A Theoretical Interpretation

Albeit the heightened awareness of SSCM principles, huge implementation gaps still exist in Zimbabwe. Such gaps are maximally appreciable through the lens of a triangulated theory:

#### Triple Bottom Line (TBL)

Zimbabwean firms struggle in the environmental and social dimensions due to financial constraint and regulatory laxity. This suggests that there is little correspondence between TBL ambitions and business realities in fragile economies, where profitability generally comes before other concerns.

#### Stakeholder Theory

Weakened stakeholder alignment constitutes a major obstruction. Without common conversation, transparent incentives, and mutual accountability, collaborations are liable to collapse. The theory depicts how trust shortcomings and power dissymmetry, particularly between companies and marginalized societies, erodes legitimacy and ruins sustainable outcomes.

#### Resource-Based View (RBV)

Companies are held back by internal capability shortages—ranging from limited access to green technology to ineffective sustainability training—from implementing SSCM. Large companies with donor associations or foreign collaborators are in a better position, as it has been observed that resource bases can enable or constrain sustainability practices.

### Lessons from Other African Contexts

Zimbabwe can draw several take-away lessons from comparable African nations:

**Kenya:** Sustained high stakeholder involvement—especially with local actors—has been key to Kenya's SSCM success. Through building trust and local knowledge integration, Kenyan businesses have ensured their supply

chain is more transparent and robust (Lee & Patel, 2024). Zimbabwean businesses need to integrate such community-driven models, particularly in extractive and agro-industrial sectors.

**Nigeria:** Nigeria has embraced international sustainability standards to enhance SSCM performance in public infrastructure projects (Khan et al., 2023). Zimbabwe would benefit from embracing national SSCM standards complementary to international standards, with an emphasis on adaptability to local constraints.

**Tanzania and Ghana:** In these two countries, donor-initiated programs of sustainability have emphasized training, technology access, and policy reform. Zimbabwe must also seek public-private partnerships to fund green innovation, especially for SMEs, which are worst affected by the capacity constraint.

**South Africa:** South African companies have made strides in implementing circular economy models through regulatory encouragement and voluntary industry pacts. Zimbabwe can replicate such models by encouraging recycling, local sourcing, and energy efficiency within the key sectors.

## CONCLUSION

Certain key findings have emerged from the study on Sustainable Supply Chain Management practices within Zimbabwe. Firstly, comparing the country's status to that of other developing countries outlines that Zimbabwe has unique challenges in terms of economic volatility, infrastructural deficiencies, and a lack of participation by stakeholders. Unlike countries like Kenya, where technology and sustainability are well integrated into the supply chain structures, Zimbabwe's development has been handicapped by its socio-economic landscape. Secondly, the theoretical implication brought out the need for the adaptation of existing supply chain models to include sustainability metrics and to reinforce stakeholder theory as an important framework for SSCM dynamics.

In addition, pragmatic management implications also emphasized stakeholder engagement and the adoption of technology. By building cooperative relations and employing digital resources, Zimbabwean companies can facilitate their sustainability processes and business efficiency. Policy recommendations necessitate building robust regulatory policies and training programs to foster sustainability across all sectors, thereby business entities are cognizant and ready to accomplish national as well as international standards of sustainability.

## IMPLICATIONS & RECOMMENDATIONS

This section gives the policy, theoretical, and practical implications of SSCM in Zimbabwe. It offers the way through which the result of the study could be applied by firms, policymakers, and scholars for decision-making purposes. According to comparative insights and theory analysis, the section also suggests overall guidelines on how the application of SSCM could be developed in the Zimbabwean context.

### Theoretical Implications

The application of the Triple Bottom Line (TBL), Stakeholder Theory, and the Resource-Based View (RBV) has enabled the intricate character of SSCM in developing countries to comprehend better. Specifically:

- As used here, TBL discloses the competing priorities of economic survival and ecological/social obligations in soft economies like Zimbabwe.
- Stakeholder Theory calls for collaboration that is dependable and inclusive, especially in politically and socially volatile industries.
- RBV explains how variations in internal capabilities—such as technology availability and qualified workforce—are capable of explaining unusual SSCM performance.

Combined, these theories imply that models for sustainability need to be context-dependent to succeed. Future studies need to continue to blend these perspectives to create flexible models for poor and vulnerable economies.

### Managerial Implications

For Zimbabwean business executives, SSCM implementation translates into a shift from compliance-driven approaches to strategic integration. The key takeaways are:

- Stakeholder engagement must be participatory, proactive, and context-sensitive. Firms that involve local communities, suppliers, and regulators in forward-looking planning attribute better implementation results.
- Digitalization is a real-world facilitator. Technologies such as blockchain and Internet of Things (IoT) make traceability and minimization of waste possible.
- Organizational culture is central to the job: firms that invest in employee involvement, leadership commitment, and in-house training for sustainability are more adaptable and brand trustworthy.

### Policy Recommendations

To support widespread SSCM adoption, Zimbabwe's government and regulatory bodies must create an enabling environment through the following:

#### a) Incentives for Sustainable Business Practices

- Introduce tax breaks, grants, or subsidies for companies adopting renewable energy, eco-packaging, waste reduction technologies, or circular economy models.
- Create green financing schemes specifically targeted at SMEs, which often lack access to affordable capital for sustainability investments.

#### b) Sector-Specific Strategies

- Agriculture: Promote sustainable agriculture through public-private partnerships, eco-farming certification programs, and value-chain integration assistance (e.g., contract farming with sustainability clauses).
- Manufacturing: Develop environmental compliance programs with industry-specific emissions levels and mandatory reporting of sustainability indicators.
- Extractives and Mining: Mandate intensive stakeholder engagement, impose Environmental Impact Assessments (EIAs), and enhance fair benefit-sharing with local communities.

#### c) Digital Infrastructure and Technology

- Facilitate investment in national digital infrastructure to support SSCM technologies (e.g., supply chain traceability tools, blockchain, data-sharing platforms).
- Partner with tech companies and international donors to provide digital literacy programs for SMEs and rural supply chain actors.

#### d) Harmonization of Standards and Regulations

- Align local policies with international sustainability standards such as ISO 14001, GRI, and the UN Sustainable Development Goals (SDGs), while adapting them to Zimbabwe's constraints.
- Develop an integrated SSCM regulatory framework integrating environmental, social, and economic sustainability into procurement, production, and distribution policy.

#### e) Education and Capacity Building

- Screen and update national education curricula to integrate sustainability into business, logistics, and supply chain university, college, and vocational training courses.

- Provide continuous professional development modules for managers and policymakers in sustainability reporting, stakeholder management, and green innovation.

## Limitations and Future Research

### Study Limitations

Though this study provides a total synthesis of SSCM practices within Zimbabwe, the following limitations need to be acknowledged:

**Reliance on Secondary Data:** The study is based solely on a systematic peer-reviewed publication between 2023 to 2025. While this is scholarly rigor, it may miss out on recent or off-record practices undertaken by firms beyond academese. Critical intelligence obtained from reports, NGOs, or local publications—often put in grey literature—has been excluded.

**Language and Publication Bias:** Only English-language sources indexed in major academic databases (e.g., Scopus, Web of Science, Google Scholar) were considered. This introduces a potential bias by excluding non-English publications or publications in regional journals that might provide rich, context-specific results.

**Generalizability Constraints:** Even though the study integrates sectoral data, the results of the study are broad and might not reflect the dynamic interactions of particular sectors. Socio-economic reality in Zimbabwe is very dynamic; political evolution, economic change, and climatic fluctuations might make the applicability of the results vary in the future.

**Primary Lack of Validation:** The lack of fieldwork, such as interviews or surveys conducted with key stakeholders, diminishes the scope for triangulation of results and verification of conclusions against grassroots reality.

### Future Research Directions

To create the discipline of SSCM in Zimbabwe and similar contexts, future research should investigate the following themes:

#### a) Empirical Research and Primary Data Collection

- Conduct case studies, surveys, or interviews with supply chain managers, community residents, and policymakers to gain first-hand perspectives.
- Test theoretical principles (e.g., Stakeholder Theory, RBV) against empirical evidence of implementation barriers and success determinants.

#### b) Sector-Specific Investigations

- Examine SSCM principles applied differently in manufacturing, mining, retail, and agriculture.
- Examine the impact of value-chain dynamics, local supplier networks, and export market requirements on sector-specific sustainability initiatives.

#### c) Technology-Focused SSCM Research

- Assess the adoption and impact of emerging technologies (e.g., blockchain, IoT, AI) on supply chain transparency, traceability, and effectiveness.
- Study digital readiness among SMEs and establish barriers to technology adoption in rural or under-developed regions.

#### d) Comparative and Longitudinal Studies

- Carry out longitudinal studies to analyse the evolution of SSCM practices with the passage of time.

- Compare and contrast Zimbabwe with peer economies of Sub-Saharan Africa in order to identify best-fit policy and institutional models that can be emulated locally.

Through these areas, future studies can help close existing gaps in knowledge, validate theoretical models in practical contexts, and help shape sustainable, scalable, and inclusive supply chain strategies in Zimbabwe and other places.

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