THE EFFECT OF PERCEIVED COMPATIBILITY ON THE ADOPTION OF SUSTAINABLE SUPPLY CHAIN PRACTICES IN HUMANITARIAN ORGANIZATION IN MAURITANIA

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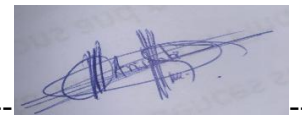
DECLARATION

I, kadima marebuza aristote, declare that this research is entirely my original work and has never been submitted elsewhere. All information sources used in this study have been properly recognized through complete citations and references in accordance with academic integrity guidelines.

Signed: ----------  ----------

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Date: ----------20/06/2025----------

APPROVAL

I hereby confirm that this dissertation titled: "the effect of perceived compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania" has been prepared under my supervision and meets the academic standards required for submission.

Signed: ------  ----

Dr. Henry Mugisha

Date: -------20/06/2025----

DEDICATION

I dedicate this work, my family and dear friends.

To God, for His endless grace and guidance.

ACKNOWLEDGEMENTS

To the Source of my every breath and the Giver of wisdom that sustains my studies. Almighty God, I offer my deepest gratitude. This academic journey stands as testimony to His unending grace; I know with absolute certainty that without His guidance, I could never have reached this milestone. His blessings have continuously illuminated my path, Through the good and bad times, the Lord has been faithful. As it is written: *"So do not fear, for I am with you; do not be dismayed, for I am your God. I will strengthen you and help you; I will uphold you with my righteous right hand."* (Isaiah 41:10).

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ACRONYMS

AfDB: African Development Bank

CHLRD: Centre for Humanitarian Logistics and Regional Development

CVI: Content Validity Index

CI: Counterpart International

DOI: Diffusion of Innovation

ERP: Enterprise Resource Planning

EU: European Union

GDP: Gross Domestic Product

HLA: Humanitarian Logistics Association

IASC: Inter-Agency Standing Committee

ICT: Information and Communication Technology

INGO: International Non-Governmental Organization

IT: Information Technology

NGO: Non-Governmental Organization

NNGO: National Non-Governmental Organization

SDGs: Sustainable Development Goals

SPSS: Statistical Package for the Social Sciences

SSCPs: Sustainable Supply Chain Practices

TOE: Technology-Organization-Environment

UN: United Nations

UNDP: United Nations Development Programme

UNEP: United Nations Environment Programme

UNHCR: United Nations High Commissioner for Refugees

USAID: United States Agency for International Development

USD: United States Dollar

WASH: Water, Sanitation and Hygiene

WFP: World Food Programme

ABSTRACT

This research investigates the effect of perceived compatibility on the adoption of Sustainable Supply Chain Practices (SSCP) among humanitarian organizations operating in Mauritania. Drawing on the Diffusion of Innovation (DOI) Theory and the Technology-Organization-Environment (TOE) Framework, the study conceptualizes compatibility in three dimensions: organizational, collaborative, and technological. A cross-sectional quantitative design was employed, with data collected from 63 humanitarian organizations using a structured questionnaire. Descriptive statistics, Pearson correlation, and multiple regression analysis were used to analyze the data.

The regression analysis revealed that the model was statistically significant ($F = 30.165$, $p < .001$), explaining 76.4% of the variance in SSCP adoption ($R^2 = 0.764$, Adjusted $R^2 = 0.738$). Findings reveal that all three dimensions of compatibility significantly influence SSCP adoption. Organizational compatibility was the strongest predictor ($\beta = 0.339$, $t = 8.852$, $p < 0.001$), followed by collaborative compatibility ($\beta = 0.287$, $t = 3.758$, $p < 0.001$), showing stronger effects than technological compatibility. Specifically, alignment between sustainability goals and internal organizational culture, leadership, resources, staff, as well as external partnerships with donors, beneficiaries, NGOs and government agencies, emerged as key drivers of adoption.

Technological compatibility, while statistically significant ($\beta = 0.126$, $t = 2.891$, $p = 0.005$, played a supportive rather than leading role, its enabling role is often dependent on foundational organizational and collaborative readiness. The type of NGO was found to significantly affect; INGOs showed a notable negative effect ($\beta = -0.156$, $p = .026$) compared to UN organizations indicating that INGOs adopted SSCPs less than UN organizations, while local NGOs' negative

relationship (B = -0.099, p = .147) was not statistically significant, while years of operation and sector of activity had no significant influence.

The study contributes theoretically by extending the application of DOI and TOE frameworks to the underexplored context of humanitarian supply chains in developing countries. It also offers practical recommendations for NGOs, donors, and policymakers to foster internal alignment, strengthen collaboration, and improve technological readiness to accelerate sustainability integration. The study end with recommendations for further research, including longitudinal and qualitative approaches in order to gain better understanding of the dynamics of innovation adoption in humanitarian sector.

Keywords: Sustainable supply chain practices, perceived compatibility, humanitarian organizations, Mauritania, DOI Theory, TOE Framework, sustainabilit

CHAPTER ONE

INTRODUCTION

1.1 Introduction

In This chapter an introduction to the study, is provided. The first chapter of this thesis explains the study's background, problem statement, research objectives, research questions, hypotheses, scope, significance, and conceptual framework. The aim of this study was to assess the effect of perceived compatibility on the adoption of sustainable supply chain practices. This chapter lay the groundwork for examining the organizational, technological, and cooperative aspects that influence the use of sustainability in crisis response activities.

1.2 Background of the study

Sustainable Supply Chain Practices (SSCPs) are becoming very important not only for the companies, but also for the global community, since they have a major impact on organizational operations and competitive advantages on the global market (Walker, Seuring, Sarkis, & Klassen, 2014; Pagell & Shevchenko,2014). driven by the growing worldwide awareness of social injustice, environmental degradation, climate change, and economic inefficiencies, businesses are now incorporating sustainability into their strategic operations (Sarkis, Zhu, & Lai, 2020; Dubey et al., 2017). as reported by, the United Nations Global Compact, over 71% of businesses globally have genuinely incorporated sustainability into their strategic operations, and over 93% of global CEOs are taking sustainability as crucial for future business success (UN Global Compact, 2022).

Building on this, according to a World Economic Forum survey, 50% or half of global supply chain executives now see sustainability as a crucial component that supports long-term

organizational performance, risk reduction and resiliency (World Economic Forum, 2021). More and more people believe that sustainable supply chains made possible by ethical sourcing, green procurement, and circular economy strategies could revolutionize how businesses function and provide their services (Sarkis, Zhu, & Lai, 2020).

in developing countries as well, this momentum has encouragingly been adopted. in various parts of Africa, which often struggle with limited resources and inadequate infrastructure, several initiatives have been developed to support the move toward sustainable supply chain practices (Silvestre, 2015; Geng et al., 2017). Between 2016 and 2021, Over $1.4 billion USD has been invested in green procurement and circular economy principles across public and private sectors in Africa (AfDB, 2021). These initiatives are a reflection of African nations' growing recognition that sustainable supply chains are important drivers of environmental stewardship and socio-economic advancement (AfDB, 2021; Mansi & Pandey, 2016). Using examples from Kenya and Uganda, the United Nations Environment Programme's successful pilot projects (UNEP, 2020), efforts are clear indication of how adopting sustainable practices can lead to real benefits. According to these studies, putting green purchasing into practice could lower operating costs by about 18% while also improving environmental performance and build trust among stakeholder confidence (UNEP, 2020; Orji et al., 2019).

Recognized for their potential to enhance effectiveness, efficiency, organizational reputation and stakeholder relationships (Dubey et al., 2019; Haavisto & Kovács, 2019), the relevance of SSCPs is also becoming increasingly evident in the humanitarian contexts. A study by the Humanitarian Logistics Association (2021) found that humanitarian organizations adopting SSCPs were 27% more likely to report improve donor relations. They were also more likely to reduce last-mile

delivery costs by 21%, and 33% more likely to experience enhanced community trust (HLA, 2021).

Mauritania's ongoing socio-economic problems, recurrent food insecurity, and high susceptibility to climate change have made sustainability in humanitarian supply chains a growing priority (WFP, 2022). With criteria like local procurement, renewable energy, and eco-friendly logistics ingrained in their operational strategies and funding criteria, major international donor organizations such as the World Food Programme (WFP), USAID, the European Union (EU), the World Bank, and UNHCR have made sustainability the focal point of humanitarian interventions in Mauritania (WFP, 2022; USAID, 2021). in WFP's Country Strategic Plan for Mauritania (2019–2023) for example, Sustainability, was specifically included, where they committed over $48 million USD to support sustainable food systems, local sourcing, solar-powered cold-chain logistics, and eco-friendly transportation (WFP, 2022).

Perceived compatibility is about how well a new idea or innovation fits with current organizational principles, resource capacities, technology infrastructure, and collaboration frameworks is known as perceived compatibility (Rogers, 2003; Oliveira & Martins, 2011). Even with strong support from donors, the effectiveness of SSCPs adoption has mostly depended on how humanitarian organizations view these practices fit with current organizational structures, capabilities, and strategic orientations. It's really about finding that right fit to make things work effectively (Rogers, 2003; Tornatzky & Fleischer, 1990).

According to other studies (Rogers, 2003; Tornatzky & Fleischer, 1990; Oliveira & Martins, 2011), perceived compatibility is considered a main factor on organizational willingness to adopt innovations, and it highly influences both the pace and scope of adoption. In this research, Three

aspects of perceived compatibility were specifically examined: technological compatibility (alignment with technological infrastructure), collaborative compatibility (alignment with external stakeholders), and organizational compatibility (alignment with internal values and resources) (Zhu, Sarkis, & Lai, 2013; Dubey et al., 2017).

this study investigated how perceived compatibility affects the adoption of sustainable supply chain practices in humanitarian organization in Mauritania. This relationship is essential for organizational capacity development, to inform strategic donor interventions, (Dubey et al., 2019). it can constitute the basis on which sustainable humanitarian supply chain operations are possible (Haavisto & Kovács, 2019; Oliveira & Martins, 2011).

1.3 Statement of the problem

Humanitarian organizations working in developing nations, especially Mauritania, continue to lag far behind in implementing Sustainable Supply Chain Practices (SSCPs) into their supply chain operations, despite the growing global emphasis on sustainability and the proven strategic importance of these practices (UNDP Mauritania, 2023; Dubey et al., 2019). this gap in the capacity of the organizations represents a major operational risk, especially since over 62% of humanitarian operations in Mauritania take place in areas where SSCPs are desperately needed (UNDP Mauritania, 2023).

In 2023, the United Nations Development Programme evaluated the humanitarian operations in the region and reported that less than 25% of humanitarian NGOs operating in Mauritania have explicit sustainability rules incorporated into their supply chain (UNDP, 2023). Despite growing donor-driven demands for sustainable practices in humanitarian operations, this highlights a

significant implementation gap that reflects the strategic and operational difficulties that these organizations face (WFP, 2022; UNDP Mauritania, 2023).

A working paper by the Centre for Humanitarian Logistics and Regional Development (CHLRD), expand these issues, reporting 30-40% of key humanitarian organizations operating in Mali, Mauritania, and Niger have started to include at least one sustainability practice, like sourcing locally, using green logistics, or adopting renewable energy. (CHLRD, 2020). These numbers clearly indicate that there's still a lot of room for improvement when it comes to sustainable supply chain practices in this region, especially in Mauritania.

Although there has been clear benefits like better efficiency, increased trust within communities, and stronger relationships with donors from using sustainable practices, many humanitarian organizations in Mauritania are still reluctant to fully embrace these changes (Kovács & Spens, 2021; HLA, 2021).

Furthermore, the majority of research on sustainable supply chains focuses on developed nations or private sector settings, leaving a big gap in understanding how humanitarian organizations in Mauritania a resource-constrained environments, view and implement these sustainable practices (Silvestre, 2015; Dubey et al., 2017). To be more specific, there is still a scarcity of empirical data about the influence of perceived compatibility on SSCP adoption in developing nations such as Mauritania (Rogers, 2003; Zhu, Sarkis, & Lai, 2013). Since perceived compatibility has a major impact on an organization's decision to embrace new practices, influencing both the scope and speed of implementation, it is imperative that these empirical gaps are addressed (Rogers, 2003; Oliveira & Martins, 2011).

Taking into account these gaps and difficulties, this study examined to what extent factors of perceived compatibility such as organizational, collaborative, and technological affects the adoption of sustainable supply chain practices among humanitarian organization in Mauritania. In order to improve humanitarian supply chain management sustainability, donor strategies, organizational policies, and existing research, it is imperative that this issue is explored and addressed.

1.4 Purpose of the study

This research focuses on analyzing the effect of perceived compatibility on the adoption of sustainable supply chain practices (SSCP) in humanitarian organizations based in Mauritania. the study specifically seeks to evaluate how different aspects of perceived compatibility, including organizational, collaborative and technological compatibility influence the implementation of sustainable supply chain practices. Through identifying key barriers and drivers, the research hopes to gather actionable empirical evidence that will assist policymakers, humanitarian agencies, and supply chain managers in integrating sustainability into humanitarian supply chains not only in Mauritania but also in the wider context of the adoption of innovation in the humanitarian sector.

1.5 Objectives of the study

1.5.1 Main objective

To assess the effect of perceived compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania.

1.5.2 Specific objectives

i. To ascertain the effect of organizational compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania.
ii. To examine the influence of collaborative compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania.
iii. To establish the impact of technological compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania.

1.5.3 Research questions

i. What is the effect of organizational compatibility on the adoption of sustainable supply chain practices?
ii. What is the effect of collaborative compatibility on the adoption of sustainable supply chain practices?
iii. What is the effect of technological compatibility on the adoption of sustainable supply chain practices?

1.6 Hypotheses

Based on the objectives, the research hypothesis included:

H1: There is a significant and positive relationship between perceived organizational compatibility and the adoption of sustainable supply chain practices in humanitarian organizations operating in Mauritania.

H2: There is a positive and significant relationship between perceived collaborative compatibility and the adoption of sustainable supply chain practices in humanitarian organizations operating in Mauritania.

H3: There is a significant and positive relationship between perceived technological compatibility and the adoption of sustainable supply chain practices in humanitarian organizations operating in Mauritania.

H4: The dimensions of perceived compatibility (organizational, collaborative, and technological) collectively have a strong positive effect on the adoption of sustainable supply chain practices in humanitarian organizations operating in Mauritania.

1.7 scope of the study

1.7.1 conceptual scope

The research assessed the effect of perceived compatibility as the independent variable on the adoption of Sustainable Supply Chain Practices (SSCPs) as the dependent variable. In this study, perceived compatibility was examined through three dimensions: Organizational compatibility looking at the alignment with mission, leadership support, resource availability. Collaborative compatibility looking stakeholder alignment, regulatory compliance, community acceptance. And lastly, Technological compatibility looking at the existing technological infrastructure, integration, ease of use, adaptability. The study explored how these factors influenced SSCPs, including green procurement, ethical sourcing, local sourcing, community engagement, renewable energy, and eco-friendly logistics in humanitarian organizations.

1.7.2 sectoral scope

The study encompassed a range of humanitarian sectors where supply chain activities are significant encompassing, but not restricted to health, education, food security, water, sanitation and hygiene (WASH), shelter, and logistics.

1.7.3 organizational scope

The study targeted a diverse range of humanitarian organizations operating in Mauritania, including United Nations agencies, local non-governmental organizations (NNGOs), international non-governmental organizations (INGOs), and other relevant humanitarian entities involved in supply chain management.

1.7.4 Geographical scope

This study was conducted in Mauritania, a West African country facing difficulties in sustainable supply chain management due to climate conditions, resource constraints, and logistical constraint in humanitarian operations. The study focused on humanitarian organizations actively involved in supply chain operations within the geographical boundaries of Mauritania.

1.7.5 Time scope

The research was carried out from January to June 2025. This period was selected to allow sufficient time to collect data, analysis, and validation of findings. This research captured the perceptions and adoption levels of SSCPs in humanitarian organizations in Mauritania as they existed during this specific timeframe.

1.8 justification and significance of the study

Humanitarian organizations globally face increasing pressure from donors, communities, and regulatory bodies to integrate sustainability into their operational practices (Kovács & Spens, 2021; HLA, 2021). In Mauritania, where environmental vulnerabilities and resource scarcity are prevalent, understanding the adoption of sustainable supply chain practices (SSCPs) is critical for improving efficiency, resilience, and stakeholder trust (Dubey, Gunasekaran, & Childe, 2019; UNDP Mauritania, 2023). Despite growing international investment in sustainability, adoption in humanitarian contexts remains relatively low, creating a gap between global goals and local realities (CHLRD, 2020; WFP, 2022). By focusing on organizational, collaborative, and technological compatibility, this study provides evidence-based insights into barriers and enablers of SSCP adoption, thus addressing an important empirical gap (Oliveira & Martins, 2011; Zhu, Sarkis, & Lai, 2013).

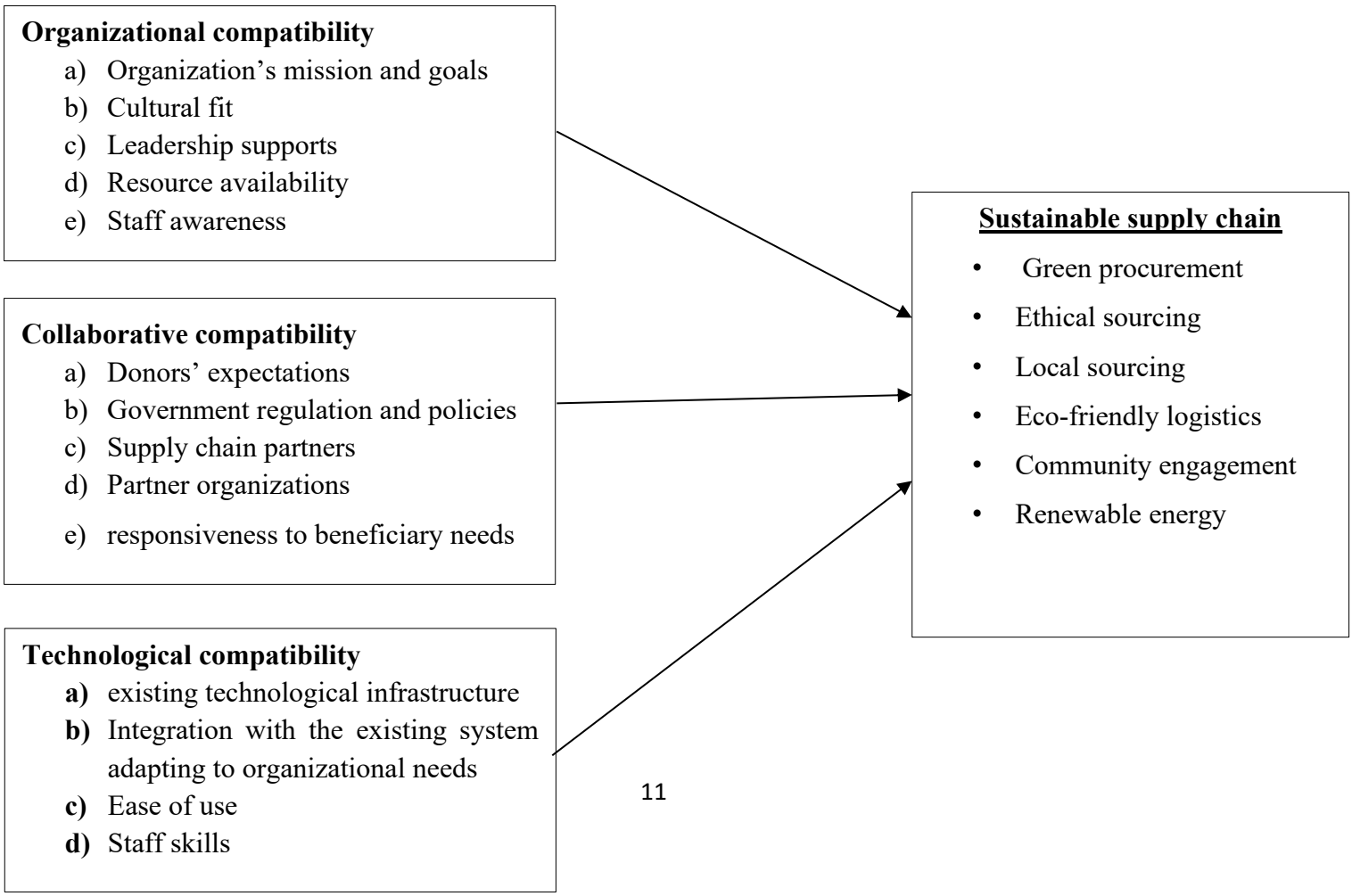
The study's findings are significant for multiple stakeholders. For humanitarian organizations, the results offer practical guidance on aligning sustainability with mission goals, leadership priorities, and internal culture. For policymakers and donors, the study provides evidence to support the formulation of policies, funding criteria, and accountability systems that encourage sustainability integration in aid operations (WFP, 2022). For supply chain and logistics professionals, it offers strategies to integrate sustainability through compatible technologies, strategic partnerships, and resource optimization. Finally, for academics and researchers, this study contributes to innovation adoption theory by applying the Diffusion of Innovation (DOI) and Technology-Organization-Environment (TOE) frameworks to a less-explored humanitarian context, paving the way for further comparative and longitudinal research (Rogers, 2003; Sarkis et al., 2020).

By bridging theoretical and practical insights, the study contributes to global sustainability objectives, particularly Sustainable Development Goals (SDGs) 12 and 13, while providing actionable strategies for humanitarian actors in Mauritania and similar contexts

1.9 Conceptual framework

The study's conceptual framework is predicated on two variables, the adoption of sustainable supply chain practices as the dependent variable, and perceived compatibility as the independent. Below is an illustration of how the independent variable affects the dependent variable.

Figure 1: Showing the conceptual framework, a link between perceived compatibility and adoption of SSCPs



Source: *The framework is based on existing scholarly works including but not limited to: Rogers (2003); Tornatzky and Fleischer (1990); Zhu, Sarkis, and Lai (2013); Dubey, Gunasekaran, and Childe (2019); and Kovács and Spens (2021).*

Figure 1 presents the conceptual framework guiding this study, illustrating the relationship between perceived compatibility broken down into three dimensions: organizational, collaborative, and technological and the adoption of sustainable supply chain practices (SSCPs) within humanitarian organizations in Mauritania.

The conceptual framework draws from the DOI (Diffusion of Innovation) developed by Rogers in 2003, which posits that among the major variables influencing the adoption of innovation is compatibility, or the degree to which a new concept aligns with the preexisting values, requirements of potential adopters and experiences. Additionally, it is based in the T-O-E (Technology-Organization-Environment) Framework by Tornatzky & Fleischer,(1990), which highlighting how organizational traits, technological preparedness, and external environmental factors influence the adoption of technology.

Organizational compatibility includes alignment with the organization's mission, cultural fit, leadership support, resource availability, and staff awareness all of which can either facilitate or hinder SSCP adoption (Zhu, Sarkis, & Lai, 2013). The impact of donor expectations, regulatory rules, partner dynamics, and responsiveness to beneficiaries on SSCP adoption is reflected in collaborative compatibility (Dubey, Gunasekaran, & Childe, 2019). Then, we have technological compatibility, which looks at how current infrastructure, system integration, ease of use, and staff skills help or hinder the adoption of SSCPs. (Oliveira & Martins, 2011).

According to the conceptual framework, these three aspects of perceived compatibility taken together are the main drivers of the extent to which humanitarian organizations adopt green procurement, ethical sourcing, local sourcing, eco-friendly logistics, community engagement, and renewable energy as SSCPs composite (Seuring & Müller, 2008; Kovács & Spens, 2021). Understanding this framework can help organizations better adapt to and implement these important practices.

CHAPTER TWO

LITERATURE REVIEW

2.1 introduction

This section provides a deep review of relevant to the study on the effect of perceived compatibility on the adoption of sustainable supply chain practices (SSCPs) in humanitarian organizations in Mauritania. this chapter includes theoretical, conceptual, empirical literature review and ends with a summary and synthesis of the literature gap. This review aims to build a solid foundation for understanding sustainable supply chains by exploring what has already been discovered about innovation adoption and the importance of compatibility in decision-making within these humanitarian supply chains.

2.2 Theoretical Review

In this study, The Diffusion of Innovation (DOI) Theory by Everett Rogers (2003) and the Technology-Organization-Environment (TOE) Framework by Tornatzky and Fleischer (1990) are the theories that serve as the foundation for this research. When taken as a whole, these theories offer a strong theoretical framework for comprehending how humanitarian organizations in Mauritania have adopted sustainable supply chain practices (SSCPs). Both theories shed light on different but connected aspects that affect how organizations embrace new innovations., the TOE focuses on organizational-level contextual factors, while DOI emphasizes the significance of perceived innovative qualities.

2.2.1 Diffusion of Innovation (DOI) Theory

The DOI theory, developed by Rogers (2003), provides a foundational framework for explaining how, why, and at what rate new ideas and innovations whether managerial, social, or technological are adopted within organizations and social systems. Rogers (2003) identifies five key attributes that influence the rate of adoption: relative advantage, compatibility, complexity, trialability, and observability.

Everett Rogers' Diffusion of Innovation (DOI) theory offers a fundamental framework for comprehending what, how, why, and at what percentage new concepts, innovations whether managerial, social and technological are spread within organizations and social systems overtime. The theory posits that five main attributes of an innovation influence its adoption: relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003). Among these, compatibility is most relevant to this study, presented as "the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters" (Rogers, 2003, p. 15).

In this study, compatibility is conceptualized across three dimensions: organizational, collaborative, and technological. These dimensions align with how humanitarian organizations assess the "fit" of SSCPs such as green procurement, ethical sourcing, local procurement, community engagement, renewable energy or eco-friendly logistics with their internal culture, stakeholder expectations, and technological infrastructure. The DOI theory thus directly supports the central research objective: to examine how perceived compatibility influences the adoption of SSCPs in humanitarian settings.

2.2.2 Technology-Organization-Environment (TOE) Framework

created by Tornatzky and Fleischer in 1990, the TOE (Technology-Organization-Environment) framework, explain how new innovations are adopted by organizations. This theory highlights technological, organizational, and environmental as key areas that influence decisions on innovation adoption (Tornatzky & Fleischer, 1990). This approach is especially useful when examining how different factors such as structural and technological and institutional affect how humanitarian organizations integrate SSCPs in their operations.

The availability, applicability, and compatibility of technologies inside the company are referred to as the technological context. It relates to technological compatibility in this study, which evaluates if the company has the systems, digital tools, systems and necessary infrastructure required to support sustainable supply chain activities (Oliveira & Martins, 2011).

On the other hand, the organizational context includes factors like the size of the organization, its structure, leadership support, culture, and available resources. This aligns with organizational compatibility, reflecting the degree to which sustainable practices align with internal capabilities and strategic orientation.

The environmental context includes external influences such as industry trends, competitors, regulations, and donor or partner expectations. This study aligns this with collaborative compatibility, focusing on how external relationships (e.g., donors, suppliers, partner NGOs) shape and facilitate SSCP adoption.

The TOE framework enriches this study by providing a comprehensive and systems-oriented perspective on adoption behavior. It complements the DOI theory by situating the perceived compatibility of innovations within broader internal and external organizational realities an

essential consideration in the humanitarian context, where resource constraints and stakeholder expectations heavily influence decision-making (Oliveira & Martins, 2011; Zhu, Sarkis, & Lai, 2013).

Together, the DOI and TOE frameworks provide a dual-level theoretical grounding with the DOI focusing on individual and organizational perceptions, and TOE framing the structural and contextual factors affecting adoption. This integrated theoretical approach strengthens the study's capacity to explain not only whether but also why and how perceived compatibility affect the adoption of sustainable supply chain practices in humanitarian organizations.

2.3 Conceptual Literature Review

2.3.1 Organizational Compatibility

Organizational compatibility refers to the extent to which new practices align with an organization's internal values, strategic objectives, culture, leadership orientation, and operational capabilities (Rogers, 2003; Carter & Rogers, 2008). SSCPs such as local sourcing, green procurement, or ethical labor standards are more likely to be adopted when perceived as reinforcing the organization's mission and goals. For example, humanitarian organizations with mandates focused on environmental sustainability or community empowerment may view SSCPs as a natural extension of their core identity (Gold, Hahn, & Seuring, 2013). In contrast, where innovation is perceived as diverging from immediate service delivery or seen as an externally imposed agenda, adoption is often resisted (Kovács & Spens, 2011).

Organizational culture plays a powerful role in shaping innovation readiness. Cultures that promote learning, experimentation, and environmental stewardship create favorable conditions for

SSCP integration (Seuring & Müller, 2008; Lo, 2014). Conversely, rigid hierarchies or output-driven cultures may downplay environmental goals. In this context, leadership support becomes a key enabler. Leaders who signal sustainability as a strategic imperative through planning, budgeting, and communication help foster alignment and legitimacy for SSCP adoption (Oliveira & Martins, 2011; Aboelmaged, 2018).

Additionally, adoption feasibility depends on resource availability and staff awareness. Budget constraints, lack of technical staff, or high turnover rates, conditions which are common in humanitarian organizations in developing contexts, can limit the perception of SSCP feasibility (Dubey et al., 2017). Furthermore, if staff do not understand how SSCPs contribute to organizational success, their adoption remains symbolic or inconsistent (Zhu et al., 2013; Giunipero, Hooker, & Denslow, 2012). Thus, internal capacity building, training, and resource planning are essential to increasing compatibility and moving sustainability from rhetoric to reality.

2.3.2 Collaborative Compatibility

Collaborative compatibility refers to the extent to which SSCPs align with the practices, expectations, and capacities of an organization's external stakeholders, including donors, suppliers, partner organizations, government agencies, and beneficiaries (Dubey, Gunasekaran, & Papadopoulos, 2017). In humanitarian settings, donor agencies are primary influencers of operational choices. When donors integrate sustainability standards such as mandates on local sourcing or carbon reduction into funding frameworks, implementing organizations are more likely to view SSCPs as necessary and beneficial (WFP, 2022; Salama, 2020). However, if donor

criteria are unrealistic, uncoordinated, or inadequately funded, perceived incompatibility increases and implementation stalls (Kovács & Spens, 2021).

National regulations and supply chain partnerships further influence collaborative alignment. For instance, regulatory requirements around procurement, labor practices, or import/export restrictions can either facilitate or hinder SSCP deployment (Silvestre, 2015; Tachizawa & Wong, 2014). Similarly, sustainability requires close alignment with suppliers, third-party logistics providers, and local stakeholders. Where supply chain actors share a common vision and capacity for environmental or ethical practices, organizations are more inclined to adopt SSCPs (Foerstl, Azadegan, Leppelt, & Hartmann, 2015).

Moreover, coordination with partner organizations and responsiveness to beneficiaries are critical dimensions. Joint ventures, cluster mechanisms, and consortium projects require that partner NGOs align on shared sustainability standards and goals to ensure consistency (Humanitarian Logistics Association, 2021). Finally, community engagement strengthens compatibility when SSCPs reflect beneficiary needs and cultural norms, enhancing legitimacy and cooperation (Seuring & Gold, 2012). Without buy-in from the people they serve, humanitarian organizations risk misalignment, inefficiency, and reputational loss. Collaborative compatibility, therefore, is essential to the legitimacy, operational alignment, and sustainability of supply chain innovations in humanitarian contexts.

2.3.3 Technological Compatibility

Technological compatibility refers to the extent to which an organization's existing technological infrastructure, systems, and capabilities support the integration of innovations such as sustainable supply chain practices (Zhu, Sarkis, & Lai, 2013). This includes the presence of enterprise systems,

mobile technology, digital logistics platforms, and connectivity infrastructure. For example, humanitarian organizations already using Enterprise Resource Planning (ERP) systems or digital inventory tracking tools are better positioned to adopt innovations such as energy-efficient transport routing or carbon emission monitoring (Oliveira & Martins, 2011; Al-Jabri & Roztocki, 2015). Where such systems are absent, perceived misalignment discourages sustainability adoption, especially in low-resource contexts like Mauritania.

Adopting SSCPs often requires upgrades in systems and processes that must integrate with current organizational technologies. The difficulty of such integration becomes a barrier when systems are not interoperable or customizable (Kurnia, Rahim, & Nasiri, 2015). Compatibility also relates to how well a new system aligns with internal workflows and structures a factor shown to influence adoption decisions in both public and private sectors (Oliveira, Thomas, & Espadanal, 2014). This is particularly relevant in humanitarian organizations where operations are time-sensitive and disruptions from new systems can significantly impact service delivery (Sarkis, Zhu, & Lai, 2011).

Moreover, the ease of use and staff technological capacity are central to perceived technological compatibility. Innovations that are overly complex or require high ICT proficiency tend to face resistance, especially in organizations with limited digital skills or support systems (Silvestre, 2015; Ifinedo, 2011). In the humanitarian sector, where frontline staff often lack technical training and operate under intense time constraints, systems must be simple, accessible, and intuitive (Dubey, Gunasekaran, & Childe, 2019). Staff readiness, access to training, and ongoing IT support significantly determine whether SSCP-related technologies will be adopted or abandoned.

2.3.5 Sustainable Supply Chain Practices

Sustainable Supply Chain Practices (SSCPs) refer to the integration of environmental, social, and economic sustainability principles into supply chain management, encompassing activities from procurement to distribution and waste disposal (Seuring & Müller, 2008). Rooted in the Triple Bottom Line framework (people, planet, and profit), SSCPs are designed to reduce environmental harm, promote ethical labor standards, and improve long-term economic viability (Elkington, 1998; Carter & Rogers, 2008). these practices are increasingly adopted by organizations seeking to balance operational efficiency with stakeholder expectations, regulatory compliance, and global development goals (Beske & Seuring, 2014).

SSCPs comprise diverse yet interconnected practices. Green procurement emphasizes the sourcing of environmentally friendly goods and services that reduce waste, emissions, and energy use (Zhu, Sarkis, & Lai, 2013), often require suppliers to meet eco-certification criteria during bidding processes (Hoejmose, Brammer, & Millington, 2013). Ethical sourcing ensures suppliers adhere to social responsibility metrics such as fair-trade compliance, anti-child labor policies, labor regulations, and decent work conditions (Giunipero, Hooker, & Denslow, 2012). Local sourcing supports regional economies, reduces carbon emissions from transportation and promote resilience in supply chains (Tachizawa & Wong, 2014), but its application in humanitarian contexts can be limited by the technical and operational capacity of local suppliers, especially in low-resource humanitarian settings (Kunz, Van Wassenhove, & Besiou, 2017).

Additionally, eco-friendly logistics refers to the use of transportation, packaging, and warehousing solutions that minimize environmental footprints through fuel-efficient routing, modal shifts, and renewable energy integration (Govindan et al., 2014). Humanitarian agencies operating in arid

regions, for example, have adopted route optimization algorithms and fuel-efficient vehicles to reduce emissions while ensuring timely delivery of critical supplies (WFP, 2023). Community engagement involves working closely with local stakeholders through participatory approaches in logistics design and decision-making, enhancing social legitimacy and program relevance (Mangan & Lalwani, 2016). often including the training and development of local suppliers to meet sustainability standards (Heaslip, Sharif, & Althonayan, 2018). Renewable energy use, such as solar-powered warehousing or cold chains, not only mitigates environmental impact but also enhances supply resilience in energy-insecure contexts, it is gaining traction as a means to reduce dependency on fossil fuels (Silvestre, 2015).

The humanitarian sector that has historically prioritized equity and urgency, is now facing a shift towards using sustainable supply chain practices to support long-term goals. usually, Humanitarian supply chains operate in challenging environments where resources are limited, hence they focus mainly on immediate relief and often ignoring sustainability (Kovács & Spens, 2011). However, research has shown that adopting sustainable methods can really boost effectiveness of operations. For example, Dubey, Gunasekaran, & Childe, (2019), demonstrated that using green logistics and sourcing supplies locally can improving transparency for donors and satisfaction among stakeholders while shortening delivery times and lowering costs. Plus, these sustainable practices can enhance coordination, ensure the supply chain runs smoothly, and better beneficiaries' engagement (Van Wassenhove, 2006).

Research has shown that adopting sustainable practices can really help organizations in humanitarian work. According to a previous cross-sectional study of 83 NGOs in East Africa, those that implemented at least three sustainable supply chain practices (green procurement, engaging with the community, and using renewable energy) saw a 21% boost in their delivery

efficiency and a 28% improvement in how well they met donor requirements (Dubey et al., 2019). In the same line, the Humanitarian Logistics Association (2021), reported that local communities were more trusting of humanitarian organization that practice community-based planning and ethical sourcing, which consequently decreased operational hiccups. It has been shown that sustainability can have a dual effect on the environment, a longitudinal case study by Silvestre (2015), showed that cold chains powered by renewable energy installed in Kenyan refugee camps increased vaccination preservation rates while reducing diesel fuel use by 35%.

humanitarian organizations in Mauritania are working in challenging areas and delicate ecosystem, SSCPs (Sustainable Supply Chain Programs) provide a great chance to tackle both environmental, social and operational issues (UNDP, 2023). A report from WFP Mauritania (2022) highlighted that, implementing local sourcing, involving the community, and using solar-powered logistics, organization can protect the environment, support local economies, and lower transportation costs. For example, using solar energy in warehouses has been a cost-effective and reliable solution for storing food in remote locations (AfDB, 2021). donors like the European Union and USAID are additionally encouraging this shift by including sustainability criteria in their funding requirements, and humanitarian organizations are being pushed to align their operations with these sustainability goals (Kovács & Tatham, 2009; Salama, 2020). Despite these advancements, limited research, poor infrastructure, not enough awareness among staff and perceived incompatibility with traditional emergency supply chain models are making barriers to this adoption (Silvestre, 2015).

2.4 Empirical Relationships Between Compatibility Dimensions and SSCP Adoption

For humanitarian organizations looking to adopt sustainable practices into their operational models, grasping how perceived compatibility relates to the adoption of Sustainable Supply Chain Practices (SSCPs) is essential. This section examines how particular aspects of technological, organizational, and collaborative compatibility affect the adoption of SSCPs, basing on the Diffusion of Innovation (DOI) theory and the T-O-E framework (Technology-Organization-Environment).

2.4.1 Organizational Compatibility and SSCP Adoption

Organizational compatibility has a big impact on SSCP adoption. In this research, organizational compatibility, which is characterized by mission alignment, culture, leadership, resource base, and awareness. In a study of European social enterprises, Gold, Hahn, and Seuring (2013), showed that European social enterprises emphasizing sustainability or community impact were better at integrating green procurement into their main strategies. This is consistent with researches in the humanitarian sector, Kovács and Spens in 2021 noted that mission-driven NGOs focused on resilience and food security are more open to sustainable practices that support their social goals.

Organizational culture and leadership further mediate adoption. Oliveira and Martins (2011), in a cross-sectional study of 235 Portuguese firms, noted that a culture of innovation and learning, supported by leadership commitment, resulted in a statistically significant increase in environmental innovation uptake. Humanitarian Logistics Association (2021) reports that humanitarian organizations with strong executive support for sustainability policies, such as green warehouse construction or renewable energy sourcing, experienced smoother integration of SSCPs and less internal resistance. Leadership can also institutionalize sustainability by embedding it in

job descriptions, key performance indicators, and performance reviews, which further legitimizes new practices.

Internal resource capacity and staff awareness are final, yet equally crucial, dimensions. Aboelmaged (2018) found that organizations with sufficient financial flexibility and technical staffing were 29% more likely to implement SSCPs such as solar refrigeration and local sourcing networks. Giunipero, Hooker, and Denslow (2012) also established that training programs and staff sensitization efforts directly improved ethical sourcing outcomes in both commercial and NGO procurement teams. By Raising internal knowledge and reallocating resources, humanitarian efforts which struggle with limited staff and budgets in Mauritania may greatly increase the perceived viability of SSCP adoption.

2.4.2 Collaborative Compatibility and SSCP Adoption

Collaborative compatibility is all about how well humanitarian organizations work with their partners, donors, governments, suppliers, and the people they aim to help. A study by Kovács and Spens (2021) which looked at 83 humanitarian organizations in Sub-Saharan Africa, found that the adoption of SSCP went up by more than 30%, when donors stated their sustainability goals clearly and offered flexible funding. But when donors pushed for sustainable projects without adapting to local conditions, these projects often faced delays or were dropped (Kovács & Spens, 2021). This shows that donors need to match their expectations with what's possible on the ground. This shows it's important for donor expectations to match the real-world capabilities of organizations.

supplier alignment and governmental policies & regulations impact also the implementation of the SSCP. Foerstl et al. (2015) established that companies incentives tend to get their suppliers

involved in sustainability when they are in a regulated environments that support the introduction of green procurement through environmental taxes, incentives, or requirements. Similarly, Silvestre (2015) discovered that the effective application of ethical and environmentally friendly purchasing techniques in humanitarian operations depended heavily on local laws and how well suppliers are prepared. Organizations view sustainability initiatives as too challenging to implement successfully if partner suppliers are unaware of or unable to work with compliance.

Finally, inter-agency collaboration and community responsiveness are powerful enablers. The Humanitarian Logistics Association (2021) reported that collaborative SSCP planning among multiple NGOs led to reduced duplication, increased efficiency, and higher beneficiary satisfaction. Similarly, Seuring and Gold (2012) emphasize that sustainability initiatives co-created with local communities, such as choosing local transport solutions or designing inclusive sourcing policies, are more legitimate and sustainable. These findings affirm that collaborative compatibility, when grounded in shared goals, clear communication, and mutual value creation, significantly increases the success of SSCP adoption in humanitarian logistics.

2.4.3 Technological Compatibility and SSCP Adoption

Technological compatibility is a foundational determinant of SSCP adoption, especially in data-driven and logistics-heavy environments like humanitarian supply chains. A study by Zhu, Sarkis, and Lai (2013) on 180 Chinese manufacturing firms found that the presence of robust technological infrastructure such as ICT networks, procurement systems, and data management platforms, directly correlates with the adoption of both internal and external green supply chain management practices. In humanitarian contexts, infrastructure gaps are frequently cited as

constraints. Silvestre (2015) showed that in emerging economies, limited ICT systems in NGOs delayed the implementation of sustainability tracking tools and emissions-reporting platforms.

Integration with existing systems is another critical factor. Kurnia, Rahim, and Nasiri (2015) examined firms in Southeast Asia and found that innovation adoption is significantly more successful when new sustainability technologies can be integrated with legacy systems with minimal disruption. In humanitarian operations, where logistical coordination and speed are paramount, adopting technologies that require minimal training and system re-engineering increases the perceived feasibility of SSCP implementation. Oliveira and Martins (2011) confirm that perceived ease of integration with existing tools is one of the strongest predictors of IT-based innovation adoption in resource-constrained organizations.

In addition to infrastructure and integration, staff digital literacy and technical support capacity significantly influence adoption. In a study of 56 humanitarian organizations across South Asia and East Africa, Dubey, Gunasekaran, and Childe (2019) found that organizations with well-trained staff in digital tools had 34% higher SSCP adoption rates than those without. Similarly, Aboelmaged (2018) highlights that in small and medium enterprises, the absence of internal IT champions reduces the success of sustainability initiatives, especially those involving eco-logistics systems. Thus, empirical findings suggest that all four technological dimensions, existing infrastructure, system integration, ease of use, and staff skills are interlinked predictors of SSCP adoption in humanitarian operations.

2.5 Summary and Synthesis of the Literature Gap

In 2013, Gold, Hahn, and Seuring, looked into how social enterprises incorporate sustainability and their findings highlighted that organizations whose missions are focused on sustainability and

those whose operations are completely sustainable tend to go on and use such practices as local sourcing and ethical procurement. In the same line with this, a study by Oliveira and Martins (2011) pointed out that in adopting new ideas, organization's readiness, which involves support from leaders, cultural alignment, the ability to innovate and staff capacity, play a vital role. In big part, these studies are based on commercial and social companies in developed or emerging countries. even though they offer fundamental insight into organizational compatibility, it's still uncertain how these concepts apply to humanitarian organizations, which often work under tight deadlines and limited resources (Aboelmaged, 2018).

Kovács and Spens (2021) carried out a study that looked at how outside influences affect sustainable practices in humanitarian logistics. According to their findings, when donors push for sustainability while providing helpful context and support, organizations are more likely to adopt. However, they also noted that rigid donor demands or lack of alignment with local capabilities could hinder implementation. Other studies, such as Foerstl et al. (2015), further underscore the importance of supplier alignment and regulatory environments, demonstrating that external pressures alone are insufficient without inter-organizational trust and operational feasibility. Yet, very few empirical studies explore how humanitarian NGOs coordinate SSCP efforts across multiple stakeholders especially in fragile contexts like Mauritania through collaborative mechanisms such as inter-agency planning, local sourcing partnerships, or community engagement (Humanitarian Logistics Association, 2021).

Zhu, Sarkis, and Lai (2013) explored the institutional and performance-based antecedents of green supply chain management practices among Chinese firms. Their study revealed that internal technological capabilities, such as IT infrastructure, and compatibility with existing systems significantly influence the implementation of sustainable practices. This finding supports the

premise that technological readiness is crucial for adoption. However, their work focused on manufacturing firms in China and did not consider humanitarian organizations operating in low-infrastructure environments such as Mauritania, where digital infrastructure and ICT skills are often limited (Silvestre, 2015).

The reviewed literature establishes a strong theoretical and empirical foundation for understanding SSCP adoption across various sectors. It demonstrates that perceived compatibility across technological, organizational, and collaborative dimensions acts as a key enabler of sustainability integration (Zhu et al., 2013; Oliveira & Martins, 2011; Dubey, Gunasekaran, & Childe, 2019). Yet, existing studies largely focus on firms in industrialized or commercially competitive contexts, offering limited insights into the operational realities of humanitarian organizations. Moreover, there is an absence of comprehensive studies that disaggregate compatibility into distinct dimensions and examine their influence on SSCPs holistically within nonprofit supply chains (Silvestre, 2015; Giunipero, Hooker, & Denslow, 2012).

This study seeks to address these gaps by examining how perceived compatibility specifically organizational compatibility (mission alignment, leadership, resources, and staff awareness), and collaborative compatibility (donor expectations, regulations, partner alignment, and community responsiveness), technological compatibility (infrastructure, system integration, ease of use, and skills), influences the adoption of SSCPs within humanitarian organizations in Mauritania. By focusing on core sustainability practices such as green procurement, ethical sourcing, renewable energy, community engagement, eco-friendly logistics, and local sourcing, this research contributes both theoretical clarity and context-specific evidence to guide humanitarian actors, donors, and policymakers toward more sustainable supply chain and operational models.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The methodology that was used to conducts this research is presented in this chapter. It provide details on the study population's characteristics, the sampling process, sample size, measuring tools, and the data collections methods used. along with the methods used to analyze the data and the steps taken to guarantee that research ethics were followed throughout the investigation, This chapter also cover Important aspects of validity and reliability.

3.2 Research approach

The study used a quantitative approach, which was great for testing hypotheses in an objective way. By using statistical tools, we assessed how different variables relate to each other and ensure our findings could be applicable to the entire target population. We collected data with a structured questionnaire that included Likert-scale questions, allowing strong statistical analysis and validation of the conceptual framework (Bryman, 2016).

3.3 Research Design

To effectively capture these dynamics, the study utilized a cross-sectional survey design. This design allow the collection of data at a single point in time (Cohen et al., 2017; X. Wang & Cheng, 2020). For this study, to effectively capture these dynamic, we adopted a cross-sectional survey design. According to Olsen and Marie (2004), this strategy proved suitable for finding patterns and connections without the need for longitudinal tracking. This design was chosen because of its

effective use in past studies and projects that investigated similar topic, like those by Sarkis et al. (2020) and Zhu, Q. et. al. (2013). Knowing, that there are some limitations in this research design; to improve the findings of the cross-sectional study, attention was taken to select suitable participants and analysis methods.

Additionally, as highlighted by Creswell & Creswell in 2018, the explanatory technique was utilized to investigate the relationship between perceived compatibility and the adoption of SSCPs, while the descriptive analysis shed light in understanding the current state of Sustainable Supply Chain Management (SSCM) adoption (Babbie, 2020).

3.4 Study population

The study's population was composed of humanitarian organizations with active logistics and supply chain operations and large-scale humanitarian response in Mauritania.

According to The Logistics Cluster, a coordination mechanism established under the Inter-Agency Standing Committee (IASC) system to address gaps in supply chain logistics preparedness and response ensuring an efficient and effective logistics support during humanitarian emergencies, led by the United Nations World Food Programme (WFP), There are mainly 63 humanitarian organizations involved in large-scale humanitarian responses with active logistics, procurement, or supply chain operations in Mauritania (logistics cluster, 2025). comprising local non-governmental organizations (local NGOs), United Nations (UN) agencies and international non-governmental organizations (INGOs).

Table 1: Number of Humanitarian organizations

Organization Type	Number of Organizations
International NGOs	24
Local NGOs	26
UN Agencies	13
Total	63

Source: *Logistics cluster, WFP, logistics capacity assessment Mauritania list of contact humanitarian agency (2025)*

3.5 Sample Size and Sampling Method

Given the clearly defined and manageable population size of humanitarian organizations operating in Mauritania with large-scale humanitarian responses with active logistics, procurement, or supply chain operations estimated at 63 organizations (logistics cluster, 2015), a census approach was employed in this study. This approach aligned with recommendations for small population studies, where the feasibility of contacting every member outweighs the need for probabilistic sampling (Krejcie, 1970).

All 63 organizations were invited to participate in the survey, rather than selecting a sample. A census ensured complete representation of the target population, eliminating sampling error and enhanced the accuracy and generalizability of the study findings. (Israel, 1992).

It was particularly suitable for studies aiming to understand sector-wide practices, as is the case with the adoption of sustainable supply chain practices among humanitarian actors in Mauritania.

To ensure high participation, follow-up reminders and direct outreach were used to maximize the response rate from all organizations in the population.

The study successfully contacted and included 63 organizations, achieving a response rate of 100%. According to Booker et al. (2021), a response rate above 80% is regarded as excellent. Table 2 presents the characteristics of the participating enterprises.

Table 2: characteristics of organizations included in the study

	Category	**Frequency**	**Percentage**
Type of NGO	International NGO	24	38.1%
	Local NGO	26	41.3%
	UN agencies	13	20.6%
	total	63	100%
Years of Operation in Mauritania	Less than 2 years	0	0%
	2–5 years	0	0%
	6–10 years	13	20.63%
	More than 10 years	50	79.37%
	total	63	100%
	Health	19	30.2%

Sector of operations	Education	15	23.8%
	Food Security	21	33.3%
	Shelter	18	28.6%
	WASH	24	38.1%
	multi-sectoral	28	44.4%

Source: primary data

As shown in Table 2, most of the humanitarian organizations included in the study were local NGOs 26 (41.3%), followed closely by international NGOs 24 (38.1%), while UN agencies accounted for 13(20.6%) of the sample. This indicates a relatively balanced representation among the different types of organizations, with slightly more national than international presence.

In terms of years of operation in Mauritania, the majority of the organizations 50 (79.37%) had been operating for more than 10 years, while 13 (20.63%) had been in the country for between 6 and 10 years. None of the organizations had been operating for less than six years, which suggests that the sample is composed of well-established and experienced actors in the humanitarian space.

The organizations operated across a range of sectors, with many engaged in more than one area of intervention. There were 28 organizations (44.4%) that operated in multi-sectoral programming, 24 (38.1%) in WASH, 21 (33.3%) in food security, 19 (30.2%) in health, 18 (28.6%) in shelter, and 15 (23.8%) in education. This overlap reflects the interconnected nature of humanitarian needs and the multifaceted approaches adopted by NGOs to address them.

3.6 Data Collection Method and tools

Hashim et al., 2022; Sekaran & Bougie, 2016 posit that a questionnaire is A systematic collection of pre-written questions, mostly multiple-choice, but can also include open-ended ones to get more detailed or qualitative responses. In this study, we used a structured questionnaire survey to gather information from participants on the research problem (Dumondor, 2017). The purpose of the questionnaire was to gauge respondents' perceptions of compatibility and the adoption of sustainable supply chain practices (SSCPs).

The questionnaire was divided into five sections, as outlined below:

Section 1: Demographic Information. This section captured background data on the type of organization (INGO, UN agency, or national NGO), sector of operation, years of operation in Mauritania, and the respondent's role and experience within the organization.

Section 2: Perceived Organizational Compatibility. This section contained a series of statements based on previously identified indicators, assessing the extent to which the organization perceived SSCM practices as compatible with its mission, culture, leadership support, staff skilled and resource availability.

Section 3: Perceived Collaborative Compatibility. This section measured the perceived alignment of SSCM practices with donor expectations, compatibility with partner organizations, responsiveness to beneficiary needs (in a sustainable manner), alignment with local regulations, and compatibility with supply chain partners.

Section 4: Perceived Technological Compatibility This section evaluated the perceived fit between the technological requirements of SSCM practices and the organization's existing infrastructure, staff skills, ease of use, adaptability to organizational needs, and integration with current systems.

Section 5: Adoption of Sustainable Supply Chain Practices. This section assessed the extent to which the organization had adopted various SSCM practices. It included statements reflecting specific practices (based on specific sustainable supply chain practices the indicators identified earlier), allowing respondents to indicate whether their organization had implemented each one.

For Sections 2, 3, 4 and 5, a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) was used to capture responses quantitatively. The questionnaire was prepared through online survey platforms (e.g., Google Forms) to ensure wide accessibility and efficient data collection. Participants received a link to complete the online questionnaire independently via email (Appendix 6). For respondents with limited internet access, paper-based questionnaires were made available, with data subsequently entered manually for analysis.

3.7 Data Management

The data collected through online surveys were securely stored in google drive a password-protected digital databases provided by the survey platform (Google Forms), which ensured restricted access and data integrity. For respondents who filled out the paper-based questionnaires, data were entered into the same digital system manually, in order to maintain uniformity and reduce input discrepancies.

Before the analysis, we methodically examined the completeness, logical consistency and compliance of the responses with the questionnaire framework. We used standard methods to clean the data, including finding and removing all duplicates, spotting unusual responses, and addressing

any missing information. We also looked for conflicting answers to ensure everything was logical. If needed, we followed up with some respondents to clarify any unclear or incomplete data.

This thorough process helped to improve the quality, validity and reliability of the dataset, making sure the information was accurate and truly reflected the responses (Kumar, 2019).

3.8 validity and reliability

3.8.1 Validity

According to Zikmund et al. (2010), validity is a crucial standard for assessing research tools to make sure they measure the target constructs effectively. Sahlan et al. (2020) stated that the instrument's validity depends on how well it fits the theoretical framework and operational definitions of the study. For a questionnaire to be considered content valid, the items must accurately reflect the target domain (Khalid et al., 2021; Mohajan, 2017).

Validity in this study was confirmed, using quantitative validation and expert evaluation. We created the questionnaire based on the conceptual framework, literature reviews and past researches, making sure that the questions matched our objectives of the study and research question.

Four experts, comprised of two academic and two professionals were chosen to evaluate the questionnaire's content validity. They evaluated each question using a 4-point rating system, with 1 denoting "not relevant," 2 "slightly relevant," 3 "quite relevant," and 4 "highly relevant."

The Content Validity Index (CVI) was calculated using the formula:

$$\text{CVI} = \frac{relevant\ items}{total\ items} \times 100\%$$

The I-CVI is the proportion of experts who rated the item as either 3 or 4 (indicating "Relevant" or "Highly Relevant") (Hair et al. 2010). In total, 35 items were evaluated across the questionnaire. Of these, 33 items (94.3%) achieved an I-CVI score ≥ 0.75, meaning that at least 3 out of 4 experts rated these items as relevant (Appendix 4). This indicates a high level of expert agreement regarding their content relevance.

However, 2 items (5.7%) received an I-CVI score of 0.50 which < 0.70, indicating that only 2 out of 4 experts considered them relevant suggesting ambiguity or a lack of perceived relevance. These items were flagged for review and subsequently revised to enhance clarity and relevance, following the guidance of Hair et al. (2010), Salkind (2010), and Saunders et al. (2012).

Furthermore, to strengthened the validity of the whole instruments and not just individual items, the S-CVI/Ave (Average of I-CVI scores) and S-CVI/UA (Universal Agreement among Experts) were computed. the S-CVI/Ave (Average of I-CVI across items) was 0.96 while the S-CVI/UA (Universal Agreement, proportion of items with I-CVI = 1.0 was 0.91. According to Polit and Beck (2006), S-CVI/Ave values ≥ 0.80 and S-CVI/UA values ≥ 0.70 are indicative of excellent content validity. Both indices in this study exceed these thresholds, reinforcing the robustness and relevance of the measurement the questionnaire.

Table 3: Brief summary of CVI results

Indicator	**Score**
Total Items	35
Items with CVI ≥ 0.75	33
Items with CVI < 0.70	2
Scale-Level CVI (S-CVI/Ave)	0.96

Scale-Level CVI (S-CVI/UA)	0.91

Source: primary data

3.8.2 Reliability

A research instrument's stability and consistency over time are always measured by its reliability (Nunnally & Bernstein, 1994). To check the reliability and consistency of the measurement scales in this study, we calculated Cronbach's Alpha (α) for the main areas we focused which are the Organizational, Collaborative, Technological Compatibility, and Sustainable Supply Chain Practices (SSCP). Cronbach's Alpha is recognized as the most credible metric of scale consistency, with values of 0.70 or greater being seen as acceptable (Nunnally & Bernstein, 1994), indicating that the questionnaire measure effectively the desired constructs (Tavakol & Dennick, 2011).

Table 4: Summary of constructs reliability

Construct	**No. of Items**	**Cronbach's Alpha (α)**
Organizational Compatibility	5	0.980
Collaborative Compatibility	5	0.709
Technological Compatibility	4	0.904
Sustainable Supply Chain Practices (SSCP)	16	0.823

Source: primary data, N=30

Based on the results from the table above, both Organizational Compatibility and Technological Compatibility scored high on reliability, with Cronbach's Alpha values of 0.980 and 0.904, which are well above the usual standard indicating outstanding dependability. With an α of 0.823, the

SSCP construct demonstrated strong internal consistency. Meanwhile, the Collaborative Compatibility construct scored 0.709, which hits the minimum acceptable level of 0.70 that researchers look for in social sciences (Hair et al., 2014). Although this is comparatively lower than the other scores, is still seen as acceptable, especially in exploratory investigations (Hair et al., 2014). to improve internal consistency, future research might review or improve the components included in this construct.

3.9 Data Analysis

To make sure that the data is accurate and thorough in this research, we exported the responses from the completed questionnaire using Google Forms and then analyzed everything with SPSS version 28 and Excel for basic charts and tables.

In the first part of the analysis, we looked at descriptive statistics like frequencies, percentages, averages, and standard deviations. The results helped to summarize information about the demographic traits of respondents, including what type of organizations they were from, their sectors, and their years of experience. It also gave us a clearer picture of how humanitarian organizations in Mauritania are adopting sustainable supply chain practices.

In the second step of the analysis, we ascertain whether there was a significant link or relationships between the dependent variable, the adoption of SSCPs, and perceived compatibility (organizational, collaborative, and technological). Using the Pearson's correlation analysis we also measured the direction and strength of these relationships.

To evaluate the predictive impact of these organizational, collaborative, and technological factors on the adoption of SSCPs, multiple regression analysis was also performed. Below is the model.

$$Y=\beta0+\beta1X1+\beta2X2+\beta3X3+\epsilon$$

Where:

- Y = Adoption of sustainable supply chain practices
- X_1 = Organizational compatibility
- X_2 = Collaborative compatibility
- X_3 = Technological compatibility
- β = regression constant
- $\beta 1$ to $\beta 3$= are regression coefficients of independent variables
- ϵ = Error term

The absence of multicollinearity among the independent variables, linearity, and the normality of the residuals were among the fundamental presumptions upon which the regression analysis was done. In this analysis, a p-value below 0.05 ($p < 0.05$), which indicates a 95% confidence level in rejecting the null hypothesis and a less than 5% chance that the result was an accident, were deemed statistically significant.

3.10 Limitations of the Study

As this research provide important information on the adoption of sustainable supply chain practices in humanitarian organization working in Mauritania, it has also been a subject to various limitations. The use of a cross-sectional research design is the first limitation, this design mean that information and data were collected at once, in one specific point in time. This Design worked effectively for spotting the relationships between the variable, but it does not allow us to see how

things change over time or to draw conclusions about cause and effect. (Creswell & Creswell, 2018).

The second limitation of this study is the geographic scope. This study focused was only on humanitarian organizations operating in Mauritania, making these findings not applicable to organizations working in others countries with a different geopolitical, institutional and social conditions, impacting also the generalizability of findings. (Bryman, 2016). Changes in donor's requirement, cultures and government policies among nations can affect the relevance of this findings outside Mauritania.

Another limitation of this study to consider is the reliance on data coming self-reported responses to the structured questionnaires. According to Podsakoff et al., (2003), this strategy always introduces subjective question interpretation and common technique bias, meaning that people might have interpreted the questions based on their own experiences, individual role, organizational events which could lead to some bias in how they answered.

The last limitation of this study was the pressing nature of humanitarian work. This made it difficult for some organizations to fully engage and finish the questionnaire due their time sensitive and high-pressure operations. In order to address this, respondents were prepared prior to data collection that they will be requested to participate in the study, follow-up procedures and reminders were put in place while emphasizing the significance of confidentiality during the data collection.

Even with these challenges, the study offers valuable insights that can help improve understanding and application of sustainable supply chain practices in humanitarian contexts.

3.10 Ethical considerations

While conducting this research, we complied fully with well-established ethical standards in order to protect the right, dignity and well-being of all participants. Before we collected data an informed consent was obtained from all respondents through a document and clear statement attached to the questionnaire (Appendix 3). In the consent form the voluntary nature of participation and the right of respondents to withdraw at any time plus the purpose of the research were all mentioned. In accordance with ethical best practices, no personally identifiable information was collected unless explicitly agreed upon by the participant (Resnik, 2011).

To ensure transparency and credibility, a letter of introduction was obtained from the School of Business at Uganda Christian University (Appendix 1) and attached to the questionnaire. In line with scientific requirements, an application was also submitted to the Research Ethics Committee (Ref No: UG-REC-026), with further details provided in Appendix 2. This letter and the ethical clearance clarified that the research was entirely for academic purposes and officially authorized by the institution.

Furthermore, the study complied with the ethical guidelines and data protection policies of the humanitarian organizations from which data were collected. Permission to conduct the research was sought from the management or ethics focal points of these organizations, and all relevant internal protocols were followed, including those related to informed consent, data access, and staff participation (Israel & Hay, 2006; World Health Organization, 2011).

All collected data were handled with strict confidentiality and anonymity. Data were stored securely on a database that requires a password. During data cleaning and analysis, no personal

identifiers were linked to respondents. The questionnaire avoided sensitive or intrusive questions, and every effort was made to minimize any potential discomfort or burden on participants.

Overall, the study upheld the principles of academic integrity by properly citing and acknowledging all sources, and by reporting findings accurately without fabrication or manipulation.

CHAPTER FOUR

PRESENTATION OF RESULTS

4.0 Introduction

This chapter covers the analysis, presentation and interpretation of the study findings. The chapter start with descriptive statistics of the key constructs particularly the perceived organizational compatibility, technological compatibility, collaborative compatibility, and the adoption of sustainable supply chain practices (SSCPs). Following this, the relationships between the key variables of interest which are the perceived compatibility and the adoption of sustainable supply chain practices is presented, then lastly the regression analysis results.

4.1 Descriptive Statistics

4.1.1 Perceived Organizational Compatibility

This subsection presents respondents' perceptions of how well sustainable supply chain practices align with internal organizational characteristics. The analysis focused on the compatibility of SSCPs with organizational mission, culture, leadership, resource allocation, policy frameworks, and staff development. A 5-point Likert scale was used to rate the responses, where 1 meant strongly disagree, 2 disagree, 3 neutral, 4 agree, 5 strongly agree, and N/A "Not Applicable" option was also provided, but excluded from the analysis. The table 5 below present the results of The mean and standard deviations.

Table 5: Respondents' Ratings on Organizational Compatibility

Code	Statement	Mean	SD
OC1	Sustainable supply chain practices align with our organization's mission and strategic goals.	4.06	0.64
OC2	The culture of our organization supports the implementation of sustainable practices.	4.06	0.59
OC3	Our leadership actively prioritizes sustainability in supply chain decisions.	3.97	0.74
OC4	The organization allocates adequate resources to support sustainability in supply chains.	3.05	0.87
OC5	Staff are regularly trained on sustainable supply chain practices.	3.31	0.84

Source: Primary data

Respondents strongly agreed that sustainable supply chain practices align with their organization's mission and goals (mean = 4.06, SD = 0.64), and that organizational culture supports sustainability (mean = 4.06, SD = 0.59). These relatively high means and low standard deviations suggest broad agreement and consistency across organizations.

Leadership prioritization of sustainability scored slightly lower (mean = 3.97), with some variability (SD = 0.74), implying that while many leaders are sustainability-oriented, commitment levels may vary across organizations.

Resource allocation had the lowest mean (3.05, SD = 0.87), indicating that many organizations may struggle to allocate sufficient resources to support sustainable supply chain practices. Training on SSCPs was also moderate (mean = 3.31, SD = 0.84), suggesting a need for capacity building and continuous learning among staff.

4.1.2 Perceived Collaborative Compatibility

This section presents descriptive statistics on collaborative compatibility in relation to the adoption of SSCPs. It assesses how external stakeholders such as donors, government, supply chain partners, and beneficiaries contribute to or influence sustainability efforts in humanitarian supply chain. A 5-point Likert scale was used to rate the responses, where 1 meant strongly disagree, 2 disagree, 3 neutral, 4 agree, 5 strongly agree, and N/A "Not Applicable" option was also provided, but excluded from the analysis. below in table 6 the mean and standard deviations are presented.

Table 6: Respondents' Ratings on Collaborative Compatibility

Code	Statement	Mean	SD
CC1	Donors strongly support the adoption of sustainable supply chain practices.	4.68	.469
CC2	Government policies encourage our organization to pursue sustainable logistics and procurement.	3.87	.553
CC3	We collaborate effectively with supply chain partners to implement sustainable practices.	3.75	.647
CC4	Our partner organizations share similar values toward sustainability.	3.41	.557
CC5	Feedback from beneficiaries influences the sustainability choices we make.	3.95	.490

Source: Primary data

The findings indicate that donor support is the strongest collaborative driver of SSCP adoption, with a high mean score of 4.68 and low standard deviation (0.47). This implies a broad consensus

that donors are highly supportive of sustainable initiatives, likely due to global shifts toward greener funding requirements and ESG compliance.

Government policy influence was also positively rated (mean = 3.87, SD = 0.553), indicating that respondents agree that national regulations or guidelines moderately encourage sustainability. However, the slightly higher standard deviation reflects some variation in perceptions depending on the specific policy environment encountered.

Effective collaboration with supply chain partners (mean = 3.75, SD = 0.647) and value alignment with partner organizations (mean = 3.41, SD = 0.56) received moderate ratings. These results reflect some challenges in harmonizing sustainability efforts across stakeholders, highlighting the need for capacity building and stronger alignment among partners.

Feedback from beneficiaries plays a considerable role in shaping sustainability decisions (mean = 3.95, SD = 0.49), showing that humanitarian organizations do consider community voices when making sustainable supply chain choices.

4.1.3 Perceived Technological Compatibility

This section presents the descriptive statistics on technological compatibility, focusing on the technological infrastructure, system integration, staff competencies, and the usability of systems in supporting sustainable supply chain practices (SSCPs).

Respondents rated their agreement with each statement on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), and the findings are summarized in Table 7.

The agreement of the respondents with each statement was rated using A 5-point Likert scale was used to rate the responses, where 1 meant strongly disagree, 2 disagree, 3 neutral, 4 agree, 5

strongly agree, and N/A "Not Applicable" option was also provided, but excluded from the analysis. in table 7 below are the results.

Table 7: Respondents' Ratings on technological compatibility

Code	Statement	Mean	SD
TC1	Our organization has the technological infrastructure needed to support sustainable supply chains.	3.11	0.90
TC2	Our current technologies are compatible with existing systems and adaptable to sustainability goals.	3.30	0.87
TC3	Staff are adequately skilled in using technologies that support sustainable supply chain management.	3.25	0.74
TC4	The systems we use are user-friendly and support sustainability tracking.	3.30	0.69

Source: Primary data

The results reveal moderate agreement with all four statements on technological compatibility. Respondents gave the highest mean scores (3.30) to both TC2 (technology compatibility and adaptability) and TC4 (user-friendliness and sustainability tracking), indicating that the current systems are perceived as adaptable to sustainability needs and reasonably easy to use. However, the relatively high standard deviation (0.87 and 0.69 respectively) indicates some variation in respondents' experiences, likely due to differences in organizational investment in digital infrastructure.

The lowest-rated item was technological infrastructure availability (mean = 3.11, SD = 0.90), suggesting that while some organizations possess a solid infrastructure to support sustainable

practices, others still face notable limitations. This reflects a technological disparity across humanitarian organizations operating in different contexts.

Skills of staff in utilizing sustainability-supportive technologies were moderately rated (mean = 3.25, SD = 0.74), suggesting some capacity but also indicating a potential training gap that organizations may need to address to maximize the impact of technology in driving SSCPs.

4.1.4 Adoption of Sustainable Supply Chain Practices (SSCP)

This section presents the descriptive statistics on the extent to which humanitarian organizations in Mauritania have adopted sustainable supply chain practices. The adoption of SSCPs was assessed across six key sub-dimensions: Green Procurement, Ethical Sourcing, Community Engagement, Local Sourcing, Renewable Energy and Eco-Friendly Logistics. Using the same 5-point Likert scale as from the other sections above, respondents indicated how much they agreed with 16 statements. The table 8 below is a summary of the results.

Table 8: Respondents' Ratings on sustainable supply chain practices adoption

Code	Statement	Mean	SD
GP1	Our procurement process emphasizes environmentally friendly products.	4.11	0.68
GP2	We include sustainability criteria in our tenders and contracts.	4.11	0.69
GP3	The organization prefers vendors with green certifications (e.g., ISO 14001).	4.11	0.69
ES1	We consider labor rights and ethical standards when selecting suppliers.	4.11	0.68
ES2	Suppliers must comply with anti-child labor and fair-trade practices.	4.11	.698

ES5	We avoid suppliers involved in unethical or exploitative practices.	4.11	.698
LS1	We prioritize sourcing materials/products locally when possible.	4.56	0.56
LS2	Local sourcing is part of our formal sustainability strategy.	4.08	0.37
CE1	We involve community stakeholders in supply chain decisions.	3.46	0.59
CE2	We train local suppliers in sustainable practices.	3.16	0.75
CE5	Our procurement supports local job creation and empowerment.	3.95	0.52
EL1	Our transport systems are designed to reduce carbon emissions.	2.85	0.55
EL2	We consolidate shipments to minimize fuel usage.	4.02	0.53
EL5	We evaluate logistics suppliers based on environmental impact.	3.23	0.67
RE1	We use renewable energy in warehouses/operations.	2.77	1.00
RE2	The organization has invested in solar/clean energy technologies.	2.85	1.04

Source: Primary data

Respondents reported a consistently high adoption of green procurement and ethical sourcing practices. Specifically, the use of green-procurement (GP1,2 & 3) and Ethical Sourcing (ES1, ES2, ES5) recorded an identical mean score of 4.11 with a standard deviation (SD) of 0.698. This uniformity in responses indicates a strong collective agreement on the implementation of sustainable procurement practices across organizations, with moderate variability in perceptions. The consistent mean suggests that practices such as using environmentally friendly products (GP1), including sustainability criteria in tenders (GP2), and preferring vendors with green

certifications (GP3) are widely adopted. Similarly, ethical considerations such as respecting labor rights (ES1), enforcing anti-child labor and fair-trade compliance (ES2), and avoiding unethical suppliers (ES5) are uniformly emphasized in procurement decisions. The moderate SD implies some variation in implementation levels, but overall, these practices appear to be well integrated into organizational supply chain strategies.

On the other hand, the prioritization of local suppliers (LS1) was highly rated (mean = 4.56, SD = 0.56), suggesting that many organizations are committed to supporting local economies. Formal integration of local sourcing into sustainability strategy (LS2) was also evident (mean = 4.08, SD = 0.37), indicating both widespread and consistent practice. The low SD further emphasizes that most organizations have similar policies regarding local sourcing.

Statement related to Community Engagement scored moderately. Involving community stakeholders (CE1) had a mean of 3.46 (SD = 0.59), suggesting moderate practice with some variability. Training local suppliers in sustainable practices (CE2) received a lower mean of 3.16 and a relatively high SD of 0.75, indicating inconsistent implementation across organizations. On the other hand, supporting local job creation (CE5) had a stronger mean of 3.95 (SD = 0.52), pointing to moderate to strong adoption with moderate consistency.

On ecofriendly logistics, statements demonstrated a mixed result. Designing transport systems to reduce carbon emissions (EL1) had a relatively low mean of 2.85 (SD = 0.55), indicating limited implementation. However, consolidating shipments to reduce fuel usage (EL2) was better rated (mean = 4.02, SD = 0.53), reflecting widespread adoption of this practical cost- and energy-saving strategy. Evaluating logistics suppliers based on environmental impact (EL5) scored a mean of 3.23 (SD = 0.67), suggesting this is less consistently practiced.

Lastly, Renewable energy practices received the lowest overall ratings. The use of renewable energy in operations (RE1) had a mean of 2.77 (SD = 1.00), and investment in solar or clean energy technologies (RE2) had a mean of 2.85 (SD = 1.04). These means indicate low adoption levels, while the relatively high standard deviations suggest significant disparities among organizations. Some may be actively investing in renewable energy, but many are not yet implementing these initiatives. These low scores, coupled with relatively high standard deviations, suggest that adoption in this area remains limited and highly variable between organizations.

Based on the results of mean which is high and low standard deviation, for embracing ethical sourcing, eco-friendly procurement, and using local suppliers when necessary, most of humanitarian organization in Mauritania really place high priority on these sustainability practices. For community involvement, green logistics, and renewable energy, the results portray a mixed picture between moderate to low levels, with a number of organizations making great progress in adoption, while others are still behind. In the humanitarian sector, these differences highlights that there's a chance to improve overall sustainable practices implementation by concentrating on training, better resource distribution, and policies that support sustainability.

4.2 Correlation Analysis of Perceived Compatibility and Adoption of Sustainable Supply Chain Practices (SSCP)

This section of this research presents the correlation analysis that was done to look at the direction and strength of the relationships between the adoption of sustainable supply chain practices abd the three dimension of compatibility that we are studying in this research eg: Organizational, Collaborative, and Technological Compatibility)

Before their inclusion in the regression analysis, the control variables such years of operations, and type of NGO were also included in the relationship to demonstrate their correlation with the variables of interest. For this analysis, the statistical metric employed was the Pearson correlation coefficient (r). Table 9 below displays the relationships between the variables.

Table 9:Correlation Analysis of Perceived Compatibility and Adoption of SSCP's

Correlations						
		Org_comp	Colla_comp	Tech_comp	Years_operations	SSCPs
Org_comp	Pearson Correlation	1				
	Sig. (2-tailed)					
Colla_comp	Pearson Correlation	.207	1			
	Sig. (2-tailed)	.104				
Tech_comp	Pearson Correlation	.203	.513**	1		
	Sig. (2-tailed)	.111	<.001			
Years_operations	Pearson Correlation	-.222	-.092	.008	1	
	Sig. (2-tailed)	.081	.472	.949		
SSCPs	Pearson Correlation	.747**	.533**	.493**	-.170	1
	Sig. (2-tailed)	<.001	<.001	<.001	.182	
**. the significant level of the correlation is 0.01 level (2-tailed), N=63						

from primary data, using SPSS

According to the findings in Table 9 above, humanitarian organizations that have higher levels of Sustainable Supply Chain Practices adoption (SSCP) are the one with that have stronger perceived organizational, collaborative, and technological compatibilities.

A significant positive correlation was found between organizational compatibility and SSCPs (r = 0.747, $p < 0.01$). This indicates that organizations with internal alignment, such as mission, culture, shared sustainability goals, leadership support, resource availability, and staff awareness, are significantly more likely to adopt sustainable supply chain practices. This finding supports existing literature emphasizing the central role of organizational readiness in sustainability adoption (Zhu et al., 2018).

Collaborative compatibility also demonstrated a moderate positive correlation with SSCPs (r = 0.533, $p < 0.01$). This suggests that organizations that actively collaborate with donors, engage stakeholders, and align with government sustainability regulations tend to implement sustainable practices more effectively. The result highlights the critical role of external partnerships and shared values in promoting sustainable supply chain integration (Seuring & Müller, 2008).

Similarly, Technological compatibility was found to have a moderate positive and significant correlation with SSCPs (r = 0.493, $p < 0.01$). This implies that organizations equipped with appropriate, compatible, and user-friendly technological infrastructure along with skilled personnel are more likely to adopt and operationalize sustainability within their supply chains.

Moreover, the analysis reveals notable inter-correlations among the compatibility dimensions. Specifically, collaborative compatibility and technological compatibility exhibited a moderate positive correlation ($r = 0.513$, $p < 0.01$), suggesting that organizations that work well with external partners may also invest in compatible technologies that support sustainability. However, organizational compatibility showed only weak and statistically non-significant correlations with collaborative (r = 0.207, p = 0.104) and technological compatibility (r = 0.203, p = 0.111), indicating a more distinct role in influencing SSCPs.

On the control variables, years of operations had a weak negative correlation with SSCPs (r = -0.170, p = 0.182), which was not statistically significant. This suggests that the duration an organization has operated does not necessarily affect its commitment or ability to adopt sustainable supply chain practices.

A one-way ANOVA was also conducted to examine whether the adoption of Sustainable Supply Chain Practices (SSCP) differed by type of NGO (Local NGO, International NGO, and UN agency). The results indicated no statistically significant difference in SSCP adoption across the three groups, $F(2, 60) = 0.499$, $p = .610$. The mean SSCP score was slightly higher for UN agencies ($M = 3.82$, $SD = 0.41$) compared to local NGOs ($M = 3.71$, $SD = 0.32$) and international NGOs ($M = 3.70$, $SD = 0.40$), but this difference was not significant. The effect size ($\eta^2 = 0.016$) was small, indicating that only 1.6% of the variance in SSCP adoption was explained by NGO type.

Table 10: one-way ANOVA type of NGO and SSPC

Type of NGO	**Mean SSCP**	**Std. Deviation**	**F**	**Sig. (p)**	**Eta Squared (η^2)**
Local NGO	3.71	0.32	0.499	0.610	0.016
International NGO	3.70	0.40			
UN Agency	3.82	0.41			
Total	3.73	0.37			

Source: primary, using SPSS

4.3 Regression Analysis of the Relationship Between Perceived Compatibility and Adoption of SSCP

This section presents the results of the multiple linear regression analysis conducted to examine the effect of perceived compatibility dimensions (organizational, collaborative, and technological)

on the adoption of sustainable supply chain practices (SSCP) among humanitarian organizations in Mauritania. The years of operation in Mauritania, and two dummy-coded variables representing the type of NGO (INGO and Local NGO) United Nations agencies served as the reference group were also included in the analysis. This analysis allowed us to assess the individual and collective effects of these variables on the adoption of SSCP.

To ensure valid results and confirm the absence of multicollinearity one of the key assumptions of multiple regression analysis the Variance Inflation Factor (VIF) was assessed. The results are presented in Table 11, and the correlation assumption was verified earlier in Table 9.

Table 11: Regression Analysis Results (Regression Coefficients and Model Summary)

Variables	**Model**			
	β	**t**	**VIF**	**Sig.**
Control Variables				
Years of operation	-.039	-.626	1.147	.534
Type of NGO	-.156	-2.291	1.962	.026
	-.099	-1.472	1.964	.147
Independent Variables				
Organizational compatibility	.339	8.852	1.154	<.001
Collaborative compatibility	.287	3.758	1.428	<.001

Technological compatibility	.126	2.891	1.690	.005
Model Summary				
R	.874			
R Square (R^2)	.764			
Adjusted R^2	.738			
F-statistic	30.165			
Standard Error of Estimate	.18706			

N=63, Significance (ANOVA p-value) **P<.001, Dependent variable: SSCP

In the table 11 above, the model yielded an R^2 of 0.764, suggesting that approximately 76.4% of the variance in SSCP adoption is accounted for by the six predictors and indicate a strong explanatory power. The adjusted R^2 of 0.738 indicates a very good model fit, considering the number of predictors. This model was statistically significant ($F = 30.165$, $p < .001$), suggesting that a substantial portion of the variance in SSCP adoption, was explained by the predictors combined together.

From the results, Organizational Compatibility emerged as the strongest and most significant predictor of SSCP adoption ($\beta = 0.339$, $t = 8.852$, $p < .001$), indicating that internal alignment such as organization's mission & goal, cultural fit, leadership support, resource availability and staff skills strongly drives sustainable practice adoption. This implies that a one-unit increase in organizational compatibility leads to a 0.339 unit increase in SSCP adoption, holding all other variables constant.

Collaborative Compatibility was also positively and significantly associated with SSCP adoption ($\beta = 0.287$, $t = 3.758$, $p < .001$). This highlights the importance of alignment and cooperation with donors, partners, suppliers, and beneficiaries in promoting sustainable supply chain practices adoption in humanitarian organization.

Lastly, Technological Compatibility, while statistically significant ($\beta = 0.126$, $t = 2.891$, $p = 0.005$), exhibited the weakest effect among the three predictors. This suggests that although having technological infrastructure, compatible ICT systems, ease of use system and skilled staff contributes positively to SSCP adoption, its relative influence is less pronounced compared to organizational and collaborative alignment.

Moving on to Control variables, Years of Operation was not a significant predictor ($p = .534$), suggesting that the length of an organization's presence in Mauritania does not significantly influence SSCP adoption in this sample. In the same way, organizational type, being an INGO was associated with a significant negative effect on SSCP adoption ($B = -0.156$, $p = .026$), indicating that INGOs adopted SSCPs less than UN organizations (the reference category), when holding other variables constant. Local NGOs also showed a negative relationship ($B = -0.099$) but this effect was not statistically significant ($p = .147$).

Regarding the multicollinearity analysis, The Variance Inflation Factor (VIF) values for all the variables ranged from 1.15 to 1.96 which are below the commonly used threshold of 5, confirming that multicollinearity did not distort the results (Hair et al., 2019). Additionally, this result confirms that the independent variables do not strongly correlate with each other and can be reliably used in the same regression model.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 Introduction

This chapter discusses the findings of the research as shown in chapter 4 in relation to the research objectives, existing literature, and the theoretical frameworks that guided the study (DOI and TOE). The research investigated how perceived compatibility affects the adoption of sustainable supply chain practices (SSCP) in humanitarian organizations in Mauritania. The findings are discussed below according to the major constructs specifically how organizational, collaborative, and technological compatibility affects the adoption of SSCPs in humanitarian organizations in Mauritania. The aim is to interpret what the results mean for humanitarian organizations in Mauritania, highlight practical implications, and position them within the broader body of knowledge on sustainable supply chain practices (SSCPs).

5.1 Effect of organizational compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania.

For this research, the initial specific objective was to ascertain the effect of organizational compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania. In this study the organizational compatibility considered were the organization's mission & goals, cultural fit, leadership supports, resource availability, staff awareness. The study found that organizational compatibility strongly influences the adoption of SSCPs. Descriptive statistics indicate that humanitarian organizations strongly agree that SSCPs align with their organization's mission and strategic goals (mean = 4.06, SD = 0.64) and that organizational culture

supports sustainability (mean = 4.06, SD = 0.59). While most these humanitarian organizations in Mauritania agree that their leadership support and prioritize sustainability with a different commitment level scoring (mean = 3.97, SD = 0.74), they indicated a moderate perception regarding adequate resource allocation with the lowest mean (mean = 3.05, SD = 0.87) indicating that many organizations struggle to allocate sufficient resources to support sustainable supply chain practices. This reflects findings by Testa et al. (2016), who observed that resource scarcity is a major obstacle to sustainability in resource-poor environments. Furthermore, staff training on SSCPs (mean = 3.31, SD = 0.84), also suggested potential areas for improvement despite overall positive alignment. (table5).

The study revealed a strong positive and statistically significant effect of organizational compatibility on the adoption of SSCPs supported by the correlation and regression analyses. Organizational compatibility showed a strong positive and significant correlation with the adoption of SSCPs ($r = 0.747$, $p < 0.001$) (table 9), suggesting that organizations with greater internal alignment are significantly more likely to adopt sustainable supply chain practices, highlighting the central role internal readiness plays in fostering sustainable supply chain practices in humanitarian organization in Mauritania. Findings from the regression analysis provided a deeper understanding of this relationship. Organizational compatibility emerged as the strongest and most important predictor of SSCP adoption ($\beta = 0.339$, $t = 8.852$, $p < 0.001$), reconfirming the correlation results (Table 11). Based on these findings, internal alignment cultural fit, leadership support, resource availability and staff skills have a significant influence on the adoption of sustainable supply chain practices in Mauritania's humanitarian organizations. According to Agyabeng-Mensah et al., (2020), strong alignment between internal culture, leadership, and sustainability goals significantly enhances adoption.

These strong findings are also supported by previous studies and theories. For example, Oliveira and Martins (2011) and Gold, Hahn, and Seuring (2013), highlighted that the positive correlation between innovation adoption and organizational readiness, which is rooted in internal capacity, leadership, and mission. By providing empirical confirmation of their application in a complex setting of humanitarian organizations in Mauritania, This study advances these understandings. (Aboelmaged, 2018). the Diffusion of Innovation (DOI) Theory, also support the significant impact of organizational compatibility on SSCP adoption in humanitarian organizations, it holds that innovations that are seen to be highly compatible with preexisting needs, values, culture and past experience are more likely to be adopted (Rogers, 2003). As defined in this study, organizational compatibility reflects the internal "fit" of SSCPs with the organization's mission, culture, leadership, resources, and staff capabilities. This is also in line with the Technology-Organization-Environment (TOE) Framework's organizational context, which highlights that internal characteristics like culture, leadership, and resource availability as crucial determinants of innovation adoption (Tornatzky & Fleischer, 1990).

The successful implementation of sustainable practices in humanitarian supply chains is mostly driven by a supportive organizational internal environment specifically the strategy alignment and cultural embrace of sustainability (Dubey et al., 2017). The adoption of green logistics and procurement strategies requires both strategic alignment and top management support according to Rai et al. (2019).

While many organizations align sustainability with their missions and demonstrate leadership commitment, gaps remain in resource allocation and staff capacity. This suggests that even when sustainability is prioritized at the strategic level, operational challenges such as funding shortages and limited staff training hinder implementation.

The implications for humanitarian organization working in Mauritania is clear. internal readiness must go beyond policy alignment to include tangible investments in resources and training. Organizations need to invest actively in building a solid internal environment, in order to promote the adoption of SSPCs. For smaller local NGOs, this includes, integrate sustainability into their core mission while creating an organizational culture that supports sustainability and securing strong leadership commitment and adequate resources and training for staff.

5.2 Effect of collaborative compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania.

The study's second objective was to determine the effect of collaborative compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania. Collaborative compatibility assesses how external stakeholders such as donors, government regulations and policies, supply chain partners, partner organizations and beneficiaries contribute to or influence SSCPs adoption.

Findings on the descriptive analysis highlight that donor support is the strongest collaborative driver of SSCP adoption, with a very high mean score of 4.68 and low standard deviation (0.47) (Table 6). Government policies and regulations influence was also positively rated (mean = 3.87, SD = 0.553) followed by feedback from beneficiaries playing a considerable role (mean = 3.95, SD = 0.49). these results imply that donors are highly supportive of sustainable initiatives, national regulations or guidelines moderately encourage sustainability and humanitarian organizations do consider beneficiaries feedback when making sustainable supply chain choices. Effective collaboration with supply chain partners (mean = 3.75, SD = 0.647) and value alignment with partner organizations (mean = 3.41, SD = 0.56) received moderate ratings, suggesting some

challenges in external harmonization of sustainability efforts across stakeholders, highlighting the need for capacity building and stronger alignment among partners. Bai and Sarkis (2010) and Bhakoo and Choi (2013), who emphasize the role of inter-organizational collaboration in enabling sustainability. However, the Mauritanian case highlights a unique risk: overreliance on donor-driven agendas may limit local ownership and adaptation.

The analysis revealed that collaborative compatibility significantly increased the adoption of SSCP. with a moderate positive and significant correlation with the adoption of SSCPs ($r = 0.533$, $p < 0.001$), indicating that greater alignment and cooperation with donors, alignment with government sustainability regulations, engagement of stakeholders lead to more effective implementation of sustainable supply chain practices. In the humanitarian sector, external stakeholders, particularly donors and beneficiaries, play a pivotal role. The high perceived support from donors for SSCPs strongly suggests that external pressures and incentives are significant catalysts for adoption. Effective collaboration with partners and alignment with government policies, engagement of stakeholders also fosters an environment conducive to sustainability initiatives. This indicates that organizations are more likely to adopt SSCPs when they perceive consistency and support from their external network, reinforcing the idea that shared values and coordinated efforts across the supply chain are crucial for effective sustainability integration (Seuring & Müller, 2008).

The regression analysis further supported this relationship, showing that collaborative compatibility was positively and significantly associated with SSCP adoption ($\beta = 0.287$, $t = 3.758$, $p < 0.001$) (Table 11). the environmental context of the TOE Framework, which emphasizes external influences such as industry trends, regulations, and donor/partner expectations as key drivers of innovation adoption (Tornatzky & Fleischer, 1990), also aligns strongly with this

finding. Similarly, the findings support the Diffusion of Innovation (DOI) Theory, which emphasizes that innovations are more likely to be adopted when they are compatible with external stakeholder expectations (Rogers, 2003). organizations a greater likelihood of implementing SSCP when their partners also value and promote sustainable supply chain principles, when they align their practices with donor values and local needs. This is consistent with Vachon and Klassen's (2006) study, that illustrated that firm cooperation with its supply chain partners creates better environmental performance. While local suppliers and host communities have an impact on the sourcing and implementation process, in the humanitarian sector, donors play a crucial role by establishing sustainability requirements. Beske and Seuring (2014), also showed that trust, information sharing, and shared sustainability goals with supply chain partners enhance sustainability performance. This highlights the importance of alignment and cooperation with donors, government regulations, partners, suppliers, and beneficiaries in promoting SSCP adoption in humanitarian organizations in Mauritania.

Prior research by Kovács and Spens (2021) also found that donor mandates on sustainability significantly increase adoption, particularly when accompanied by contextual relevance. However, this study extends previous findings by providing empirical evidence on how humanitarian NGOs specifically coordinate SSCP efforts across multiple stakeholders in a fragile context like Mauritania, an area where very few empirical studies exist (Humanitarian Logistics Association, 2021).

The study revealed that external stakeholders, especially donors, play a central role in driving SSCP adoption. Donor priorities for sustainability emerged as a stronger influence than government regulations or partnerships with local suppliers. While partnerships and beneficiary

feedback matter, donor mandates remain the most decisive external pressure for NGOs in Mauritania.

These insights underscore the need for humanitarian organizations in Mauritania to deliberately cultivate strong collaborative relationships with all external stakeholders. In practice, they must balance donor requirements with community needs and government frameworks, fostering value alignment and effective collaboration with supply chain partners, to ensure sustainable outcomes. For local NGOs, the challenge is aligning with donor standards while navigating limited bargaining power.

5.3 Effect of Technological compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania.

The third objective of this study aimed to establish the effect of technological compatibility on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania. This dimension focuses on the available technological infrastructure, system integration, staff competencies, and the usability of systems in supporting SSCPs.

The results indicate that while technological compatibility contributes positively to SSCP adoption, its effect is weaker compared to organizational and collaborative factors. NGOs in Mauritania reported moderate levels of technological readiness, with infrastructure gaps and limited staff skills constraining full adoption.

The descriptive data revealed moderate agreement with all four statements on technological compatibility (Table 7). Organizations gave the highest mean scores (3.30) to both technology compatibility and adaptability (TC2) and user-friendliness (TC4). indicating that the current systems are perceived as adaptable to sustainability needs and reasonably easy to use. However,

variations across organizations, likely attributable to differences in investment in technological infrastructure, were noted. Staff skills in utilizing sustainability-supportive technologies were also moderately rated (mean = 3.25, SD = 0.74). suggesting that some organization have capacity but also indicating a potential training gap that may need to addressed. However, the lowest-rated item was technological infrastructure availability (mean = 3.11, SD = 0.90), suggesting that while some organizations possess a solid infrastructure to support sustainable practices, others still face notable limitations. Showing a technological disparity across humanitarian organizations.

Statistical analyses (correlation and regression) jointly confirm the significant effect of technological compatibility on the adoption of sustainable supply chain practices. Technological compatibility showed a moderate positive and significant correlation with the adoption of SSCPs ($r = 0.493$, $p < 0.001$), showing that organizations equipped with appropriate and user-friendly technology, alongside skilled personnel, are more likely to adopt sustainable supply chain practices. This support Yadav and Desai (2016) study's, which found that technological readiness significantly affects green supply chain implementation in developing economies. Similarly, Bag et al. (2021) and Lin and Ho (2011), highlight that technology enhances sustainability performance only when supported by resources and organizational capacity, through data tracking, emission monitoring and supplier management. The regression analysis shown in Table 11, confirmed that technological compatibility had a statistically significant positive effect on SSCP adoption ($\beta = 0.126$, $t=2.891$, $p = 0.005$). However, it exhibited the weakest effect among the three predictors. This suggests that while having technological infrastructure, compatible technological, systems, user-friendly systems, and skilled staff contributes positively to SSCP adoption, its relative effect is less pronounced compared to organizational and collaborative alignment.

This finding supports the technological context dimension of the TOE Framework (Tornatzky & Fleischer, 1990) and the compatibility attribute of the DOI theory (Rogers, 2003). While Zhu, Sarkis, and Lai (2013) found internal technological capabilities to be crucial, their work focused on manufacturing firms in China. This study extends this understanding to humanitarian organizations operating in low-infrastructure environments like Mauritania, where digital infrastructure and technological skills are often limited (Silvestre, 2015). The findings imply that in such contexts; the foundational aspects of internal alignment and external support may take precedence. Studies such as Lin (2013) have shown that without organizational and external support, technology alone cannot drive sustainability adoption. though technological readiness remains a significant, albeit weaker, enabler. This might be due to the nature of humanitarian operations, where robust processes and strong partnerships may sometimes compensate for technological limitations, or where technological investments are still nascent for specific SSCP areas like renewable energy infrastructure (which received the lowest adoption rates in the descriptive statistics). The observed disparity in infrastructure suggests that access to and investment in technology remains a challenge for some organizations, impacting their ability to fully leverage technology for sustainability.

The results indicate that humanitarian organizations should make deliberate investments in technological infrastructure and staff training. Although other forms of compatibility may have a greater effect, the effective use of technology can still play a crucial role in promoting the adoption of sustainable supply chain practices (SSCP) in humanitarian organization in Mauritania.

The practical implication is that technology cannot substitute for internal alignment and external support. Instead, it should be seen as a complementary enabler. For humanitarian NGOs, this involves identifying existing technological gaps, gradual investments in affordable, flexible and

user-friendly systems, and focusing on capacity building to fully harness technology's potential particularly in areas such as eco-friendly logistics and the use of renewable energy. This, may provide better returns than large-scale, costly technological upgrades. This is especially relevant for smaller NGOs with limited resources, where strategic partnerships can offset infrastructure weaknesses.

5.4 Control Variables.

Among the control variables, the analysis showed that type of NGO significantly affects the SSCP adoption, indicating that certain organizational types (e.g., international vs. local NGOs) may face different challenges or levels of support for implementing sustainability initiatives in their supply chain. With UN agencies demonstrating stronger adoption compared to INGOs and local NGOs. International NGO (INGO) was associated with a significant negative effect on SSCP adoption (B = -0.156, p = .026), meaning that INGOs adopted SSCPs less than UN organizations, and Local NGOs had a negative relationship (B = -0.099) with an effect not statistically significant (p = .147). Years of operation, however, had no significant effect. This suggests that institutional type and mandate shape adoption more than organizational longevity.

These finding challenges assumptions that experience alone fosters sustainability and instead emphasizes the role of organizational mandate and resource structure. For local NGOs, this highlights the need to leverage partnerships and donor alignment to compensate for limited structural advantages.

5.5 Synthesis of Findings

Collectively, the findings unequivocally demonstrate that perceived compatibility, across its organizational, collaborative, and technological dimensions, significantly influences the adoption

of sustainable supply chain practices in humanitarian organizations in Mauritania. Organizational compatibility emerged as the most critical factor, emphasizing the importance of aligning internal mission & goal, internal culture, resources, staff and leadership with sustainability goals. Collaborative compatibility also plays a significant role, underlining the influence of partnerships with donors, supply chain partners, beneficiaries and government bodies. Although technological compatibility is less dominant, it still contributes meaningfully and should be gradually developed. Additionally, the type of NGO affects SSCP adoption, possibly reflecting differences in resources, mandates, or external obligations.

The integration of the DOI Theory and TOE Framework in the theoretical approach of our research was found to be effective in explaining the adoption behaviors. Both the TOE's more comprehensive examination of organizational and environmental factors and the DOI's emphasis on perceived compatibility were amply validated. The results indicate that external support and perceived internal fit are important factors that influence the adoption of sustainable supply chain practices in humanitarian organizations, and that technological readiness is a supportive but secondary factor in this particular setting. Practically, the results indicate that for humanitarian NGOs in Mauritania, especially smaller local organizations success in adopting SSCPs depends on strengthening internal readiness, cultivating strategic collaborations, and making incremental technological investments.

All in all, the results highlight, that promoting sustainable supply chains in in resource-constrained humanitarian operations requires a thorough approach that combine organizational alignment, stakeholder collaboration and technological readiness.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

In this chapter, the conclusions, contributions, practical recommendations and future research area are presented.

6.1 Conclusions

This research analysed the effect of different aspect of perceived compatibility on the adoption of sustainable supply chain practices on humanitarian organizations in Mauritania. The organization, collaboration and technological compatibility were the key compatibility dimension explored. The study employed the theoretical lenses of Diffusion of Innovation (DOI) Theory, Technology-Organization-Environment (TOE) Framework and utilized descriptive statistics, correlation analysis and multiple regression to examine responses from 63 humanitarian organizations, reaching several conclusions.

The study concluded that organizational compatibility significantly influences SSCP adoption in humanitarian organizations in Mauritania. Organizations that align sustainability with their mission & goal, leadership priorities, internal culture, staff skills and resource allocation are more likely to adopt green procurement, ethical sourcing, local sourcing, and other sustainable practices. suggesting that internal readiness and strategic alignment are foundational for sustainable supply chain integration.

Collaborative compatibility also emerged as a significant predictor of SSCP adoption. Humanitarian organizations that enjoy strong alignment with donors, government policy, supply

chain partners, other NGO and beneficiaries are better positioned to integrate sustainable practices. This underscores the importance of institutional and external pressures, especially in aid-driven contexts like Mauritania.

Although technological compatibility was the weakest of the three predictors, it still showed a statistically significant influence on SSCP adoption it Supports, but Does Not Lead. This implies that humanitarian organizations that have the technological infrastructure, adaptable, easy to use and skilled staff, in order to observe the full impact, they will need organizational and collaborative readiness.

The control variable analysis revealed that the type of NGO significantly affects SSCP adoption, with likely variations in mandates, funding structures, and operational capacity. In contrast, years of operation and sector did not significantly influence adoption levels.

6.2 Theoretical Contributions

In the context of sustainable supply chain practices within humanitarian organizations, this study advances the application of the Technology-Organization-Environment (TOE) Framework and the Diffusion of Innovation (DOI) Theory, making a substantial theoretical contribution. It empirically demonstrates that compatibility understood in organizational, collaborative, and technological dimensions is a pivotal determinant of innovation adoption in sustainability efforts. By disaggregating compatibility into distinct dimensions, the study enhances theoretical clarity. It offers a more nuanced understanding of how internal alignment, external partnerships, and technological readiness collectively influence adoption behavior. Furthermore, it extends the DOI and TOE frameworks to a less explored setting of humanitarian organizations in a developing country, thereby confirming that the dynamics of innovation adoption are context-dependent. The

pronounced role of collaborative compatibility, particularly donor influence, underscores the unique structure of decision-making and resource flow in humanitarian settings, while the comparatively modest role of technology reflects the operational realities of such organizations. This contextualized insight offers valuable theoretical refinement for future studies exploring innovation in sustainability-oriented sectors.

6.3 Recommendations

The study demonstrated that the influence of organizational compatibility is profound and direct on the adoption of sustainable supply chain practices in humanitarian organizations in Mauritania. Humanitarian organizations should integrate sustainability into their mission statements, leadership agendas, and operational procedures. Developing formal sustainability policies, establishing internal accountability mechanisms, Investments in resource allocation and regular staff training on SSCPs (especially for areas like eco-friendly logistics and renewable energy, where adoption is low) are crucial to enhance organizational readiness.

Given the limited resources available to local NGOs, the findings highlight the need for innovative and collaborative approaches to enhance the adoption of sustainable supply chain practices. Smaller NGOs can form consortia or coalitions to pool resources for staff training, technology acquisition, and green procurement. For instance, bulk purchasing of eco-friendly materials can help reduce costs. Peer-learning models also offer a viable strategy, where larger or better-resourced NGOs mentor and train smaller organizations, thereby enhancing capacity without substantial financial investment. In addition, local NGOs should prioritize the adoption of simple, affordable, and user-friendly technologies, such as mobile-based procurement applications, open-source supply chain software, or cloud platforms, to track sustainability with minimal cost.

Leveraging their proximity to local communities, smaller NGOs can further promote low-cost, community-driven sustainability initiatives, including local sourcing, recycling programs, or the use of renewable energy at the grassroots level.

Since donor support represents a strong driver of sustainable supply chain practice adoption, NGOs should proactively align their proposals and reporting mechanisms with donor sustainability priorities. This involves integrating sustainability metrics, such as the proportion of local sourcing or use of eco-friendly logistics, into project proposals. Highlighting small but impactful initiatives, such as renewable energy pilots or ethical sourcing projects, can further demonstrate alignment with donor objectives. Additionally, engaging in regular dialogue with donors allows NGOs to negotiate flexibility and support for low-cost yet sustainable initiatives.

Although technological compatibility exhibited the weakest effect among the three predictors, it remains an essential enabler of sustainability adoption. NGOs should conduct internal audits to identify gaps in technological readiness and adopt cost-effective, user-friendly systems for procurement, supplier evaluation, transport and sustainability reporting. Strategic investment in technologies that address less-adopted practices such as renewable energy integration in logistics, emission tracking, and eco-friendly transportation can further strengthen sustainability outcomes.

Humanitarian NGOs, particularly smaller organizations, should collaborate through national humanitarian coordination platforms to advocate for supportive policies. This includes lobbying for government incentives, such as subsidies or tax breaks for eco-friendly suppliers and renewable energy adoption, as well as the development of national guidelines that promote sustainability in humanitarian supply chains.

6.4 Limitations of the Study

For this study, the In-depth discussions of the research design, scope, and technique limitations have been covered in Chapter 3. While not compromising the findings' validity, these limitations point to areas that required careful consideration when interpreting the results. They also offer helpful direction for planning further investigations that could expand on the current work.

6.5 Future Research Areas

Following The comprehensive findings of this study, various number of recommendations can be made to promote the adoption of sustainable supply chain practices in humanitarian organization.

This study uses a cross-sectional approach, which capture data in a given period in time without analyzing changes overtime. A longitudinal method could be useful for future studies on the adoption of sustainable supply chain practices (SSCPs) in humanitarian organizations. This approach would enable researchers to track how perceived compatibility changes over time, how it affects the actual implementation of SSCPs, in contrast to the current cross-sectional study. From this approach, strong casual relationships and changes in donors' requirements, external factors and organizational strategies may be captured.

Future researcher should also use qualitative techniques to supplement these quantitative results. Supply chain experts, program managers, and policy advisers could participate in in-depth interviews or focus groups to gain more understanding of how organizational culture, stakeholder involvement, and leadership commitment influence compatibility perceptions. This approach may also provide some evidence on underlying obstacles like resistance to change which often hinder the adoption of innovations.

Finally, comparative analysis and regional extension could be useful for future research. Examining humanitarian organizations in different locations or nations would test the generalizability of these findings and identify context-specific drivers or barriers. Comparative research between NGOs operating in stable vs conflict-affected areas, or between international and local NGOs, may shed light on how organizational type and environment influence the adoption of SSCP. Furthermore, future models' explanatory power might be improved by adding other factors such as donor dependency, innovation readiness, and institutional pressure.

6.6 Final Remark

All things considered, this study provides strong empirical support for the critical role that compatibility whether organizational, collaborative or technological plays in promoting sustainability in humanitarian supply chains. With growing global concern regarding environmental and ethical responsibility, these findings are relevant and practical insights, enabling humanitarian practitioners to develop supply chains which are resilient, sustainable, and contextual to the needs of the local environment.

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APPENDICES

Appendix 1: introductory letter

This appendix contains the introductory letter received from the school of business at UCU and shared with potential participants, explaining the purpose of the study and inviting them to take part.

UGANDA CHRISTIAN UNIVERSITY
A Centre of Excellence in the Heart of Africa

28th April 2025

To Whom It May Concern;

RE: MASTERS IN BUSINESS ADMINISTRATION (MBA)

Mr. Kadima Marebuza , REG. No J24M15/009 is a student at Uganda Christian University, pursuing a degree of Master's in Business Administration.

In partial fulfillment of the requirements for the award of the Master's degree, he is conducting a research study titled: **The effect of perceived compatibility on the adoption of sustainable supply chain practices in humanitarian organisations in Mauritania**

This communication therefore serves to formally request you to allow him access any information in your custody/organisation, which is relevant to his research .

Thank you for your cooperation on this matter

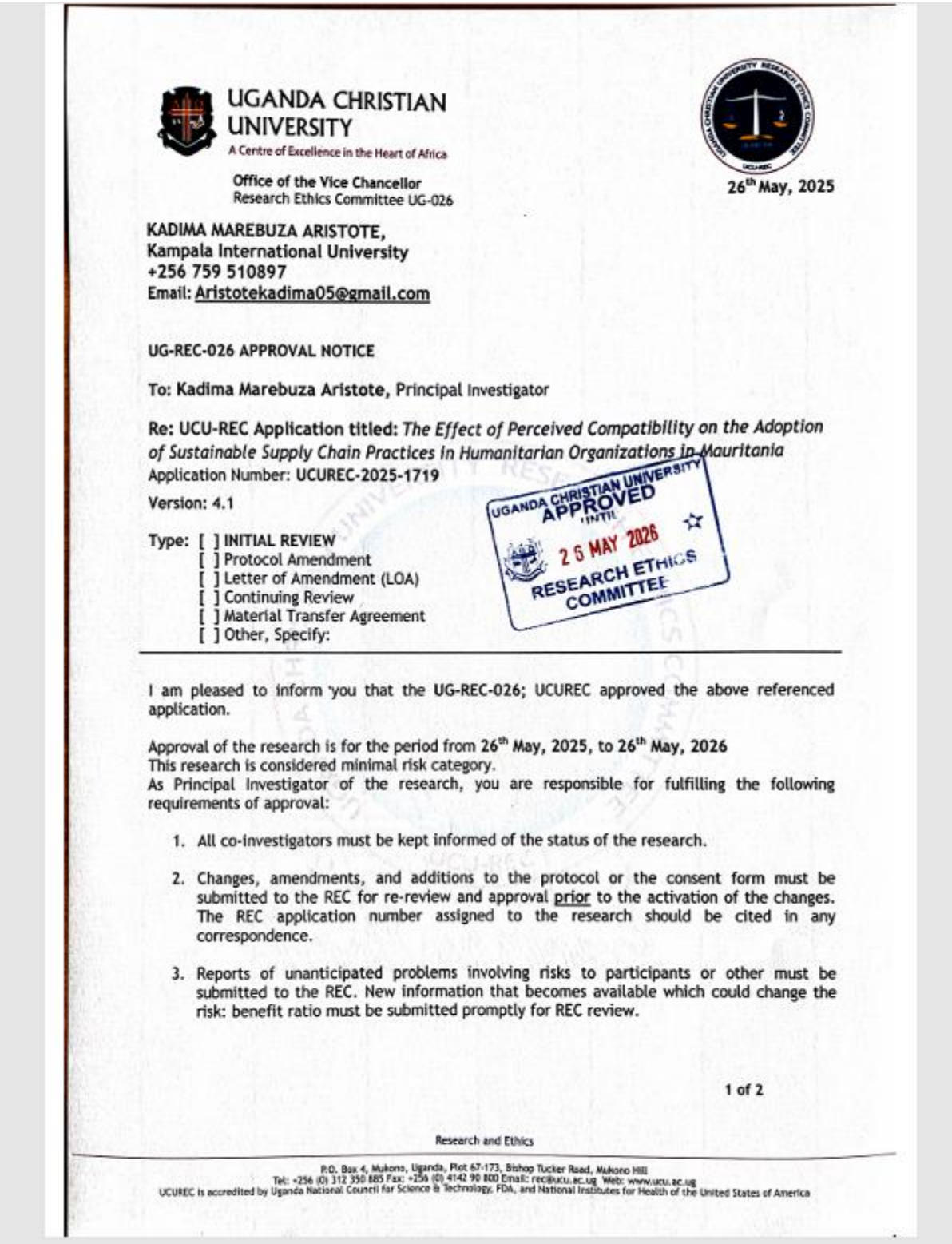
Yours Sincerely,

Dr. Henry Mugisha
Head of Department, Postgraduate Studies

UGANDA CHRISTIAN UNIVERSITY P. O. BOX 4, MUKONO 28 MAY 2025 FACULTY OF BUSINESS AND ADMINISTRATION

Appendix 2: Ethical Approval

This appendix provides the Research Ethics Committee approval letter, confirming that the study met ethical standards.



UGANDA CHRISTIAN UNIVERSITY
A Centre of Excellence in the Heart of Africa

Office of the Vice Chancellor
Research Ethics Committee UG-026

26th May, 2025

KADIMA MAREBUZA ARISTOTE,
Kampala International University
+256 759 510897
Email: Aristotekadima05@gmail.com

UG-REC-026 APPROVAL NOTICE

To: Kadima Marebuza Aristote, Principal Investigator

Re: UCU-REC Application titled: *The Effect of Perceived Compatibility on the Adoption of Sustainable Supply Chain Practices in Humanitarian Organizations in Mauritania*
Application Number: UCUREC-2025-1719
Version: 4.1

UGANDA CHRISTIAN UNIVERSITY APPROVED UNTIL 26 MAY 2026 RESEARCH ETHICS COMMITTEE

Type: [ ] INITIAL REVIEW
[ ] Protocol Amendment
[ ] Letter of Amendment (LOA)
[ ] Continuing Review
[ ] Material Transfer Agreement
[ ] Other, Specify:

I am pleased to inform you that the UG-REC-026; UCUREC approved the above referenced application.

Approval of the research is for the period from 26th May, 2025, to 26th May, 2026
This research is considered minimal risk category.
As Principal Investigator of the research, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and additions to the protocol or the consent form must be submitted to the REC for re-review and approval prior to the activation of the changes. The REC application number assigned to the research should be cited in any correspondence.
3. Reports of unanticipated problems involving risks to participants or other must be submitted to the REC. New information that becomes available which could change the risk: benefit ratio must be submitted promptly for REC review.

1 of 2

Research and Ethics

P.O. Box 4, Mukono, Uganda, Plot 67-173, Bishop Tucker Road, Mukono Hill
Tel: +256 (0) 312 350 885 Fax: +256 (0) 4142 90 800 Email: rec@ucu.ac.ug Web: www.ucu.ac.ug
UCUREC is accredited by Uganda National Council for Science & Technology, FDA, and National Institutes for Health of the United States of America

UGANDA CHRISTIAN UNIVERSITY
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Office of the Vice Chancellor
Research Ethics Committee UG-026

4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by subjects and/or witnesses should be retained on file. The REC may conduct audits of all study records, and consent documentation may be part of such audits.
5. Regulations require review of an approved study not less than once per 12-month period. **Therefore, a continuing review application must be submitted to the REC eight weeks prior to the above expiration date of 26th May, 2026 in order to continue the study beyond the approved period.** Failure to submit a continuing review application in a timely fashion may result in suspension or termination of the study, at which point new participants may not be enrolled and currently enrolled participants must be taken off the study.
6. The REC application number assigned to the research should be cited in any correspondence with the REC of record.
7. Your research details have been shared with the Executive secretary of Uganda National Council for Science and Technology (UNCST) and you are not required to get clearance since you are a Master's Degree research. Refer to UNCST Research registration and clearance Policy and guidelines (July 2016) in Uganda section 6(e).

The following is the list of all documents approved in this application by **UG-REC _026:**

	Document Title	Language	Version	Version Date
1.	Protocol	English	1.0	2025-05-22
2.	Questionnaire	English	1.0	2025-05-22
3.	Informed consent form	English	1.0	2025-05-22

Signed and Stamped

Prof. Peter Waiswa.
UCUREC Chairperson,
pwaiswa@musph.ac.ug

UGANDA CHRISTIAN UNIVERSITY APPROVED UNTIL 26 MAY 2026 RESEARCH ETHICS COMMITTEE

Research and Ethics
P.O. Box 4, Mukono, Uganda, Plot 67-173, Bishop Tucker Road, Mukono Hill
Tel: +256 (0) 312 350 885 Fax: +256 (0) 4142 90 800 Email: rec@ucu.ac.ug Web: www.ucu.ac.ug
UCUREC is accredited by Uganda National Council for Science & Technology, FDA, and National Institutes for Health of the United States of America

Appendix 3: Informed Consent Form for participants

This appendix presents the consent form signed by participants, ensuring voluntary participation and confidentiality.

INFORMED CONSENT FORM FOR PARTICIPANTS

Title of Study:

The Effect of Perceived Compatibility on the Adoption of Sustainable Supply Chain Practices in Humanitarian Organizations in Mauritania

Researcher:
Kadima marebuza Aristote
MBA Candidate, Uganda Christian University
Email: Aristotekadima05@gmail.com | Phone: +256759510897

1. Purpose of the Study

You are invited to participate in a research study being conducted to explore how humanitarian organizations in Mauritania adopt sustainable supply chain practices and how this process is influenced by their perception of compatibility with existing systems and practices. Your responses will contribute to a better understanding of factors that enhance or hinder sustainable supply chain development in humanitarian contexts.

2. Procedures

If you agree to participate, you will be asked to complete a questionnaire regarding your organization's procurement, logistics, and sustainability practices. The estimated time commitment is approximately 10–15 minutes.

3. Voluntary Participation

The Participation in this study is entirely voluntary. You have the right to decline to answer any question and may withdraw from the study at any time without any consequences or loss of benefits to which you are otherwise entitled.

4. Confidentiality and Anonymity

Your identity and responses will be kept strictly confidential. The data collected will be used solely for academic purposes. Information will be anonymized and reported in such a way that no individual or organization can be identified. All records will be securely stored and accessible only to the researcher.

5. Risks and Benefits

There are no foreseeable risks associated with participating in this study. While you may not benefit directly from this research, your participation will help inform future strategies and frameworks for enhancing sustainability in humanitarian supply chains.

6. Rights of the Participant

- You have the right to ask any questions related to the study before, during, or after participation.
- You may request access to your individual responses and/or the final research report upon completion.
- You have the right to refuse participation or to withdraw without penalty.

7. Contact Information

If you have any questions about the study or your rights as a participant, you may contact the researcher at:

Email: Aristotekadima05@gmail.com | Phone: +256759510897

Consent Declaration

I have read and understood the information above. I voluntarily agree to participate in this research study.

Name of Participant: _____

Position/Title: _____

Organization: _____

Signature of Participant: _____

Date: _____

Appendix 4: Content Validity Index invitation

This appendix contains the letter sent to experts inviting them to evaluate the questionnaire for content validity.

Expert Review Invitation for Content Validity of Research Questionnaire

Dear Experts,

I am conducting a research study titled: "The Effect of Perceived Compatibility on the Adoption of Sustainable Supply Chain Practices in Humanitarian Organizations in Mauritania" as part of my MBA dissertation at Uganda Christian University.

As part of the instrument development process, I kindly invite you to review the questionnaire items developed for this study. The aim of this expert review is to assess the content validity of each item in terms of its relevance to the intended construct.

Please rate each item using the following scale: 1 = Not Relevant | 2 = Needs Major Revision | 3 = Relevant but Needs Minor Revision | 4 = Very Relevant

If you rate any item as 1 or 2, kindly provide a brief comment or suggestion for improvement.

Your feedback will be instrumental in refining the questionnaire and ensuring that it meets the standards of academic rigor and validity. I sincerely appreciate your time and contribution to this research.

Kind regards,

Kadima Aristote M.

MBA Candidate – Uganda Christian University

Questionnaire Content Validity Review Form

Section A: Organizational Compatibility

Please rate each item using the following scale:
1 = Not Relevant, 2 = Needs Major Revision, 3 = Relevant but Needs Minor Revision, 4 = Very Relevant. If you rate an item as 1 or 2, kindly provide a brief comment or suggestion for improvement.

Code	**Statement**	**1**	**2**	**3**	4
OC1	Sustainable supply chain practices align with our organization's mission and strategic goals.				
OC2	The culture of our organization supports the implementation of sustainable practices.				
OC3	Our Leadership actively supports and champions sustainability in supply chain operations.				
OC4	The organization allocates adequate resources to support sustainability in supply chains operations.				
OC5	Relevant Staff are regularly trained on sustainable supply chain practices.				

Collaborative compatibility

Code	**Statement**	**1**	**2**	**3**	4
CC1	Our Donors strongly support the adoption of sustainable supply chain practices.				
CC2	Government policies encourage our organization to pursue sustainable logistics and procurement.				
CC3	We collaborate effectively with supply chain partners to implement sustainable practices.				
CC4	Our partner organizations share similar values and priorities toward sustainability.				
CC5	We adapt our practices based on feedback from beneficiaries and community needs.				

Technological compatibility

Code	Statement	1	2	3	4
TC1	Our organization has the necessary technology to support sustainable supply chains practices.				
TC2	Existing technologies integrate well with our systems and can adapt to sustainability goals.				
TC3	Staff are adequately skilled in using technologies that support sustainable supply chain management.				
TC4	The systems we use are user-friendly and support sustainability tracking.				

Adoption of Sustainable Supply Chain Practices (SSCPs)

Please rate each item using the following scale:
1 = Not Relevant, 2 = Needs Major Revision, 3 = Relevant but Needs Minor Revision, 4 = Very Relevant. If you rate an item as 1 or 2, kindly provide a brief comment or suggestion for improvement.

A. Sustainable Procurement Practices

Code	Statement	1	2	3	4
GP1	Our procurement process emphasizes environmentally friendly products and materials.				
GP2	We include sustainability criteria in our tenders, contracts and evaluation.				
GP3	our organization prefers vendors with green certifications (e.g., ISO 14001).				
ES1	We consider labor rights and ethical standards when selecting suppliers.				
ES2	our Suppliers must comply with anti-child labor and fair-trade practices.				
ES5	We avoid suppliers with histories of unethical or exploitative practices				

Local Sourcing & Community Impact

Code	Statement	1	2	3	4
LS1	We prioritize sourcing materials/products locally whenever feasible.				
LS2	Local sourcing is formally part of our sustainability strategy and policy.				
CE1	We engage local community members in decisions that affect supply chain operations.				
CE2	We train local suppliers in sustainable practices.				
CE5	Our procurement strategies support local job creation and empowerment.				

Green Logistics & Renewable Energy

Code	Statement	1	2	3	4
EL1	Our transport systems are designed to reduce carbon emissions.				
EL2	Our logistics practices include shipment consolidation to reduce environmental impact				
EL5	Environmental impact is a key factor in selecting third-party logistics providers				
RE1	We use renewable energy in warehouses/operations.				
RE2	The organization has invested in solar/clean energy technologies in facilities and operations.				

Please return the completed form by the end of this week. Your input will be acknowledged in the final dissertation document. If you have any questions or require clarification, feel free to reach out.

Thank you once again for your time and support.

Sincerely,

Kadima Aristote M.

Appendix 5: Content Validity Index Reports

This appendix includes the detailed expert evaluation reports used to refine the questionnaire items.

Expert Review Report on Questionnaire for Assessing Compatibility and Adoption of Sustainable Supply Chain Practices in Humanitarian Organizations

1. Introduction

This report summarizes the expert validation of a questionnaire designed to assess perceived compatibility and the adoption of Sustainable Supply Chain Practices (SSCPs) in humanitarian organizations operating in Mauritania. The review involved four subject matter experts who rated the clarity, relevance, and adequacy of questionnaire items using a four-point Likert scale (1 = Not relevant, 4 = Very relevant).

2. Expert Rating

Section A: demographic information

Statement	Expert 1 rating (1-4)	Expert 2 rating (1-4)	Expert 3 rating (1-4)	Expert 4 rating (1-4)
Type of NGO	4	4	4	4
Sector of operation	4	4	4	4
Years of Operations	4	4	4	4
Your Current Role in the Organization	4	4	4	4
Your Experience within the Organization	4	3	4	3

Section B. perceived compatibility

Organizational Compatibility

Code	Statement	Expert 1	Expert 2	Expert 3	Expert 4

		rating (1-4)	rating (1-4)	rating (1-4)	rating (1-4)
OC1	Sustainable supply chain practices align with our organization's mission and strategic goals.	3	3	4	4
OC2	The culture of our organization supports the implementation of sustainable practices.	3	4	3	4
OC3	Our Leadership actively supports and champions sustainability in supply chain operations.	4	4	4	4
OC4	The organization allocates adequate resources to support sustainability in supply chains operations.	4	4	4	4
OC5	Relevant Staff are regularly trained on sustainable supply chain practices.	4	3	4	3

Collaborative Compatibility

Code	Statement	Expert 1 rating (1-4)	Expert 2 rating (1-4)	Expert 3 rating (1-4)	Expert 4 rating (1-4)
CC1	Our Donors strongly support the adoption of sustainable supply chain practices.	4	3	3	3
CC2	Government policies encourage our organization to pursue sustainable logistics and procurement.	4	4	4	3
CC3	We collaborate effectively with supply chain partners to implement sustainable practices.	4	3	3	3
CC4	Our partner organizations share similar values and priorities toward sustainability.	4	3	3	4
CC5	We adapt our practices based on feedback from beneficiaries and community needs.	3	4	4	2

Technological Compatibility

Code	Statement	Expert 1 rating (1-4)	Expert 2 rating (1-4)	Expert 3 rating (1-4)	Expert 4 rating (1-4)
TC1	Our organization has the necessary technology to support sustainable supply chains practices.	4	4	4	4
TC2	Existing technologies integrate well with our systems and can adapt to sustainability goals.	3	3	4	4
TC3	Staff are adequately skilled in using technologies that support sustainable supply chain management.	3	3	4	3
TC4	The systems we use are user-friendly and support sustainability tracking.	3	4	4	4

Section Adoption of sustainable Supply Chain Practices (SSCPs)

A. Sustainable Procurement Practices

Code	Statement	Expert 1 rating (1-4)	Expert 2 rating (1-4)	Expert 3 rating (1-4)	Expert 4 rating (1-4)
GP1	Our procurement process emphasizes environmentally friendly products and materials.	4	4	4	4
GP2	We include sustainability criteria in our tenders, contracts and evaluation.	4	4	4	4
GP3	our organization prefers vendors with green certifications (e.g., ISO 14001).	3	4	4	4
ES1	We consider labor rights and ethical standards when selecting suppliers.	3	4	4	3
ES2	our Suppliers must comply with anti-child labor and fair-trade practices.	3	3	3	2

ES5	We avoid suppliers with histories of unethical or exploitative practices	4	3	4	4

B. Local Sourcing & Community Engagement

Code	Statement	Expert 1 rating (1-4)	Expert 2 rating (1-4)	Expert 3 rating (1-4)	Expert 4 rating (1-4)
LS1	We prioritize sourcing materials/products locally whenever feasible.	4	4	4	4
LS2	Local sourcing is formally part of our sustainability strategy and policy.	4	4	4	4
CE1	We engage local community members in decisions that affect supply chain operations.	3	3	3	3
CE2	We train local suppliers in sustainable practices.	4	3	4	3
CE5	Our procurement strategies support local job creation and empowerment.	4	4	3	3

C. Green Logistics & Renewable Energy

Code	Statement	Expert 1 rating (1-4)	Expert 2 rating (1-4)	Expert 3 rating (1-4)	Expert 4 rating (1-4)
EL1	Our transport systems are designed to reduce carbon emissions.	3	4	4	4
EL2	Our logistics practices include shipment consolidation to reduce environmental impact	4	4	4	3
EL5	Environmental impact is a key factor in selecting third-party logistics providers	3	4	3	4

RE1	We use renewable energy in warehouses/operations.	3	4	4	4
RE2	The organization has invested in solar/clean energy technologies in facilities and operations.	3	3	3	3

Summary of Expert Ratings

Section	Subsection	Average Rating (Max = 4)
A	Demographic Information	3.9
B	Organizational Compatibility	3.8
B	Collaborative Compatibility	3.4
B	Technological Compatibility	3.6
C	Sustainable Procurement Practices	3.7
C	Local Sourcing & Community Engagement	3.6
C	Green Logistics & Renewable Energy	3.6

3. Section-by-Section Analysis

Section A: Demographic Information

This section was consistently rated very highly by all experts. All items received scores of 4, except for "Experience within the Organization," which scored 3 from two reviewers. This suggests the item is relevant but might benefit from minor clarification or rewording.

Section B: Perceived Compatibility

Organizational Compatibility:
The statements in this section received strong ratings, especially those related to leadership support and resource allocation. Only minor variations were noted, indicating the items are clear and aligned with the construct.

Collaborative Compatibility:
This sub-section had more varied responses. While some items were rated well, others—especially those on donor support and community feedback—had slightly lower scores. These may need clarification or more precise wording to ensure shared understanding.

Technological Compatibility:
Items in this category generally scored well, with consistent agreement on the relevance of technology in supporting sustainability. However, a few items on staff skills and system integration had slightly lower ratings, suggesting these could be refined for better clarity.

Section C: Adoption of Sustainable Supply Chain Practices (SSCPs)

Sustainable Procurement Practices:
Most items were rated highly, especially those addressing green procurement and evaluation criteria. Ethical sourcing items like ES2 received slightly lower ratings, indicating they may need to be rephrased to reflect practical realities.

Local Sourcing & Community Impact:
Items in this section were mostly well received. However, the community engagement item (CE1) showed some inconsistency in ratings, suggesting a need to clarify its intent or context.

Green Logistics & Renewable Energy:
Overall, this section was positively rated. Items about transport and logistics were seen as very relevant. However, renewable energy-related items like RE2 had slightly lower scores, possibly due to varying levels of investment across organizations.

Appendix 6: Questionnaire

This appendix presents the final structured questionnaire administered to humanitarian organizations in Mauritania.

QUESTIONNAIRE

Dear Sir/Madam,

I am an MBA candidate at Uganda Christian University, conducting a study titled "The Effect of Perceived Compatibility on the Adoption of Sustainable Supply Chain Practices in Humanitarian Organizations in Mauritania." This research is in partial fulfillment of the requirements for the MBA degree. The study explores how organizational, collaborative, and technological compatibility affect the adoption of sustainable supply chain practices (SSCPs).

Your participation will offer insights to help humanitarian organizations align systems and partnerships with sustainability goals. It will inform donors and policymakers on key compatibility factors and support the advancement of ethical, inclusive, and eco-friendly supply chains in Mauritania.

The questionnaire is anonymous, takes about 10–15 minutes, and uses a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), with a "Not Applicable" option where relevant. Participation is entirely voluntary, and data will be used solely for academic purposes.

Thank you for your valuable time and contribution.

Sincerely,
KADIMA Aristote M.
MBA Candidate – Uganda Christian University

Section A: Demographic Information

1. Type of NGO: ☐ Local NGO ☐ International NGO ☐ UN Agency

2. Sector of Operation: ☐ Health ☐ Education ☐ Food Security ☐ Shelter ☐ WASH ☐ multi-sectoral ☐ Other: _____

3. Years of Operation in Mauritania: ☐ Less than 2 years ☐ 2–5 years ☐ 6–10 years ☐ More than 10 years

4. Your Current Role in the Organization: _____

5. Your Experience within the Organization: ☐ Less than 1 year ☐ 1–3 years ☐ 4–6 years ☐ More than 6 years

Section B: Perceived compatibility

Organizational Compatibility

Instructions: Please indicate the extent to which you agree with the following statements on different constructs. Use a scale of: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral/Undecided, 4 = Agree, and 5 = Strongly Agree. Please tick N/A if an item does not apply to your organization.

Code	Statement	1	2	3	4	5	N/A
OC1	Sustainable supply chain practices align with our organization's mission and strategic goals.						
OC2	The culture of our organization supports the implementation of sustainable practices.						
OC3	Our Leadership actively supports and champions sustainability in supply chain operations.						
OC4	The organization allocates adequate resources to support sustainability in supply chains operations.						
OC5	We have clear policies that encourage sustainable procurement and logistics						
OC6	Relevant Staff are regularly trained on sustainable supply chain practices.						

Collaborative Compatibility

Code	Statement	1	2	3	4	5	N/A
CC1	Our Donors strongly support the adoption of sustainable supply chain practices.						
CC2	Government policies encourage our organization to pursue sustainable logistics and procurement.						
CC3	We collaborate effectively with supply chain partners to implement sustainable practices.						
CC4	Our partner organizations share similar values and priorities toward sustainability.						
CC5	We adapt our practices based on feedback from beneficiaries and community needs.						

Technological Compatibility

Code	Statement	1	2	3	4	5	N/A

TC1	Our organization has the necessary technology to support sustainable supply chains practices.						
TC2	Existing technologies integrate well with our systems and can adapt to sustainability goals.						
TC3	Staff are adequately skilled in using technologies that support sustainable supply chain management.						
TC4	The systems we use are user-friendly and support sustainability tracking.						

Section Adoption of sustainable Supply Chain Practices (SSCPs)

A. Sustainable Procurement Practices

Code	Statement	1	2	3	4	5	N/A
GP1	Our procurement process emphasizes environmentally friendly products and materials.						
GP2	We include sustainability criteria in our tenders, contracts and evaluation.						
GP3	our organization prefers vendors with green certifications (e.g., ISO 14001).						
ES1	We consider labor rights and ethical standards when selecting suppliers.						
ES2	our Suppliers must comply with anti-child labor and fair-trade practices.						
ES5	We avoid suppliers with histories of unethical or exploitative practices						

B. Local Sourcing & Community Engagement

Code	Statement	1	2	3	4	5	N/A
LS1	We prioritize sourcing materials/products locally whenever feasible.						
LS2	Local sourcing is formally part of our sustainability strategy and policy.						
CE1	We engage local community members in decisions that affect supply chain operations.						
CE2	We train local suppliers in sustainable practices.						
CE5	Our procurement strategies support local job creation and empowerment.						

C. Green Logistics & Renewable Energy

Code	Statement	1	2	3	4	5	N/A
EL1	Our transport systems are designed to reduce carbon emissions.						
EL2	Our logistics practices include shipment consolidation to reduce environmental impact						
EL5	Environmental impact is a key factor in selecting third-party logistics providers						
RE1	We use renewable energy in warehouses/operations.						
RE2	The organization has invested in solar/clean energy technologies in facilities and operations.						

Section D: Final comments

1. Additional Comments or Suggestions

_____

_____

_____

2. Would you be willing to be contacted for clarification or to receive study results? ☐ Yes ☐ No

If yes, please provide your email: _____

Thank you so much