



**UNIVERSIDADE  
FERNANDO  
PESSOA**

# **SUSTAINABLE VALUE CREATION THROUGH ESG INTEGRATION IN NON-PROFIT ORGANIZATIONS**

[Criação de valor sustentável através da integração de ESG  
em organizações sem fins lucrativos]

Dissertação de Mestrado

Mestrado em Acção Humanitária, Cooperação e Desenvolvimento

Joana Macedo Rocha

Orientadores:

Professor Doutor João Casqueira

Professora Doutora Ana Fonseca

January 2026







# **SUSTAINABLE VALUE CREATION THROUGH ESG INTEGRATION IN NON-PROFIT ORGANIZATIONS**

[Criação de valor sustentável através da integração de ESG  
em organizações sem fins lucrativos]

Dissertação de Mestrado

Mestrado em Acção Humanitária, Cooperação e Desenvolvimento

Joana Macedo Rocha

Orientadores:

Professor Doutor João Casqueira

Professora Doutora Ana Fonseca

Janeiro 2026



## ACKNOWLEDGEMENTS

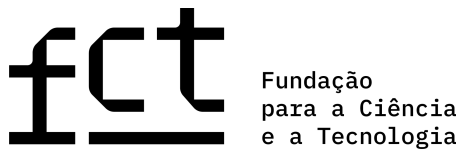
First and foremost, I would like to express my deepest gratitude to my coordinators, Professor Doutor João Casqueira and Professora Doutora Ana Fonseca, whose guidance, valuable feedback, and expertise were critical throughout my research path.

I want to thank all the NPOs representatives that volunteered for interviews, enabling this research to be possible, as well as all the experts that took their time to contribute with invaluable observations, allowing for the considerable improvement of this work.

Finally, I would like to extend a special thanks to Hamit Ozonur, for his expert knowledge, unwavering patience, and constant inspiration, without whom the completion of this work - and so many others - would not have been possible.

This research has been funded by:

Fundação para a Ciência e a Tecnologia, I.P. (<https://ror.org/00snfq58>) under Grant 2023.14406.PEX (<https://doi.org/10.54499/2023.14406.PEX>)





## **ABSTRACT**

This research addresses the gap in sustainability management tools specifically tailored for non-profit organizations (NPOs), which currently rely on generic for-profit models and lack accessible, context-sensitive frameworks. Conducted within the ESG4NPO research project, it aims to bridge this gap by developing and validating a diagnostic tool to help NPOs assess and enhance their sustainable value creation through Environmental, Social, and Governance (ESG) integration. Employing a sequential mixed-methods approach, the research first identified key processes and determinants for sustainable value creation through a systematic literature review, whose findings were validated and complemented through semi-structured interviews with NPO representatives. On this empirical foundation, a diagnostic tool was developed using a capability maturity model (CMM) designed to provide NPOs with an actionable roadmap for improvement. This tool was then validated by an expert panel review, achieving a scale-level content validity index (S-CVI) of 0.95. This thesis concludes by demonstrating the tool's potential through an illustrative simulation, which translates diagnostic data into visual prioritizations for action. This work establishes the foundation for the next phase of the ESG4NPO project, which envisions large-scale field testing and the integration of Artificial Intelligence (AI) to assist NPOs in managing sustainability dimensions despite significant resource constraints.

**Key-words:** Sustainability; non-profit; management; sustainable value; ESG



## RESUMO

Esta investigação aborda a lacuna em ferramentas de gestão de sustentabilidade adaptadas para organizações sem fins lucrativos (OSFL), que atualmente recorrem a formatos genéricos concebidos para o setor privado e carecem de modelos acessíveis e pertinentes ao contexto sectorial. Realizado no âmbito do projeto de investigação ESG4NPO, este trabalho visa colmatar esta lacuna através do desenvolvimento e validação de uma ferramenta de diagnóstico para apoiar as OSFL na avaliação e melhoria de criação de valor sustentável através da integração das dimensões Ambiental, Social e de Governação (*Environmental, Social and Governance - ESG*). Recorrendo a uma abordagem sequencial de metodologias mistas, a investigação começou por identificar os processos e determinantes mais importantes para criação de valor sustentável através de uma revisão sistemática da literatura, cujos resultados foram validados e complementados através de entrevistas semiestruturadas com representantes de OSFL. Sobre esta base empírica, foi desenvolvida uma ferramenta de diagnóstico utilizando um modelo de maturidade de capacidade (*Capability Maturity Model: CMM*), concebido para fornecer um plano de ação progressivo às OSFL. Esta ferramenta foi posteriormente revista por um painel de especialistas, tendo alcançado um índice de validação de conteúdo (*scale-level content validity index - S-CVI*) de 0,95. Esta tese conclui com uma demonstração ilustrativa do potencial da ferramenta, traduzindo dados de diagnóstico em ações de melhoria priorizadas. Este trabalho estabelece a base para a próxima fase do projeto ESG4NPO, o qual prevê a realização de testes de campo em larga escala e a integração de Inteligência Artificial (IA), de forma a apoiar as OSFL na gestão de criação de valor sustentável, apesar de consideráveis limitações de recursos.

**Palavras-chave:** sustentabilidade; OSFL; gestão; valor sustentável; ESG



## TABLE OF CONTENTS

ABSTRACT.....	ix
RESUMO.....	xi
TABLE OF CONTENTS.....	xiii
LIST OF FIGURES.....	xv
LIST OF TABLES.....	xvii
LIST OF ABBREVIATIONS.....	xix
INTRODUCTION.....	1
CHAPTER 1: Contextualizing Sustainable Value Creation in NPOs.....	4
1.1 ESG Definition.....	4
1.1.1. ESG Application to Non-profits.....	5
1.2 Sustainable Value Creation Definition.....	7
1.2.1 Characteristics and challenges for sustainable value creation in NPOs.....	7
1.3 The research gap: tailored diagnostic and management tools for NPOs.....	8
CHAPTER 2: Identifying Processes and Determinants.....	10
2.1 Literature Review.....	10
2.1.1 Results: Processes.....	11
2.1.2 Results: Determinants.....	24
2.2 Validation and complementation: Interviews with NPOs’ representatives.....	27
2.2.1 Methodology.....	27
2.2.2 Results Analysis.....	29
CHAPTER 3: Developing a Diagnostic Tool.....	34
3.1 Methodology.....	34
3.1.1 Capability Maturity Model.....	37
3.1.2 Expert Panel Review Validation.....	38
3.2 Simulation and Illustrative Application.....	39
DISCUSSION.....	45
CONCLUSION.....	48
BIBLIOGRAPHY.....	51
Appendix A	
Appendix B	
Appendix C	



## LIST OF FIGURES

<b>Figure 1.</b> Methodology summary	2
<b>Figure 2.</b> Literature Review PRISMA diagram	11
<b>Figure 3.</b> Processes for sustainable value creation in NPOs	12
<b>Figure 4.</b> Determinants for sustainable value creation in NPOs	26
<b>Figure 5.</b> Processes' performance rating	31
<b>Figure 6.</b> Determinants' impact rating	31
<b>Figure 7.</b> Radar chart - Environmental Processes	40
<b>Figure 8.</b> Radar chart - Social Internal Processes	41
<b>Figure 9.</b> Radar chart - Social External Processes	41
<b>Figure 10.</b> Radar chart - Governance Processes	42
<b>Figure 11.</b> Scored bar chart - Environmental Processes	42
<b>Figure 12.</b> Scored bar chart - Social Internal Processes	43
<b>Figure 13.</b> Scored bar chart - Social External Processes	43
<b>Figure 14.</b> Scored bar chart - Governance Processes	44



## **LIST OF TABLES**

<b>Table 1.</b> ESG international frameworks	5
<b>Table 2.</b> Profile of participants	28
<b>Table 3.</b> Interviews summary	30
<b>Table 4.</b> Expert's relevant fields	38



## LIST OF ABBREVIATIONS

<b>AI</b>	Artificial Intelligence
<b>APP</b>	Accountability to Affected Populations
<b>CBOs</b>	Community-Based Organizations
<b>CMM</b>	Capability Maturity Model
<b>CVI</b>	Content Validity Index
<b>EBA</b>	European Banking Authority
<b>ESG</b>	Environmental, Social, and Governance
<b>ESG4NPO</b>	"Strategic sustainability integration in non-profit organizations" project name
<b>FCT</b>	Fundação para a Ciência e a Tecnologia
<b>GHG</b>	Greenhouse Gas
<b>GRI</b>	Global Reporting Initiative
<b>I-CVI</b>	Item-level Content Validity Index
<b>NPO</b>	Non-profit Organization
<b>PRISMA</b>	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
<b>PSEA</b>	Protection from Sexual Exploitation and Abuse
<b>S-CVI</b>	Scale-level Content Validity Index
<b>S-CVI/Ave</b>	Average of the Scale-level Content Validity Index
<b>SDG</b>	Sustainable Development Goal
<b>SI</b>	Social Innovation
<b>SROI</b>	Social Return on Investment
<b>TSOs</b>	Third Sector Organizations



## INTRODUCTION

Non-profit organizations (NPOs) are fundamental actors in society, working as pillars for social, environmental, and community resilience. Though their contribution is mostly perceived through their humanitarian mission, the rapid-evolving sustainability paradigm brings a new consideration: how NPOs' integration of sustainability dimensions can bring value to both their operations and the global pursuit of the Sustainable Development Goals.

However, the NPO sector faces significant strategic challenges to adopt this approach. Sustainability management frameworks are predominantly designed for the for-profit context, built on assumptions of shareholder primacy, financial materiality, and resource availability that often contradict the reality of non-profits. Consequently, they lack accessible, context-sensitive tools to diagnose and manage their sustainability value creation capacity. This not only limits their operational resilience and accountability but ultimately constrains their full potential impact.

The research project *ESG4NPO: Strategic sustainability integration in non-profit organizations: development of a management tool assisted by artificial intelligence*, (<https://esg4npo.ufp.edu.pt/>), was conceived to directly address this critical gap. Funded by the Fundação para a Ciência e a Tecnologia (FCT), this interdisciplinary initiative aims to translate Environmental, Social and Governance (ESG) dimensions into actionable strategy for the non-profit sector, by adapting integration models and developing a management tool, assisted by Artificial Intelligence (AI), to support their implementation.

This thesis was conducted under an FCT research grant 2023.14406.PEX, as an integral component of the humanitarian and sector-specific field work for the ESG4NPO project, while integrated in the project's interdisciplinary team. Through progressive tasks, the scholarship work plan guided research to ensure that resulting models or tools are relevant and actionable.

Within this framework, the general objective - to develop a diagnostic and management tool to facilitate ESG integration for NPOs - is built on the research question: "How can NPOs enhance sustainable value creation through the integration of Environmental, Social and Governance (ESG) dimensions?"

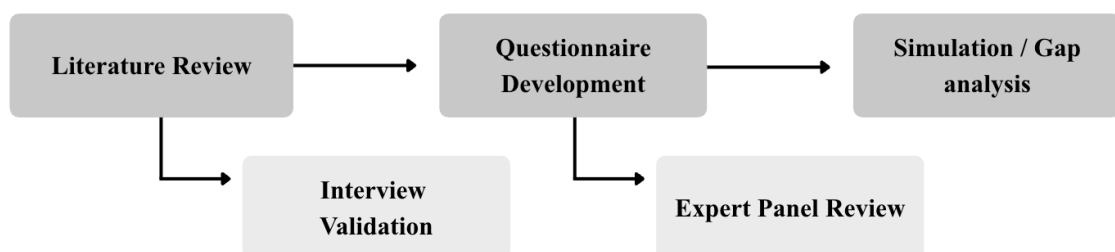
To answer this, the thesis pursues the following specific objectives:

1. Contextualize the application of ESG principles within the particular characteristics of Non-profit Organizations.
2. Identify the key processes and determinants that drive sustainable value creation in NPOs.
3. Validate these findings on processes and determinants with actors in the field.
4. Design a structured diagnostic tool for assessing ESG maturity in NPOs.

Taking into account the considerable constraints that NPOs face regarding financial and human resources, this research makes use of for-profit strategies, directing them towards the chronically underfunded, but essential, non-profit sector. By addressing this critical sector gap, these objectives contribute to the development of an empirically-grounded diagnostic and management tool for NPOs to enhance resilience, accountability, impact, and ultimately strengthen their contribution to the Sustainable Development Goals.

This thesis employs multiple qualitative methodology approaches to support the different stages of research. As it can be observed in Figure 1, two methods were applied to support research results: 1) the literature review was validated by interviews with actors on the field; 2) the diagnostic questionnaire development was reviewed by an expert panel from management and humanitarian fields. This allowed a concrete and evidence-supported simulation of the tool with a representation of its potential for gap analysis and direct improvement application.

*Figure 1: Methodology summary*



While efforts were made to include diversity regarding areas of action and geographic location, the interviewee sample is relatively small considering the vast diverseness of the

sector, which might result in missing all cultural and sub-sectoral nuances of the different non-profit organizations. Additionally, it is important to note that all the interviewees were part of their organization's leadership, which limits the self-reported data to the perception from a management position, excluding in this way varying levels of lived experience from employees or volunteers. In the end, this thesis produces a prototype diagnostic tool that has yet to be implemented. Its real-world efficacy and impact on NPO performance remains to be tested in the next phase of the project (field work). The thesis sets the foundation for the subsequent steps of large-scale testing, AI integration and impact evaluation, executing only a simulation for visual representation.

Despite the interdisciplinary nature of the ESG4NPO project, this thesis scope is exclusively focused on the non-profit organizations and their sustainable value creation through the lens of ESG dimensions. While artificial intelligence is an integral part of the final objective of the project, and its potential use was considered in the development of the diagnostic questionnaire, AI concepts, functions and implications are out of the scope of this research.

The thesis is structured around three main sections: the first section establishes context by defining ESG dimensions and sustainable value creation while outlining the specific characteristics and challenges of NPOs that justify the need for tailored tools; the second section presents a systematic literature review to identify key sustainable value creation processes and determinants, followed by the validation and complementation of these findings through semi-structured interviews with NPO representatives; and the third section details the methodology and development of a diagnostic tool - a comprehensive questionnaire based on a Capability Maturity Model - designed to operationalize the research findings. The discussion chapter will interpret the key findings that were processed during research, and the conclusion will summarize the thesis' contribution to the research question, offering recommendations for future research paths.

# **CHAPTER 1: Contextualizing Sustainable Value Creation in NPOs**

## **1.1 ESG Definition**

The acronym ESG refers to the sustainability dimensions of Environmental, Social and Governance. It is a framework designed for corporations with the intent to guide their organizational practices while aiming to achieve long-term sustainability (Li et al., 2021; Sultana et al., 2018). The adherence to this standard's reference has been heavily influenced by the increasing demand from investors, customers and regulators, who understand the importance of formal accountability and transparency systems when addressing sustainability issues (Khamisu, Paluri, & Sonwaney, 2024). Ultimately, the declared incorporation of the ESG framework can determine the range of stakeholders that a corporation can have access to, the success of their financial objectives and their place in an evermore competitive landscape (Oncioiu et al., 2020).

In a time where information access surpasses any attempt for credible deniability, an organised sustainability reference such as ESG allows corporations to act on their declared principles, centering their decisions on responsible investment through behaviour standards, that will eventually also affect their own future financial performance evaluation. Or, as Li et al. (2021) practically frames it, ESG is “an investment philosophy that pursues long-term value growth”.

The three dimensions allow both the evaluation and application of “environmental stewardship, social responsibility, and governance practices” (Li et al., 2021), through different possible approaches that address sustainability issues such as the ones seen in table 1. However, even though this work provides a competitive advantage, it also comes with the risk of failing to effectively implement such approaches, which can lead to a loss of the corporation's reputation (Khamisu, Paluri, & Sonwaney, 2024).

**Table 1.** ESG framework (international frameworks). Source: Li et al. (2021) elaboration based on the EBA report on ESG risk management and supervision.

Dimension	Factors	Definition
Environmental (E)	<ul style="list-style-type: none"> <li>• GHG emissions</li> <li>• Energy consumption and efficiency</li> <li>• Air pollutants</li> <li>• Water usage and recycling</li> <li>• Waste production and management (water, solid, hazardous)</li> <li>• Impact and dependence on biodiversity</li> <li>• Impact and dependence on ecosystems</li> <li>• Innovation in environmentally friendly products and services</li> </ul>	Environmental matters that may have a positive or negative impact on the financial performance or solvency of an entity, sovereign, or individual.
Social (S)	<ul style="list-style-type: none"> <li>• Workforce freedom of association</li> <li>• Child labor</li> <li>• Forced and compulsory labor</li> <li>• Workplace health and safety</li> <li>• Customer health and safety</li> <li>• Discrimination, diversity, and equal Opportunity</li> <li>• Poverty and community impact</li> <li>• Supply chain management</li> <li>• Training and education</li> <li>• Customer privacy</li> <li>• Community impacts</li> </ul>	Social matters that may have a positive or negative impact on the financial performance or solvency of an entity, sovereign, or individual.
Governance (G)	<ul style="list-style-type: none"> <li>• Codes of conduct and business principles</li> <li>• Accountability</li> <li>• Transparency and disclosure</li> <li>• Executive pay</li> <li>• Board diversity and structure</li> <li>• Bribery and corruption</li> <li>• Stakeholder engagement</li> <li>• Shareholder rights</li> </ul>	Governance matters that may have a positive or negative impact on the financial performance or solvency of an entity, sovereign, or individual.

### 1.1.1. ESG Application to Non-profits

Despite ESG dimensions being predominantly adopted by corporate environments as a beneficial tool that could improve shareholder value, risk management and financial gains, the frameworks are now recognized as a fundamental resource to achieve lasting resilience - a foundational skill pursued by NPOs. This is attained by the interlayered symbiosis of each dimension, within a broader alignment for decision weighting towards the United Nations Sustainable Development Goals (SDGs) (Barbosa et al., 2023; Li et al., 2021; Saxena et al., 2022; Pauzuoliene & Derkach, 2024; United Nations, 2015).

The distinct characteristics of non-profits - explored in the sub-chapter “*Characteristics and challenges of NPOs*” - leads them to leverage ESG frameworks towards their predominant needs. This can be expressed by enhancing reporting and transparency allowing stakeholders to assess performance beyond their financial situation (Chopra et al., 2024; Pratici et al.,

2024), by facilitating ethical leadership, inclusivity, and community engagement, which are pillar criteria for NPO's missions as well as for SDG compliance (Alhazemi, 2025; Ahmad, 2024), or by addressing sector-specific challenges, mainly centered in resource limitation and governance structures (Ahmad, 2024; Pratici et al., 2024; Samuel, 2024).

Since ESG frameworks often overlook non-profit's constraints - such as volunteer-based human capital, donor dependency or multi-stakeholder governance (Richardson et al., 2023) - the application of the three principles should be carefully adapted to their operational realities, while ensuring that their actions are still driven by their core mission (Pratici et al., 2024). Hence, we can observe the following adapted dimensions:

Environmental - often the core mission of non-profits, organizations face severe challenges to implement already existing solutions, due to resource constraints and the underprioritization of environmental sustainability in favor of the social aspects during emergency situations (Pratici et al., 2024).

Social - being inherently central to most non-profit missions, it includes fair labor practices within the organization, diversity and inclusiveness, as well as true community engagement (Ahmad, 2024). This dimension is not only a metric for NPOs but part of their objectives. A positive performance in this aspect strengthens reputation and often influences the capacity to secure funding (Chopra et al., 2024)

Governance - as a critical determinant for NPOs effectiveness, it can significantly improve trust with stakeholders, donors and communities by fostering ethical leadership, board oversight and transparency towards positive sustainability and impact (Alhazemi, 2025; Kassem et al., 2021)

It is apparent that the existing ESG frameworks lack the nuanced metrics necessary to convey the specific value dimensions created by NPOs (Kassem et al., 2021), such as social, cultural, institutional and even symbolic capital (Cotterlaz-Rannard and Ferrary, 2025). In addition, as it will be detailed in the results of the literature review sub-chapter "*Processes*", they also face key challenges for effective implementation, such as navigating complex and often inconsistent regulatory policies (Samuel, 2024), ensuring mission-focused actions and ethical values preservation over a compliance-driven approach (Pratici et al., 2024), or, more importantly, the limitation of financial and human resources, including technical skills for ESG data collection, management and reporting (Ahmad, 2024; Saxena et al., 2022), which this research aims to bridge.

## **1.2 Sustainable Value Creation Definition**

The main objective of this thesis seeks to ultimately support sustainable value creation in NPOs through the strategic integration of the ESG dimensions mentioned above. By sustainable value creation, it is meant the generation of positive economic, social and environmental value for multiple stakeholders over the short, medium and long term, in ways that support overall sustainable development. Under reporting and governance frameworks, value refers not only to financial capital, but also to manufactured, intellectual, human, social and nature capitals (Mähönen, 2020; Pigatto et al., 2023).

This multi-capital perspective is one of its core components, integrating economic, social and environmental sustainability considerations, rather than focusing only on financial gains (Jaki and Siuta-Tokarska, 2019; Méndez-León et al., 2021), such as mitigating climate issues or supporting community well-being. Regarding its approach to the actors involved, it implies the extension from directing efforts only to shareholders to considering multiple stakeholders, which can include customers, employees, suppliers, but also communities and even the environment itself (Freudenreich et al., 2019). Lüdeke-Freund (2020) also notes that there is a co-creation of value with the stakeholders themselves, recognizing positive outputs that go beyond monetary returns, which is achieved through bi-lateral relationships and interactions across different sectors, rather than solely by the organization's actions (Freudenreich et al., 2019). Considering its potential impacts across time, sustainable value creation is inherently long-term based, requiring integrated strategy, governance and prospects (Manninen et al., 2023; Pigatto et al., 2023). This integration is also linked to the adoption of the ESG dimensions towards the advancement of sustainable development while ensuring the organization's viability (Pigatto et al., 2023).

### **1.2.1 Characteristics and challenges for sustainable value creation in NPOs**

In non-profit realities, sustainable value creation is more accurately represented by the long-lasting social, environmental, and institutional benefits while under complex, resource-constrained environments (Freeman, 1984; Friedman and Miles, 2006).

More than just being structured organizations, non-profits face distinctive challenges driven by their own nature and mission. The most commonly referenced and easily observed is resource scarcity. Often operating with limited and unpredictable funding, non-profits need to manage this scarcity within their goals, programs and sustainability (Joseph & Kumar, 2025; Samad & Ahmad, 2022). Additionally, their governance often implicates multiple stakeholders including donors, beneficiaries, partnerships, governments, employees, volunteers and board members. This can create scattered power dynamics and dependencies, with a complex governance management structure. (Wellens & Jegers, 2014; Mato-Santiso et al., 2021; Schubert & Willems, 2020; Wang, 2021). And finally, at the center of non-profits' goals are their social/environmental impacts, rather than profit, which can result in inefficient adaptations of business models focused on commercial income (Suykens et al., 2019; Jönsson & Huzzard, 2020)

Therefore, when considering the principles from stakeholder theory (Freeman, 1984; Friedman and Miles, 2006), resource-based view (Barney, 1991; Freeman et al., 2021) and institutional theory (DiMaggio and Powell, 1983), we can see that, unlike for-profit organizations, value in NPOs is created by acting on social needs, ecosystem's fragilities and ethical governance, while ensuring financial viability to support their primary mission and maintaining social legitimacy.

The ability to generate sustainable value creation under resource constraints implies a dual approach: creation of social impact and financial sustainability. This dual focus is often achieved through innovation, adaptation and flexibility of business models and active stakeholder engagement. (Weerawardena et al., 2019; Kandaiya & Chavan, 2017; Weerawardena et al., 2010; Brehmer et al., 2018; Gamage, 2020; Ziolo et al., 2023)

### **1.3 The research gap: tailored diagnostic and management tools for NPOs**

Non-profit organizations are increasingly recognized as vital actors in advancing sustainable development, yet the literature consistently highlights a significant gap: most sustainability management tools and strategies are designed for for-profit organizations and show important limitations when transposed to the particular complexities of NPOs (Nawaz & Koç, 2017; Ab Samad et al., 2023).

In result, NPOs end up relying on generic frameworks developed for corporate purposes, such as SROI or GRI/ESG-style frameworks (Landoni, 2024), which are primarily designed to answer to shareholder value, risk management, and financial materiality, rather than to NPOs characteristics such as volunteer-based human capital, donor dependency, and multi-stakeholder governance (Richardson et al., 2023).

Some of the most relevant barriers to adoption and successful implementation of these tools include limited financial and human resources, lack of management training and capacity, fragmented approaches focusing on financial sustainability over multidimensional models, shifting stakeholder/funder priorities, and regulatory and societal challenges. (Ab Samad et al., 2023; Ab Samad & Ahmad, 2022; Anwar et al., 2020). For example, tools oriented by the monetization of social value, such as SROI, not only require substantial resources and evaluator expertise to produce credible data, but also privilege short-term or funder-preferred actions over complex, long-term outcomes, risking organisations to steer away from their mission (Arvidson et al., 2013).

Although many organisations exhibit robust values and external reporting capacities, the financial constraints often create challenges to reach their sustainability goals, particularly in the environmental dimension (Albert et al., 2022). On the other hand, corporate reporting frameworks, such as GRI/ESG, often function as disclosure reports rather than tools for strategic management, and this supplementary reporting requires time and human resources, which creates low adherence, and risk superficiality (Pavaloia et al., 2017).

While standardized approaches and monetization logics can be helpful to easily share short-term information to donors, it does not support capacity development or strategic management that is oriented to mission outcomes (Asogwa et al., 2021).

Recently, there have been efforts to introduce NPO-specific models such as the Sustainability Model Canvas, but they are not yet widely adopted or standardized (Landoni, 2024). The same barriers seem to persist, and the need for context-sensitive, multidimensional and accessible management tools that reflect the specificity of NPO missions, cultural contexts, and multiple stakeholder dynamics, remains a pressing challenge for both research and professional practice (Daub et al., 2014).

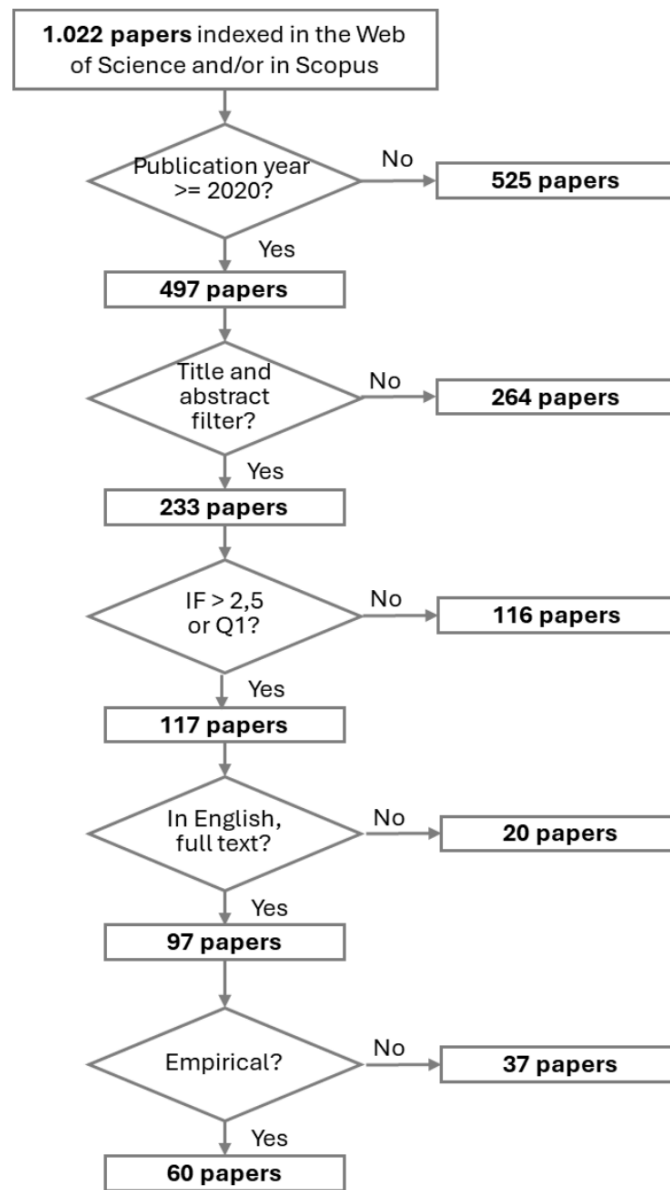
## CHAPTER 2: Identifying Processes and Determinants

### 2.1 Literature Review

To address the second specific objective - *identify the key processes and determinants that drive sustainable value creation in NPOs* - a systematic literature review was undertaken. Following academic rigor recommendations (Moher et al., 2009; Tranfield et al., 2003), a three-stage methodological procedure was implemented: planning, conducting and reporting (Tranfield et al., 2003). The planning stage consisted of an exploratory literature analysis to identify the research gap, which led to the definition of the research aim: to identify sustainable value creation processes focused on environmental, social and governance topics, and determinants that would have an impact in that creation. The conducting stage selected two comprehensive databases: Scopus and Web of Science. Through them, a detailed search path was defined by three components: (1) NPO-related terms in the title, (2) Sustainability-related terms in the title, abstract and keywords, and (3) Determinant-related terms in the title, abstract and keywords, resulting in an initial identification of 1,022 papers.

This sample was refined applying consequent filters. The timeframe of 2020 to 2025 reduced it to 497 papers, and a title/abstract screening was conducted by two independent evaluations with an inclusion criteria for papers that would address determinants for NPOs' success in creating sustainable value and an exclusion criteria for papers focusing on for-profit organizations benefits from NPOs collaboration or that didn't have a clear research focus on determinants. A sample of 233 papers resulted from this refinement. To deepen the qualitative content analysis, the review was further narrowed to journals with higher academic impact (Impact Factor >2.5 in Web of Science) or belonging to the top Quartile/75th percentile (Scopus), resulting in 117 papers. After excluding review articles and papers not written in English 97 papers were left, from which, after full-text reading, 37 were eliminated for lack of relevant empirical data. The final sample of 60 papers is summarized and presented in the PRISMA diagram in Figure 2.

**Figure 2:** Literature Review PRISMA diagram (Source: adapted from Page et al., 2021)

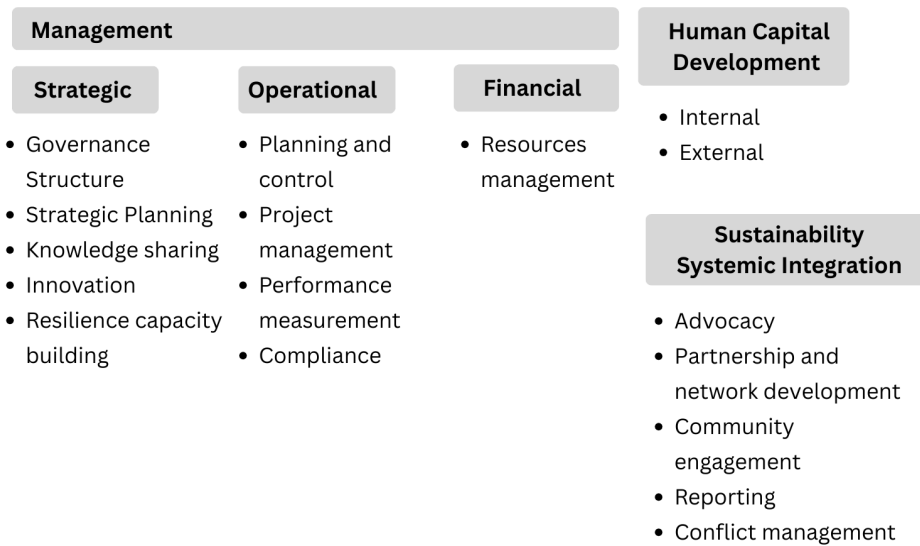


### 2.1.1 Results: Processes

In the context of this research, “sustainable value creation processes” refers to the actions conducted by NPOs that aim to generate value in environmental, social and/or governance dimensions. The present section will detail each of the processes identified through the literature review, categorized into five different domains (Figure 3): strategic management;

operational management; financial resources management; human capital development; and systemic integration of sustainability. The processes will be considered by themselves and by how they contribute directly to the creation of sustainable value in NPOs.

*Figure 3: Processes for sustainable value creation in NPOs*



### Strategic Management

Strategic management provides the framework for setting objectives, managing risks, ensuring accountability and aligning operations with the main mission, while supporting the continuous development of sustainable value (Esposito and Antonucci, 2022; Ferreira et al., 2022). Within this process, five functional domains were identified in the literature review: governance, strategic planning, innovation, partnership and network development, and resilience capacity building

**Governance** is defined as the exercise of authority and responsibility within an entity (Ferreira et al, 2022), as it acts through an integrated set of systems and processes that direct the overall direction, control and accountability of an organization (Diaz and Rees, 2020; Kassem et al., 2021).

Unlike for-profit entities, NPO governance is driven by its mission, all along while maintaining long-term sustainability and accountability to different stakeholders, including donors, beneficiaries, and the general public (Sahazad et al., 2024; Kassem et al., 2021). However, an increase of professionalization has been observed in reaction to pressures from

stakeholder demands and regulatory changes (Diaz and Rees, 2020), which has shifted NPOs traditional and informal management styles towards business-like models, as well as increasing employee participation (Ferreira et al., 2022; Kassem et al., 2020).

Some indicators of effective governance include transparency and accountability practices, heterogeneity of governing bodies, leadership commitment, clear definition of an organization's mission and vision, and the capacity to adapt to stakeholders demands and internal dynamics (Bauer and Greiling, 2024; Rincon-Roldan and Lopez-Cabrales, 2021; Wolf et al., 2021).

**Strategic planning** is a formal process that defines an organization's mission, vision, and strategic goals as well as the actions to achieve them. It guides direction and ensures accountability through a series of structured systems. In NPOs, strategic planning relies on leadership commitment to the organization's long term vision (Shahzad et al., 2024), efficient resource allocation (Moldavanova and Wright, 2020), organizational resilience through well-developed contingency plans (Fagbemi et al., 2024), strategic partnerships (Kassem, 2020), action systematization by specific and structured measures (Chaves-Avila and Gallego-Bono, 2020), and the incorporation of specific goals that align with sustainability integration (Samara et al., 2022; Shahzad et al., 2024).

These key elements work as the blueprint for the mission's development, ensuring long-term impact (Moldavanova and Wright, 2020), and creating a distinctive and relevant framework for the organization (Al-dmour et al., 2023).

**Innovation** refers to the development and implementation of ideas that create novel solutions for existing problems through improved processes, products, marketing or organizational structures, providing stakeholders with distinguished value (Brimhall, 2021; Clifton et al., 2024).

In the non-profit context, this is often termed as "social innovation" (SI), which is based on processes with four particular characteristics: objectives that address social and environmental challenges, stakeholder's collaborative processes, focused direction on sustainability, and its impact and consequences towards social systemic change (Díaz-Perdomo, 2021). It has also become increasingly intersectoral, with co-creation and collaborative approaches engaging joint actors to solve complex social issues (Díaz-Perdomo,

2021; Vigoroso et al., 2023). Leadership that encourages inclusivity, empowerment and an accepting organizational culture will foster innovation practices (Vigoroso et al., 2023), which are often facilitated by technological advancements (Shoshany-Tavory et al., 2024).

While innovation enhances capacities and results, it can also create challenges such as the overshadowing of the social mission for the sake of financial and efficiency goals (Kassem, 2020; Shahzad et al., 2024).

**Partnerships** and collaborative networks are dynamics between two or more actors that allow mutual development by sharing resources, competencies, knowledge and experiences (Alnamrouti et al., 2022; Fontana and Pisalyaput, 2023; Kassem et al., 2020). It implicates a balance between autonomy and commitment in order to create value for both society and the partners involved (Kassem et al., 2021), and to amplify social and environmental impact (Lebec and Dudau, 2024; Zikargae et al., 2022).

NPOs particularly benefit from cross-sector and multi-stakeholders partnerships with different actors such as business companies (Ahmadsimab and Chowdhury, 2021; Al-Tabbaa et al., 2021; Vigoroso et al., 2023; Yin, 2021), public entities and governmental agencies (Clifton et al., 2024; Triyanti et al., 2024; Wright and Reames, 2020), and local communities (Dellmuth et al., 2020; Fontana and Pisalyaput, 2023; Khan et al., 2022; Ma et al., 2021; Zikargae et al., 2023). These partnerships can often be defined by the type of activities they interchange, from transactional with resource sharing or social investments, to integrative by combining complementary strengths for greater effect (Kassem et al., 2020).

Internal drivers to create partnerships are often related to enhancing financial stability, but also as a way to gain specialized technical expertise by bidirectional learning, enabling circular supply chains and the improvement of sustainability practices (Kassem et al., 2020; Lafont-Torio et al., 2023). These relationship dynamics also require collaborative governance with formal and deliberative decision-making processes as well as mutual accountability (Dellmuth et al., 2020; Kassem et al., 2021).

In this way, successful partnerships can generate different types of value such as associational value from improved credibility and visibility, direct benefits from transferred resources, or synergistic value, which arises from the amplification of their

accomplishments by the combination of resources, often leading to innovation (Díaz-Perdomo et al., 2021; Kassem et al., 2020; Lebec and Dudau, 2024; Zikargae et al., 2022). Smaller NPOs particularly benefit from these networking processes in order to overcome common challenges in fundraising, service gaps and sustainable community impact (Chandrasekhar et al., 2022).

**Resilience** is described as “an organization’s ability to anticipate potential threats, to cope effectively with adverse events, and to adapt to changing conditions” (Duchek, 2020, p.220). It represents a “desirable characteristic” that allows organizations to navigate uncertainties such as financial crises, political instability or disaster events, with the minimum possible disruption of their operations (Fagbemi et al., 2024). Modern NPO resilience concepts reinforce that more than recovering from adverse events, organizations can “bounce forward” in their reaction to adapt, transform and improve themselves in the aftermath of a crisis (Manyena et al., 2019 in Fagbemi et al., 2024).

This capacity can be planned by establishing risk management systems and contingency plans, or adaptive, with a flexible and enduring reaction after the matter. It can also be dependent on either physical resources, such as financial, material or infrastructure, as well as on human resources such as leadership, collaborations and social networks. Research suggests that the latter are more critical, as they determine how an organization will effectively manage the physical resources as well (Fagbemi et al., 2024).

Several organizational factors are linked to higher resilience levels, such as management commitment to uphold ethical standards and sustain operations, diversified funding to reduce financial vulnerability, supply chain integration for operational adaptability, and the already mentioned collaborative networks to ensure security and facilitate the exchange of vital resources. (Fagbemi et al., 2024; Shahzad et al., 2024)

For NPOs, resilience capacity building is particularly important to avoid the impact of interrupting continuity for the beneficiary communities while they are facing the cumulative challenges from any disruptive events (Choi et al., 2023; Fagbemi et al., 2024; Samara et al., 2022).

## **Operational Management**

While strategic management focuses on the long-term vision, operational management acts on the immediate implementation of those strategies through planning, execution and coordination. In the non-profit sector in particular, it is the process of operationalizing the management's vision into tangible real-world impacts that create clear benefits for both the organization and the beneficiaries (Shahzad et al., 2024). Since resource scarcity is often a main challenge for NPOs, effective operational management not only enables sustainable value creation, but also ensures NPO's long-term viability and impact (Fontana and Pisalyaput, 2023; Samara et al., 2022; Zikargae et al., 2023). Three sub-processes relevant to sustainability value creation can be identified in the literature review: planning and control, performance measurement and compliance.

Planning and control require a transversal approach to multiple angles of coordination towards organization stability and sustainability challenges (Fontana and Pisalyaput, 2023). Resources require a sensible management of the relationships between funding, partnerships, revenue sources, and evaluation systems (Alnamrouti et al., 2022; Zikargae et al., 2023). Therefore, systems such as supply chain integration, which synchronise and coordinate all processes from suppliers to end beneficiaries, enable a transparent communication between stakeholders, effective resource allocation and a common direction towards sustainability goals (Shahzad et al., 2024). Human resources must also be included in the sustainability goals, ensuring decent work conditions, ethical labor and fair compensation (Geradine and McWha-Hermann, 2024). Other differentiated resources such as artificial intelligence can also reduce costs by automating tasks and improving information sharing and data processing (Alnamrouti et al., 2022; Shin et al., 2020). While NPOs' missions are often focused on social impact, the integration of environmental considerations into strategic plans and performance indicators shouldn't be dismissed (Zikargae et al., 2023). Strategic environmental actions include reducing carbon footprint, using green energy, developing green buildings, implementing green purchasing practices and improving waste management (Bauer and Greiling, 2024; Zikargae et al., 2023).

One of the core functions of operational management is performance measurement to ensure operational adaptability, effectiveness, efficiency, and impact across social, financial and environmental dimensions (Ferreira et al., 2022; Lebec and Dudau, 2024). Adaptability is particularly critical, especially in volatile environments such as conflict zones, to ensure that operations are maintained while upholding ethical standards (Shahzad et al., 2024).

Performance measurement allows continuous learning and development, while providing critical information to stakeholders (Cuckston, 2022; Lebec and Dudau, 2024). However, both management and evaluation require compliance to a certain set of rules, principles and practices adopted by the organization and systematized in external standards. This commitment strongly enhances credibility and legitimacy, improves operational efficiency and risk management, which also results in valuable contributions to sustainability goals (Bauer and Greiling, 2024; Slomski et al., 2022). It is not enough to have a vision for the mission. The synchronization of all parts of the organization through operational management is what will allow the strategic planning to achieve its aims.

### **Financial resource management**

Financial resource management seems to be one of the biggest challenges for NPOs, both because of their non-profit nature and dependence on funding sources, as well as their volatile systems of value determination. As a process, it refers to the strategies that allocate, distribute and monitor funds in order to ensure the success of the organization's objectives while maintaining long-term viability (Shahzad et al., 2024; Ferreira et al., 2022). When this process is efficient, it allows the organization to fulfil their mission, attracts further donor support, and creates legitimacy to prospective stakeholders (Ely et al., 2023; Leardini et al., 2020; Shin et al., 2020).

One of the critical ways to reduce financial vulnerability overall is revenue diversification (Ferreira et al., 2022). For NPOs, the main financial sources identified are individual or collective donations, government's funding, and the commercialization of products or services (Kumi, 2022; Landoni and Trabucchi, 2024). Considering the often inconsistent stream from either of these sources, it is a key strategic approach to ensure that the organization does not become dependent on a single income source (Ye and Gong, 2021). However, strong diversification can also lead to management fatigue - especially considering the limited skilled human resources in NPOs - from handling multiple requirements, or the loss of organizational autonomy when government funding is predominant (Wright and Reames, 2020). In the face of this challenge, the incentive to develop partnerships is reinforced when seeking financial stability, and the partner's own financial stability can be a predictor for positive results, and therefore, an important selection criterion (Kassem et al., 2020). On the other hand, to attract the interest of donors and investors, NPOs must

understand each stakeholder's value perception and provide the appropriate benefits, which can be aimed to achieve the SGDs when under government incentives (Landoni and Trabucchi, 2024). These same government incentives require financial management to properly translate the resources into community development and environmental activities (Anwar et al., 2020).

In this sector, financial management is not only about money allocation but also about optimizing available resources for maximum social impact. This requires a strong management commitment that aligns with the organization's strategic goals, as well as a complex balance between dependencies and value exchanges (Shahzad et al., 2024).

It is also clear that transparency and disclosure of financial information, as well as comprehensive information on resource utilization builds trust with stakeholders, enhances fundraising success and directly influences donors (Esposito and Antonucci, 2022; Leardini et al., 2020; Shin et al., 2020). On this account, modern NPO governance has been shifting from simple financial accounting to performance auditing and public accountability (Ferreira et al., 2022).

Some strategies can be adopted to improve financial performance, such as the use of blockchain technology to reduce the cost of third-party intermediaries in donations and fund transfers (Shin et al., 2020), or the procurement of endowments, from which long-term revenue can be created from the attached income, rather than from the original donation itself, creating a stable and possibly perpetual financial stability for specific programs (Ely et al., 2023).

All these challenges put into question the prioritization of sustainability dimensions over the capacity to operate towards the mission (Dellmuth et al., 2020). In extreme cases, such as risk environments or conflict zones, management needs to be particularly resilient to maintain the work during supply chain fluctuations and sudden funding cuts without compromising their own ethical standards (Shahzad et al., 2024).

## **Human Capital Development**

Human capital development refers to the processes of enhancing the knowledge, skills and engagement of paid staff and volunteers towards fulfilling the organization's mission (Alnamrouti et al., 2022; Choi et al., 2023). However, when talking about human resources in

NPOs, we have to clearly note that volunteers are not only as essential as paid staff, but often the very foundation for the organization's existence.

Organizational learning, for example, is considered to be a critical component of sustained competitive advantage, as the collective expertise of each individual pushes forward innovation and improves the NPO's capacity to adapt to societal challenges (Alnamrouti et al., 2022; Wright and Reames, 2020). Also resulting in a contribution to innovation and resilience, is the integration of different skills and perspectives from outside the organization, while building external stakeholder relationships in ways that develop human capacity (Shahzad et al., 2024). Likewise, the successful training of the organization's human resources is shown to influence productive stakeholder relationships, with direct consequence on better outcomes in perceived financial and operational performance, as well as in community sustainability efforts (Wright and Reames, 2020; Alnamrouti et al., 2022)

A key component of human capital development is professionalized management mechanisms, where NPOs increasingly rely on formal tools in order to manage human assets (Ferreira et al., 2022). This can be achieved through administrative formalization, creating description manuals and performance evaluation models to ensure that activities are clearly defined and every individual's actions are aligned with organizational goals; an efficient matching of skills to roles, particularly ensuring that employees with higher education work within their field of expertise, and that general training is adequate to the specific activities; and continuous learning, prioritizing vocational ongoing training so that staff remains up-to-date and adequately informed for project development (Alnamrouti et al., 2022; Ferreira et al., 2022).

In conjunction with these actions, strategic human resource management can be used to add value by using an holistic approach to motivate employees, reduce turnover and create a sense of belonging and commitment, maintaining high quality working conditions and regular inter-hierarchical communication, as well as focusing on organizational culture and ethical values to drive sustainability through value alignment (Rincon-Roldan and Lopez-Cabrales, 2021). Additionally, specifically for the ability to effectively implement and maintain sustainability programs, human capital development actions should work on the ability to communicate new policies, integrate new technologies, manage financial costs and organizational change, and report sustainability achievements (Asogwa, 2023; Wright and Reames, 2020).

In the NPO sector, human capital uniquely depends on the unpaid workforce of volunteers. Hence, their effective valuation and training is critical to ensure their work is as professionalized as that of paid staff (Choi et al., 2023). NPOs often face multiple challenges when recruiting and retaining volunteers, where the practice of integrated ethical values can be one of the ways to improve long-term commitment (Aboramadan et al., 2022; Brimhall, 2021).

A main barrier identified in achieving operational execution of human resources strategies is financial constraints that prevent many NPOs from offering competitive salaries, while one of the major drivers is organizational resilience, as organisations that invest in human capital become significantly better equipped to endure and adapt their service during unexpected crises (Clifton et al., 2024; Wright and Reames, 2020).

On a different approach, collaboration with external stakeholders can be used to provide bidirectional knowledge sharing, and to co-create sustainability solutions for complex challenges. In this way, partnerships are once again contributing to internal and external development as well as more impactful sustainability results (Fontana and Pisalyaput, 2023; Liu and Jia, 2022).

This is a particular important process for NPOs given their under-investment challenges in hiring practices, overall limited resources, and the contrasting need for specialized expertise (Diaz and Rees, 2020; Fagbemi et al., 2024; Shahzad et al., 2024)

### **Systemic Sustainability Integration**

Systemic integration of sustainability in non-profit organizations (NPOs) refers to the paradigm shift where sustainability is no longer seen as an extra isolated responsibility, but as an integral part of the organization's core strategy, operations and collaborations. This depends on a coordinated approach throughout the identified sub-processes of advocacy, community engagement, and transparency and accountability.

Advocacy serves as a vital component for systemic sustainability integration, by acting as the bridge between the organization's actions and the broader societal shifts required to create lasting impact (Díaz-Perdomo, 2021), and by translating NPOs' vision into public consciousness and government policies (Khan et al., 2022; Triyanti et al., 2024; Zikargae et al., 2022). This way, it becomes a fundamental aspect towards achieving their mission in alignment with all stakeholders, as it plays a facilitator role into the decision making

processes of the organization (Kassem et al., 2020; Wolf et al., 2021). With successful advocacy strategies, NPOs are able to promote significant changes in civil society, encouraging the adoption of more ethical and responsible business practices that can ultimately contribute towards complex global challenges such as climate change.

The practice of advocacy can also push forward the mainstreaming of sustainability towards influencing sustainability integration in broader policy contexts (Chaves-Avila and Gallego-Bono, 2020). This can be accomplished by directly lobbying for and assisting in the adoption of national regulatory frameworks (Triyanti et al., 2024), and by participating in community partnerships for collaborative governance. Another relevant outcome from advocacy efforts is its positive contribution for the reputation and legitimacy of the organization, which eventually leads to greater support and bigger donations (Cabrera-Luján et al., 2023). This can be achieved through collaborative or confrontational advocacy, resulting in more legitimate sustained support and effective social change with different levels of institutional acceptance, respectively.

However, advocacy doesn't come without its challenges, particularly when it comes to organizational tensions. When NPOs are dependent on government funding, the dilemma between their advocacy role versus their mission role surges, with potential for "advocacy myopia", potentially undermining the NPO's capacity to act in ways that might contradict government policies and lead to the loss of administrative autonomy (Wright and Reames, 2020). Additionally, conflicts might arise between a value-driven NPO's mission and the immediate needs of the beneficiaries they serve, which can eventually lead to a loss of trust and hinder the overall advocacy efforts (Deng and O'Brien, 2021).

Community engagement works in multiple ways towards systemic sustainability integration. At its core, it fosters a sense of belonging among the community members by ensuring active participation. Rather than treating sustainability as a top-down directive, it directly engages citizens, beneficiaries and other stakeholders, in a performance perspective of a "shared fate", directly linked to the well-being and resilience of the surrounding community (Lebec and Dudau, 2024). Integration of the community in all levels of decision-making has been shown to be paramount to solve complex social problems and to support the accomplishment of the organization's mission (Díaz-Perdomo et al., 2021).

Rather than acting under a mostly compliance approach, where community members merely respond to pre-decided policies, effective engagement requires functional participation

strategies that can integrate the community at every stage of the project, where they contribute with knowledge about how policies will affect their community from the outset (Moldavanova and Wright, 2020; Zikargae et al., 2022). One example of such strategies would be to create discursive spaces or public spheres where individuals can contribute towards a consensus regarding environmental or social interventions (Zikargae et al., 2022). Joint actions that involve collaboration and co-production can take the engagement a step further, in a way that allows the community to be co-owner of projects (Díaz-Perdomo et al., 2021), such as what happens in development and empowerment projects with the rural communities (Fontana and Pisalyaput, 2023; Forkuor and Korah, 2023). And one last example of integration can be found in consultation strategies, where the community becomes the main source of information to identify priorities and root causes of problems, considering they will be the ones with deeper knowledge of the land and the social fabric (Zikargae et al., 2023). This approach can also facilitate collaboration with traditional authorities and community leaders, and overcome possible cultural barriers that might be creating resistance to the organization's operations (Forkuor and Korah, 2023; Triyanti et al., 2024).

In this way, community engagement can create a social symbiosis between beneficiaries and organization's leadership, where local knowledge can be translated into scientific approaches, while maintaining appropriate cultural adaptation (Triyanti et al., 2024). To nurture trust and to secure the resilience of this relationship, it is also important to ensure that information regarding project-related achievements is shared in a timely manner, through communication processes that adequately match the receiving community (Zikargae et al., 2023; Buijs et al., 2024; Khan et al., 2022).

Despite its benefits, NPOs encounter several systemic challenges when it comes to community engagement, especially when local priorities are not aligned with the NPO's goals, or when there isn't a clear economic advantage created (Deng and O'Brien, 2021; Khan et al., 2022). There might also appear mistrust among beneficiaries, often originating from a lack of financial transparency or from prioritizing accountability towards donors instead of the community itself (Khan et al., 2022). Another risk that should be taken into account from the very start is the potential for local elites or politically motivated individuals to dominate the participatory processes described above, in order to fulfill their own personal goals, rather than the community interests, which can lead to resistance, augment existing inequalities, or even generate new conflicts (Deng and O'Brien, 2021; Khan et al., 2022).

Still, the benefits outweigh the risks, as community-based organizations (CBOs) with collaborative networking are more likely to meet sustainability goals through pooling of joint resources, shared risks and exchange of expertise that address the most complex challenges (Wright and Reames, 2020).

Although positive outcomes can be found in all the different aspects of integration mentioned so far, their continuity and credibility is ultimately grounded on comprehensive transparency and accountability. While transparency covers the proactive disclosure of the organization's operations, performance and resource distribution, accountability refers to the mechanisms through which the organizations are held responsible for their decisions and actions, by opening themselves to public scrutiny and assessing performance against internal goals (Saraite-Sariene et al., 2022). For NPOs, this means that their systems had to evolve from simple financial bookkeeping into a comprehensive responsibility for all actions that are relevant to their stakeholders (Ferreira et al., 2022). It is now seen as an essential characteristic that conveys trust and enhances legitimacy, and it has moved from being a secondary consideration (as it might be for for-profit organizations) to a central identity aspect of the NPO's purpose (Esposito and Antonucci, 2022).

Consequently, available transparency and accountability have a direct influence on donor and volunteer support, from which NPOs rely most of their operational functionality, as well as on partnerships and reliant community engagement (Asogwa, 2023; Diaz and Rees, 2020; Ferreira et al., 2022). Donations, in particular, as the primary source of funding for most NPOs, end up depending on this mutual trust regarding where the funds are spent, which is why it can be observed that the more an organization openly discloses information, the more likely it will be to receive said donations (Leardini et al., 2020). Despite the importance of upward accountability towards funders, donors and regulatory bodies, it is also important to note that it is the downward accountability - towards beneficiaries and the community - that will ensure the actual needs are met, and that the organization remains aligned with their main social mission (Díaz-Perdomo et al., 2021).

There are several mechanisms that NPOs can use to demonstrate accountability. Social accounting and reporting are procedures that both measure and communicate the organization's social and environmental performance. In some cases, this has moved from a voluntary effort to a legal obligation, required within annual reports (Esposito and Antonucci, 2022). These reports, rather than when focusing exclusively on financial information, are more efficient when they include full performance disclosure, such as organizational mission,

values, history, strategic goals and projects (Leardini et al., 2020). Social media platforms have been steadily occupying an increasing space in digital accountability, becoming a key tool for NPOs to foster dialog with stakeholders, developing their reputation and ultimately attracting more donations and volunteers (Liu and Jia, 2022; Saraite-Sariene et al., 2022). And lastly, in a more internal organization perspective, the active consideration of internal responsibility within staff management allows that every action and decision is guided by their own self evaluation (Lebec and Dudau, 2024).

However, the pursuit of transparency can often lead to internal tensions and face significant challenges. NPOs often lack the proper human resources to produce the administrative work required for timely and reliable communication (Park and Matkin, 2021), which also creates delayed responses from funders. This fractured communication network can compromise long-term financial sustainability and effective information exchange (Zikargae et al., 2023, 2022). On the other hand, regardless of sufficient administrative capacity, a conflict can arise between compliance with rigid metrics and the necessary subtlety applied in aspects of social response that are proven to be difficult to quantify (Lebec and Dudau, 2024). Additionally, when addressing the specificities of sustainability reporting, there is a clear lack of uniform reporting indicators that can be accurately applied to the non-profit sector, together with the lack of supportive government policies appertained to this subject (Asogwa, 2023; Bauer and Greiling, 2024). When studying the application of the ESG framework for social reporting in non-profit contexts, Pratici et al. (2024) concluded that ESG could be used to guide sustainability reporting in NPOs, once the gap is bridged by proper ESG criteria adaptation to NPO's mission-driven foundations.

### **2.1.2 Results: Determinants**

In addition to processes, the literature data analysis also identified a set of determinants that impact sustainable value creation in NPOs. These can present either as obstacles or drivers in achieving sustainability, as they might influence positively or negatively the processes identified before, as well as other separate factors that also impact sustainable value creation results. Most of the determinant's characteristics have already been detailed in the previous chapter as part of the process's functions. For the purposes of text fluidity, despite each

determinant being often referred to by multiple authors, only one source per determinant will be cited.

At the foundation of an NPO's internal structure, one needs to take into account its size, age and range of activities, which can show its capacity to mobilize resources, and its resilience to volatile environments (Chandrasekhar et al., 2022). Overall organizational culture guides the shared values and norms practiced by the staff (Vigoroso et al., 2023), which also connects to the type of governance structure adopted, that will define the NPO's strategy and decision making (Diaz and Rees, 2020). As seen before, the availability of financial and human resources is critical to the operational conditions of the organization, with the potential to affect every stage of the project (Alnamrouti et al., 2022). Additionally, the skills and capacities from both internal and external stakeholders strongly influence sustainable value creation. Leadership commitment to sustainability goals is often responsible for either implementing ideas into actionable steps, or the shortcomings from insufficient dedication (Shahzad et al., 2024). Diversity within the leadership has been shown to be a multidimensional factor, as, for example, the presence of women in top management positions has been found to enhance accountability procedures and stakeholder engagement (Saraite-Sariene et al., 2022). Still referring to leadership, communication capabilities can determine the success of information transference as well as the systems for effective and safe feedback between different management, employees and volunteers (Ma et al., 2021). In turn, employees and volunteers are the backbone of operations, and together with knowledge, skills and collaborative capacity (Wright and Reames, 2020), their capabilities for communication, negotiation, training, organizational learning, innovation, and resilience are also valuable determinants (Valero-Amaro et al., 2021; Zikargae et al., 2023).

From the outside of the organization, two of the most influential determinants seem to be policies and regulations from governmental institutions (Anwar et al., 2020), and donor dependency (Leardini et al., 2020), a side effect of insufficient revenue diversification, as presented in the financial resource management processes. It was also shown how strategic partnerships can strongly influence resource access and resilience, and the partner's willingness and ability to engage in collaborative processes appears as an important determinant (Pesqueira et al., 2020). Wider societal dynamics must also be taken into account, such as the presence of external pressures (Asogwa, 2023), how the organization's legitimacy is perceived (Asogwa, 2023), and the broader socioeconomic context in which the organization is operating (Moldavanova and Wright, 2020).

In Figure 4, the identified determinants can be found organized by their different areas, and in following chapters it can be seen how these determinants can have either positive or negative impact in sustainable value creation depending on the aggregated characteristics of the NPO.

*Figure 4: Determinants for sustainable value creation in NPOs*



## **2.2 Validation and complementation: Interviews with NPOs' representatives**

### **2.2.1 Methodology**

The results from the literature review regarding processes and determinants were further validated and complemented by semi-structured interviews with NPOs' representatives, to take advantage of their direct experience on the field. The semi-structure approach was chosen to allow personal insights while maintaining direct answers to key questions. The sample to which the interviews were applied consisted of professional network contacts from the research team members. Several were contacted and a total of eight NPOs were successfully interviewed through online meetings between July and October of 2025 (see Table 2). A deliberate effort was made in order to meet representativity criteria, by including organizations from different activity sectors (environmental, social, gender violence, youth, education and healthcare), age since their foundation (between 33 and 8 years old), size considering number of paid staff and volunteers (0-30 and 8-270 respectively), and geographical location (Africa, Asia, Europe, North America and South America). The interviews proceeded until theoretical saturation was reached and no further new insights were provided from the interviewees (Guest et al., 2006).

The participation of each interviewee was entirely voluntary, confirmed in writing after first contact by a senior member of the research team. Provided full verbal consent, the interviews were recorded in video format and later transcribed for research support.

**Table 2: Profile of Participants**

	Activity Scope	Founded in	Employees / Volunteers	Geographical Area	
				Based in	Acts in
<b>NPO1</b>	Environmental awareness	2016	7 / 270	Africa	Africa
<b>NPO2</b>	Societal progress	2013	85 / 50	Europe	Europe and Africa
<b>NPO3</b>	Social inclusion	1993	30 / 50	Europe	Europe
<b>NPO4</b>	Safety and well-being of vulnerable people	2010	10 / 35	Europe	Europe
<b>NPO5</b>	Education and development of vulnerable communities	2018	0 / 18	Africa	Africa
<b>NPO6</b>	Woman-centered social business solutions	2015	12 / 8.	Europe and Asia	Asia
<b>NPO7</b>	Prevention of gender-based violence	2012	20 / 15	Asia and North America	Asia and North America
<b>NPO8</b>	Prevention of violence against children and youth	2010	8 / 18.	South America	South America

The interview consisted of two main parts: an overview of the general context of the organization and ESG awareness, and the validation of the findings in the literature review regarding processes and determinants for sustainable value creation. An interview guide was prepared and sent in advance to the interviewees, but enough flexibility was maintained throughout the process to allow in-depth commentaries.

The first part of the interview started with an introduction of the ESG4NPO project, where two main goals were presented: 1) to improve value creation in non-profit organizations (NPOs) through the integration of Environment, Social and Governance (ESG) dimensions; 2) to enable NPOs to develop a strategic and systematic approach to sustainability management, in line with the Sustainable Development Goals. After the introduction, general information was gathered about the NPO's mission and governance structure, familiarity with ESG concepts, internal capacities and limitations to apply sustainability value creation through human and financial resources, and external motivation and/or pressure to implement them.

The second part was dedicated to validate and complement the findings regarding processes and determinants for sustainability creation. First, the list of processes was presented to the interviewee, who was asked to identify which were the ones being performed at the highest

and lowest level by their organization. Then, the list of determinants was presented and the interviewee was asked to identify which ones have helped towards the success of the processes that they previously identified as high-performing, as well as which ones have hindered the success of the processes previously identified as low-performing. Lastly, a moment was facilitated for the interviewee to add perceived missing processes and determinants, as well as developing a final comment.

### **2.2.2 Results Analysis**

The first part of the interviews provided a general description of the NPOs' mission, values and strategic goals, as well their perceptions on sustainability management. When questioned about their familiarity with ESG concepts, only two out of eight of the interviewees responded negatively (NPO2 and NPO4). Regarding resources to operationalize the integration of ESG dimensions, all interviewees recognized the predominance of financial constraints and only half confirmed having sufficient skilled human resources to implement the tasks (NPO1, NPO2, NPO3 and NPO8). When addressing the existence of external pressures, only two NPOs answered affirmatively, mentioning external expectations from partnerships and donors (NPO4) and from communities (NPO5). However, two NPOs detailed that even though there weren't any external factors, they recognized that volunteers might not adhere if there was no sustainability integration (NPO2 and NPO3) and the remaining ones mentioned that the commitment to sustainability was still present through internal philosophy and intrinsic motivation (NPO6, NPO7 and NPO8).

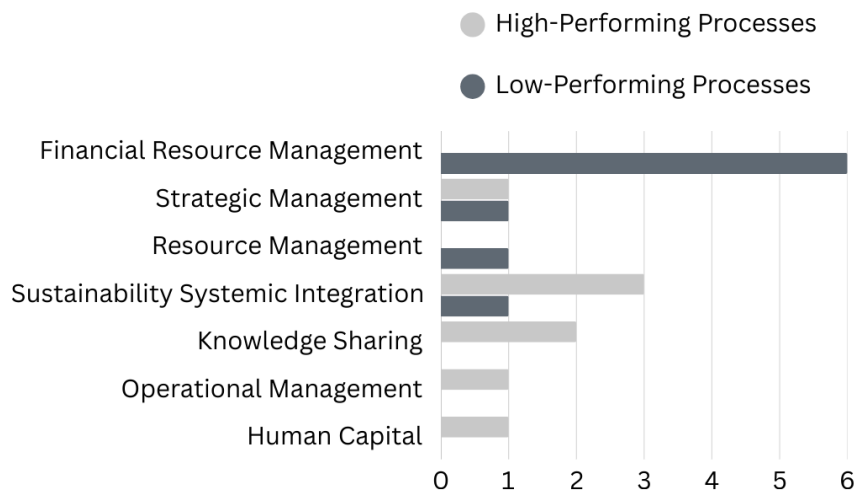
The second part of the interviews listed the processes selected by the interviewees regarding most and least successful as well as the determinants selected regarding the most positive and negative impact are summarized in Table 3. The majority of the NPOs (six out of eight) promptly identified Financial Resources Management as the lowest performing process, with two of them (NPO7 and NPO8) specifically clarifying that the difficulty wasn't on how to manage said resources, but that they were insufficient. Regarding the determinants that most support the high performance of value creation processes, Leadership and Employees were identified across the sample, while Donor Dependency and Policies and Regulations were consistently referenced as the most hindering ones.

Table 3 presents an interviews’ summary, while Figures 5 and 6 provide a comparative visual representation of the answers obtained from the interviews.

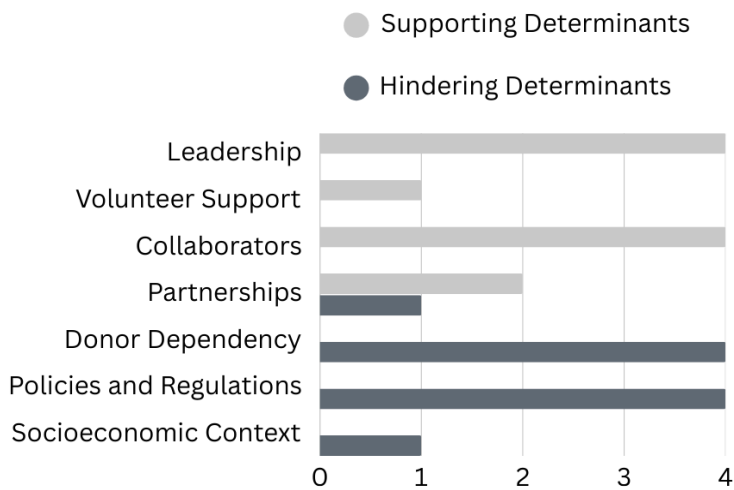
**Table 3: Interviews Summary**

	PROCESSES			DETERMINANTS		
	High-performing	Low-performing	Additional Suggestions	Supporting	Hindering	Additional Suggestions
NPO1	Strategic Management	Financial resource management	Marketing and Communication	Leadership	Donor Dependency Policies and Regulations	Media and academic publicity
NPO2	Human Capital Development	Financial resource management	—	Volunteers	Policies and Regulations	—
NPO3	Operational Management	Sustainability Systemic Integration	—	Employees	Socioeconomic Context	—
NPO4	Sustainability Systemic Integration	Financial resource management	Marketing and Communication Fundraising	Leadership Employees	Donor Dependency	Public funding Credibility
NPO5	Human Capital Development	Financial resource management	—	Leadership	Policies and Regulations	Ethical values in partnerships
NPO6	Sustainability Systemic Integration	Strategic management	—	Employees: innovation capacity, collaboration capacity	Internal context: low financial resources, broad activity range	—
NPO7	Human Capital Development	Financial resource management	—	Leadership Partners	Donor Dependency Policies and Regulations	—
NPO8	Sustainability Systemic Integration	Financial resource management	Fundraising	Employees	Donor Dependency	Socio-political context

**Figure 5: Processes' performance rating**



**Figure 6: Determinants' impact rating**



When questioned about missing processes and determinants from the provided lists that would impact sustainable value creation, the following suggestions were given:

**Processes**

- Marketing and Communication: “Fundraising processes require investment in marketing and public relations.” (NPO1); “Marketing and communication processes

should be considered in the scope of fundraising, not only regarding financial funds, but also for the engagement with communities, partners, volunteers, and other relevant stakeholders for the NPO to have resources.” (NPO4).

- Fundraising: “Fundraising is a process that is fundamental for NPOs, without it we do not live.” (NPO4); “We have adequate processes for financial resources management, the problem is the reduced budget.” (NPO7); “The problem is not financial management, we manage our resources effectively, the problem is access to sufficient funds.” (NPO8).

### **Determinants**

- Credibility: “Credibility is currently a challenge for NPOs, since society is tending to have negative perceptions on the importance of the work being developed, and on the ways that resources are being spent. We are facing a crisis in the availability of volunteers.” (NPO4).
- Sociopolitical context: “Political forces and politicized social groups impact humanitarian action and ESG-related activities.” (NPO8).
- Ethical values: “Ethics can be challenging because of corruption and embezzlement in partnerships” (NPO5).
- Public Funding: “Many NPOs are considerably dependent on public fundings, so this is an important determinant of success” (NPO4).

Lastly, the interviewees final comments contribute to highlight the relevance of the identified sustainable value creation processes:

- Regarding Performance Measurement: “NPO’s products or services should be assessed considering the production process, monitoring the input and output of resources and energy” (NPO2); “NPOs should make the global balance of their environmental and social impacts, assuring that environmental costs are overcome by positive social impacts” (NPO3).

- Regarding Human Capital Development: “NPOs should consider how they are improving the capacity of people to act more sustainably” (NPO3).
- Regarding Planning and Control: “When planning community interventions, it is very important to promote the community ownership of the project, thus ensuring its continuity after the NPO’s intervention” (NPO6).

## **CHAPTER 3: Developing a Diagnostic Tool**

### **3.1 Methodology**

From the information gathered in the literature review and interviews, a quantitative questionnaire was designed, with two intended purposes: 1) to collect standardized data from a large sample of NPOs; 2) to serve as the first point of interaction in the projected AI tool, for a detailed diagnose that will inform both the NPOs themselves and the potential sustainable value creation actions.

The questionnaire is divided into three main sections. Section A collects general information regarding the identity and organizational structure of the NPO, Section B measures the determinants identified in the literature review, and Section C collects detailed information about the processes on each of the environment, social and governance dimensions.

#### **Section A**

To provide foundational information, the first section includes Identity, Structure, Scope and Funding.

The identity of non-profit organizations is often expressed by their mission statement, provided by a short answer open question, along with multiple choice options for the main area of action: climate and environment, social equity, health and well-being, education and capacity building, emergency response and humanitarian aid and advocacy, with an additional option to specify areas that are not mentioned.

Structure variables are used to determine the organization age: categorized in 0-3 years old, 4-10 years old, and 11+ years old; the annual budget: ranging from under 20,000€ up to over 1,000,000€; the number of paid staff and volunteers: respectively from 0 (where its fully operated by volunteers) to over 50, and 51 to over 100; and its legal structure: trust non-profit association, foundation or cooperative/collective.

To determine the type of governance structure, four options were provided with detailed descriptions: Collective/non-hierarchical (strategic decisions are made by consensus of employees and/or volunteers. There is no traditional CEO or hierarchical board);

Board-governed with executive leadership (a legally constituted board of directors holds ultimate decision-making, while an executive team manages daily operations); Community-led (community representatives hold the highest decision-making power); and Partnership/network-based (the organization functions as a coalition or network where strategic direction is set collaboratively with partner organizations) (Diaz & Rees, 2020; Ferreira et al).

The organizational reach is defined by the geographic scope of operations: local/community, regional, national, international, and their focus captured by the primary beneficiary group, which includes categories such as general public, refugees and migrants, women and girls, environment and ecosystems, among others.

The funding profile classification follows established typologies in non-profit finance literature (Salamon & Anheier, 1999; Landoni & Trabucchi, 2024), including foundations, grants, government contracts, individual donations, corporate sponsorship/partnerships, earned income, and membership fees. The inclusion of perceived donor dependency reflects its documented impact on NPO autonomy and sustainability (Froelich, 1999; Anwar et al., 2020; Samad & Ahmad, 2022).

## **Section B**

This section assesses the perceived influence of internal and external factors on the organization's sustainability goals, and it includes every determinant found on the literature review. A five-point Likert scale was used for measurement, anchored as follows: 1) Hindering and Liability: actively impedes sustainability goals and/or is a drain on resources; 2) Hindering: creates challenges and resistance; 3) Neutral/Mixed: has no clear net effect; 4) Enhancing: creates consistent and reliable benefits; 5) Enhancing and key asset: a fundamental source of advantage and active contributor to positive impact.

The choice for an impact scale intends to create a simple and clear interpretation of how each one of the determinants might affect the organization's sustainability value creation. This section is also considered part of the identity perception, with the internal and external determinants shaping their mission operationalization.

## Section C

Lastly, and as the central analytical component of the questionnaire, this section refers to ESG Operational Processes through a maturity assessment. For these processes, a new differentiation was considered. Despite the organization's mission focusing on environmental or social aspects, governance is the transversal pillar that determines the NPO's operational performance. Considering this, governance processes are required answers, while environment and social remain dependent on the organization's intentions, main goals and relevant capacities, which justifies its optionality in a continuous effort to not overburden the respondent with unnecessary detail.

Each element is evaluated through a positive statement and its position in a maturity scale from one to five, with the following defining anchors: 1) Reactive: no formal processes, ad-hoc responses; 2) Developing: basic awareness, informal processes; 3) Defined: documented processes, consistent execution; 4) Managed: measured, analyzed, integrated systems; and 5) Optimizing: continuous improvement, predictive adaptation (Paulk et al., 1995). The reasoning behind the maturity model choice is detailed in the next chapter.

The governance processes evaluated are the ones identified in the literature review with the addition of *marketing and communication*, and *fundraising*, as complements from the interviews' results.

The different perspectives on social processes were differentiated and completed in accordance with the Global Reporting Initiative (GRI) G4 Guidelines (2013) and the minimum standards in humanitarian response from The Sphere Association Handbook (2018), and subsequently organized into two sub-groups considering their internal or external origins. This findings included: capacity development, health and safety, equitable compensation, communication, gender equality and diversity inclusion, community engagement, vulnerable groups identification, social inequalities, the "do no harm" principle, protection from sexual exploitation and abuse (PSEA), culture sensitivity, data privacy, human rights, accountability to affected populations (APP), competitiveness and corruption. It can be noticed that the social dimension was the one that had the most differentiation from corporate social requirements. This is particularly reflected in the addition of the layered section of external social responsibilities, in comparison to the all-embracing "community impact" criteria.

The environmental processes follow the same guidelines as the ones defined for corporate frameworks (Li et al., 2021) and include: carbon footprint, climate resilience, pollution prevention, energy and water, material purchase, waste management, ecosystem protection, transportation and compliance.

Every item evaluated in Section C is also considered for mission alignment and improvement motivation, by two yes/no statements: 1) This process has an impact on our mission; 2) Our organization is interested and motivated to improve this process. These ensure both the relevance of each item for their particular mission, and the realistic intention and capacity for acting on them.

### **3.1.1 Capability Maturity Model**

According to Albert et al. (2022), maturity models can serve as a strategic tool in NPOs by providing a structured framework for progress evaluation on a developmental path while offering clear recommendations for reaching the next performance levels. While a Likert scale was also considered, it offered a much more limited and superficial overview than the designed diagnostic tool required, therefore, the capability maturity model (CMM) was the scale chosen for the questionnaire's assessment. Maturity scales provide a clear progressive roadmap of the evolution of a capability across defined stages, while Likert scales only measure opinions or agreement intensity, which can lead to midpoint bias or inconsistent interpretation of the scale's intervals (Tanujaya et al., 2023). Overall, maturity scales are structured for development tracking through capability stages, which, more than the personal opinion of the respondent regarding the statements, is the ultimate objective of this diagnostic tool.

Drawing from the foundational maturity model theory of Paulk et al. (1995), each descriptive statement is scored by a five level progression model: level 1 (Initial/Ad-hoc): No formal processes, reactive approaches; level 2 (Developing/Repeatable): Basic processes documented, inconsistent application; level 3 (Defined/Established): Standardized processes, consistent implementation; level 4 (Managed/Integrated): Processes measured and controlled, data-driven decisions; level 5 (Optimizing/Leading): Continuous improvement, innovation, best practices. This method reduces ambiguity and allows for a calculation of an average score per dimension, and an overall maturity profile via a gap analysis, which aims for target

maturity levels. Rather than a static assessment, it shows the clear next step towards improvement, as the description of each level inherently outlines the capabilities necessary to progress. This makes maturity scales particularly adequate for NPO diagnostic, where the goal is actionable improvement planning, rather than attitude measurement.

### 3.1.2 Expert Panel Review Validation

To ensure content validity of the statements formulated for Section C of the diagnostic questionnaire, an expert panel review was conducted following the guidelines proposed by Polit and Beck (2006).

A purposive sample of six experts was invited to the panel, based on their areas of expertise as outlined in Table 4, to provide feedback on theoretical relevance and practical applicability of the processes' statements.

**Table 4:** *Expert's relevant fields*

Expert nº 1	Quality Management
Expert nº 2	Sustainability Management
Expert nº 3	Environmental Management
Expert nº 4	Sustainability Management
Expert nº 5	Humanitarian Action
Expert nº 6	Social Work

Experts were asked to rate each statement in a five-point scale regarding their relevance, as well as clarity and content, with the possibility for suggestions or commentaries in each point. In order to calculate the content validity index (CVI), a conservative approach was taken by recoding scores from one to three to 0 and four to five to 1, with an acceptable threshold of  $CVI \geq 0.83$  as per established benchmarks (Polit and Beck, 2006; Polit et al., 2007).

The average results for scale-level content validity index (S-CVI/Ave) per sub-section were as follow: Environmental = 0.93, Social, Internal = 0.93, Social, External = 0.97, and Governance = 1, with a total average of S-CVI/Ave = 0.95 for the totality of the statements,

with no item-level content validity index (I-CVI) below 0.83. The detailed data can be seen in Appendix C.

Although the results were above the validation threshold, further evaluations were considered for the improvement of the statements. Out of the 46 items, 19 had a score of 3 in the clarity criteria (19 items from Expert n°4, with 3 equivalent items from Expert n°5). This feedback, in addition to specific clarity suggestions from all six Experts, was applied to the statements that had multiple notations, by wording simplification and the improvement of grammatical fluency, in some cases adopting the experts' suggested phrasing.

Overall, there was high congruence between experts, and only one item was subtracted after being integrated into a previous statement to avoid redundancy. The process resulted in a revised version of Section C of the questionnaire, with 45 processes' statements for maturity evaluation. The final table of domains and respective statements can be found in Appendix A, and the full, revised, questionnaire can be found in Appendix B.

Experts' participation was voluntary, consensual, and confidentiality was maintained throughout the reporting process.

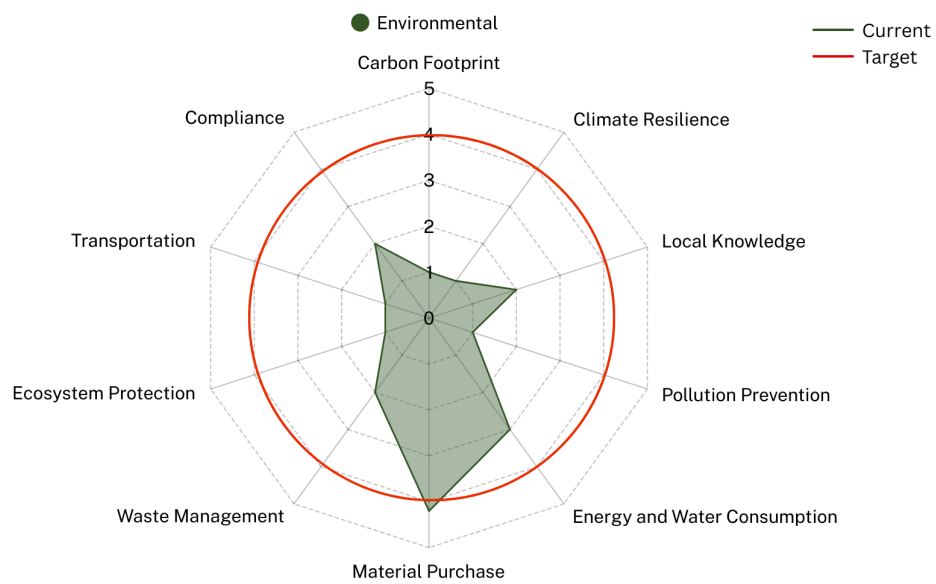
### **3.2 Simulation and Illustrative Application**

For the purpose of demonstrating the potential application of the diagnostic questionnaire developed and validated in the previous chapters, a simulation was run for an hypothetical NPO assessment. This step does not mean to make empirical claims, but rather to illustrate how the diagnostic tool can be operationalized to generate visual analytics in the form of radar and sorted bar charts. Visual illustrations are often used to communicate maturity model applications, and are particularly useful when combining different types of representations (Mettler and Rohner, 2009).

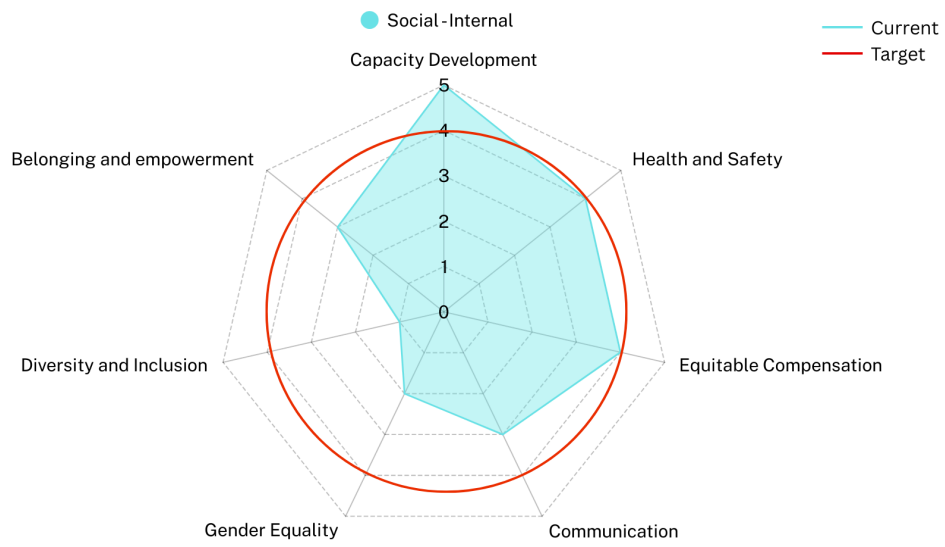
Therefore, the simulation is presented in a radar chart (Figures 7 to 10) and a sorted bar chart (Figures 11 to 14) for each dimension - with the social dimension subdivided into *internal* and *external* for easier readability - with a target maturity level (Managed: measured, analyzed, integrated systems) demarcated in a red line. While the radar charts provide a fast visualization of the processes' overall positions, the sorted bars also allow for the highlighting of the items marked as *relevant impact* and *seeking improvement*, which can

facilitate the prioritization of improvement tasks. The target delimitation informs a gap analysis that will underline the clear next action required to advance the processes' maturity. Furthermore, this simulation can serve as a bridge between the research methods utilized in this thesis and its potential value for researchers, non-profit organizations and future AI applications.

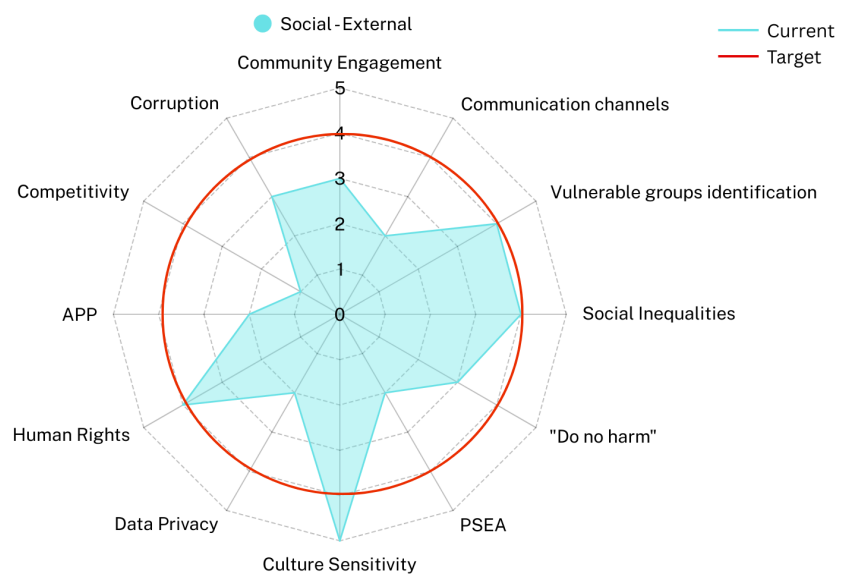
**Figure 7:** Radar chart - Environmental Processes



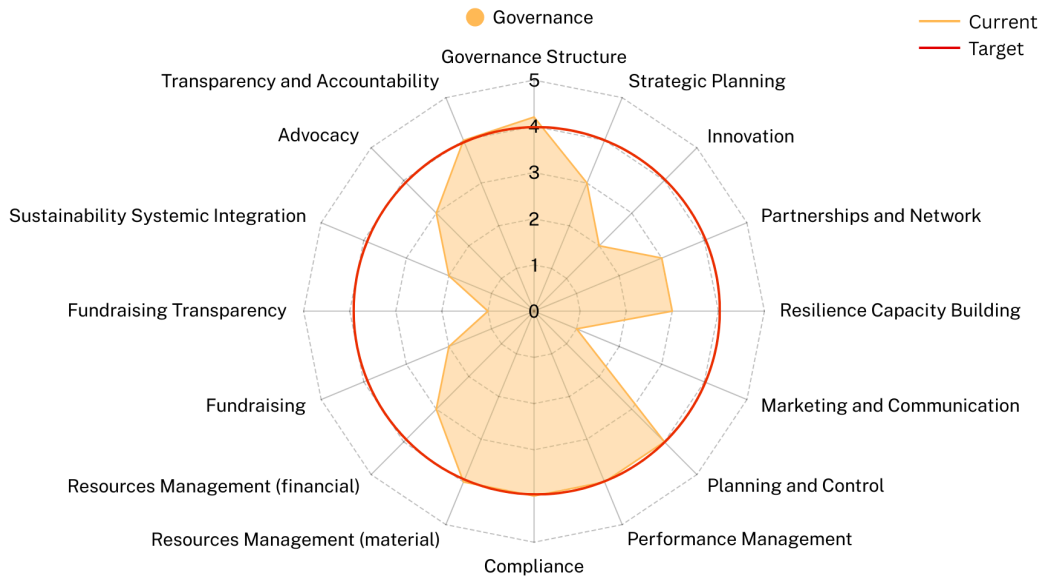
**Figure 8: Radar chart - Social Internal Processes**



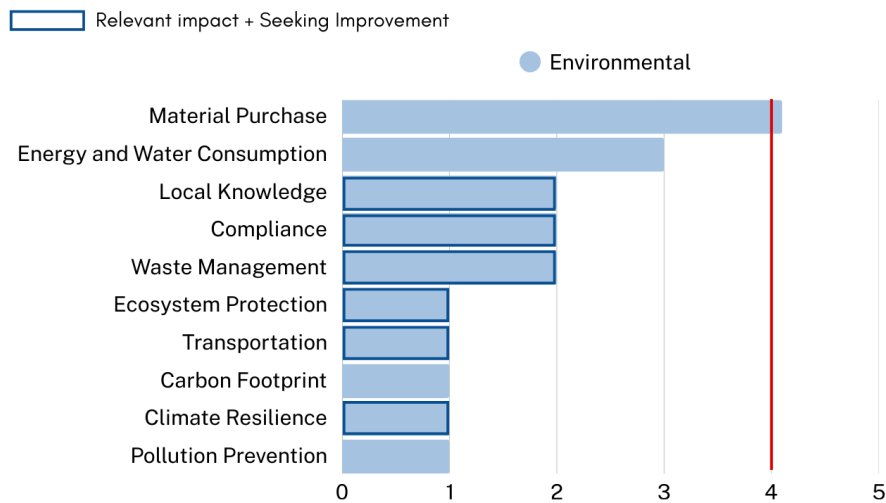
**Figure 9: Radar chart - Social External Processes**



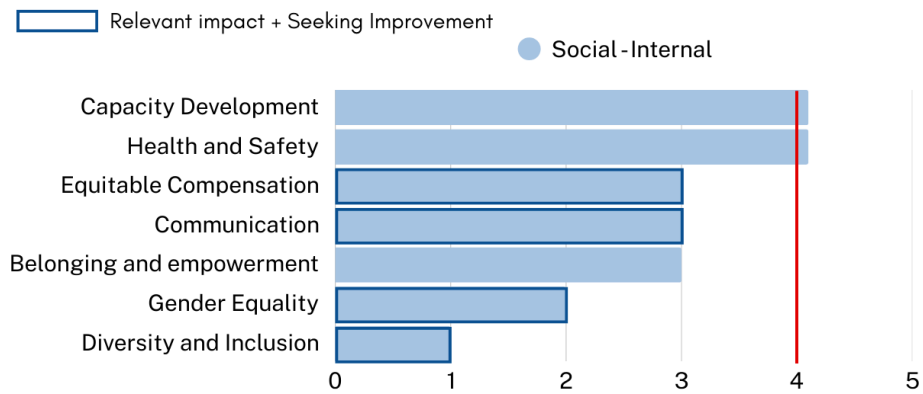
**Figure 10: Radar chart - Governance Processes**



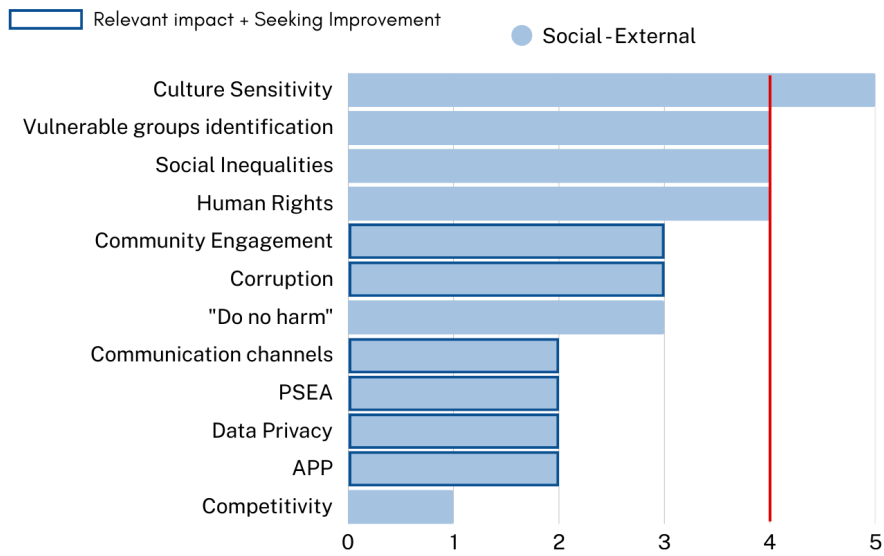
**Figure 11: Scored bar chart - Environmental Processes**



**Figure 12: Scored bar chart - Social Internal Processes**



**Figure 13: Scored bar chart - Social External Processes**



**Figure 14: Scored bar chart - Governance Processes**



## DISCUSSION

This research was conducted to address the persistent gap between theory and practice when it comes to sustainability goals in non-profit organizations. In particular, the lack of tailored management resources that could enable NPOs to diagnose and strategically enhance sustainable value creation through ESG integration. The integration of findings from the different methodology approaches has created a layered and interconnected picture for understanding how the correct identification of processes and determinants, together with the insights from field actors, can inform the design of a sustainability management tool.

The first crucial outcome of the research was the empirically grounded identification of the key processes and determinants that have a relevant impact in sustainable value creation for NPOs. The resulting items show integrated characteristics and symbiosis in most processes, such as the interlink between partnerships, financial resources and human capital development: successful partnerships and networks can provide multiple sustained funding as well as opportunities for knowledge sharing towards staff capacity development, allowing for a more efficient financial management, while in return an enhanced human capital capacitation can facilitate successful partnerships and network development (Fontana and Pisalyaput, 2023; Kassem et al., 2020; Liu and Jia, 2022). This interdependency suggests that sustainability in NPOs shouldn't only be studied through fixed funding and social outcomes (Ceptureanu et al., 2017; Iwu et al., 2015), but considered as an ever evolving dynamic between structural, relational, and strategic variables (Singh and Mthuli, 2021). These findings are in agreement with the dimensions of the maturity model for sustainability management in non-profit contexts proposed by Albert et al. (2022), and add a mutually conditioning perspective of processes that often creates challenges and compromising decision making in NPOs.

The validation from interviews with NPO's representatives provided a confirmation of the framework's relevance, with the paramount identification of *financial resource management* as the most challenging process, and *donor dependency* as the most hindering determinant, in agreement with the literature (Samad and Ahmad, 2022). However, as it can be seen in the commentaries from the interviews presented in the Results Analysis chapter, the qualitative feedback highlights an important nuance: the main issue is not poor resource management, but a fundamental lack of adequate funds to manage in the first place. This has relevant implications, not only for the organization's resilience strategies (Marren et al. 2024), but also

for their sustainability integration capacity, forcing NPOs to balance economic viability with sustainability development.

The interviews also provided valuable complementation, such as the addition of Fundraising and Marketing as highly consequential processes, or Socio-Political Context as critical determinant. Also important to note is how similar terminology between for-profit and non-profit language can have different meanings. For example, while in the for-profit context the term “value” mostly refers to financial returns, in NPOs it is tightly linked to mission fulfilment and social impact. This reinforces why despite having parallels between both sectors, such as the importance of leadership commitment, stakeholder engagement, communication capacity, and organizational trust (Fonseca et al., 2021), corporate-derived ESG tools can be misaligned with NPOs’ realities. In this way, the interviews provided valuable details to ensure the relevancy and pertinence of processes and determinants to be used in a potential management tool.

The translation of a conceptual framework into a structured diagnostic tool involved the consideration of design choices that would be the most efficient to the research gap. The decision to employ a capability maturity model was central to the practicality of the questionnaire. This choice is in agreement with Albert et al. (2022), noting the progressional nature of this model over mere disclosure reports, and it was later validated by agreeing commentaries from the expert panel review. The high S-CVI/Ave results (= 0.95) - above the recommended  $\geq 0.83$  cut-off (Polit and Beck, 2006; Polit et al., 2007) - indicate that the items chosen were relevant for their purpose, and the strong consensus between experts regarding statement clarity/wording made it possible to solidly improve each of the items. This step moved the questionnaire from a theoretical informed draft into one with established content validity.

An important observation can be made regarding the need to considerably expand the Social dimension items to match NPOs operational standards (Sphere Association, 2018), particularly by the creation of a separate “external social impact” sub-section. This can be explained by two factors: on one side, the direct nature of social-driven NPOs’ missions and the importance of community engagement as an integral part NPO’s resilience and mission accomplishment (Díaz-Perdomo et al., 2021), and, on the other side, the bigger focus from for-profit into the Environmental dimension driven by external pressures. While regulatory and shareholder are the main influence for ESG adoption in corporate environments (Martiny et al., 2024), the interviews clearly showed that external pressures rarely play a role when it

comes to sustainability intents (six out of eight interviewees mentioned no external pressures, while the two positive responses were regarding partners and donors, and community legitimacy).

Lastly, the illustrative simulation, using the validated questionnaire, serves as a proof-of-concept, demonstrating its potential application and quick value return. The juxtaposition of the target level with the current dimension profile operationalizes the maturity model functions (Mettler & Rohner, 2009), presenting with clarity the next step to be taken by the NPO. This simulation shows a possible way to communicate complex diagnostic data into an immediate visual prioritisation for action, showcasing its potential to bridge the human resources capacity gap in NPOs (Pavaloaia et al., 2017), or eventual further development towards AI applications.

## CONCLUSION

This thesis was guided by the central research question: *How can NPOs enhance sustainable value creation through the integration of Environmental, Social and Governance (ESG) dimensions?* Through a sequential mixed-methods approach, the general objective - to develop a diagnostic and management tool (with possible AI functionalities) that enables non-profit organizations to improve their sustainable value creation through the strategic integration of Environmental, Social, and Governance dimensions - aimed to bridge a sectorial gap into a validated, actionable solution. For that purpose, the following specific objectives were reached:

- *Contextualize the application of ESG principles within the particular characteristics of non-profit organizations*

It was clarified how the ESG framework, designed for corporate contexts, requires significant adaptation to mission-driven and resource-constrained characteristics, and its potential practical applications in sustainable value creation for non-profit realities.

- *Identify the key processes and determinants that drive sustainable value creation in NPOs*

A literature review identified five domains of processes and seven domains of determinants, with 17 and 15 subcategories respectively, highlighting the operational interconnection within NPOs' structures.

- *Validate the findings of processes and determinants with actors on the field*

Eight interviews were conducted for validation and complementation of the literature review's findings, resulting in a detailed and grounded list of processes and determinants that have direct impact on the field.

- *Design a structured diagnostic tool (questionnaire) for assessing ESG maturity in NPOs*

A structured diagnostic questionnaire using a maturity model framework was created, from which a subsequent expert panel review achieved  $S-CVI/Ave = 0.95$ , concluding in a test simulation that demonstrated how this tool can translate diagnosis into strategic planning.

Theoretically, the implications of this research contribute to a contextualized adaptation of ESG dimensions to the non-profit sector, establishing its integrated and multidimensional nature, and it provides substantiated guidelines for NPOs to systematize their sustainability development while maintaining organizational resilience. In terms of practical applications, it delivers a management prototype that can equip NPOs with a self-assessment roadmap without further draining of their limited human and financial resources, and establishes the primary data-generation foundation for the subsequent AI application phase of the ESG4NPO project.

The limitations of this thesis are mostly defined by its scope. The primary limitation, as noted in the introduction, is that the diagnostic tool remains a prototype validated in design, but not in use. Further operational properties require testing through large-scale piloting with a diverse population of NPOs - which will be conducted during the next stage of the ESG4NPO project. The literature review purposely applied limitations to the scope of analysed studies - timeframe restriction, quality filtering and restriction to studies reporting empirical data. Furthermore, while achieving valuable insights, the interview sample was limited in size (eight representatives) and comprised only of leadership perspectives, which can considerably limit an holistic understanding of the organization's challenges and operational realities.

From the reflections in the discussion chapter, some future research pathways are suggested: 1) Validation and complementation of processes and determinants for sustainable value creation with employees and volunteers from different levels within the organization; 2) Studies on the interconnections and implications of the lowest and highest-performing processes and the most supporting and hindering determinants for sustainable value creation in NPOs; 3) Large-scale testing by deploying the diagnostic questionnaire to a broad and varied sample of NPOs; 4) AI integration and development, as envisioned by the ESG4NPO project; 5) Longitudinal studies to evaluate the tool's efficacy in ESG maturity improvements over time.

After the foundational start built by this thesis, the next essential step is to test and evaluate in the field, closing the gap between research and practical impact.



## BIBLIOGRAPHY

- Aboramadan, M., Kundi, Y. M., & Becker, A. (2022). Green human resource management in nonprofit organizations: Effects on employee green behavior and the role of perceived green organizational support. *Personnel Review*, 51(7), 1788–1806.  
<https://doi.org/10.1108/PR-02-2021-0078>
- Ahmadsimab, A., & Chowdhury, I. (2021). Managing tensions and divergent institutional logics in firm–NPO partnerships. *Journal of Business Ethics*, 168(4), 651–670.  
<https://doi.org/10.1007/s10551-019-04265-x>
- Al-dmour, H., Hadad, H., & Al-dmour, R. (2023). The impact of the adoption of green marketing on corporate performance of non-profitable organizations: An empirical study. *Social Responsibility Journal*, 19(1), 1–19. <https://doi.org/10.1108/SRJ-03-2021-0114>
- Al-Tabbaa, O., Lopez, C., Konara, P., & Leach, D. (2021). Nonprofit organizations and social-alliance portfolio size: Evidence from website content analysis. *Industrial Marketing Management*, 93, 147–160. <https://doi.org/10.1016/j.indmarman.2020.12.006>
- Albert, M., Bauche, X., Closmann, L., Eichholz, T., & Preis, K. (2022). Sustainability management in non-governmental organisations: Development of a maturity model. *International Journal of Innovation and Sustainable Development*, 16(3-4), 425–460.  
<https://doi.org/10.1504/IJISD.2022.123905>
- Alnamrouti, A., Rjoub, H., & Ozgit, H. (2022). Do strategic human resources and artificial intelligence help to make organisations more sustainable? Evidence from non-governmental organisations. *Sustainability*, 14(12), Article 7327. <https://doi.org/10.3390/su14127327>
- Anwar, M., Khattak, M. S., Popp, J., Meyer, D. F., & Máté, D. (2020). The nexus of government incentives and sustainable development goals: Is the management of resources the solution to non-profit organisations? *Technological and Economic Development of Economy*, 26(6), 1284–1310. <https://doi.org/10.3846/tede.2020.13404>
- Asogwa, I. E. (2023). Uptake of sustainability reporting adoption by non-governmental organisations: An agenda for policy and practice. *Journal of Cleaner Production*, 388, Article 135842.  
<https://doi.org/10.1016/j.jclepro.2022.135842>
- Barbosa, A. de S., Crispim, M. C., da Silva, L. B., da Silva, J. M. N., Barbosa, A. M., & Morioka, S. N. (2024). How can organizations measure the integration of environmental, social, and governance (ESG) criteria? Validation of an instrument using item response theory to capture workers' perception. *Business Strategy and the Environment*, 33(2), 1060–1079.  
<https://doi.org/10.1002/bse.3675>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bauer, P., & Greiling, D. (2024). Greening Austrian social service and healthcare non-profits. *Heliyon*, 10(2), Article e23767. <https://doi.org/10.1016/j.heliyon.2023.e23767>

- Brimhall, K. C. (2021). Are we innovative? Increasing perceptions of nonprofit innovation through leadership, inclusion, and commitment. *Review of Public Personnel Administration*, 41(1), 3–24. <https://doi.org/10.1177/0734371X19857455>
- Buijs, A. E., de Koning, S., Mattijssen, T. J. M., Smeding, I. W., Smits, M. J., & Steins, N. A. (2024). Civil society for sustainable change: Strategies of NGOs and active citizens to contribute to sustainability transitions. *Journal of Environmental Planning and Management*, 67(13), 2863–2884. <https://doi.org/10.1080/09640568.2023.2205571>
- Cabrera-Luján, S. L., Sánchez-Lima, D. J., Guevara-Flores, S. A., Millones-Liza, D. Y., García-Salirrosas, E. E., & Villar-Guevara, M. (2023). Impact of corporate social responsibility, business ethics and corporate reputation on the retention of users of third-sector institutions. *Sustainability*, 15(3), Article 1781. <https://doi.org/10.3390/su15031781>
- Chandrasekhar, D., García, I., & Khajehei, S. (2022). Recovery capacity of small nonprofits in post-2017 hurricane Puerto Rico. *Journal of the American Planning Association*, 88(2), 206–219. <https://doi.org/10.1080/01944363.2021.1938637>
- Chaves-Avila, R., & Gallego-Bono, J. R. (2020). Transformative policies for the social and solidarity economy: The new generation of public policies fostering the social economy in order to achieve sustainable development goals. The European and Spanish cases. *Sustainability*, 12(10), Article 4059. <https://doi.org/10.3390/su12104059>
- Choi, D., Lee, K. H., & Park, J. (2023). What makes NPOs sustainable in an emergency? Examining the effect of person-organization fit and generation on volunteer activities during the COVID-19 pandemic. *Risk Management and Healthcare Policy*, 16, 779–791. <https://doi.org/10.2147/RMHP.S408608>
- Clifton, N., Kyaw, K. S., Liu, Z., & Walpole, G. (2024). An empirical study on public sector versus third sector circular economy-oriented innovations. *Sustainability*, 16(4), Article 1650. <https://doi.org/10.3390/su16041650>
- Cotterlaz-Rannard, G., & Ferrary, M. (2025). Exploring the virtuous circle of societal value creation and capture by non-profit organizations from a Bourdieusian perspective. *Public Management Review*, 27(9), 2172–2193. <https://doi.org/10.1080/14719037.2024.2402373>
- Cuckston, T. (2022). Accounts of NGO performance as calculative spaces: Wild animals, wildlife restoration and strategic agency. *Critical Perspectives on Accounting*, 84, Article 102374. <https://doi.org/10.1016/j.cpa.2021.102374>
- Dellmuth, L. M., Petersson, M. T., Dunn, D. C., Boustany, A., & Halpin, P. N. (2020). Empowering NGOs? Long-term effects of ecological and institutional change on regional fisheries management organizations. *Global Environmental Change*, 65, Article 102197. <https://doi.org/10.1016/j.gloenvcha.2020.102197>
- Deng, Y., & O'Brien, K. J. (2021). Value clashes, power competition and community trust: Why an NGO's earthquake recovery program faltered in rural China. *The Journal of Peasant Studies*, 48(5), 1187–1206. <https://doi.org/10.1080/03066150.2019.1690470>

- Díaz-Perdomo, Y., Álvarez-González, L. I., & Sanzo-Pérez, M. J. (2021). A way to boost the impact of business on 2030 United Nations sustainable development goals: Co-creation with non-profits for social innovation. *Frontiers in Psychology, 12*, Article 719907. <https://doi.org/10.3389/fpsyg.2021.719907>
- Díaz, D. A., & Rees, C. J. (2020). Checks and balances? Leadership configurations and governance practices of NGOs in Chile. *Employee Relations, 42*(6), 1159–1177. <https://doi.org/10.1108/ER-08-2019-0327>
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147–160. <https://doi.org/10.2307/2095101>
- Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research, 13*(1), 215–246. <https://doi.org/10.1007/s40685-019-0085-7>
- Ely, T. L., Katz, J., & Calabrese, T. D. (2023). Endowment building and use by nonprofits: An integration of theory and practice. *Nonprofit Management and Leadership, 34*(2), 317–343. <https://doi.org/10.1002/nml.21578>
- Esposito, P., & Antonucci, G. (2022). NGOs, corporate social responsibility and sustainable development trajectories in a new reformative spectrum: ‘New wine in old bottles or old wine in new bottles?’ *Corporate Social Responsibility and Environmental Management, 29*(3), 609–619. <https://doi.org/10.1002/csr.2223>
- Fagbemi, T., Dosumu, O., Adigun, R., Nakpodia, F., & Sakariyahu, R. (2024). Resilience and adaptation of third sector organizations (TSOs) during crisis situations: Insights from a West African economy. *Financial Accountability & Management, 40*(1), 89–115. <https://doi.org/10.1111/faam.12408>
- Ferreira, A., Santos, C., Inácio, H., Costa, A. J., Bandeira, A. M., Tomé, B., Joaquim, C., Góis, C., Curi, D., Meira, D., Azevedo, G., Jesus, M., Teixeira, M. G., Monteiro, P., Duarte, R., & Marques, R. P. (2022). Accountability in the social economy: The case of private social solidarity institutions. *Sustainability, 14*(3), Article 1147. <https://doi.org/10.3390/su14031147>
- Fontana, E., & Pisalyaput, N. (2023). Understanding the importance of farmer–NGO collaboration for sustainability and business strategy: Evidence from the coffee supply chain. *Business Strategy and the Environment, 32*(5), 2715–2735. <https://doi.org/10.1002/bse.3266>
- Forkuor, D., & Korah, A. (2023). NGOs and sustainable rural development: Experience from Upper West Region of Ghana. *Environment, Development and Sustainability, 25*(1), 351–374. <https://doi.org/10.1007/s10668-021-02057-w>
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Freeman, R. E., Dmytriiev, S. D., & Phillips, R. A. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of Management, 47*(7), 1757–1770. <https://doi.org/10.1177/0149206321993576>

- Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. A. (2020). A stakeholder theory perspective on business models: Value creation for sustainability. *Journal of Business Ethics*, 166(1), 3–18. <https://doi.org/10.1007/s10551-019-04112-z>
- Friedman, A. L., & Miles, S. (2006). *Stakeholders: Theory and practice*. Oxford University Press.
- Geradine, K., & McWha-Hermann, I. (2024). In search of decent work: Human resource managers as custodians of fair reward in international NGOs. *German Journal of Human Resource Management*. Advance online publication. <https://doi.org/10.1177/23970022241231838>
- Global Reporting Initiative. (2013). *G4 sustainability reporting guidelines: Reporting principles and standard disclosures*. <https://www.globalreporting.org>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
- Jaki, A., & Siuta-Tokarska, B. (2019). New imperative of corporate value creation in face of the challenges of sustainable development. *Entrepreneurial Business and Economics Review*, 7(2), 63–81. <https://doi.org/10.15678/EBER.2019.070204>
- Kassem, H. S., Aljuaid, M., Alotaibi, B. A., & Ghazy, R. (2020). Mapping and analysis of sustainability-oriented partnerships in non-profit organizations: The case of Saudi Arabia. *Sustainability*, 12(17), Article 7178. <https://doi.org/10.3390/su12177178>
- Kassem, H. S., Bagadeem, S., Alotaibi, B. A., & Aljuaid, M. (2021). Are partnerships in nonprofit organizations being governed for sustainability? A partnering life cycle assessment. *PLOS ONE*, 16(3), Article e0249228. <https://doi.org/10.1371/journal.pone.0249228>
- Khan, N. A., Choudhury, J. K., Rashid, A. Z. M. M., Siddique, M. R. H., & Sinha, K. (2022). Co-management practices by non-government organizations (NGOs) in selected coastal forest zones of Bangladesh: A focus on sustainability. *Sustainability*, 14(22), Article 14885. <https://doi.org/10.3390/su142214885>
- Landoni, P., & Trabucchi, D. (2024). Non-profit and hybrid organizations as multi-sided platforms: Insights from the analysis of sustainability models. *European Journal of Innovation Management*, 27(2), 384–407. <https://doi.org/10.1108/EJIM-08-2023-0641>
- Leardini, C., Rossi, G., & Landi, S. (2020). Organizational factors affecting charitable giving in the environmental nonprofit context. *Sustainability*, 12(21), Article 8947. <https://doi.org/10.3390/su12218947>
- Lebec, L., & Dudau, A. (2024). From the inside looking out: Towards an ecosystem paradigm of third sector organizational performance measurement. *Public Management Review*, 26(8), 1988–2013. <https://doi.org/10.1080/14719037.2023.2238724>
- Li, T.-T., Wang, K., Sueyoshi, T., & Wang, D. D. (2021). ESG: Research progress and future prospects. *Sustainability*, 13(21), Article 11663. <https://doi.org/10.3390/su132111663>

- Liu, Z., & Jia, H. (2022). What drives the development and sustainable growth of cultural nonprofits—Chinese province-level evidence. *Sustainability*, *14*(9), Article 5139. <https://doi.org/10.3390/su14095139>
- Lüdeke-Freund, F., Rauter, R., Pedersen, E. R. G., & Nielsen, C. (2020). Sustainable value creation through business models: The what, the who and the how. *Journal of Business Models*, *8*(3), 62–90.
- Ma, Z., Li, C., Xue, Y., Nduneseokwu, C. K., Wang, X., & Harder, M. K. (2021). From pioneer to promotion: How can residential waste diversion non-profit organizations (NPOs) best co-evolve in modern China? *Environmental Challenges*, *3*, Article 100055. <https://doi.org/10.1016/j.envc.2021.100055>
- Mähönen, J. (2020). Integrated reporting and sustainable corporate governance from a European perspective. *Accounting, Economics, and Law: A Convivium*, *10*(2), Article 20180048. <https://doi.org/10.1515/acl-2018-0048>
- Manninen, K., Laukkanen, M., & Huiskonen, J. (2023). Framework for sustainable value creation: A synthesis of fragmented sustainable business model literature. *Management Research Review*, *47*(1), 99–122. <https://doi.org/10.1108/MRR-03-2022-0177>
- Martiny, A., Tagliatalata, J., Testa, F., & Iraldo, F. (2024). Determinants of environmental social and governance (ESG) performance: A systematic literature review. *Journal of Cleaner Production*, *456*, Article 142213. <https://doi.org/10.1016/j.jclepro.2024.142213>
- Mettler, T., & Rohner, P. (2009). Situational maturity models as instrumental artifacts for organizational design. In V. Vaishnavi & S. Purao (Eds.), *Proceedings of the 4th International Conference on Design Science Research in Information Systems and Technology* (Article 22, pp. 1–9). ACM Press. <https://doi.org/10.1145/1555619.1555649>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., Antes, G., Atkins, D., Barbour, V., Barrowman, N., Berlin, J. A., Clark, J., Clarke, M., Cook, D., D'Amico, R., Deeks, J. J., Devereaux, P. J., Dickersin, K., Egger, M., Ernst, E., Gøtzsche, P. C., Grimshaw, J., Guyatt, G., Higgins, J., Ioannidis, J. P. A., Kleijnen, J., Lang, T., Magrini, N., McNamee, D., Moja, L., Mulrow, C., Napoli, M., Oxman, A., Pham, B., Rennie, D., Sampson, M., Schulz, K. F., Shekelle, P. G., Tovey, D., & Tugwell, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLOS Medicine*, *6*(7), Article e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Moldavanova, A. V., & Wright, N. S. (2020). How nonprofit arts organizations sustain communities: Examining the relationship between organizational strategy and engagement in community sustainability. *The American Review of Public Administration*, *50*(3), 244–259. <https://doi.org/10.1177/0275074019884316>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., Shamseer, L., Tetzlaff, J.M., Akl, E.A., Brennan, S.E., Chou, R., Glanville, J., Grimshaw, J.M., Hróbjartsson, A., Lalu, M.M., Li, T., Loder, E.W., Mayo-Wilson, E., McDonald, S., McGuinness, L.A., Stewart, L.A., Thomas, J., Tricco, A.C., Welch, V.A., Whiting, P., Moher, D.

- (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *International Journal of Surgery*, 88, Article 105906. <https://doi.org/10.1016/j.ijso.2021.105906>
- Park, Y. J., & Matkin, D. S. T. (2021). The demise of the overhead myth: Administrative capacity and financial sustainability in nonprofit nursing homes. *Public Administration Review*, 81(4), 543–557. <https://doi.org/10.1111/puar.13269>
- Paulk, M. C., Weber, C. V., Curtis, B., & Chrissis, M. B. (1995). *The capability maturity model: Guidelines for improving the software process*. Addison-Wesley.
- Pesqueira, L., Glasbergen, P., & Leroy, P. (2020). Framing contests in global NGO networks: How controversies enable and challenge collaboration and action. *Nonprofit Management and Leadership*, 30(3), 423–444. <https://doi.org/10.1002/nml.21395>
- Pigatto, G., Cinquini, L., Tenucci, A., & Dumay, J. (2023). Disclosing value creation in integrated reports according to the six capitals: A holistic approach for a holistic instrument. *Sustainability Accounting, Management and Policy Journal*, 14(7), 90–123. <https://doi.org/10.1108/SAMPJ-11-2021-0493>
- Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health*, 29(5), 489–497. <https://doi.org/10.1002/nur.20147>
- Pratici, L., Salvatore, F. P., Fanelli, S., Zangrandi, A., & Milone, M. (2024). Using ESG paradigm as a basis for social reporting in nonprofit organizations: Evidence from cases in healthcare. *Management Decision*, 63(2), 586–609. <https://doi.org/10.1108/MD-10-2023-2012>
- Richardson, S., Kelly, S. J., & Gillespie, N. (2023). How can nonprofit boards innovate for growth? An integrative-systematic review. *Nonprofit Management and Leadership*, 34(1), 35–58. <https://doi.org/10.1002/nml.21563>
- Rincon-Roldan, F., & Lopez-Cabrales, A. (2021). Ethical values in social economy for sustainable development. *Annals of Public and Cooperative Economics*, 92(4), 705–729. <https://doi.org/10.1111/apce.12300>
- Samara, A., Sweis, R. J., Tarawneh, B., Albalkhy, W., Sweis, G., & Alhomsy, S. (2022). Sustainability management of international development projects by international non-governmental organizations: The case of INGOs working with refugees in Jordan. *International Journal of Construction Management*, 22(9), 1657–1666. <https://doi.org/10.1080/15623599.2020.1741490>
- Saraite-Sariene, L., Galán-Valdivieso, F., Alonso-Cañadas, J., & García-Tabuyo, M. (2022). The role of women's leadership in environmental NGOs' online accountability. *Online Information Review*, 46(4), 660–677. <https://doi.org/10.1108/OIR-09-2020-0403>
- Shahzad, S. K., Masudin, I., Zulfikarijah, F., Nasyiah, T., & Restuputri, D. P. (2024). The effect of supply chain integration, management commitment, and sustainable supply chain practices on non-profit organizations performance using SEM-FsQCA: Evidence from Afghanistan. *Sustainable Futures*, 8, Article 100282. <https://doi.org/10.1016/j.sfr.2024.100282>

- Shin, E. J., Kang, H. G., & Bae, K. (2020). A study on the sustainable development of NPOs with blockchain technology. *Sustainability*, *12*(15), Article 6158. <https://doi.org/10.3390/su12156158>
- Shoshany-Tavory, S., Trop, T., & Shiftan, Y. (2024). A cross-cultural study of nonprofit self-organized ridesharing. *Transportation*. Advance online publication. <https://doi.org/10.1007/s11116-022-10347-z>
- Slomski, V. G., de Britto, A. A., Slomski, V., de Vasconcelos, A. L. F., Lugoboni, L. F., & Imoniana, J. O. (2022). Compliance of management practices instituted in the third sector based on governance guidelines established by Brazilian organizations. *Sustainability*, *14*(9), Article 5366. <https://doi.org/10.3390/su14095366>
- Sphere Association. (2018). *The Sphere handbook: Humanitarian charter and minimum standards in humanitarian response* (4th ed.). Practical Action Publishing. <https://spherestandards.org/handbook>
- Sultana, S., Zulkifli, N., & Zainal, D. (2018). Environmental, Social and Governance (ESG) and Investment Decision in Bangladesh. *Sustainability*, *10*(6), 1831. <https://doi.org/10.3390/su10061831>
- Tanujaya, B., Prahmana, R. C. I., & Mumu, J. (2023). Likert scale in social sciences research: Problems and difficulties. *FWU Journal of Social Sciences*, *16*(4), 89–101. <https://doi.org/10.51709/19951272/Winter2022/7>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, *14*(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- Triyanti, A., Dieperink, C., Hegger, D., Vu, T. T., Luu, T. T., Nguyen, D. C., & Nguyen, H. Q. (2024). Enhancing the role of International NGOs in promoting the implementation of ecosystem-based adaptation policies: Insights from an International Union for Conservation and Foundation of Netherlands Volunteers led project in the Vietnamese Mekong Delta. *Ecology and Society*, *29*(1), Article 31. <https://doi.org/10.5751/ES-14727-290131>
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. <https://sdgs.un.org/2030agenda>
- Valero-Amaro, V., Galera-Casquet, C., & Barroso-Méndez, M. J. (2021). Innovation orientation in the non-profit sector: Analysis of its impact on the performance of Spanish non-governmental development organizations. *Frontiers in Psychology*, *12*, Article 797621. <https://doi.org/10.3389/fpsyg.2021.797621>
- Vigoroso, L., Sorrenti, R., Cavallo, E., & Caffaro, F. (2023). Non-profit organizations as facilitators of the sustainable social innovation of firms: An Italian case study. *Sustainability*, *15*(10), Article 8058. <https://doi.org/10.3390/su15108058>
- Wolf, P., Harboe, J., Sudbrack Rothbarth, C., Gaudenz, U., Arsan, L., Obrist, C., & van Leeuwen, M. (2021). Non-governmental organisations and universities as transition intermediaries in sustainability transformations building on grassroots initiatives. *Creativity and Innovation Management*, *30*(3), 596–618. <https://doi.org/10.1111/caim.12425>

- Wright, N. S., & Reames, T. G. (2020). Unraveling the links between organizational factors and perceptions of community sustainability performance: An empirical investigation of community-based nongovernmental organizations. *Sustainability*, *12*(12), Article 4986. <https://doi.org/10.3390/su12124986>
- Ye, S., & Gong, X. (2021). Funding the present and the future: Drivers of NPO's financial sustainability. *Nonprofit Management and Leadership*, *32*(2), 197–218. <https://doi.org/10.1002/nml.21483>
- Yin, J. (2021). How multinational corporations and nonprofits collaborate for sustainability: Assessing social partnerships from China. *Sustainability Accounting, Management and Policy Journal*, *12*(6), 1289–1311. <https://doi.org/10.1108/SAMPJ-04-2020-0104>
- Zikargae, M. H., Woldaregay, A. G., & Skjerdal, T. S. (2023). A critical analysis of a local non-governmental organization community-based environment and forest development programs and its implication for sustainable development: Evidences of participatory environmental communication in Ethiopia. *African Identities*, *21*(4), 726–742. <https://doi.org/10.1080/14725843.2021.1965540>
- Zikargae, M. H., Woldearegay, A. G., & Skjerdal, T. (2022). Assessing the roles of stakeholders in community projects on environmental security and livelihood of impoverished rural society: A nongovernmental organization implementation strategy in focus. *Heliyon*, *8*(11), Article e10987. <https://doi.org/10.1016/j.heliyon.2022.e10987>

# Appendix A

## Process domains and diagnostic questionnaire statements

### Environmental

<b>Carbon Footprint</b>	Systems that track, report, and work to reduce carbon emissions and greenhouse gas footprint
<b>Climate Resilience</b>	Strategies to build resilience against extreme weather and changing climate patterns
<b>Local Knowledge</b>	Integration of environmental practices and local knowledge from host communities into response planning and design
<b>Pollution Prevention</b>	Measures to control and reduce air and water pollution from operations
<b>Energy and Water Consumption</b>	Measures to monitor and reduce energy and water consumption
<b>Material Purchase</b>	Practices to include environmental criteria in purchase decisions
<b>Waste Management</b>	Protocols and practices to minimize waste generation and ensure proper separation, recycling, and safe waste disposal
<b>Ecosystem Protection</b>	Protocols and practices to protect natural habitats, minimize ecosystem disruption, and promote sustainable land use
<b>Transportation</b>	Practices to manage and reduce the environmental impact of transportation activities
<b>Compliance</b>	Protocols and enforcement of environmental audits, maintenance of compliance systems, and environmental standards adherence

### Social Internal

<b>Capacity Development</b>	Skills and capacity development programs for employees and volunteers
<b>Health and Safety</b>	Establishment and enforcement of health and safety protocols for safe work environments
<b>Equitable Compensation</b>	Protocols to ensure fair and equitable compensation
<b>Communication</b>	Communication and feedback systems between management, employees and volunteers, including whistleblower protection
<b>Gender Equality</b>	Practices towards gender equality and women's representation in senior roles and leadership positions
<b>Diversity and Inclusion</b>	Diversity and inclusion protocols into hiring, promotion, and retention of people from minority groups (ethnicity, disability, LGBT+, etc.)
<b>Belonging and empowerment</b>	Practices that foster inclusion, belonging, respect, and empowerment within the organization

<b>Social</b>	External
---------------	----------

<b>Community Engagement</b>	Direct involvement of community members in program design, implementation, evaluation and decision-making
<b>Communication channels</b>	Communication channels and application of community feedback into program and operational improvement
<b>Vulnerable groups identification</b>	Processes to identify and prioritize the needs of vulnerable groups and persons at risk
<b>Social Inequalities</b>	Practices to reduce social inequities in the communities served
<b>"Do no harm"</b>	Analysis and mitigation of program impacts on local contexts, particularly regarding social tensions, inequalities, and market distortions
<b>Protection from Sexual Exploitation and Abuse (PSEA)</b>	Policies and procedures to protect vulnerable populations from exploitation, abuse, harassment, and sexual misconduct by staff or partners
<b>Culture Sensitivity</b>	Knowledge and respect for local culture, norms and power structures, avoiding the imposition of external values
<b>Data Privacy</b>	Systems to protect beneficiary data privacy in programs and operations
<b>Human Rights</b>	Promotion of human rights and social justice principles into organizational culture, program delivery and advocacy
<b>Accountability to affected populations (APP)</b>	Systems to ensure accountability to the communities served, including transparent feedback and response mechanisms
<b>Competitiveness</b>	Approach to cooperative rather than competitive operations with local businesses
<b>Corruption</b>	Anti-corruption protocols and practices in interactions with government actors, partners, and other external stakeholders

### Governance

<b>Governance Structure</b>	Governance structure support towards sustainability-oriented strategies
<b>Strategic Planning</b>	Delineation of sustainability goals, metrics, and resource allocation
<b>Innovation</b>	Identification, testing, and integration of innovative sustainability solutions
<b>Partnerships and Network</b>	Partnerships and networks's management for collective sustainability improvement
<b>Resilience Capacity Building</b>	Planning and risk management for organizational resilience building
<b>Marketing and Communication</b>	Communication strategies for reaching and engaging with target audiences.
<b>Planning and Control</b>	Planning and control systems for the execution of sustainability initiatives
<b>Performance Management</b>	Systems for measuring, analyzing, and evaluating sustainability performance
<b>Compliance</b>	Systems to ensure regulatory and standards compliance.

<b>Resources Management (financial)</b>	Processes for allocating financial resources toward strategic sustainability priorities.
<b>Resources Management (material)</b>	Processes for allocating material resources toward strategic sustainability priorities.
<b>Fundraising</b>	Fundraising activities for financial resilience and resource security
<b>Fundraising transparency</b>	Practices to ensure ethical and transparent fundraising.
<b>Sustainability Systemic Integration</b>	Integration of sustainability into organizational values, systems, and decision-making.
<b>Advocacy</b>	Advocacy processes towards sustainability policies and practices
<b>Transparency and Accountability</b>	Practices to ensure transparency and accountability of sustainability performance to relevant stakeholders

# Appendix B

## Diagnostic questionnaire

### Section A

This section asks for general information about your organization.

Please select the most accurate option.

STRUCTURE				
Organization's Age	Annual Budget	Nº of Paid Staff	Nº of Volunteers	Legal Structure
0-3 years <input type="checkbox"/>	Under 20,000€ <input type="checkbox"/>	0 (All Volunteers) <input type="checkbox"/>	0 <input type="checkbox"/>	Trust <input type="checkbox"/>
4-10 years <input type="checkbox"/>	20,000€ - 80,000€ <input type="checkbox"/>	1 to 5 <input type="checkbox"/>	1 to 10 <input type="checkbox"/>	Non-Profit Association <input type="checkbox"/>
11+ years <input type="checkbox"/>	80,000€ - 200,000€ <input type="checkbox"/>	6 to 20 <input type="checkbox"/>	11 to 50 <input type="checkbox"/>	Foundation <input type="checkbox"/>
	200,000€ - 1Million€ <input type="checkbox"/>	21 to 50 <input type="checkbox"/>	51 to 100 <input type="checkbox"/>	Cooperative/Collective <input type="checkbox"/>
	Over 1Million€ <input type="checkbox"/>	Over 50 <input type="checkbox"/>	Over 100 <input type="checkbox"/>	Other <input type="checkbox"/>

**Governance Structure:** Which of the following best describes your organization's primary model of governance?

<input type="checkbox"/>	<b>Collective/Non-Hierarchical</b>	Strategic decisions are made by consensus of staff and/or volunteers. There is no traditional CEO or hierarchical board
<input type="checkbox"/>	<b>Board-Governed with Executive Leadership</b>	A legally constituted Board of Directors holds ultimate decision-making, while an Executive team manages daily operations
<input type="checkbox"/>	<b>Community-Led</b>	Community representatives hold the highest decision-making power
<input type="checkbox"/>	<b>Partnership/Network-Based</b>	The organization functions as a coalition or network where strategic direction is set collaboratively with partner organizations.

**SCOPE**

Geographic Scope of Operations	Primary Beneficiary Group
Local/Community <input type="checkbox"/>	General Public <input type="checkbox"/>
Regional <input type="checkbox"/>	Refugees & Migrants <input type="checkbox"/>
National <input type="checkbox"/>	Children & Youth <input type="checkbox"/>
International <input type="checkbox"/>	Women & Girls <input type="checkbox"/>
	Environment & Ecosystems <input type="checkbox"/>
	Other Vulnerable Groups →

Elderly <input type="checkbox"/>
LGBTQAI+ <input type="checkbox"/>
People with disabilities <input type="checkbox"/>
Ethnic minorities <input type="checkbox"/>
HIV/AIDS or other chronic illnesses <input type="checkbox"/>
Institutionalized people <input type="checkbox"/>
Addictions <input type="checkbox"/>
Other <input type="checkbox"/>

**FUNDING**

Primary Source of Funding	Perceived Donor Dependency
Foundations <input type="checkbox"/>	Highly dependent (few sources) <input type="checkbox"/>
Grants <input type="checkbox"/>	Diversified <input type="checkbox"/>
Government Contracts <input type="checkbox"/>	Highly diversified <input type="checkbox"/>
Individual Donations <input type="checkbox"/>	
Corporate Sponsorship/Partnerships <input type="checkbox"/>	
Earned Income <input type="checkbox"/>	
Membership Fees <input type="checkbox"/>	





## Appendix C

### S-CVI Expert Panel Review Analysis

#### Environmental

	Expert n°1	Expert n°2	Expert n°3	Expert n°4	Expert n°5	Expert n°6	Experts in agreement	I-CVI
Statement 1	1	1	1	1	1	1	6	1
Statement 2	1	1	1	0	1	1	5	0.83
Statement 3	1	1	1	0	1	1	5	0.83
Statement 4	1	1	1	1	1	1	6	1
Statement 5	1	1	1	1	1	1	6	1
Statement 6	1	1	1	0	1	1	5	0.83
Statement 7	1	1	1	1	1	1	6	1
Statement 8	1	1	1	0	1	1	5	0.83
Statement 9	1	1	1	1	1	1	6	1
Statement 10	1	1	1	1	1	1	6	1
							<b>S-CVI/Ave</b>	0.93

#### Social, Internal

	Expert n°1	Expert n°2	Expert n°3	Expert n°4	Expert n°5	Expert n°6	Experts in agreement	I-CVI
Statement 1	1	1	1	0	1	1	5	0.83
Statement 2	1	1	1	1	1	1	6	1
Statement 3	1	1	1	0	1	1	5	0.83
Statement 4	1	1	1	1	1	1	6	1
Statement 5	1	1	1	1	1	1	6	1
Statement 6	1	1	1	0	1	1	5	0.83
Statement 7	1	1	1	1	1	1	6	1
Statement 8	1	1	1	1	1	1	6	1
							<b>S-CVI/Ave</b>	0.93

**Social, External**

	Expert n°1	Expert n°2	Expert n°3	Expert n°4	Expert n°5	Expert n°6	Experts in agreement	I-CVI
Statement 1	1	1	1	1	1	1	6	1
Statement 2	1	1	1	1	1	1	6	1
Statement 3	1	1	1	1	1	1	6	1
Statement 4	1	1	1	0	1	1	5	0.83
Statement 5	1	1	1	1	1	1	6	1
Statement 6	1	1	1	1	1	1	6	1
Statement 7	1	1	1	1	1	1	6	1
Statement 8	1	1	1	1	1	1	6	1
Statement 9	1	1	1	1	1	1	6	1
Statement 10	1	1	1	1	1	1	6	1
Statement 11	1	1	1	0	1	1	5	0.83
Statement 12	1	1	1	1	1	1	6	1
							<b>S-CVI/Ave</b>	0.97

**Governance**

	Expert n°1	Expert n°2	Expert n°3	Expert n°4	Expert n°5	Expert n°6	Experts in agreement	I-CVI
Statement 1	1	1	1	1	1	1	6	1
Statement 2	1	1	1	1	1	1	6	1
Statement 3	1	1	1	1	1	1	6	1
Statement 4	1	1	1	1	1	1	6	1
Statement 5	1	1	1	1	1	1	6	1
Statement 6	1	1	1	1	1	1	6	1
Statement 7	1	1	1	1	1	1	6	1
Statement 8	1	1	1	1	1	1	6	1
Statement 9	1	1	1	1	1	1	6	1
Statement 10	1	1	1	1	1	1	6	1
Statement 11	1	1	1	1	1	1	6	1
Statement 12	1	1	1	1	1	1	6	1
Statement 13	1	1	1	1	1	1	6	1
Statement 14	1	1	1	1	1	1	6	1
Statement 15	1	1	1	1	1	1	6	1
Statement 16	1	1	1	1	1	1	6	1
							<b>S-CVI/Ave</b>	1