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Influence of Local Development due to Entrepreneurship on
addressing International Sustainable Challenges.
A Case Study of São Tomé and Príncipe in Achieving the SDGs

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PhD in International Studies

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de Lisboa

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Agradecimento

Quatro anos, é o tempo suficiente para que um cipreste deixe de ser uma árvore discreta e frágil para se tornar numa mais firme, com raízes profundas e resistentes, e com uma copa que embora estreita e alongada, cresce em relevância e imponência no jardim que o acolhe. Contudo, esse cipreste, embora dependendo em grande parte de si mesmo, não cresce sozinho, é sustentado por inúmeros fatores e intervenientes que o ajudam a enfrentar as adversidades do tempo. Tal como o cipreste, também este trabalho começou como um simples desejo de explorar um tema e, ao fim de quatro anos, apresenta-se hoje como uma investigação concretizada e consolidada graças ao apoio de muitos.

A Deus, que foi como o sol que brilhou todos os dias, mantendo viva a esperança no propósito inicial e final deste esforço, e motivando para a caridade e a fé ao longo de todo o percurso.

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Agora, passados quatro anos, é chegada a hora de o cipreste dar frutos e oferecer a sua sombra, partilhando com todos os que dele precisem.

Totus Tuus

Resumo

Esta tese de doutoramento, desenvolvida no âmbito do programa de Estudos Internacionais, analisa de que forma o empreendedorismo local pode responder a desafios globais, em particular ao desenvolvimento sustentável, procurando identificar o papel dos agentes locais na resolução de problemas internacionais. Tendo como referência o caso de São Tomé e Príncipe, a investigação examina como a atividade empreendedora contribui para o cumprimento dos Objetivos de Desenvolvimento Sustentável (ODS), aprofundando o conhecimento sobre áreas prioritárias de intervenção e apoiando a Agenda 2030.

O estudo adota uma abordagem mista, combinando dados qualitativos e quantitativos obtidos através de um questionário aplicado a 100 empreendedores. A análise foi estruturada em torno das cinco dimensões dos ODS (pessoas, planeta, prosperidade, paz e parcerias), permitindo uma avaliação abrangente das contribuições do empreendedorismo para o desenvolvimento sustentável.

Os resultados mostram que os empreendedores em São Tomé e Príncipe apresentam desempenhos superiores em 33 dos 70 indicadores de proximidade (47%) alinhados com os ODS, sugerindo que a atividade empreendedora local pode situar-se acima da média nacional em várias dimensões. As respostas abertas geraram 726 tópicos associados aos 169 alvos dos ODS (média de 3,63 tópicos por indicador), fornecendo evidência adicional e revelando novos desafios e perspetivas.

O estudo destaca o potencial do empreendedorismo local para catalisar o progresso em direção aos ODS e identifica a redução da dependência externa como fator crítico para a sustentabilidade económica, social e ambiental. Conclui-se que ecossistemas empreendedores inclusivos e resilientes em contextos em desenvolvimento podem acelerar a sustentabilidade global, oferecendo recomendações políticas práticas e contribuindo para o debate académico.

Palavras-chave:

Empreendedorismo local; Objetivos de Desenvolvimento Sustentável (ODS); Desenvolvimento Sustentável; Pequenos Estados Insulares em Desenvolvimento (PEID); São Tomé e Príncipe (STP).

Abstract

This doctoral thesis, developed within the doctoral programme in International Studies, examines how local entrepreneurship addresses global challenges, particularly sustainable development, and identifies the role of local actors in solving international problems. Using São Tomé and Príncipe as a case study, it explores how entrepreneurial activity contributes to the UN Sustainable Development Goals (SDGs), advancing knowledge on priority intervention areas and supporting the 2030 Agenda. A mixed-methods approach combined qualitative and quantitative data from a questionnaire administered to 100 entrepreneurs. The analysis was structured around the five SDG dimensions (people, planet, prosperity, peace, and partnerships), enabling a comprehensive assessment of entrepreneurial contributions to sustainable development.

Findings show that entrepreneurs in São Tomé and Príncipe achieved stronger outcomes in 33 of 70 (47%) proxy indicators aligned with the SDGs, suggesting local entrepreneurship may outperform national averages in several areas. Open-ended responses generated 726 topics mapped to 169 SDG targets (averaging 3.63 topics per indicator), offering further insights into entrepreneurial perspectives and challenges.

The study underscores the potential of localised entrepreneurship to catalyse SDG progress and highlights reducing external dependence as a critical cross-cutting factor for economic, social, and environmental sustainability. It concludes that inclusive and resilient entrepreneurial ecosystems in developing contexts can accelerate global sustainability, offering both practical policy recommendations and theoretical contributions.

Keywords:

Local entrepreneurship; Sustainable Development Goals (SDGs); Sustainable development; Small Island Developing States (SIDS); São Tomé and Príncipe (STP).

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Glossary

CPLP – Community of Portuguese Language Countries

FAO – Food and Agriculture Organization of the United Nations

GDP – Gross Domestic Product

HDI – Human Development Index

ICT – Information and Communication Technologies

IE – Inclusive Entrepreneurship

IMF – International Monetary Fund

INE – National Institute of Statistics

NGO – Non-Governmental Organization

PPP – Public-Private Partnership

SDG / SDGs – Sustainable Development Goal(s)

SIDS – Small Island Developing States

SME – Small and Medium-sized Enterprises

STP – São Tomé and Príncipe

UN – United Nations

UNCTAD – United Nations Conference on Trade and Development

UNDP – United Nations Development Programme

WB – World Bank

SDG 1 – End poverty in all its forms everywhere

SDG 2 – End hunger, achieve food security and improved nutrition and promote sustainable agriculture

SDG 3 – Ensure healthy lives and promote well-being for all at all ages

SDG 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

SDG 5 – Achieve gender equality and empower all women and girls

SDG 6 – Ensure availability and sustainable management of water and sanitation for all

SDG 7 – Ensure access to affordable, reliable, sustainable and modern energy for all

SDG 8 – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

SDG 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

SDG 10 – Reduce inequality within and among countries

SDG 11 – Make cities and human settlements inclusive, safe, resilient and sustainable

SDG 12 – Ensure sustainable consumption and production patterns

SDG 13 – Take urgent action to combat climate change and its impacts

SDG 14 – Conserve and sustainably use the oceans, seas and marine resources for sustainable development

SDG 15 – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

SDG 16 – Promote peaceful and inclusive societies for sustainable development, provide access

SDG 17 – Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Introduction

In recent years, international attention has increasingly focused on the urgent need to address complex and interrelated global challenges such as climate change, persistent social inequality, and uneven economic development, these “grand challenges” threaten not only local well-being but also the viability of the planet’s ecological and socio-economic systems ([Ricciardi et al., 2021](#); [Fernhaber & Zou, 2022](#); [Popkova et al., 2022](#)). According to the World Meteorological Organization ([WMO, 2025](#)), 2025 is projected to be the warmest year ever recorded, with continued glacier loss, rising sea levels, and extreme weather events posing significant threats to biodiversity, infrastructure, and human health. Also, inequality is worsening across regions, since the 2024 Commitment to Reducing Inequality Index reveals that most countries have regressed in key areas of social protection, taxation, and workers rights, increasing economic disparities and undermining social cohesion ([Kamande et al., 2024](#)). Economically, the world is facing one of the slowest growth periods in decades, with intersecting climate, social, and financial crises reversing development progress and weakening democratic legitimacy and public trust ([WEF, 2024](#)).

Against this backdrop, entrepreneurship has emerged as a critical and adaptive force, because entrepreneurs are uniquely positioned to respond to local challenges with context-specific, innovative, and scalable solutions ([Neumann, 2022](#)). Particularly in resource-constrained environments, they have demonstrated the capacity to fill institutional voids, generate employment, deliver basic services, and foster social and environmental transformation, as noted by Seneler et al. ([2019](#)), entrepreneurs are playing a central role in climate mitigation and adaptation by rapidly deploying sustainable technologies and models. Further, Apostu and Gigauri ([2023](#)) emphasize the mutually reinforcing relationship between entrepreneurship and sustainable development, especially in emerging and developing economies where entrepreneurs catalyse both economic growth and social progress.

At the same time, the 2030 Agenda for Sustainable Development ([UN, 2015](#)), adopted by the United Nations in 2015, offers a shared global framework for building a just, inclusive, and ecologically viable future. It defines 17 Sustainable Development Goals (SDGs), supported by 169 measurable targets and organized around five strategic pillars, People, Planet, Prosperity, Peace, and Partnerships. This integrated vision encourages countries and stakeholders to pursue transformative, inclusive, and integrated action across sectors and scales. Yet despite global commitment, the 2024 UN SDG Progress Report confirms that less than 15% of targets are currently on track, with many countries experiencing reversals in environmental and social indicators ([UN, 2024](#)). Massive investment, stronger local engagement, and more innovative approaches are urgently needed to realize the agenda’s ambition.

One critical gap in both academic research and development policy is the limited exploration of how local entrepreneurship contributes to the SDGs, especially in Small Island Developing States (SIDS). These countries face overlapping vulnerabilities, limited infrastructure, external dependence, small domestic markets, and exposure to environmental risks, yet also possess untapped potential for localized innovation, community engagement, and inclusive development ([Scobie, 2019](#)). As Markman et al. ([2019](#)) and Del-Aguila-Arcenales et al. ([2022](#)) observe, entrepreneurship is often overlooked in international development models, despite growing evidence of its transformative potential. Local entrepreneurs, in particular, remain underappreciated actors in the global development landscape.

Whit this, the present doctoral thesis responds directly to that gap by examining the influence of local development driven by entrepreneurship on addressing international sustainable challenges, using the São Tomé and Príncipe as a case study. Located in the Gulf of Guinea, São Tomé and Príncipe is a SIDS marked by profound development constraints, economic informality, infrastructure deficits, youth unemployment, and climate vulnerability, but also by significant entrepreneurial activity, strong cultural identity, and emerging governance reforms ([UN, 2020](#)). These factors make it a highly relevant context for understanding how local entrepreneurial ecosystems can promote sustainable and inclusive development. Also, the country has been the focus of renewed international cooperation through the United Nations Sustainable Development Cooperation Framework 2023 - 2027 ([2019](#)), which aims to foster green growth, social inclusion, and climate resilience.

The research is guided by two central questions:

1. What is the influence of entrepreneurship on local development?
2. How does this local development contribute to the achievement of the Sustainable Development Goals (SDGs)?

To address these questions, the thesis adopts a mixed-methods approach, integrating both quantitative and qualitative analysis. The research involved fieldwork with 100 local entrepreneurs across various sectors, using structured questionnaires with close-ended questions designed around SDG indicators, combined with open-ended responses. The aim was to assess the multidimensional contributions of entrepreneurs to social inclusion, environmental sustainability, and economic resilience with proximity indicators. The quantitative analysis allows for benchmarking progress against national and global SDG trends, while the qualitative data provides insight into the lived experiences, values, and strategies of São Toméan entrepreneurs in real-world contexts. Cross-checking both these indicators this thesis offers a broad view of this influence.

To provide a comprehensive and interdisciplinary understanding of the research topic, this thesis is structured into four chapters, integrating theory, empirical analysis, and policy recommendation. The chapters are organized as follows:

- Chapter 1 - Introduces the research problem, conceptual framework, and key literature, including a critical review of entrepreneurship as a development strategy and the relevance of the SDGs.
- Chapter 2 - Outlines the research methodology, detailing the data collection tools, sampling strategy, SDG-based indicators, and the rationale for combining quantitative and qualitative approaches.
- Chapter 3 - Presents the core empirical findings and is divided into two main analytical components:
 - The close-question analysis evaluates the performance of local entrepreneurs across selected SDG indicators, comparing their outcomes to national averages and identifying areas of convergence or divergence.
 - The open-question analysis explores the perceptions, motivations, and experiences of entrepreneurs regarding their roles in social development, environmental protection, and economic growth, drawing on narrative and thematic content analysis.
- Chapter 4 - Offers a synthesis of findings across both analytical dimensions. It identifies key patterns, discusses implications, addresses research limitations, and provides evidence-based policy recommendations tailored to similar contexts.

Each chapter begins with a general descriptive text explaining what is covered in that chapter, providing context to facilitate reading. This integrated structure supports a multi-dimensional and grounded understanding of how entrepreneurship can function as a tool for sustainable development in low-resource settings.

Ultimately, the findings suggest that local entrepreneurship can be a strategic enabler of the SDGs, particularly when embedded within inclusive, supportive, and resilient ecosystems. While this thesis is grounded in an in-depth case study of São Tomé and Príncipe, the analysis also aims to generate insights for other SIDS and developing countries facing similar structural vulnerabilities. In this sense, STP serves as an illustrative lens through which broader reflections on entrepreneurship and sustainable development can be made. The path to international development may well begin from the bottom up, with empowered individuals creating local solutions to global challenges.

Note: Artificial Intelligence applications were employed to support the translation and revision of the present text. Also, United Nations materials were used in accordance with established usage standards ([UN, 2025](#)).

CHAPTER 1

1. Literature Review

This chapter provides a comprehensive and critical review of the existing literature at the intersection of entrepreneurship, sustainable development, and the SDGs, with a specific focus on the potential of local entrepreneurship to catalyse inclusive and environmentally sustainable development in Small Island Developing States (SIDS) focusing on São Tomé and Príncipe reality. Drawing on interdisciplinary perspectives from development studies, innovation theory, sustainability science, and institutional economics, the chapter outlines both the theoretical underpinnings and empirical evidence that inform the research questions of this doctoral thesis.

The section 1.1 reviews entrepreneurship as a response to grand challenges, highlighting how entrepreneurial actors can mobilize local knowledge, resources, and social capital to generate scalable solutions to complex problems. The literature underscores the dual potential of entrepreneurship as both a driver of innovation and an agent of structural transformation.

The section 1.2 focus into the specificities of local entrepreneurship, examining its capacity to promote territorial development, build resilience, and support bottom-up pathways toward the achievement and/or contribution of the SDGs. Emphasis is placed on the differentiated impacts of entrepreneurial activity across various domains, social inclusion (people), environmental protection (planet), and economic revitalization (prosperity), underscoring its relevance in fragile contexts.

Subsequently, the chapter in the section 1.3 explores the sustainable development and the architecture and relevance of the 2030 Agenda for Sustainable Development, offering a critical analysis of how entrepreneurship intersects with its five foundational pillars: People, Planet, Prosperity, Peace, and Partnerships. This section interrogates the extent to which entrepreneurial ecosystems can contribute to the localization of the SDGs and identifies key theoretical and empirical gaps in the existing literature.

Finally, in the section 1.4 the chapter contextualizes global debates within the national setting of São Tomé and Príncipe, as an SIDS with acute socio-economic vulnerabilities and untapped entrepreneurial potential. The national context serves as an empirical grounding for the study, providing both the rationale and the comparative lens through which the role of local entrepreneurship in advancing sustainable development can be examined.

Overall, this literature review aims to build a robust conceptual foundation for the thesis by identifying the main debates, tensions, and research lacunae in the field. It advances the proposition that local entrepreneurship, particularly in fragile and insular states, constitutes a critical but underutilized lever for achieving the SDGs, warranting deeper empirical investigation and theoretical elaboration.

1.1 Entrepreneurship as a solution to grand challenges

The growing global concern associated with the need to solve transversal problems often referred to as grand challenges ([Fernhaber & Zou, 2022](#); [Popkova et al., 2022](#)) has been recognised as one of the main international efforts to guarantee sustainable development in all its aspects. This effort has led to the emergence of various solutions in a wide variety of fields and areas, reflected in the identification, adaptation and/or implementation of behaviours that promote progressive practices to solve and/or reduce the aforementioned organised problems, defined and compiled in the UN's 17 sustainable development goals ([2015](#)). One of the practices identified in recent years has been entrepreneurship ([Dean & McMullen, 2007](#); [Hall et al., 2010](#); [Shepherd & Patzelt, 2011](#); [Apostolopoulos, 2018](#); [Sreenivasan & Suresh, 2023](#)) by discovering, creating, innovating and ultimately exploiting opportunities, which can be seen as agents of economic growth and means of solving environmental and human challenges ([Neumann, 2022](#)) and can vary depending on the type of purpose between economic, social and environmental development.

By entrepreneurship, we can consider that it refers to the ability and willingness of individuals or groups to identify opportunities, organise resources and innovate to create economic or social value, often through the creation of businesses or products ([Shane & Venkataraman, 2000](#); [Aldrich, 2005](#); [Bygrave et al., 2024](#)). Different authors have identified a number of positive factors, including the following advantages:

- Innovation - Entrepreneurs are often driven by the need to innovate, creating new and creative solutions to old and emerging problems, this can lead to the development of technologies, products and services that address global issues more effectively ([Andergassen et al., 2009](#); [Bae and Yoo, 2015](#); [Santacreu, 2015](#)) and highlights the importance of fostering both entrepreneurial mindset and the ability to innovate for sustained success ([Manigandan & Raghuram, 2024](#)).
- Flexibility and agility - Entrepreneurial companies tend to be more flexible and agile than larger, more bureaucratic organisations, they often quickly adjust their strategies and operations to respond to changing global needs and opportunities ([Zang, 2016](#); [Rofiaty, 2022](#)).
- Focus on real problems - Many entrepreneurs identify real problems in their communities or around the world and dedicate themselves to finding practical solutions ([Samara & Terzian 2021](#)). This can include anything from a lack of access to clean water to quality education and healthcare ([Santhi & Kumar \(2011\)](#); [Juliana et al \(2021\)](#)).
- Job creation - Entrepreneurship create jobs and stimulate local economies ([Ajide & Dada, 2023](#)), helping to reduce poverty and improve social welfare ([Nor, 2023](#)). Small businesses often employ people from the community, contributing to local economic development ([Kulmie, 2023](#)).
- Boosting impacts - More and more entrepreneurs are focusing on sustainable practices and social impact businesses ([Cheng et al., 2021](#)), seeking solutions that not only generate profit, but are also

beneficial to the environment and society ([Li et al., 2022](#)). Social entrepreneurship tackles both social and environmental issues through inclusive business models because creates opportunities for people with disabilities, highlighting the interconnectedness of social inclusion and sustainable development ([Nguyen et al., 2024](#)). Mishra et al. ([2024](#)) highlight the role of environmental values in driving green entrepreneurial intentions, suggesting that it fostering these values can promote more sustainable business practices.

- Empowerment and inclusion – Is a powerful force for empowering young and/or marginalised groups and promote social inclusion ([Baxter et al., 2014](#)). Women, young people and minorities often find entrepreneurship as a way of overcoming barriers ([Adegun, 2013](#)) and contribute positively to their communities ([Omeje et al., 2020](#)). Education and financial support significantly boost women’s entrepreneurial intentions, highlighting the need to empower women to be independent rather than dependent on government or social support ([Hossain et al., 2024](#)). Research by Freiha and Sassine ([2024](#)) highlights how organizational justice impacts workplace outcomes, suggesting that fair treatment and support can boost employee commitment and positive behaviours.
- Scalability and policies - Solutions developed by entrepreneurs are scaled up to achieve greater impact ([Henrekson & Stenkula, 2016](#)). Effective technologies and business models can be adapted and implemented in different geographical and cultural contexts ([Dias et al., 2023](#)).
- Partnerships and collaborations - Entrepreneurs often form partnerships with governments, NGOs and other companies to maximise the impact of their initiatives ([Klein et al., 2013](#)). These collaborations can leverage additional resources and expertise, increasing the effectiveness of the proposed solutions ([Xing et al., 2018](#)).
- Attracting investment - Startups and innovative companies have the ability to attract venture capital investments, social investors and philanthropists who are willing to fund initiatives that promise to solve critical problems on a global scale ([Honjo & Nakamura, 2020](#)).
- Consumer behaviour - Research indicates that consumers value significantly influence sustainable purchasing and how factors like environmental attitude and concern mediate this relationship, impacting the demand for eco-friendly products and highlighting the role of consumer behaviour in environmental protection ([Mishra & Barik, 2025](#)).
- Problem-solving culture - The entrepreneurial spirit fosters a culture of problem-solving and resilience, because entrepreneurs have to identify challenges, seek solutions and persist in the face of obstacles, an essential mindset for tackling global problems ([Garba, 2010](#)).

These advantages are changing over time, as is the concept of entrepreneurship itself, which is related to the evolution of mentality, creativity and innovation towards a paradigm shift to respond

to the progress of change and adaptation to environmental alterations associated with local presence and focused on a single problem ([Rofiaty, 2022](#)).

Despite the numerous benefits highlighted, several authors warn of structural limitations of entrepreneurship as an engine of development. In contexts marked by informality, as in many developing economies, entrepreneurial activity can perpetuate social and economic inequalities, especially when entrepreneurs operate outside formal labour, tax or legal protection systems ([Naudé, 2011](#); [Williams & Youssef, 2014](#)). Similarly, micro and small enterprises, although essential for the survival of families and communities, rarely achieve sufficient scale to generate significant macroeconomic impacts or to alter structural dynamics of poverty and exclusion ([Ketchen & Ireland, 2013](#)). Thus, there is a risk of overvaluing entrepreneurship as a single solution to complex challenges, when it often depends on adequate public policies and institutional infrastructure to produce sustainable results.

Another critical point of debate concerns the dilemma between economic growth and environmental sustainability. While entrepreneurship is often promoted as a way to reconcile economic development and environmental responsibility, in practice, not all business models follow this path. Many enterprises continue to adopt practices geared primarily towards rapid growth, even at the expense of intensive exploitation of natural resources or precarious working conditions ([Hahn et al., 2015](#)). This paradox reflects the tension between the imperative to generate economic value and the need to respect environmental and social limits, raising questions about the extent to which entrepreneurship alone can fully align with the Sustainable Development Goals.

Furthermore, the positive impact of entrepreneurship varies according to the type of sector, market and level of global integration. Social and sustainable enterprises, for example, face difficulties in attracting capital and competing with traditional profit-driven companies, which limits their ability to scale up solutions ([Dacin et al., 2010](#)). Dependence on external investment or donor support can also create vulnerabilities, making it difficult to build autonomous development trajectories ([Branzei et al., 2018](#)). For these reasons, the critical literature suggests that entrepreneurship should be analysed in conjunction with institutional, political and cultural factors, recognising that it does not always produce equitable and sustainable effects on a large scale.

1.2 Local Entrepreneurship

Among the various possible actions of entrepreneurship with impact, local entrepreneurship emerges as a means of changing realities through the dynamism associated with the creation of individual and/or collective local businesses/projects ([Fini et al., 2018](#)). Local entrepreneurship is understood to be the set of entrepreneurial initiatives that take place within a specific community, usually involving small and medium-sized enterprises that seek to promote sustainable economic development while

utilising local resources and aligning themselves with the needs and characteristics of the region ([Anderson, 2000](#); [Audretsch & Thurik, 2001](#)). Local entrepreneurship refers also to the creation and management of businesses developed by individuals or groups within a specific community, aimed at meeting local needs and promoting territorial development ([Buratti et al., 2022](#)).

Entrepreneurship typologies include traditional, profit-oriented, social, focused on solving community problems, impact and sustainable, which incorporates environmental and social concerns into economic activity ([Ratten, 2023](#)). Regardless of the type, local entrepreneurs act as agents of change, identifying opportunities, mobilizing resources and implementing solutions adapted to the context in which they live ([Prokopenko, 2024](#)). In the context of local development, they play a fundamental role in generating employment, boosting local economies and strengthening social capital, helping to reduce regional inequalities and promote social cohesion ([Manning & Vavilov, 2023](#)).

In recent years, the literature has recognized the transformative potential of entrepreneurship to promote sustainable development ([Liguori & Bendickson, 2020](#)). Sustainable entrepreneurship integrates environmental and social concerns into economic activity, acting as a mechanism for responsible innovation ([Rosário et al., 2022](#)). Studies show that local entrepreneurs are in a privileged position to respond to complex challenges specific to their communities, promoting solutions adapted to the territory, with positive impacts in multiple dimensions ([Kim & Kim, 2022](#)). On the economic side, they create jobs and boost local production chains ([Kurpayanidi, 2022](#)), on the social side, they promote inclusion, education and equity ([Anh et al., 2022](#)), and on the environmental, they adopt conscious practices and use resources efficiently ([Ahmad et al., 2022](#)) among other impacts. Social and environmental entrepreneurship, in particular, has gained prominence as a strategic tool for achieving the SDGs, by combining social impact, economic viability and ecological awareness ([Sreenivasan & Suresh, 2023](#)).

In Small Island Developing States (SIDS), such as São Tomé and Príncipe, entrepreneurship takes on particular characteristics due to structural limitations of scale, external dependence and vulnerability to environmental and economic shocks ([UN-OHRLS, 2015](#); [Briguglio, 2016](#)). Compared to larger countries, opportunities for productive diversification are more limited, which accentuates the role of local entrepreneurship as a driver of livelihoods and adaptive innovation ([Baldacchino, 2017](#)). In this context, the informal economy is highly relevant, functioning as a network of social and economic resilience, but also raising challenges related to job insecurity, lack of regulation and limited access to formal financing ([Williams & Kedir, 2018](#)). In São Tomé and Príncipe, the predominance of the informal sector suggests that understanding entrepreneurial dynamics requires looking not only at formalised initiatives, but also at everyday practices that contribute to family livelihoods and economic circulation. Thus, analysing local entrepreneurship in SIDS allows us to question the balance between

informality, innovation and sustainable development, highlighting the need for inclusive policies that value the diversity of entrepreneurial forms.

1.3 Sustainable Development and the SDGs

The concept of sustainable development, consolidated by the Brundtland Report ([1987](#)), refers to development that meets present needs without compromising the ability of future generations to meet their own needs. This paradigm is based on three interconnected dimensions: social, economic and environmental, as represented in the pillars of the Sustainable Development Goals (SDGs) of the 2030 Agenda ([UN, 2015](#)). The social dimension is associated with inclusion, equity and quality of life, the economic dimension with growth, innovation and stability, and the environmental dimension with the preservation of ecosystems and responsible use of natural resources ([Fu et al., 2019](#)). The interdependence between these dimensions means that actions in one of them have an impact on the others, requiring integrated approaches ([Lusseau & Mancini, 2019](#)). The interactions of the three dimensions are Eco-Economy (for the environmental and economic), Socio-Environmental, (for social and environmental), and Social Economy, (for Social and Economy), and combine all in the sustainable development ([Redclift, 1991](#)).

In this context, the Sustainable Development Goals (SDGs), established by the United Nations in 2015 as part of the 2030 Agenda, constitute a widely recognized normative and operational framework to guide policies, practices and initiatives aimed at equitable, inclusive and environmentally responsible development ([Weiland et al., 2021](#)). The 17 SDGs are organized along five central thematic/dimensions/areas, known as the "5 Ps" of sustainable development: People, Planet, Prosperity, Peace and Partnerships, which synthesize the fundamental dimensions of sustainability ([UN, 2015](#)). The aggregation of the SDGs into the three pillars of sustainable development reflects this interconnection, reinforcing the importance of strategies that simultaneously address equity, prosperity and environmental sustainability ([Fu et al., 2020](#)). While organisations, authors, and countries vary in how they categorise the 17 SDGs within the five pillars, they agree that these pillars nonetheless serve as a common framework for structuring Common Country Assessments (CCAs), Voluntary National Reviews (VNRs), as well as various policies, strategies, programmes, and reports ([Tremblay et al., 2020](#)).

For this study, since it has a focus to highlight the local entrepreneurship as an solution for the grand challenges it will consider the organization of the SDGs per P, according with the "Municipalities and the Sustainable Development Goals: Local Action Manual for Global Transformation" of IMVF ([IMVF, 2020](#)), due to its relevance in the Portuguese national context, as it is a reference document for the local implementation of the SDGs in Portugal and in Portuguese-speaking countries, such as STP. Prepared by recognised entities in this area, it clearly presents the division of

the SDGs into the 5 Ps and promotes the practical application of the 2030 Agenda at the municipal level, while aligning with international guidelines (figure 1.1). It therefore constitutes an appropriate scientific and methodological basis for academic work focused on the implementation of the SDGs in local contexts. With this the People axis includes SDGs 1, 2, 3, 4 and 5 aimed at eradicating poverty, food security, access to health and quality education, as well as promoting gender equality. The Planet axis includes SDGs 6, 12, 13, 14 and 15, aimed at conserving natural resources, mitigating climate change and the sustainable management of terrestrial and marine ecosystems. The Prosperity axis, in turn, covers SDGs 7, 8, 9, 10 and 11, which emphasize inclusive economic growth, innovation, reducing inequalities and promoting sustainable cities. The Peace axis is represented by SDG 16, which aims to strengthen effective, transparent and accountable institutions and promote peaceful and inclusive societies. Finally, the Partnerships axis corresponds to SDG 17, which underlines the need for international cooperation and multisectoral synergies for the effective implementation of the 2030 Agenda.



Figure 1.1 - Alignment of the SDGs with the 5 Ps
Source – UNPD, 2016

Each of the 17 SDGs is broken down into a set of specific goals, called targets, totaling 169 for the agenda as a whole (UN, 2015). These targets represent concrete commitments to be achieved within the established timeframe, often expressed in a quantifiable or verifiable way. To monitor progress towards these commitments, the UN has established a system of statistical indicators, which

currently comprises more than 244 global indicators, however, since nine indicators repeat under two or three different targets (see below), the actual total number of individual indicators in the list is 232. These indicators play a crucial role in operationalizing the SDGs by enabling systematic monitoring, international comparability and evidence-based guidance for the formulation of public policies and organizational strategies.

In light of this framework, entrepreneurship can be analysed as an agent for implementing the SDGs, contributing transversally to multiple goals by generating innovative, scalable and contextualized solutions ([Sreenivasan & Suresh, 2023](#)). Their ability to intervene simultaneously in economic, social and environmental dimensions is in line with the integrated and indivisible nature of the SDGs, reinforcing the role of local actors and the private sector in achieving truly sustainable development ([Del-Aguila-Arcenales et al., 2022](#)).

Despite its global legitimacy, the 2030 Agenda has been widely criticized for the slow pace of implementation and the uneven progress across regions and countries. Many SIDS and least developed countries remain heavily dependent on external financing and international aid, which raises concerns about the long-term sustainability and local ownership of SDG initiatives ([Fukuda-Parr & McNeill, 2019](#); [UN, 2022](#)). Furthermore, scholars have noted the risk of “SDG washing,” where governments, corporations, or organizations symbolically adopt the language of the SDGs without introducing substantial changes in practices or policies ([Bexell & Jönsson, 2019](#)). These critiques highlight the tension between the global, top-down framing of the Agenda and the practical need for bottom-up, context-sensitive approaches that account for local priorities, knowledge, and institutional capacities ([Graute, 2016](#); [Georgeson & Maslin, 2018](#)). The debate over SDG localization thus emphasizes the importance of enabling municipalities, civil society, and grassroots entrepreneurs to actively shape the agenda, ensuring that its targets are not only formally endorsed but also effectively translated into transformative action at the community level.

1.3.1 Entrepreneurship for the People dimension

Entrepreneurship has traditionally been recognized as an economic growth and innovation catalyst. However, its pivotal role in driving social development is now gaining significant attention ([Urbano et al., 2019](#)). By utilizing local knowledge, networks, and resources, entrepreneurs enhance economic resilience, strengthen social infrastructure, and promote inclusive development ([Ribeiro-Soriano, 2017](#)). They create jobs, drive innovation, and empower communities, making entrepreneurship a vital tool for addressing social disparities and fostering societal progress ([Yani & Ausat, 2024](#)).

Entrepreneurial activities often address the immediate socio-economic needs of local communities while creating opportunities for employment and innovation ([Toxirovna, 2024](#)). This is

particularly impactful in rural and underserved areas, where entrepreneurial initiatives often bridge gaps in public services and infrastructure ([Henderson, 2002](#); [Ajide, 2020](#); [Robertson, et al 2020](#)).

At the same time social entrepreneurship, a specialized form of local entrepreneurship, aims to tackle societal challenges such as inequality, unemployment, and limited access to essential services ([Phillips et al., 2015](#); [Phan Tan, 2022](#)). With this, social entrepreneurs establish ventures that prioritize social value over profit, addressing systemic issues through innovative solutions ([Mair & Marti 2006](#)). For instance, initiatives focusing on marginalized groups, such as women ([Assaf, A. 2024](#)), youth ([Ong, 2021](#)), and people with disabilities ([Ortiz, 2021](#)), not only create economic opportunities but also promote social inclusion and cohesion ([Sundin, 2011](#)).

Additionally, local entrepreneurship plays a vital role in preserving and promoting cultural heritage ([Brinia et al., 2024](#)). Entrepreneurs leverage traditional knowledge and local resources to develop businesses that celebrate ([Mars, 2022](#)) and sustain cultural identities ([Cohen & Winn, 2007](#)). This is particularly relevant in regions with rich cultural histories, where entrepreneurship can serve as a bridge between modernization and heritage preservation ([Lyon & Sepulveda, 2009](#)).

Despite its potential, the impact of local entrepreneurship on social development faces significant challenges, such as limited access to capital ([Odeyeme et al., 2024](#)), inadequate infrastructure ([Ratten, 2023](#)), and unsupportive policy environments can hinder the growth and influence of local businesses ([Bruton et al., 2010](#)). Moreover, while entrepreneurship can promote inclusivity, uneven access to entrepreneurial opportunities may inadvertently reinforce social inequalities ([Welter et al., 2017](#)).

However, the understanding of how local entrepreneurial initiatives can address grand societal challenges, often framed through frameworks like the UN Sustainable Development Goals (SDGs), it's not clear, creating the opportunity of studying more the real impact of local entrepreneurs on solving local problems that are a world concern. Among the 17 SDGs identified ([2015](#)), the social dimension encompasses goals aimed at promoting equity, justice, and well-being, such as eradicating poverty, ensuring quality education, achieving gender equality, and reducing inequalities, and can be represented by:

- SDG 1 No Poverty - Aims to eradicate poverty in all forms by 2030, focusing on income deprivation, access to basic services, and resilience to shocks. Key strategies include social protection systems, equitable resource access, and climate adaptation.
- SDG 2 Zero Hunger - Seeks to end hunger and malnutrition while promoting sustainable agriculture. Targets include improving food access, doubling small-scale farmers' productivity, and enhancing agricultural resilience.
- SDG 3 Good Health and Well-Being - Focuses on reducing preventable diseases, improving healthcare access, and addressing health disparities. Goals include lowering maternal and child mortality and combating epidemics.

- SDG 4 Quality Education - Ensures inclusive, equitable education and lifelong learning opportunities. It targets eliminating education disparities and promoting global citizenship.
- SDG 5 Gender Equality - Aims to empower women and girls by eliminating discrimination, violence, and harmful practices while ensuring equal opportunities in leadership, education, and healthcare.

These SDGs are essential for fostering social development by addressing critical issues such as poverty, inequality, education, health, and gender equity. They aim to create inclusive societies where everyone has access to opportunities, resources, and services necessary for a dignified life. By prioritizing social justice, equality, and empowerment, these goals lay the foundation for resilient and cohesive communities, ensuring a fairer and more equitable future for generations to come.

1.3.2 Entrepreneurship for the Planet dimension

Entrepreneurship plays a pivotal role in advancing environmental protection by fostering innovative approaches that align economic development with ecological sustainability. Environmental protection, as defined by Morelli (2011), is a condition of balance, resilience, and interconnectedness that enables human society to meet its needs without surpassing the regenerative capacity of ecosystems or diminishing biological diversity. Within this framework, entrepreneurship has increasingly shifted towards sustainable practices that integrate ecological considerations into business models, emphasizing the need to create long-term value beyond financial profit (Cheng et al., 2021).

Sustainable entrepreneurship, also referred to as “ecopreneurship” or “green entrepreneurship,” represents a critical mechanism through which economic activity and ecological stewardship are reconciled. By integrating sustainability into their value propositions, entrepreneurs are not only responding to market demand for environmentally responsible products and services but are also proactively contributing to systemic change (Li et al., 2022). This includes the promotion of renewable energy technologies, circular economy initiatives, and low-carbon innovations that directly mitigate environmental degradation (Halder, 2019).

A key positive impact of entrepreneurship in this dimension is its capacity to accelerate the transition towards sustainable production and consumption systems. Entrepreneurs act as change agents who disrupt conventional business models by introducing resource-efficient technologies, reducing waste, and promoting sustainable supply chains (Dean & McMullen, 2007). Such entrepreneurial activities contribute to decoupling economic growth from ecological harm, thereby advancing the principles of sustainable development (Schaltegger & Wagner, 2011).

Moreover, entrepreneurial ventures frequently operate as experimental platforms for ecological innovation, enabling the testing and scaling of solutions that traditional industries may be

reluctant to adopt. This agility allows entrepreneurs to respond rapidly to environmental challenges, from climate change mitigation to biodiversity conservation ([Cohen & Winn, 2007](#)). Importantly, sustainable entrepreneurship fosters a cultural shift towards environmental responsibility, demonstrating that profitability and ecological care are not mutually exclusive but can be mutually reinforcing.

However, despite this trend, gaps persist in both the scholarly and empirical understanding of the relationship between entrepreneurship and environmental sustainability. Many existing studies emphasize conceptual frameworks or isolated case studies but fail to provide robust, data-driven analyses that establish causal links or measurable outcomes ([Lejuste et al., 2024](#)). This is particularly true in low-income or fragile contexts where environmental entrepreneurship is under-researched, under-supported, and often constrained by systemic challenges such as low digitalization, lack of training, and infrastructure deficits. As Lejuste et al. ([2024](#)) point out, many local businesses struggle with both digital and ecological transitions, limiting their capacity to innovate and contribute meaningfully to sustainability goals.

Another significant research gap is geographic. Much of the literature is concentrated in high-income or industrialized regions, with limited studies addressing entrepreneurship's role in environmental protection in Small Island Developing States (SIDS) and other vulnerable contexts ([Riti, et al., 2015](#)). This lack of localized insight inhibits the formulation of tailored strategies that could amplify the environmental impact of entrepreneurial activity in regions most at risk from ecological degradation.

The environmental dimension, more fully defined as environmental protection, includes:

- SDG 6 Drinking Water and Sanitation - aims to ensure universal access to safe drinking water and sanitation by 2030.
- SDG 12 Responsible Consumption and Production - emphasizes the critical role of entrepreneurial innovation in transitioning to sustainable patterns of production and consumption.
- SDG 13 Climate Action - focuses on urgent global action to combat climate change and its impacts.
- SDG 14 Protect Marine Life - focuses on conserving and sustainably using oceans, seas, and marine resources, which are vital for regulating the climate, supporting biodiversity, and providing food and livelihoods.
- SDG 15 Life on Land - SDG 15 focuses on protecting, restoring, and promoting the sustainable use of terrestrial ecosystems, combating desertification, halting biodiversity loss, and ensuring the conservation of forests. The goal addresses critical environmental challenges that threaten global ecological balance and human well-being.

These SDGs are fundamental to ensuring environmental sustainability and the protection of natural resources and are the key to achieving a more balanced future for future generations.

1.3.3 Entrepreneurship for the Prosperity Dimension

Entrepreneurship has increasingly been acknowledged not only as a fundamental engine of economic growth and innovation, but also as a transformative force capable of reshaping societies by fostering job creation, enhancing competitiveness, and addressing social and environmental challenges ([Sagar, 2018](#)). Scholars and policymakers emphasize that local entrepreneurship, in particular, plays a pivotal role in fostering sustainable development and addressing socioeconomic disparities ([Audretsch et al., 2007](#)). Joseph Schumpeter ([1934](#)) posited that entrepreneurs act as agents of economic development by introducing innovations, creating new industries, and disrupting existing market structures, resulting in a "creative destruction" process that underpins the dynamism of capitalist economies. This position, maintained since the publication and Local entrepreneurs, often deeply embedded in their communities, are uniquely positioned to identify context-specific opportunities, mobilize local resources, and address market inefficiencies.

The endogenous growth theory further highlights entrepreneurship as a catalyst for technological advancement and human capital development ([Khan et al., 2023](#)). By fostering innovation and increasing productivity, entrepreneurial activities contribute to sustained economic growth, particularly in regions with underutilized resources or limited access to external investments ([Adetoso et al., 2013](#)).

Studies have consistently shown that local entrepreneurship enhances economic resilience by diversifying income sources and reducing dependency on external economic actors ([Iacobucci & Perugini, 2021](#); [Enaifoghe & Vezi-Magigaba, 2023](#); [Rahmaddian, 2024](#)).

Local entrepreneurship also plays a transformative role in addressing structural challenges in developing economies. By fostering inclusive growth, entrepreneurs help bridge income gaps, empower marginalized populations, and stimulate community-led development ([Hossain et al., 2021](#); [Leong et al., 2022](#)). Women-led enterprises, for example, have been shown to generate positive spillover effects on household welfare and education, contributing to broader socio-economic advancements ([Ubfal, 2024](#)). The role of local entrepreneurship in driving economic growth is well-established in both theoretical and empirical literature. By stimulating innovation ([Kostakis & Tsagarakis 2022](#)), generating employment ([Sirojiddin, 2022](#)), and fostering inclusive development ([Satar et al., 2023](#)), local entrepreneurs contribute to the resilience and sustainability of economies, particularly in resource-constrained settings.

Despite its celebrated role in driving economic growth, entrepreneurship does not guarantee inclusive or sustainable prosperity. In many developing contexts, entrepreneurial activity is

concentrated in the informal sector, marked by precarious work conditions, weak social protections, and limited institutional support ([Naudé, 2011](#); [Williams & Youssef, 2014](#)). High failure rates of small ventures further undermine economic stability, often leaving entrepreneurs and communities vulnerable to financial and social setbacks ([Shane, 2009](#); [Bosma et al., 2020](#)). Moreover, entrepreneurial success tends to be unevenly distributed, with many micro-entrepreneurs trapped in low-productivity activities while a small elite captures the benefits, reinforcing rather than reducing structural inequalities ([Minniti, 2008](#); [Bruton et al., 2010](#)).

Entrepreneurial prosperity can also come at the expense of long-term sustainability. Growth-driven ventures may prioritize short-term profits over social and environmental responsibility, contributing to resource depletion, labour exploitation, and ecological harm ([Hahn et al., 2015](#)). Without strong institutional frameworks and enabling policies, entrepreneurship risks perpetuating economic dualism and external dependency rather than generating resilient and inclusive development ([Branzei et al., 2018](#)). Thus, while entrepreneurship holds promise for fostering prosperity, its negative externalities highlight the need for a more critical and context-sensitive approach to harness its benefits.

In the context of the SDGs, the economic dimension encompasses targets aimed at inclusive economic growth, sustainable industrialization, and the promotion of responsible consumption and production patterns. Entrepreneurship can contribute to achieving the economic growth by the following economic SDGs:

- SDG 7 Affordable and Clean Energy - focuses on ensuring access to affordable, reliable, sustainable, and modern energy for all. Entrepreneurs play a vital role in advancing this goal through innovative solutions and technologies.
- SDG 8 Decent Work and Economic Growth - emphasizes the crucial role of entrepreneurship and Small and Medium-sized Enterprises (SMEs) in driving economic growth, job creation, and sustainable development.
- SDG 9 Industry, Innovation and Infrastructure - emphasizes the critical role of entrepreneurs in driving industrial modernization, technological innovation, and sustainable economic development.
- SDG 10 Reduced Inequalities - Addresses economic and social inequalities within and among nations by promoting inclusion, equal opportunities, and fair resource distribution.
- SDG 11 Sustainable Cities and Communities - focuses on making cities inclusive, safe, resilient, and sustainable. Entrepreneurs play a crucial role in addressing urban challenges and developing innovative solutions for sustainable urban.

Based on this entrepreneurship serves as a catalyst for sustainable development by driving innovation, creating jobs, and promoting responsible business practices across various sectors. By aligning entrepreneurial activities with the SDGs, we can foster a more inclusive, resilient, and sustainable global economy and stimulating innovation ([Kostakis & Tsagarakis, 2022](#)), generating employment ([Sirojiddin, 2022](#)), and fostering inclusive development ([Satar et al., 2023](#)), local entrepreneurs contribute to the resilience and sustainability of economies, particularly in resource-constrained settings.

1.3.4 Entrepreneurship for the Peace and Partnerships Dimension

While entrepreneurship is often associated with economic growth and innovation, its role in fostering peaceful societies and global partnerships has only recently begun to receive scholarly attention ([George et al., 2016](#)). Entrepreneurship can be an effective tool for peacebuilding by addressing the root causes of conflict, poverty, inequality, and lack of opportunity ([Fernhaber & Zou, 2022](#)). In the beginning of the century Lundström and Stevenson ([2005](#)) already highlight that inclusive entrepreneurship policies can empower marginalized communities, reduce youth unemployment, and prevent radicalization. Studies in post-conflict settings such as Rwanda and Liberia ([Brück et al., 2013](#)) show that entrepreneurship contributes to social cohesion by creating intergroup economic dependencies and promoting dialogue through trade. It fosters local ownership of solutions, enhancing trust in communities where state presence is limited or contested ([Dacin et al., 2011](#)).

Also Entrepreneurship can help build institutional resilience by fostering demand for better governance and accountability. According to Acemoglu and Robinson ([2015](#)), economic empowerment through business can pressure governments to provide improved legal and regulatory frameworks. Entrepreneurship also fosters a sense of ownership and empowerment, encouraging self-reliance within communities ([Peredo & Chrisman, 2006](#); [Ademokun & Ajayi, 2012](#); [Amri, et al., 2024](#)). Small and medium-sized enterprises (SMEs), which are often the backbone of local entrepreneurship, play a critical role in skill development, enhancing human capital, and building community resilience ([Morrison, et al., 2017](#); [Bosma et al., 2020](#)).

Although entrepreneurship is often framed as a tool for peacebuilding and fostering cooperation, it can also generate dynamics that undermine stability and inclusive partnerships. In fragile and conflict-affected settings, entrepreneurial activity may be captured by elites or war economies, entrenching existing power asymmetries rather than diffusing opportunities ([Naudé, 2007](#); [Brück et al., 2013](#)). Informal and unregulated enterprises can become sources of rent-seeking and corruption, fueling tensions between groups instead of promoting reconciliation ([Williams & Kedir, 2018](#)). Moreover, entrepreneurial competition in resource-scarce environments can exacerbate

rivalries and increase social fragmentation, particularly where market access and capital are unevenly distributed ([Bruton et al., 2010](#)).

At the international level, partnerships driven by entrepreneurial ventures can also reproduce dependencies and inequalities. Cross-border collaborations frequently privilege actors with greater financial and institutional capacity, sidelining local entrepreneurs in favour of multinational corporations or donor-driven agendas ([Branzei et al., 2018](#)). This imbalance risks reducing local ownership and reinforcing economic dependency, limiting the transformative potential of entrepreneurship as a peacebuilding mechanism. Furthermore, without robust governance structures, entrepreneurship-led initiatives may remain vulnerable to political capture or exploitation, undermining trust in both institutions and partnerships ([Hahn et al., 2015](#)). Thus, while entrepreneurship holds promise for advancing peace and partnerships, it also carries the risk of perpetuating exclusion, instability, and dependency if not embedded in inclusive and equitable frameworks.

Entrepreneurship relates with the peace and partnerships development on the following SDGs:

- SDG 16 – Peace, Justice and Strong Institutions - Focuses on promoting peaceful and inclusive societies, ensuring access to justice for all, and building effective, accountable institutions.
- SDG 17 – Partnerships for the Goals - Focuses on strengthening the means of implementation and revitalizing the global partnership for sustainable development.

By reducing poverty, empowering marginalized groups, and enhancing institutional accountability, it supports the foundations of peaceful and inclusive societies ([Morison et al., 2017](#); [Fernhaber & Zou, 2022](#); [Amri et al., 2024](#)). SMEs also contribute to local resilience and capacity-building, particularly in fragile contexts ([UNDP, 2023](#); [OECD, 2022](#)). Aligned with SDG 16 and SDG 17, entrepreneurship acts as a bridge between local innovation and global cooperation, offering a practical pathway for countries

1.4 SIDS and São Tomé and Príncipe context

In order to measure the influence of Local Entrepreneurship in the resolution of the major international challenges, through the perspective of Sustainable Development, it was understood that a case study would be the most appropriate to collect the necessary information based on ([Ricciardi et al., 2021](#); [Ambos & Tatarinov, 2022](#); [Enthoven, 2023](#)). The decision to focus on a case study led to the choice of field research, as it allows for the collection of specific data and a deeper understanding of the actual conditions on the ground. This approach, more detailed in the chapter 2 (Field Research - Methods) prompted a reflective process, during which various regional options were considered, ultimately leading to the selection of São Tomé and Príncipe for its alignment with the achievement of the SDGs.

Initially this decision came upon reviewing the HDI data, it was clear that Africa, with 28 of the 33 lowest-ranked countries in 2017 ([UNDP, 2017](#)), faced the greatest difficulties. Given Africa's vast size of 30,370,000 square kilometres, the diversity of its cultures, societies, and geography is immense ([Barros, 1991](#)), this necessitated the search for a cultural group with similarities to the Portuguese language and customs, which would ease the field research process and provide richer, more intimate data collection. This led to the consideration of the PALOP countries, Angola, Mozambique, Cape Verde, Guinea-Bissau, and São Tomé and Príncipe. Factors such as geographic accessibility, political stability, and existing environmental and social vulnerabilities were then analysed. Angola and Mozambique ([CPLP ARES, 2024](#)) due to the large dimension, were initially excluded related with the financial capital to develop the study. Guinea-Bissau was excluded due to political instability ([Gonçalves & Leandro, 2024](#)), and Cape Verde although stable, posed logistical challenges due to its archipelagic structure of nine inhabited islands ([ITCV, 2024](#)). São Tomé and Príncipe, with just two main islands and a more compact territory, offered a more feasible setting for fieldwork, and also the compromise of the country to turn more sustainable showed the possibility and interested related ([UNFAD, 2015](#); [Carvalho et al., 2022](#)). UN SDG performance reports confirmed its relevance, highlighting challenges in social inclusion, environmental protection, and sustainable development ([UN, 2020](#)).

At the same time the consideration that STP is a SIDS (Small Island Developing States) increased the need for this territory, mainly because SIDS are a UN-recognized group of 39 developing island economies that share structural characteristics shaping their development trajectories, such as, small domestic markets and populations, remoteness and high transport costs, extreme exposure to external shocks, both economic and climatic, narrow export bases, and fragile ecosystems ([UN, 2025](#)). These features compound development risks and raise the cost of public service provision and private enterprise, making "the special case" for tailored international support first articulated in Rio in 1992 ([Ghina, 2003](#)) and subsequently in the Barbados Programme of Action, the Mauritius Strategy, and the Samoa Pathway ([Kohona, 2024](#)). The UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (OHRLLS) summarizes these persistent constraints, which are widely cited across policy and academic literatures that SIDS' vulnerability, indebtedness and finance nexus is binding disaster and climate impacts drive fiscal stress, high import dependence and narrow sectors magnify external shocks, and limited data systems hinder targeting ([Mikheeva, 2019](#); [UN, 2024](#)).

Within this frame, local entrepreneurship have been identified as a practical mechanism to advance SDGs in SIDS, because it can shorten supply chains and substitute imports in thin markets, create livelihood niches in the blue economy, mobilize community knowledge for climate adaptation, and catalyze public-private-community partnerships where state capacity is stretched ([Pounder &](#)

[Gopal, 2021](#); [Coy, 2023](#); [Junhua, 2024](#)). This STP exemplifies the SIDS while offering distinctive features that make it analytically tractable for field research.

São Tomé and Príncipe, officially the Democratic Republic of São Tomé and Príncipe, is a small island nation in the Gulf of Guinea, off the west coast of Central Africa. Composed of two main islands located about 140 kilometres apart and around 250 kilometres from Gabon, it has a population of approximately 204,454 ([CIA, 2023](#)). It is the second least populous country in Africa and the smallest Portuguese-speaking nation. Although currently classified as underdeveloped, it was projected to transition to middle-income status by the UN by 2024 ([UN, 2020](#)). Socially, the country faces significant inequalities in access to education, healthcare, and economic opportunities, particularly in rural areas ([Ballew, et al. 2019](#)). Nevertheless, strong community ties and cultural traditions serve as key assets in promoting local entrepreneurship, particularly initiatives that value local identity ([Barros, 1991](#)). Environmentally, São Tomé and Príncipe grapples with deforestation, poor waste management, land degradation, and threats to biodiversity ([DGA, 2016](#)). Its vulnerability to climate change is high, calling for community-based adaptation strategies that emphasize sustainable resource use ([Grantham et al. 2020](#)). Local entrepreneurship, through initiatives such as organic farming, circular economy projects, and sustainable tourism, can offer practical responses to these issues. The country's economy is fragile and highly dependent on imports, foreign aid, and sectors like agriculture and tourism ([Bishop et al., 2021](#); [Boswell, 2024](#)). Cocoa remains the main export crop, and ecotourism has been identified as a promising opportunity, albeit limited by infrastructure and structural constraints ([Fonseca et al., 2020](#); [Carvalho et al., 2022](#); [Seibert 2022](#)). This dependence makes the country susceptible to external shocks, such as fluctuations in international prices and climate change ([Briguglio, 1995](#); [De Marez, 2022](#); [Raman, 2024](#)). Related with peace and partnerships, It fosters local ownership of solutions, enhancing trust in communities where state presence is limited or contested in São Tomé and Príncipe, where fragile institutions and limited employment opportunities persist, local entrepreneurship has potential to serve as a peacebuilding mechanism, especially among youth and rural populations vulnerable to exclusion ([Dacin et al., 2011](#)). Entrepreneurial activity also encourages the formation of civil society organizations and informal institutions that help bridge the gap between state and society ([Welter & Smallbone, 2011](#)). This is particularly important in SIDS like São Tomé and Príncipe, where governance capacity is often constrained. Entrepreneurship can catalyse innovation in public service delivery through public-private partnerships and community-driven development models. In terms of policy, the country has developed national strategies like the National Sustainable Development Plan and engages in international partnerships that support green entrepreneurship, youth skills training, and small business development ([IMF, 2023](#)). However, limitations in institutional capacity and resources remain major barriers to building a resilient entrepreneurial ecosystem ([Eduardo, 2022](#)).

With this, STP as a SIDS offers methodological advantages for a case study, as compact geography, because two main inhabited islands reduce fieldwork frictions, communities are tightly networked facilitating access to entrepreneurs and civic actors and sectoral priorities (ecotourism, sustainable agriculture, circular waste solutions, small-scale fisheries) are sufficiently visible to permit rich, ground-truth data. Importantly, in 2023, the UN and the Government of São Tomé and Príncipe launched a new Cooperation Framework (2023–2027), involving eight resident UN agencies and ten signatories. This marks a stronger collaborative effort to support the country’s progress towards achieving the SDGs, particularly in areas of climate resilience, inclusive development, and sustainable economic transformation ([UN, 2023](#)).

1.4.1 STP’s Social Reality

Despite some progress in certain socioeconomic indicators, São Tomé and Príncipe continue to face persistent social inequalities. Poverty remains widespread, with many families dependent on subsistence farming. While access to healthcare and education has improved, these services are still limited, especially in rural areas. The gap between urban and rural regions intensifies disparities, with services and opportunities concentrated in the capital, São Tomé ([WBG, 2024](#)).

The healthcare system grapples with challenges such as inadequate infrastructure, a shortage of medical professionals, and a reliance on external aid. Common health issues include malaria, respiratory infections, and malnutrition. Although life expectancy has risen due to healthcare improvements, progress is still slow ([Uhatela, 2022](#)). Education is a priority, with the government aiming for universal primary education. However, high dropout rates, a lack of resources, and limited access to higher education hinder the country’s development prospects. Educational reform is necessary to address these challenges and equip the population with the skills needed for a modern economy ([Luísa, 2022](#)). Since gaining independence in 1975, São Tomé and Príncipe has evolved into a multi-party democracy, with regular elections indicating relative political stability compared to other African nations ([Sanches, 2022](#)). However, issues like corruption and inefficiencies in public administration continue to pose challenges. Civil society organizations play a crucial role in addressing social issues and advocating for greater transparency and accountability ([Violante, 2022](#)). Despite these challenges, São Tomé and Príncipe benefits from strong social cohesion, which is rooted in its shared cultural identity and tight-knit communities. This social unity provides a solid foundation for collective action to tackle developmental challenges and create a more inclusive society ([Berthet, 2012](#)).

In conclusion, the social landscape of São Tomé and Príncipe is marked by both resilience and vulnerability. Overcoming its developmental challenges will require targeted policies, international collaboration, and the empowerment of its people to fully unlock the nation’s potential.

1.4.2 STP's environmental heritage

São Tomé and Príncipe achieves an average score of 6.64 on the Forest Landscape Integrity Index, which is measured on a ten-point scale. With this score, the country ranks 68th globally out of 172 nations, standing out in terms of the preservation and integrity of its forest landscapes compared to other countries around the world ([Grantham et al. 2020](#)). São Tomé and Príncipe has a limited fauna of native mammals, but the archipelago stands out for its rich biodiversity of endemic birds and plants. São Tomé and Príncipe also plays a crucial role as a nesting site for sea turtles, which find the archipelago's beaches a favourable environment for breeding ([Dinerstein et al. 2017](#)).

Recognising its natural heritage, STPs General Directorate for the Environment aims to make economic and social development compatible with the preservation of environmental quality and ecological balance, as well as establishing criteria and standards for environmental quality and rules on the use and management of environmental resources in accordance with the legal framework created and in force in the country. To this end, the way of working was defined as contributing to the sustainable development of São Tomé and Príncipe, based on high standards of protection and enhancement of environmental systems and integrated approaches through policies and management plans, environmental monitoring and assessment, implementation of climate adaptation and vulnerability projects, awareness campaigns, information and communication for citizens on environmental matters. ([DGA, 2016](#)).

The DGA (Direção Geral Ambiente e Ação Climática) coordinates national efforts and has signed international protocols to promote environmental development. Notably, in 2008, a protocol was established with Portugal's Climate Change Commission to support creating São Tomé and Príncipe's National Designated Authority for the Kyoto Mechanisms. Additionally, two Memoranda of Understanding were signed: one in 2011 for training environmental inspectors and another in 2012 for immediate climate change action between the governments of Portugal and São Tomé and Príncipe ([SGA, 2014](#)). In 2023, the UN and the Government of São Tomé and Príncipe began implementing a new Cooperation Framework (CF) lasting until 2027. This collaboration includes 8 resident UN agencies and 10 signatories, reflecting increased support and greater access to UN expertise compared to the previous CF. ([ONU, 2023](#)).

In terms of green and blue growth, according to the 2023 Annual Report ([ONU, 2023](#)), stood out for increasing the productivity and commercialisation of local green and blue economy products, entrepreneurs' access to financial and non-financial services for companies, and the governance of the blue economy.

1.4.3 STP economical context

The economic development of SIDS has been a topic of growing interest among researchers and policymakers ([Bishop et al., 2021](#), [Boswell, 2024](#)). These nations often face structural challenges such as geographic isolation, limited natural resources, and vulnerability to external shocks, including climate change and fluctuations in global commodity prices ([Briguglio, 1995](#); [De Marez, 2022](#); [Raman, 2024](#)). Literature on SIDS emphasizes the importance of economic diversification, sustainable tourism, and foreign aid in fostering economic resilience ([Baldacchino, 2006](#); [Booth, 2020](#)).

In the case of São Tomé and Príncipe, studies highlight the country's reliance on agriculture, particularly cocoa production, which has historically been the backbone of its economy ([Seibert, 2022](#)). However, economic literature also underscores the need for modernization of the agricultural sector, the promotion of eco-tourism, and the development of the blue economy as potential drivers of sustainable growth ([Lopes dos Santos, 2023](#); [UNCTAD, 2024](#)). Moreover, the role of foreign direct investment (FDI) and international partnerships in enhancing economic stability and infrastructure development has been widely discussed in the literature ([Fisker, 2022](#); [World Bank, 2022](#)).

Despite its challenges, São Tomé and Príncipe have been recognized for their relative political stability and efforts to improve governance and transparency, which are crucial factors in attracting investment and ensuring long-term economic growth ([IMF, 2023](#)). Scholars also point to the need for strategic planning in sectors such as renewable energy, fisheries, and digital transformation to reduce dependency on imports and create employment opportunities ([AfDB, 2021](#); [Eduardo, 2022](#)).

In the context of SIDS like in Sao Tomé and Príncipe, local entrepreneurship assumes even greater significance. The island's economy, historically reliant on agriculture and tourism, faces challenges such as geographic isolation, limited market size, and vulnerability to external shocks ([Carvalho et al., 2022](#)). Local entrepreneurs have the potential to mitigate these vulnerabilities by leveraging natural resources, cultural heritage, and indigenous knowledge to create sustainable business models ([Asterbo et al., 2011](#); [Gobena et al., 2022](#); [Yeboah et al., 2023](#)). São Tomé and Príncipe can benefit from targeted policies that support local entrepreneurs in sectors such as agribusiness, eco-tourism, and renewable energy, aligning with the SDGs' focus on poverty reduction, environmental sustainability, and inclusive economic growth ([Fonseca et al., 2020](#)).

1.4.4 STP Peace and Partnership situation

São Tomé and Príncipe is frequently cited as one of Africa's most politically stable nations. Since gaining independence in 1975, the country has maintained peaceful democratic governance and avoided violent conflict ([Freedom House, 2023](#); [World Bank, 2022](#)). However, despite this peaceful environment, STP faces challenges with institutional capacity, bureaucratic inefficiencies, and limited access to justice in remote regions ([Afrobarometer, 2021](#); [UNDP, 2023](#)).

While large-scale violence is absent, governance issues persist. Public trust in institutions is weakened by corruption, clientelism, and a lack of legal accountability mechanisms. These factors hinder social inclusion and limit state effectiveness. In this context, grassroots entrepreneurship can play a meaningful role by creating economic opportunities, enhancing social cohesion, and fostering bottom-up trust in institutions ([Amri et al., 2024](#)).

São Tomé and Príncipe's development relies heavily on international aid and cooperation. Key development partners include the UNDP, World Bank, African Development Bank, CPLP, Portugal, and Brazil ([UNDP, 2022](#)). These partnerships have supported initiatives in education, health, environmental sustainability, and governance, often framed within the scope of SDG 17 (Partnerships for the Goals). However, STP remains vulnerable due to its aid dependency and limited internal capacity to independently sustain or scale development interventions.

Recent projects in eco-tourism, digital education, and sustainable cocoa farming illustrate the growing role of entrepreneurship in development. These efforts often emerge through collaboration between local actors and international partners, highlighting the potential of entrepreneurial ecosystems to serve as a bridge between local development needs and global partnerships ([FAO, 2021](#); [UNCTAD, 2021](#); [UNECA, 2022](#)).

As a SIDS, STP is especially vulnerable to external shocks, including climate change and global market fluctuations. Strengthening peace and partnerships through inclusive entrepreneurship and local innovation can help build institutional resilience and align national efforts with SDG 16. This would not only enhance community well-being but also reduce long-term dependency on international aid.

1.4.5 Entrepreneurship in STP

Entrepreneurship in São Tomé and Príncipe is largely informal and centred around subsistence activities such as agriculture, handicrafts, and small-scale local commerce ([UNDP, 2022](#)). Around 80% of businesses are micro or small enterprises, often family-run, and they face common challenges such as limited access to credit, inadequate infrastructure, and low levels of technical and entrepreneurial training ([African Development Bank, 2021](#)).

These challenges are deeply rooted in the country's historical and structural context. After gaining independence in 1975, São Tomé and Príncipe adopted a centralized economic model, nationalizing former colonial plantations and extending state control over most sectors ([Santiago, 2012](#)). However, in recent decades, economic reforms have shifted the country toward a market-based model, encouraging private initiative and entrepreneurship ([Tiny, 2011](#)). Despite these shifts, São Tomé and Príncipe still ranks poorly in international assessments of ease of doing business. According to the World Bank, it remains one of the most difficult countries in its region for starting a business,

with capital investment costs exceeding three times the national per capita income ([WB, 2012](#), [World Bank Group, 2020](#)).

One major barrier to entrepreneurship is the education system. Higher education has historically not prepared graduates to pursue entrepreneurial paths ([Dominginhos et al., 2005](#)). This suggests the need for educational reform starting from the pre-university level, to install entrepreneurial attitudes and skills from an early age ([Santiago, 2012](#); [UNESCO, 2024](#)).

Despite the constraints, opportunities for entrepreneurship are emerging in several strategic areas:

- Sustainable Tourism: The country's rich biodiversity and ecotourism appeal have attracted both local and international interest ([Brito, 2020](#)).
- Agriculture and Agroindustry: Initiatives promoting organic cocoa and modernization of farming practices show potential for value addition and rural development ([FAO, 2020](#)).
- Digital Entrepreneurship: Growing internet access has created new spaces for startups in e-commerce and digital services ([Pontes, 2022](#)).

Additionally, a growing interest in social entrepreneurship, with ventures focused on environmental sustainability, renewable energy, and community empowerment—suggests a shift toward more inclusive and impact-driven business models ([Cardoso et al., 2016](#)).

Several international organizations, such as the UNDP and the African Development Bank, are actively promoting entrepreneurship through programs that improve access to finance, strengthen value chains, and empower local entrepreneurs. Meanwhile, the São Toméan government has adopted policies aimed at encouraging private sector growth and attracting foreign investment ([UNDP, 2022](#)).

In conclusion, entrepreneurship in São Tomé and Príncipe remains constrained by systemic barriers but holds significant potential to drive socio-economic progress and contribute to achieving the Sustainable Development Goals (SDGs). Realizing this potential requires integrated efforts to reform education, expand financial access, and improve infrastructure, laying the foundation for a more resilient and inclusive entrepreneurial ecosystem.

This leads to the question “What is the influence of entrepreneurship on local development?”, which will then lead to research question “What is the influence of local development due to entrepreneurship on the realization of the SDGs?”.

2. Field Research – Methods

To address the central research questions (1) “What is the influence of entrepreneurship on local development?”, and (2) “How does this local development contribute to the achievement of the SDGs?”, the study employs a mixed-methods approach, combining quantitative analysis based on SDG-aligned indicators with qualitative inquiry derived from open-ended survey responses. This methodological choice reflects both the complexity of the research objectives and the need for a flexible, context-sensitive design capable of capturing the nuanced dynamics of entrepreneurship in low-resource environments.

To ensure methodological transparency and analytical rigor, this chapter is organized into three main sections.

Section 2.1 discusses the epistemological orientation and overall research strategy, situating the study within the broader literature on entrepreneurship and grand challenges. It justifies the choice of São Tomé and Príncipe as a case study and explains the adoption of a mixed-methods approach, integrating quantitative SDG-aligned indicators with qualitative insights from entrepreneurs’ narratives.

Section 2.2 details the design and operationalization of the structured survey. It outlines the sampling rationale and recruitment of 100 entrepreneurs across diverse sectors, as well as the adaptation of UN SDG indicators to the local context. The section also presents the ethical safeguards, inclusion criteria, and practicalities of fieldwork conducted in February 2024, ensuring that questions were understandable and culturally appropriate.

Section 2.3 introduces the qualitative instrument designed to capture perceptions across the “5 Ps” of the 2030 Agenda. It describes how open-ended responses were analyzed through systematic coding, thematic grouping, and dashboard visualizations, enabling both categorical content analysis and cross-dimensional exploration. The section emphasizes how quantitative and qualitative data streams were triangulated to generate robust evidence on entrepreneurship’s role in advancing sustainable development.

By integrating standardized indicators into locally adapted research tools, this study connects global development frameworks with the realities of local entrepreneurship. The design captures the multiple ways in which entrepreneurs contribute to sustainable development, generating insights relevant to both academia and policy, particularly in São Tomé and Príncipe and other fragile contexts.

This chapter lays the methodological foundation for the results (Chapter 3) and analysis (Chapter 4), ensuring that the thesis’s empirical claims rest on a transparent, rigorous, and context-sensitive research process.

2.1 Methodology identification

Aiming to measure the Influence of Local Entrepreneurship in the resolution of major international challenges through the perspective of Sustainable Development, using other related and recognized studies linking Entrepreneurship and major international challenges such as "Grand challenges and entrepreneurship: Emerging issues, research streams, and theoretical landscape" ([Ricciardi et al., 2021](#)), "Unpacking opportunity recognition for sustainable entrepreneurship ([Enthoven, 2021](#))" or "Building Responsible Innovation in International Organizations through Intrapreneurship" ([Ambos & Tatarinov, 2022](#)), created the notions of how to explore the topic and ensure measurement part with a consolidated and defined basis of what approach to take. Additionally the inspiration in these documents and the original symposium "E Pluribus Unum: Impact Entrepreneurship as a solution to grand challenges" by Markman, Waldron, Gianiodis and Espina ([2019](#)) grounded knowledge of the topic facilitates the discussion and flexible approach of this study. It is with this reflection that the initial choice of measuring this influence becomes so important and leads to the possibility of taking a close look at localities as drivers of public policies, examples of good practices and implementation of guidelines ([Owen et al., 2013](#); [Ribeiro et al., 2017](#)), giving rise to the desire to do a case study, in order to make the research more real and not only theoretical. Adding to the interest of doing this research, bringing the UN's Agenda 2030 into the research increases the interest by broadening the spectrum of those interested in the topic while creating theoretical and practical knowledge in solving major international challenges, enabling comparison between reports on the general population and those on the entrepreneurial population alone.

With this, and to answer the research question "What is the influence of Entrepreneurship in Local Development?" and "What is the impact of the influence of Local Development due to Entrepreneurship in achieving the SDGs?", using São Tomé and Príncipe and the achievement of the SDGs as the case study six steps were defined to answer this:

Research Question 1 – What was the influence of Entrepreneurship on Local Development?

- The creation of the questionnaire was based on official UN reports, from which the main indicators were identified to ensure comprehensive coverage of the topic and to allow for the measurement and comparison of the information collected. During the development process, considerations were made to include elements characterising the entrepreneur, as well as the type and size of the business. In parallel, an analysis of the national context was carried out to guarantee that the sample would be adequately representative of the entrepreneurial landscape in São Tomé and Príncipe. Prior to implementation in the field, the questionnaire was validated through a review process involving local entrepreneurs.
- Fieldwork was then conducted, during February 2024 (15 days), for the administration of the questionnaire and collection of relevant data. Local organisations were engaged both before

and during the data collection phase, providing essential support to ensure the process was effective and contextually appropriate. Entrepreneurs were contacted directly, and the necessary consents for the use of the collected information were obtained.

- Following the completion of the questionnaires, the data were compiled to facilitate structured comparison and subsequent analysis. A multiple linear regression analysis was performed with the aim of graphically demonstrating the influence of entrepreneurship on local development that allowed the results of Chapter 3.

Research Question 2 – What was the impact of the influence of Local Development due to Entrepreneurship on achieving the SDGs?

- Based on the outcomes of the first research question (Chapter 3), the collected data were analysed to identify key patterns and recurring relationships. Specific factors and variables were selected to enable a more detailed examination of the influence of entrepreneurial activity on sustainable development.
- These selected factors were subsequently cross-referenced with official UN indicators, including those from the Statistical Capacity Country Profile for SDG Indicators. Various graphical representations were utilised to test potential relationships and explore the scope of influence across the SDGs.
- Upon completing the cross-referencing phase and identifying significant correlations, the findings were compiled and interpreted (Chapter 4). The results were then synthesised and visually presented to facilitate clarity and comprehension.

Throughout the six methodological steps, three research approaches were taken into account, as proposed by Branski, Franco and Lima Jr. (2010), and their commonalities were considered in the development of the study. An exploratory approach was applied to investigate and understand the phenomenon in depth, including its specificities and both theoretical and practical dimensions. An explanatory approach was adopted to analyse the essence of the relationships associated with the identified factors and contributions, as well as their underlying causes. Finally, a descriptive approach was employed to ensure that the empirical study would reflect the observed reality as accurately as possible.

2.1.1 Questionnaire Creation

Research adopts a qualitative and quantitative approach through open and close questions survey, with the aim of gaining an in-depth understanding of the perceptions and experiences of local entrepreneurs regarding their role in the sustainable development of communities in São Tomé and Príncipe and the influence it has on achieving the SDGs. It was opted content analysis of responses from questionnaires, as it allows to identify meanings, patterns and categories emerging directly from the participants narratives, while respecting the complexity and specificity of the context studied

([Martin, 2006](#); [Ikart, 2019](#); [Aithal, 2020](#)). Based on the possible comparative analysis that would be possible to do to compare the general population with the entrepreneur population, the questionnaire was structured into four sections (annexes) to provide a comprehensive understanding of the reality:

1. Description of the Respondent: Collected individual data regarding personal and family contexts to enable generic comparisons between groups (Annex A).
2. Description of the Business: Gathered information about the entrepreneur's organization to facilitate comparative analysis between different businesses (Annex B).
3. Closed-Answer Questions on the SDGs: Used limited-response options to quantitatively measure trends and assess progress on the selected SDGs (Annex C, D and E).
4. Open-Ended Questions on the SDGs: Allowed unlimited responses to qualitatively capture respondents' opinions and perspectives on the SDGs, and at the same time quantitative analysis combine with the available targets (Annex F).

To ensure an equitable and representative analysis, the study employed a diverse purposive sample of 100 entrepreneurs, selected to capture variation across sectors, regions, and business sizes. This approach was designed for breadth of coverage, not statistical representativeness, and therefore does not support population-level estimates. The sample was defined as $N = 100$ in order to balance representativeness with feasibility in the specific context of São Tomé and Príncipe. Given the relatively small size of the entrepreneurial ecosystem in the country, a sample of 100 respondents provides sufficient diversity across sectors, age groups, and business types to capture heterogeneous entrepreneurial practices, while remaining feasible in terms of data collection logistics and resource constraints ([Creswell, 2014](#)). From a statistical perspective, a sample of this size allows for meaningful descriptive analysis and the identification of trends across subgroups, without aiming for probabilistic generalization. Furthermore, the decision aligns with similar studies on entrepreneurship in Small Island Developing States (SIDS), where limited population size and access challenges often necessitate modest but contextually robust samples ([Baldacchino, 2017](#); [Naudé, 2011](#)). Thus, $N = 100$ was considered an appropriate compromise to ensure both analytical depth and practical viability. The distribution of entrepreneurs to be surveyed was determined based on population data from the most recent census previous to the field work ([2017](#)).

District	Population of São Tomé by District	Entrepreneurs to be interviewed (n=100)
Água Grande	75974	38
Mé-Zochi	49852	25
Cantagalo	19006	10
Caué	7132	4
Lembá	15891	8
Lobata	21569	11
Pagué	8277	4
TOTAL	197700	100

*Table 2.1 - Coverage plan for sectoral and regional diversity in the purposive sample for a population of n=100
Source - Data organised by the Author based on data from STP census 2017*

Inclusion criteria required respondents to be active entrepreneurs, defined as individuals whose primary source of income derived from an operating business at the time of the survey. Recruitment was conducted through local business associations, municipal contacts, and snowball referrals. Participation was voluntary. This sampling design prioritizes coverage and diversity rather than probabilistic representativeness

The research was conducted in full compliance with the ethical principles applicable to research with human beings. All participants were informed about the aims of the study and how the data would be used and gave their free and informed consent before taking part. Anonymity and confidentiality of responses were guaranteed, ensuring that no individual information could be associated with a specific participant as described in the signature part of consent declaration (Annex F). Participation was voluntary and the questionnaires were administered in a safe environment that respected local cultural and social norms. The case study approach allows for contextual depth while enabling exploratory extrapolation to other comparable contexts

2.2 SDG close-answer question indicators

The question, "What is the influence of Local Development due to Entrepreneurship in achieving the SDGs?" served as the basis for analysis. To answer it, understanding how the United Nations assesses progress toward the SDGs is essential. The UN uses a structured approach with over 169 global indicators approved by the UN Statistical Commission to measure progress across all 17 SDGs. These indicators are disaggregated by factors such as gender, age, location, and economic status to ensure inclusivity. Progress is summarized in reports like the Global Sustainable Development Report (GSDR) and the annual SDG Progress Report, which highlight advancements, gaps, and priority areas. Member states also present Voluntary National Reviews (VNRs) during the High-Level Political Forum (HLPF), outlining national progress and challenges.

Data for these reports is collected through partnerships with organizations such as the OECD, World Bank, IMF, and UN agencies like UNICEF and UNESCO. Countries adapt global indicators to local contexts, with national statistics agencies playing a key role. The UN has also embraced technologies like big data and satellite imagery to improve data collection in challenging regions. A public database provides detailed statistics for follow-ups at global, regional, and national levels. Tools like the SDG Index and Dashboards visually rank countries performances using a "traffic light" system (Figure 2.1), while SDG Trend Panels track whether countries are on track to meet goals by 2030 based on historical growth rates. The HLPF serves as the main platform for reviewing SDG progress, fostering discussions on challenges, best practices, and shared experiences.



Figure 2.1 - SDG traffic light indicator panels
 Source: UN SDG Progress Report, 2024

The UN’s comprehensive system for tracking SDG progress faces significant challenges, particularly in the context of entrepreneurship and its impact on achieving the SDGs. Despite the robust global indicators, reports, partnerships, and innovative monitoring technologies employed by the UN, there are notable data gaps that hinder comprehensive comparative analyses. The lack of specific data on entrepreneurs presents a significant obstacle in understanding their role in broader SDG achievement. To address this gap, a focused approach on collecting data from entrepreneurs, defined as individuals or groups running operational businesses as their primary income source, has been proposed.

Based on the identified indicators and the absence of national data on entrepreneurs in São Tomé, it was determined that documentary analysis would not be feasible, necessitating field research to gather the required data for comparison. Various data collection methods were considered, including direct observation, interviews, questionnaires and surveys, focus groups, participant diaries, and ethnographic approaches.

Given the constraints of a 15-day timeframe for fieldwork and the need for nationally representative data, the use of a questionnaire was deemed the most suitable approach. This method not only facilitated efficient data collection but also allowed for brief direct observations of working conditions. For the closed-response section, adjustments were made following consultations with São Tomense nationals to accommodate the country’s low education levels. The questions were adapted for clarity and simplicity, with each entrepreneur required to answer two questions per each SDG indicator:

- Question 1 – Regarding the raking, the entrepreneur whether the current situation could be categorized as "Yes," "No," or "More or less."
- Question 2 – Regarding the trending, whether the situation since becoming an entrepreneur had "improved significantly," "improved slightly," "remained the same," or "worsened."

Responses were compiled and assigned values, allowing an average value to be calculated for each indicator (Table 2.2). These averages, divided as necessary, corresponded to the predefined indicators established by the UN. The resulting values formed the basis for subsequent analyses.

Question I	Answer I	Value
	Yes	3
	More or Less	2
	No	0
Question II	Answer II	Value
	Significantly improved	4
	Slightly improved	3
	Remained Identical	2
	Got worse	1

Table 2.2 - Question values per answer of the survey

Source - Data organised by the Author based on data from UN SDG Progress Report 2024

These values were selected to enable a consistent and well-founded basis for analysis. By calculating averages, the results could be categorized into response groups for further interpretation (Table 2.3).

Results Answers I	Value	0	0,1 - 0,99	1 - 1,99	2 - 2,99	3
	Icone					
Meaning	Information Unavaible	Major Challenges	Significant Challenges	Challenges Remain	SDG Achieved	

Results Answers II	Value	0	0,1 - 1	1,1 - 2	2,1 - 3	3,1 - 4
	Icone					
Meaning	Information Unavaible	Decreasing	Stagnating	Moderately Improving	On track or Maintaining	

Table 2.3 - Answers values per answer of the survey

Source - Data organised by the Author based on data from UN SDG Progress Report 2024

Responses to categorical items were numerically coded to construct a composite ordinal index, allowing directional comparison across indicators. This transformation is not intended to imply precise interval distances but rather to enable a structured, heuristic assessment of relative positioning between entrepreneurs and national dashboards. All results are therefore interpreted qualitatively in terms of direction and ordering, rather than precise magnitudes.

To enable comparison between the two dashboards, an analysis system was developed to assess progress based on rating and trend levels. This system evaluates 8 parameters, reflecting the evolution of levels within the available options. The evolution can be categorized as negative, neutral,

positive, or not applicable (Table 2.4). For positive and negative progress, the difference may involve three parameters or an improvement of 1, 2, or 3 levels.

Comparison	Value	---	--	-	=	+	++	+++	N/A
	Meaning		Negative difference of 3 levels	Negative difference of 2 levels	Negative difference of 1 level	Keep it the same	Positive difference of 1 level	Positive difference of 2 levels	Positive difference of 3 levels

Table 2.4 - Analyse system to compare the evolution according to rating and trend levels
Source - Data organised by the Author based on data from UN SDG Progress Report 2024

Like already referred the methodology was based on the *Sustainable Development Report 2024* (UN, 2024), which ranks São Tomé and Príncipe 118th out of 167 countries, with an overall SDG score of 63. Given this challenging context, the research focused on selecting the weakest-performing indicators across the SDGs. Specifically, two to three indicators were chosen for each SDG, prioritizing those with the poorest results. This approach ensured alignment with the research objective of analysing solutions to global challenges, since improvements in low-performing areas are more visible and meaningful than in areas already performing at average or high levels.

For each selected indicator, two survey questions were designed. These questions were carefully adapted to preserve the intent of the original UN indicator while also reflecting local realities, vocabulary, and levels of knowledge. This adaptation was necessary to ensure comprehension among entrepreneurs and to allow the questionnaire to run smoothly. In some cases, questions were rephrased to maintain their meaning while using alternative wording. The adapted indicators thus serve as perception-based, micro-level proxies conceptually aligned with the UN SDG targets, but not directly comparable in statistical terms. After this first adaptation, the questionnaire was reviewed and validated by São Toméan participants to confirm clarity and suitability and then revised into its final version for use in the study.

Next, we will look at each dimension of the SDGs, the status of each SDG in STP, the selected indicators, and their adaptation for the questionnaire:

2.2.1 People indicators:

São Tomé and Príncipe faces multidimensional social development challenges that hinder its progress toward achieving key people-centered Sustainable Development Goals (SDGs). The country is off track or progressing too slowly on SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education) and SDG 5 (Gender Equality). These challenges are closely linked to systemic inequalities, structural weaknesses in public services, and limited institutional capacity.

Under SDG 1 (No Poverty), poverty remains widespread and deeply entrenched, especially in rural and peri-urban areas. A significant portion of the population relies on informal and subsistence

livelihoods with little access to formal social protection mechanisms. Economic opportunities are scarce outside the public sector, and youth unemployment is notably high, contributing to cycles of intergenerational poverty and out-migration.

SDG 2 (Zero Hunger) remains a critical concern due to continued food insecurity, undernutrition, and a high dependency on food imports. Despite the country’s agricultural potential, productivity remains low due to outdated practices, land degradation, and limited access to inputs and markets. Malnutrition disproportionately affects children and women of reproductive age, and school feeding programs often struggle with irregular implementation.

In relation to SDG 3 (Good Health and Well-being), the country faces challenges in both access and quality of healthcare. While there have been improvements in vaccination coverage and maternal health, health infrastructure remains underdeveloped, especially in rural districts. There is a shortage of qualified medical personnel, limited access to essential medicines, and frequent stock-outs in primary health centers. Non-communicable diseases are rising, while malaria, respiratory infections, and diarrheal diseases continue to pose serious public health threats.

For SDG 4 (Quality Education), the education system is marked by disparities in access, quality, and learning outcomes. Primary school enrolment is relatively high, but dropout rates increase significantly in secondary education, particularly among girls. Many schools operate with insufficient teaching materials, overcrowded classrooms, and underqualified staff. Technical and vocational training remains underdeveloped, limiting the alignment between education and labor market needs.

Finally, SDG 5 (Gender Equality) presents persistent challenges across economic, social, and political dimensions. Women face barriers to accessing decent work, land ownership, and financial services, and are underrepresented in leadership and decision-making roles. Gender-based violence remains underreported and poorly addressed, due in part to limited institutional responses and cultural stigmas.

These interlinked issues demonstrate the urgent need for cross-sectoral and inclusive development strategies. Strengthening human capital, expanding social protection, improving the equity and quality of basic services, and promoting gender-responsive policies are key to accelerating progress. A more holistic and coordinated approach aligned with the 2030 Agenda is essential to improve the well-being and resilience of the population.



Figure 2.2 - Indicator dashboards of São Tomé’s People SDG 1, 2, 3, 4 and 5 in 2024

Source - UN SDG Progress Report 2024

The following indicators were selected for the people focused SDGs:

SDG	Indicator	Value	Year	Rating	Trend
SDG 1	Poverty headcount ratio at \$2.15/day (2017 PPP, %)	16.8	2024	●	→
	Poverty headcount ratio at \$3.65/day (2017 PPP, %)	43.8	2024	●	→
SDG 2	Prevalence of undernourishment (%)	13.1	2021	●	↗
	Sustainable Nitrogen Management Index (best 0–1.41 worst)	1	2018	●	↓
SDG 3	Traffic deaths (per 100,000 population)	11.7	2021	●	↑
	Universal health coverage (UHC) index of service coverage	59	2021	●	↗
SDG 4	Participation rate in pre-primary organized learning (% children aged 4 to 6)	54.5	2015	●	●
	Lower secondary completion rate (%)	98.2	2022	●	●
SDG 5	Demand for family planning satisfied by modern methods (% of females aged 15 to 49)	78.8	2022	●	→
	Ratio of female-to-male mean years of education received (%)	53.6	2023	●	→
	Ratio of female-to-male labor force participation rate (%)	54.2	2022	●	→

Table 2.4 - Dashboards of São Tomé's SDG 1, 2, 3, 4 and 5 in 2024

Source - Data organised by the Author based on data from UN SDG Progress Report 2024

Based on the methodology, to facilitate the surveys, it was necessary to adapt the questions to facilitate the perception of the survey participants. With this, in the first two questions (SDG 1) it was necessary to convert from dollars to dobras, the national currency of STP. In the case of SDG indicator 5, the two questions “Ratio of average years of schooling received between women and men (%)” and “Ratio of labour force participation rate between women and men (%)”, due to their similar placement of the question, mainly changed the theme to “Should men and women have the same opportunities at school and at work?”, thus managing to assess together these which had the same results in the UN report. That result in the following table:

SDG	Indicator	UN, 2024	
		Rating	Trend
SDG 1	Do you earn more, same, or less than 46 dobras/day?	●	→
	Do you earn more, same, or less than 70 dobras/day?	●	→
SDG 2	How many meals do you eat a day?	●	↗
	Do you know if the products you consume are sustainable?	●	↓
SDG 3	Have you ever had a driving accident?	●	↑
	Do you have access to health services?	●	↗
SDG 4	Do you have carers at any pre-schools?	●	●
	How literate are you?	●	●
SDG 5	Have you done any family planning?	●	→
	Should men and women have the same opportunities in school and labor?	●	→

Table 2.5 - Questions adapted based on the dashboards of São Tomé's SDG 1, 2, 3, 4 and 5 in 2024

Source - Data organised by the Author based on data from UN SDG Progress Report 2024

In this table, it should be noted that the indicator “Traffic deaths (per 100,000 population)”, which in the 2024 report appears with a rating of “Moderately Improving” and a trend of “On track or Maintaining”, was initially chosen because in the 2023 report it had values for the “Major Challenges” rating with a trend of “Decreasing”, having values of 27.9 in 2019 data, making it one of the worst indicators of SDG 3 in STP, a situation that has seen an extremely positive evolution, changing to the

current values. This improvement was only made public after the field investigation, which meant that the indicator could not be changed, so we are keeping the same indicator, which can be analysed.

2.2.2 Planet Indicators

São Tomé and Príncipe's environmental performance across the "planet-related" Sustainable Development Goals (SDGs) reveals both areas of progress and critical vulnerabilities. The country is making uneven strides in SDG 6 (Clean Water and Sanitation), SDG 13 (Climate Action), SDG 14 (Life Below Water), and SDG 15 (Life on Land). While it has demonstrated political commitment to sustainability, structural constraints and environmental fragilities continue to pose major obstacles to achieving long-term ecological resilience.

In contrast, SDG 6 (Clean Water and Sanitation) remains a high-risk area. A large share of the population, particularly in rural areas and on the smaller island of Príncipe, lacks access to safely managed water sources and improved sanitation facilities. Water quality monitoring systems are underdeveloped, and there is limited capacity for wastewater treatment or solid waste management. Seasonal variability, aging infrastructure, and weak institutional coordination further compromise access to clean and safe water. Inadequate hygiene infrastructure also exacerbates health risks, particularly among children and vulnerable populations.

SDG 12 (Responsible Consumption and Production) remain undefined due to limited or inconsistent data but STP is advancing through renewable energy, sustainable agriculture, and marine conservation, backed by international partnerships and private sector engagement. However, scaling up sustainable consumption and production remains an ongoing challenge tied to financing gaps, data limitations, and broader structural constraints.

SDG 13 (Climate Action) shows moderate progress. São Tomé and Príncipe is actively participating in global climate agreements, including the Paris Agreement, and has developed a Nationally Determined Contribution (NDC) outlining adaptation and mitigation goals. The government has initiated measures such as coastal protection, reforestation, and early warning systems. However, the country remains highly vulnerable to climate-related hazards including rising sea levels, increased coastal erosion, and more intense rainfall patterns, all of which threaten agriculture, infrastructure, and livelihoods. The lack of climate financing and limited adaptive capacity at the local level present ongoing challenges.

SDG 14 (Life Below Water) is an area of significant concern. As a small island developing state (SIDS), São Tomé and Príncipe depends heavily on marine resources for food security and economic activity, particularly artisanal fisheries. However, unsustainable fishing practices, lack of regulation, and growing marine pollution, including plastics and untreated waste, are leading to coastal and marine ecosystem degradation. Coral reefs and fish populations are under pressure, and marine

protected areas remain limited in scope and enforcement. This undermines both biodiversity and the livelihoods of coastal communities.

Meanwhile, SDG 15 (Life on Land) shows gradual progress. The country has rich terrestrial biodiversity, with high levels of endemism, particularly in its forests and mountain ecosystems. Conservation initiatives, such as the Obó Natural Park, have improved protected area coverage and promoted sustainable land use practices. Nonetheless, deforestation—driven by agricultural expansion, logging, and charcoal production—continues to threaten biodiversity. Soil erosion and land degradation also remain serious challenges, especially in upland farming areas where slash-and-burn techniques are still practiced.



Figure 2-2 - Indicator dashboards of São Tomé's planet SDG 6, 12, 13, 14 and 15 in 2024
Source - UN SDG Progress Report 2024

Despite national and international commitments to environmental sustainability, São Tomé and Príncipe faces cross-cutting constraints including limited institutional capacity, inadequate funding for environmental initiatives, and weak enforcement of environmental regulations. The country's SIDS status further amplifies its exposure to climate and ecological risks.

Moving forward, accelerating progress on planet-related SDGs will require integrated environmental governance, enhanced access to climate finance, stronger partnerships with international organizations, and the inclusion of local communities in conservation and climate adaptation strategies. A holistic approach that links ecological sustainability with poverty reduction and local economic development is essential to achieving the 2030 Agenda in São Tomé and Príncipe. The following indicators were identified for the 4 SDGs in the environmental area:

SDG	Indicator	Value	Year	Rating	Trend
SDG 6	Population using at least basic drinking water services (%)	77.3	2022	●	→
	Population using at least basic sanitation services (%)	47.8	2022	●	→
SDG 12	Municipal solid waste (kg/capita/day)	0.4	2014	●	●
	Electronic waste (kg/capita)	1.5	2019	●	●
	Production-based nitrogen emissions (kg/capita)	NA	NA	●	●
	Nitrogen emissions associated with imports (kg/capita)	NA	NA	●	●
	Exports of plastic waste (kg/capita)	0	2018	●	●
SDG 13	CO2 emissions from fossil fuel combustion and cement production (tCO2/capita)	0.6	2022	●	↑
	GHG emissions embodied in imports (tCO2/capita)	NA	NA	●	●
	CO2 emissions embodied in fossil fuel exports (kg/capita)	0	2023	●	●
SDG 14	Ocean Health Index: Clean Waters score (worst 0–100 best)	32.4	2018	●	↓
	Fish caught from overexploited or collapsed stocks (% of total catch)	47.3	2023	●	→
SDG 15	Mean area that is protected in terrestrial sites important to biodiversity (%)	86.3	2023	●	↑
	Mean area that is protected in freshwater sites important to biodiversity (%)	92.8	2023	●	↑
	Permanent deforestation (% of forest area, 3-year average)	NA	NA	●	●

Table 2.6 - Dashboards of São Tomé's SDG 6, 12, 13, 14 and 15 in 2024
Source - Data organised by the Author based on data from UN SDG Progress Report 2024

The 2 questions for each of the indicators needed to be adapted in order to maintain the objective of the indicator but to be adapted to the local reality, their vocabulary and knowledge. This transition meant that most of the questions only changed the way they were presented, so that they could be understood when the entrepreneurs were asked. However, in indicator 12 five indicators, were identified, as those relating to municipal solid waste (kg/capita/day) and electronic waste (kg/capita) have the same results and can be combined in the same question, “Do you have access to rubbish bins and/or recycling bins?”, as for the other three indicators, since they are related to emissions linked to product consumption, it is possible to relate them to “Do you pay attention to the origin of the products you buy?”. Also in the SDG 13, a combination of the questions associated with exports and imports led to a question associated with the impacts of climate change, with the notion that it would need to be contextualised during the questionnaire. This combination made the indicators “Information Unavailable” because it crossed two different indicators.

In addition, in the Clean Waters indicator, the concern for keeping water clean was analysed. Finally, in SDG 15, freshwater was combined with terrestrial sites important to biodiversity, as they have the same rating and trending, and in the question “Permanent deforestation (% of forest area, 3-year average)” an attempt was made to understand the notion and use of forest resources. After this initial adaptation, the questionnaire was presented to native São Toméans, who suggested changing some words and rephrasing others to ensure consistency, resulting the the following version:

SDG	Indicator	UN, 2024	
		Rating	Trend
SDG 6	Do you have access to drinking water?	●	➡
	Do you have access to a bathroom?	●	➡
SDG 12	Do you have access to rubbish bins and/or recycling bins?	●	●
	Do you pay attention to the origin of the products you buy?	●	●
SDG 13	Are you trying to reduce your consumption of fossil fuels?	●	⬆
	Do you realise the impacts of climate change?	●	●
SDG 14	Do you try to protect marine life?	●	⬇
	Do you ever fish/buy sea animals illegally?	●	➡
SDG 15	Are you trying to protect life on Earth?	●	⬆
	Do you ever use natural resources illegally?	●	●

Table 2.7 - Questions adapted based on the dashboards of São Tomé’s SDG 6, 12, 13, 14 and 15 in 2024
Source - Data organised by the Author based on data from UN SDG Progress Report 2024

2.2.3 Prosperity/Economic Indicators

São Tomé and Príncipe’s progress across selected SDG beyond the environmental domain reveals a complex landscape of persistent risks, emerging improvements, and data gaps. The country’s performance on infrastructure, urban development, and energy-related SDGs 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure),

SDG 10 (Reduced Inequalities) and SDG 11 (Sustainable Cities and Communities) reflects both the structural limitations of a SIDS and the incremental efforts to build resilience and capacity.

SDG 7 (Affordable and Clean Energy) remains an area of major concern. The country faces stagnant progress in expanding access to reliable, affordable, and sustainable energy services. Electricity access remains limited and uneven, especially in rural and remote areas, and the energy supply is heavily reliant on imported fossil fuels, contributing to energy insecurity and economic vulnerability. Although there have been efforts to promote renewable energy, such as small-scale solar projects, these remain fragmented and underfunded, with weak institutional capacity to scale up green energy infrastructure.

SDG 8 (Decent Work and Economic Growth) remain undefined due to limited or inconsistent data. However, anecdotal evidence suggests that challenges persist in promoting inclusive economic growth, reducing informality in the labour market, and fostering sustainable consumption patterns. A lack of robust monitoring systems and comprehensive data hampers policy effectiveness and accountability in these areas.

SDG 9 (Industry, Innovation, and Infrastructure) is characterized by significant challenges but shows signs of moderate improvement. Investment in basic infrastructure, such as roads, ports, and digital connectivity, has been increasing, albeit slowly, with support from international partners. However, industrial development is constrained by a small domestic market, high production costs, and limited technological capacity. Innovation remains low, and access to finance for small and medium-sized enterprises (SMEs) is limited, impeding broader economic diversification and sustainable industrialization.

SDG 10 (Reduced Inequalities) highlights the country's difficulty in ensuring inclusive development. Regional disparities, especially between the capital and rural areas or smaller islands, are pronounced. Vulnerable groups such as people with disabilities, the elderly, and youth often lack access to services and opportunities. Economic inequality is exacerbated by limited formal employment and unequal access to basic infrastructure and services.

SDG 11 (Sustainable Cities and Communities) similarly reflects significant challenges with modest upward momentum. Urban areas, particularly the capital city of São Tomé, face issues related to informal settlements, poor housing conditions, and insufficient urban planning. Waste management systems are underdeveloped, and urban resilience to climate-related risks such as flooding and landslides remains weak. Nonetheless, ongoing urban development projects and international support for municipal planning provide a foundation for more inclusive and sustainable urbanization in the future.

Overall, São Tomé and Príncipe's progress on these SDGs highlights the interplay between infrastructure deficits, capacity constraints, and external dependencies. Moving forward, targeted

investments in renewable energy, sustainable infrastructure, and institutional strengthening, supported by improved data collection and monitoring, will be critical to advancing these interconnected goals. A multi-sectoral approach that aligns with the country’s environmental priorities and socioeconomic needs is essential to delivering on the broader vision of sustainable development.



Figure 2-3 - Indicator dashboards of São Tomé’s Prosperity SDG 7, 8, 9, 10 and 11 in 2024
 Source - UN SDG Progress Report 2024

For the economical focused SDGs, the following indicators were chosen:

SDG	Indicator	Value	Year	Rating	Trend
SDG 7	Population with access to electricity (%)	78.5	2021	●	➡
	Population with access to clean fuels and technology for cooking (%)	3.7	2021	●	➡
SDG 8	Adjusted GDP growth (%)	-5.2	2022	●	●
	Victims of modern slavery (per 1,000 population)	NA	NA	●	●
	Unemployment rate (% of total labor force, ages 15+)	14.2	2024	●	⬇️
SDG 9	Population using the internet (%)	57	2024	●	⬆️
	Quality of trade and transport-related infrastructure (worst 1–5 best)	2.3	2018	●	●
SDG 10	Gini coefficient	40.7	2017	●	●
	Palma ratio	2	2017	●	●
SDG 11	Proportion of urban population living in slums (%)	52.6	2020	●	➡
	Annual mean concentration of PM2.5 (µg/m³)	15.2 2	2022	●	➡
	Access to improved water source, piped (% of urban population)	100	2022	●	⬆️

Table 2.8 - Dashboards of São Tomé’s SDG 7, 8, 9, 10 and 11 in 2024
 Source - Data organised by the Author based on data from UN SDG Progress Report 2024

The adaptation of these indicators was similar to that of the previous Ps, with the main change being translation and adaptation to the context of São Tomé and Príncipe. However, in the SDG indicators, the two associated indicators “Victims of modern slavery (per 1,000 population)” and “unemployment rate (% of total labour force, ages 15+)” were combined into “Do you receive compensation for your work?” because if they receive compensation, they are not slaves and are employed. For SDG 11, three indicators were identified and these three were translated, as it is the only SDG with three indicators, due to their relevance. With this the questions were adapted to this version:

SDG	Indicator	UN, 2024	
		Rating	Trend
SDG 7	Do you have access to electricity?		
	Do you have access to gas and/or electricity for cooking?		
SDG 8	Do you think your salary is fair?		
	Do you receive compensation for your work?		
SDG 9	Do you have access to the internet and/or a mobile phone for work?		
	Do you have access to transport?		
SDG 10	Do you feel there are equal opportunities?		
	Do you feel there is equal access?		
SDG 11	Is your home in good condition?		
	How many people live in your house?		
	Is your neighbourhood in good condition?		

Table 2.9 - Questions adapted based on the dashboards of São Tomé's SDG 7, 8, 9, 10 and 11 in 2024
Source - Data organised by the Author based on data from UN SDG Progress Report 2024

2.2.4 Peace and Partnerships Indicators

São Tomé and Príncipe's performance on the "peace and partnership", SDG 16 (Peace, Justice and Strong Institutions) and SDG 17 (Partnerships for the Goals), reflects both systemic governance constraints and promising diplomatic engagement. These two goals are critical enablers of the entire 2030 Agenda, underpinning institutional legitimacy, rule of law, and international cooperation. While there are areas of resilience, the country continues to face significant challenges, particularly in governance capacity and institutional effectiveness.

SDG 16 (Peace, Justice and Strong Institutions) presents significant challenges and shows stagnating progress. Despite São Tomé and Príncipe's reputation for relative political stability and peaceful democratic transitions compared to many of its regional peers, underlying institutional weaknesses persist. Issues such as limited access to justice, inefficient public administration, and low levels of transparency and accountability hinder more inclusive governance. Corruption remains a concern, especially in public procurement and service delivery, and law enforcement institutions often operate with insufficient resources and capacity. Efforts to improve legal frameworks and strengthen civic participation have not yet translated into measurable progress, and there is limited data availability on key justice and human rights indicators.

In contrast, SDG 17 (Partnerships for the Goals) shows significant challenges but is on track or maintaining achievement, reflecting São Tomé and Príncipe's strong engagement with international development partners. The country benefits from sustained support through multilateral and bilateral cooperation, including with the United Nations, the African Development Bank, and various EU and Portuguese-led initiatives. These partnerships have been instrumental in financing public services, building institutional capacity, and supporting climate resilience and health system strengthening. However, São Tomé and Príncipe remains highly dependent on external aid, and domestic resource

mobilization continues to be a major constraint. Statistical capacity is also limited, affecting the ability to monitor SDG progress and inform evidence-based policymaking.

To accelerate progress in the peace and partnership domain, São Tomé and Príncipe must strengthen the independence and functionality of its institutions, invest in judicial and public sector reforms, and build mechanisms for greater citizen engagement and accountability. At the same time, leveraging international cooperation for sustainable, long-term capacity development, particularly in data systems, financial governance, and institutional transparency, will be essential for advancing SDG 16 and consolidating gains under SDG 17.



Figure 2-4 - Indicator dashboards of São Tomé’s SDG 16 and 17 in 2024
Source - UN SDG Progress Report 2024

For the focused SDGs, the following indicators were chosen:

SDG	Indicator	Value	Year	Rating	Trend
SDG 16	Unsented detainees (% of prison population)	32.8	2018	Yellow	Grey
	Corruption Perceptions Index (worst 0–1 best)	45	2023	Orange	Orange arrow
SDG 17	Government spending on health and education (% of GDP)	0.5	2022	Orange	Green arrow
	Index of countries’ support to UN-based multilateralism (worst 0–100 best)	60.3	2023	Red	Grey

Table 2.10 - Dashboards of São Tomé’s SDG 16 and 17 results in 2024
Source - Data organised by the Author based on data from UN SDG Progress Report 2024

As with all the other indicators, the four indicators for these two SDGs needed to be altered in the survey in order to be perceptible to the entrepreneurs and allow for the desired comparison. For SDG 16, the indicator of the percentage of people unsentenced but detainees, the question was changed to whether they considered “Do you feel safe with the prison system?” as a way of understanding the entrepreneurs’ perception of this indicator, and for the corruption indicator, it was changed to whether the entrepreneurs had ever accepted/made an undue payment, as a way of measuring their own corruption and understanding whether it is different from the general population. With regard to the indicator of the state budget for health and education, it was relatively translated in order to gather the entrepreneurs’ perception of these investments, and finally the indicator associated with the country’s contribution to the UN was adapted to whether the entrepreneurs “knew the SDGs” in order to understand whether, despite not representing the country, they are aware of the UN’s goals, thereby representing knowledge of the work carried out by the organisation, the latter, although more indirectly linked to the initial objective, seeks to identify the population’s recognition of the objectives.

These indicators were operationalized using exploratory proxies. these do not directly replicate UN measurement standards but were designed to elicit alignment in spirit with the official goals.

These adaptations resulted in the following outcome:

SDG	Indicator	UN, 2024	
		Rating	Trend
SDG 16	Do you feel safe with the prisional system?		
	Have you ever accepted/made an undue payment?		
SDG 17	Do you feel that the government invests in health and education?		
	Do you know what the SDGs are?		

Table 2.11 - Questions adapted based on the dashboards of São Tome’s SDG 16 and 17 results in 2024
 Source - Data organised by the Author based on data from UN SDG Progress Report 2024

2.3 SDG Open-Ended indicators

The instrument of open-ended was structured based to collect data specially on the three dimensions of sustainable development, social, economic and environmental, identified as People, Planet and Prosperity for the SDGs, and formulated with questions aimed at capturing the participants’ perception of their performance in each of them. The questions asked were:

- People: " What is the role of Local Entrepreneurs / Local Entrepreneurship in the social development of communities?
- Planet: What is the role of Local Entrepreneurs / Local Entrepreneurship in the environmental protection of community territories?
- Prosperity: What is the role of Local Entrepreneurs / Local Entrepreneurship in the Economic Growth of communities?
- Peace and Partnerships: Although there were no specific questions for the area of Peace and Partnerships, combining the answers to the three questions allows for the collection of cross-cutting information.

The answers were analysed using categorical content analysis, following a systematic process of reading, coding and thematic grouping. For each of the three questions, they were identified and organized into two formats:

- Analysis of the set of topics associated with each of the "5 P"s" (People, Planet, Prosperity, Peace and Partnerships) in relation to the 269 targets of the 17 SDGs aiming to systematize the thematic distribution of the 2030 Agenda goals. This approach makes it possible to identify patterns of incidence, gaps and interrelationships between the goals, facilitating an integrated understanding of the dimensions of sustainable development and offering a solid analytical basis for subsequent in-depth studies.
- Analysis of the ten main thematic categories were identified based on the frequency and relevance of the topics mentioned by the participants. This was followed by a cross-

analysis between the three dimensions of sustainable development (economic, social and environmental) to identify areas of convergence and cross-cutting themes. This analysis made it possible to highlight common factors, such as reducing external dependence, which stood out as a structuring element with simultaneous implications for the three aspects of sustainability.

To support this process, both approaches, the Excel tool was employed to codify, categorize and cross-check the data, thereby ensuring a systematic and reliable organization of information that enhanced both the clarity and robustness of the subsequent analysis, making it possible to highlight the interrelationships between entrepreneurial actions and the Sustainable Development Goals (SDGs), even in the absence of an explicit intention on the part of the participants to align themselves with the 2030 Agenda.

CHAPTER 3

3. Results

This chapter presents the empirical findings of the field research conducted in São Tomé and Príncipe, aiming to understand the influence of local entrepreneurship on sustainable development and the achievement of the Sustainable Development Goals (SDGs). It is organized into two main analytical components that correspond to the mixed-methods approach adopted in the study, the quantitative analysis of closed-ended questions, and the mixed-analysis of open-ended responses provided by 100 local entrepreneurs across diverse sectors.

The section 3.1, presents the profile of entrepreneurs interviewed in São Tomé and Príncipe, outlining their demographic characteristics, educational background, place of residence, type and size of businesses, sectoral distribution, degree of formalization, roles within enterprises, and work experience.

In the section 3.2, the results of the close-ended survey are analysed in alignment with selected SDG indicators, structured around the five dimensions of the 2030 Agenda, People, Planet, Prosperity, Peace, and Partnerships. These results are benchmarked against national SDG dashboards and trends to assess whether entrepreneurial activity contributes to progress on key indicators, as well as to identify areas of divergence between entrepreneurs and the general population.

In the section 3.3, the open-ended responses are examined using thematic analysis, revealing entrepreneurs' perspectives on their role in promoting social inclusion, environmental protection, and economic growth. This qualitative component captures the subjective experiences, motivations, and challenges of local entrepreneurs, enriching the quantitative findings with contextual depth and narrative insight.

Together, these analyses provide a comprehensive view of how entrepreneurship in São Tomé and Príncipe interacts with sustainable development imperatives. The findings serve as the basis for the subsequent discussion in Chapter 4, where patterns, cross-cutting themes, and implications for policy and practice are explored in greater depth. All comparisons between national dashboards and entrepreneurs' responses should be read as heuristic juxtapositions. The survey results represent perception-based micro-indicators, which can conceptually align with SDG targets but are not statistically equivalent to population-level national indicators.

3.1. Entrepreneurs Profile

The profile of entrepreneurs interviewed in São Tomé and Príncipe reveals a diverse group with striking characteristics that reflect both the local reality and global trends in entrepreneurship.

The sample consisted of 100 entrepreneurs, of whom 52% were men and 48% women, showing relative gender parity. The average age of entrepreneurs was 40, with a distribution ranging from young adults to individuals over 70, but with a higher concentration between 30 and 47.

In terms of educational attainment, the majority have basic or secondary education: 43% completed the 3rd Cycle (9th Grade), 30% have Secondary Education (12th Grade), while 15% have completed the 2nd Cycle (6th Grade), 8% the 1st Cycle (4th Grade), and only 4% have higher education (University).

Urban residence predominates (65%), mainly in the regions of Água Grande (39%) and Mé-Zóchi (25%). However, there is a considerable representation of entrepreneurs in rural areas (35%), especially in districts such as Lobata and Lemba.

The business structure shows a predominance of micro and small enterprises: 48% are sole proprietorships (only one person) and 41% are microenterprises (2 to 5 people). Only a minority operate in medium-sized (7%) or large (4%) businesses. Most businesses operate in the trade sector (52%), followed by combinations of trade with services, tourism and other segments.

In terms of the type and formalisation of enterprises, there is a strong presence of individual and informal initiatives (76%) and a significant presence of formal enterprises (22%), in addition to collective organisations and other legal arrangements. The position of “owner” predominates in businesses (70%), with some performing managerial functions (19%) or as partners (10%).

The data show that many entrepreneurs started working early, with an average age of entry into the labour market at 16, and a significant proportion have more than one job (42%). The profile also suggests relative accumulated experience (the average length of business activity exceeds several decades in some cases), and few reported having no children or only one child.

In summary, STP entrepreneurs are mostly adults with basic and secondary education, living in urban areas, running micro and small businesses predominantly in the trade sector, operating independently, often in informal settings, and with a history of starting work at an early age.

3.2 Close-ended question

The close-question analysis aims to measure the contribution of local entrepreneurs in São Tomé and Príncipe to sustainable development, using specific indicators aligned with the SDGs. Based on structured questionnaires with closed-ended questions, this section compares the overall national population with the sample of entrepreneurs across selected SDG targets indicators. The objective is to identify patterns of convergence or divergence between entrepreneurial performance and national progress. The findings provide an evidence-based overview of how entrepreneurship close-question influences local development and may serve as a foundation for targeted policy interventions.

For these indicators, the questions that were considered were adapted, considering that they represent in greater detail the questions asked to entrepreneurs, bearing in mind the limitations mentioned at the end of the thesis. The scoring system provides a heuristic mapping of entrepreneur's responses to dashboard levels. It is interpreted as indicating whether entrepreneurs perform above, below, or in line with national indicators, but does not represent exact quantitative differences.

3.2.1. People

SDG	Indicator	UN, 2024		Survey		Comparison	
		Rating	Trend	Rating	Trend	Rating	Trend
SDG 1	Do you earn more, same, or less than 46 dobras/day?	●	→	●	↑	+++	++
	Do you earn more, same, or less than 70 dobras/day?	●	→	●	↑	+++	+
SDG 2	How many meals do you eat a day?	●	↑	●	↑	=	=
	Do you know if the products you consume are sustainable?	●	↓	●	↑	+++	++
SDG 3	Have you ever had a driving accident?	●	↑	●	↑	--	-
	Do you have access to health services?	●	↑	●	↑	+++	=
SDG 4	Do you have carers at any pre-schools?	●	●	●	↑	+++	N/A
	How literate are you?	●	●	●	↑	+++	N/A
SDG 5	Have you done any family planning?	●	→	●	↑	+++	++
	Should men and women have the same opportunities in school and labor?	●	→	●	↑	++	++

Table 3.1 - Comparison of Dashboards of São Tomé's SDG 1, 2, 3, 4 and 5 results

Source - Data organised by the Author based on data from UN SDG Progress Report 2024 and field research survey results

3.2.1.1 SDG 1 - No Poverty

Comparing the evolution of SDG 1, it is possible to see that the two indicators, associated with the amount received in terms of remuneration \$2.15 or \$3.65/day, had a similar rating and trend, being Major Challenges in the case of the rating and Stagnating in the case of the trend, showing that this remains a major challenge with no great prospect of positive development for the general population. These values are quite different from those achieved by the entrepreneurial population, which obtained SDG Achieved for both indicators, regarding the trend of development, the difference being that for remuneration of \$2.15, the value obtained was "On track or Maintaining" and for \$3.65 "Moderately Improving". These figures allow us to make a comparison and show that in terms of rating there was a difference of 3 levels, thus obtaining the most positive evolution possible, and in terms of trending, for the first indicator the evolution maintained the evolution of 3 levels, while the second indicator had 2 levels. This evolution allows us to understand that, on average, entrepreneurs receive the amount indicated by the UN as an indicator for getting out of the poverty line. This evolution allows us to understand that, on average, entrepreneurs receive the amount indicated by the UN as an indicator for getting out of the poverty line. This result, when compared to the population, can lead us to conclude that because they are responsible for their own income and profits, they are able to earn more than when they are employed and even more so when they are unemployed. These figures also allow us to reflect that if there were more incentives for entrepreneurship, more entrepreneurs might emerge, which could increase the amounts received from the general population. Despite these positive indicators, the drop in the trending from the first to the second indicator indicates that there

is a drop in the amounts received between wage brackets, revealing that although it is positive, it does not obtain the amounts necessary to end poverty, and may indicate that although it is positive, the guarantees of this value being stable are not secure.

3.2.1.2 SDG 2 - Zero Hunger

In the second SDG, related to combating hunger, the indicators in the UN report show values for the indicator related to nutrition associated with the question “How many meals do you eat a day?” with a rating of “Significant Challenges” and a trend of “Moderately Improving”, while for the indicator associated with the efficiency of production and consumption of products to avoid inefficiency and waste, with the adapted question “Do you know if the products you consume are sustainable?”, it had a rating of “Major Challenges” and a trend of “Decreasing”, proving to be a growing problem in São Tomé and Príncipe. These figures, when compared with those of the entrepreneurial population, obtained the same results in the first question, i.e. “Significant Challenges” for the rating and “Moderately Improving” for the trending, with a neutral evolution, while in the second indicator of this SDG, the figures were SDG Achieved for the Rating and “Moderately Improving” for the trending, representing a positive evolution. This evolution, seen in detail, was neutral for both indicators of the first indicator, but saw an evolution of 3 levels in the rating and 2 levels in the second indicator. This evolution can be interpreted as the fact that, in terms of food, there is not a great deal of variation between the target populations, possibly due to the reality of food in STP, which represents a great difficulty to overcome, but in terms of the quality of the products consumed, we can see that being an entrepreneur means that there is greater concern and the possibility of buying more sustainable products.

3.2.1.3 SDG 3 - Good health and well-being

About SDG 3, the indicators for the general population are data associated with the rate of motor vehicle accidents with the question “Have you ever had a driving accident?” and with the question of access to health care with the question “Do you have access to health services?” The UN report’s figures for the driving question were “Challenges Remain” but with a trend of “On track or Maintaining”, while for access to health care they were “Major Challenges” with a trend of “Moderately Improving”. As for the values for entrepreneurs, for the rating of driving accidents they showed “Major Challenges” and a trend of “Moderately Improving”, while for access to healthcare they showed “SDG Achieved” and “Moderately Improving”. These results, when comparing the values for the general population with the entrepreneurial population, show a negative evolution of 2 levels for the rating and 1 level for the trending, showing that the entrepreneurial population not only has more accidents than the general population, but also a more negative tendency not to contribute to

solving this problem. Part of these figures can be explained by the greater need for transport, especially on an individual level, to keep businesses running, whether it's dealing with their own supplies and resources or travelling to sales, and with this need the number of journeys increases and with it the likelihood of accidents. As for the indicator relating to access to health care, comparing the ratings of the report with that of the investigation, it improved by 3 levels, and in the trend, it maintained the same level. This positive evolution in the rating and neutral evolution in the trend can be explained by the entrepreneurial population's greater access to and ability to use health services, which, linked to the SDG1 indicator in which it is perceived that they have better financial conditions, may make it easier for them to use health services.

3.2.1.4 SDG 4 - Quality education

For SDG 4 - Quality Education, both the indicators marked "Do you have carers at any pre-schools?" and "How literate are you?" show "Major Challenges" in the 2024 report in terms of rating and "Information Unavailable" for the trend. When questioned, the entrepreneurial population obtained "SDG Achieved" ratings for both indicators and "On track or Maintaining" ratings for the trend. For the first indicator of this SDG (carers at any pre-school), they obtained "Moderately Improving" and for "How literate are you?" they obtained "On track or Maintaining". These values, when compared to the target group, had a positive evolution of 3 levels for both indicators in the rating question and as the trend did not have determined values, an inconclusive analysis was obtained, however, given that for both indicators the trend presented represents the path of progress and/or resolution of the SDG, it can be said that these are satisfactory and positive values when compared to the other more negative trend options. This evolution shows greater access to education services by the entrepreneurial population and their families, sometimes benefiting the communities themselves and wider family circles.

3.2.1.5 SDG 5 - Gender equality

With initial values for the two SDG Gender Equality indicators of "Major Challenges" in the case of "Have you done any family planning?" and "Significant Challenges" in the case of "Should men and women have the same opportunities in school and labour?" and a trend of "Stagnating" for both indicators, this SDG generally presents a delayed and challenging outlook for resolving the current challenges. About the entrepreneurial population, the rating and trend values were the same for each indicator, with "SDG Achieved" and "On track or Maintaining" representing full fulfilment of this goal. These results allow us to compare the general population with the entrepreneurial population and show that the entrepreneurial population has a difference of 3 levels on a positive scale in terms of the rating of the indicator "Have you done any family planning?" and for the remaining 3 indicators a

positive evolution of 2 levels. These results show that the entrepreneurial population, for reasons possibly linked to their knowledge of the importance of business planning, also end up planning their family life, resulting in a more constructive structure and development of their families, rather than simply a lack of planning, thereby achieving decisive results for all other spheres of personal life. In terms of women’s access to the same educational and work opportunities, entrepreneurs show an openness and concern for gender equality, seeking a society that is equal despite gender. Both indicators together are differentiated tools, but with extremely positive indicators through the lens of the entrepreneurial community.

3.2.3 Planet

SDG	Indicator	UN, 2024		Survey		Comparison	
		Rating	Trend	Rating	Trend	Rating	Trend
SDG 6	Do you have access to drinking water?	●	→	●	→	+	=
	Do you have access to a bathroom?	●	→	●	→	+	+
SDG 12	Do you have access to rubbish bins and/or recycling bins?	●	●	●	→	--	N/A
	Do you pay attention to the origin of the products you buy?	●	●	●	↑	=	N/A
SDG 13	Are you trying to reduce your consumption of fossil fuels?	●	↑	●	→	---	-
	Do you realise the impacts of climate change?	●	●	●	→	N/A	N/A
SDG 14	Do you try to protect marine life?	●	↓	●	→	=	++
	Do you ever fish/buy sea animals illegally?	●	→	●	↑	+++	++
SDG 15	Are you trying to protect life on Earth?	●	↑	●	↑	=	=
	Do you ever use natural resources illegally?	●	●	●	→	N/A	N/A

Table 3.2 - Comparison of Dashboards of São Tomé’s SDG 6, 12, 13, 14 and 15 results

Source: Data organised by the Author based on data from UN SDG Progress Report 2024 and field research survey results

3.2.3.1 SDG 6 – Clean Water and Sanitation

When comparing the initial values for access to drinking water and sanitation, the general population rated both as “Major Challenges” with “Stagnating” trends. In contrast, the entrepreneurial population showed “Challenges Remain” for both, with “Stagnating” for drinking water access and “Moderately Improving” for sanitation. This indicates that entrepreneurs have slightly better access to these resources, with three out of four indicators showing a positive shift of one level.

The improved access to drinking water can be attributed to entrepreneurs’ higher purchasing power, allowing more regular acquisition of the resource. However, the similar trend between the general and entrepreneurial populations suggests that while entrepreneurs have personal access, community access remains unchanged, with the issue still largely a government responsibility.

In terms of sanitation, the improvement in both indicators reflects the positive impact of entrepreneurship. Entrepreneurs likely benefit from better financial resources and knowledge to improve their personal facilities, which may also be shared with their families and communities. Additionally, the resale of old materials can help improve others’ sanitation.

These entrepreneurial practices contribute to measurable environmental improvements through increased access to improved sanitation infrastructure, waste reuse (via resale of materials), and promotion of hygienic practices in the community. While individual gains are clearer than collective shifts, such localized actions help reduce open defecation and environmental contamination risks.

In summary, while entrepreneurs have better access to drinking water and sanitation, they mainly contribute to local improvements in sanitation rather than water access. Being an entrepreneur offers a slightly better quality of life, bringing benefits to both the individual and their community in terms of sanitation.

3.1.3.2 - SDG 12 – Responsible Consumption and Production

In relation to SDG 12, despite the relevance of the indicators, 3 out of 4 of the evaluation metrics had a result of “Information Unavailable” which, although it makes comparisons between the general population and the entrepreneurial population impossible, allows for a perception of reality. For the indicator associated with the question “Do you feel there are equal opportunities?” the general population’s rating was “SDG Achieved” and the trend “Information Unavailable”, while the entrepreneurial population’s rating was “Significant Challenges” with a trend of “Moderately Improving”, which represents a 2-level deterioration for this indicator. For the indicator with the question “Do you feel there is equal access?” as there was no initial data, only the entrepreneurs’ data of “SDG Achieved” for the rating and “On track or Maintaining” for the trend, allow us to state that entrepreneurs are certainly doing their bit for sustainable development, while the general population may or may not be. These findings suggest that entrepreneurs’ less favourable perception of equal opportunities, is possibly due to greater awareness of the challenges they face, entrepreneurs demonstrate a positive view of equal access, indicating their active role in sustainable development.

These results are partially in line with previous reports highlighting São Tomé and Príncipe’s positive performance in SDG 12, especially in sustainable production and consumption. However, the scarcity of accurate data on many targets remains a challenge for a comprehensive assessment of the country’s progress.

These findings highlight the need to improve data collection and implement targeted policies to promote responsible consumption and production, especially among entrepreneurs, as part of efforts to achieve SDG 12 in São Tomé and Príncipe.

3.2.3.3 SDG 13 – Climate Action

In SDG 13, which focuses on fossil fuel consumption and climate change knowledge, the analysis showed significant differences between the general population and entrepreneurs. The general population's rating of fossil fuel consumption was "SDG Achieved" with a trend of "On track or Maintaining," but entrepreneurs had a "Major Challenges" rating and "Moderately Improving" trend, showing a significant negative shift. This indicates higher fossil fuel consumption among entrepreneurs compared to the general population.

Regarding climate change knowledge, while the general population had inconclusive data, entrepreneurs rated as "SDG Achieved" with a "Moderately Improving" trend, indicating better awareness of climate change impacts.

Entrepreneurs reported no active efforts to reduce fossil fuel consumption, with many using more resources than before starting their businesses. This suggests that business needs, like transportation and materials, take priority over climate action due to limited alternatives in São Tomé and Príncipe, which faces solar and technological challenges.

Despite this, entrepreneurs have a solid understanding of climate change and its impacts. This awareness has slightly improved since becoming entrepreneurs, mainly due to increased knowledge of business risks. Entrepreneurs can use this knowledge to raise local awareness and promote behaviour change.

Although their practices currently increase environmental pressure, the improved knowledge base creates measurable long-term potential for impact. Entrepreneurs are positioned to influence sustainable transitions by adopting cleaner technologies when feasible, reducing dependency on fossil fuels, and promoting climate awareness in their networks.

In conclusion, while entrepreneurs are more aware of climate change, their business needs often lead them to behaviours that increase fossil fuel consumption, presenting a paradox where they both contribute to and combat climate change.

3.2.3.4 SDG 14 – Life Below Water

For SDG 14, which focuses on the protection of marine life, São Tomé and Príncipe faces significant challenges with illegal fishing and marine life protection. The general population rated these issues as "Challenges Remain" with a "Decreasing" trend for marine life protection and "Major Challenges" with a "Stagnating" trend for illegal fishing. In contrast, the entrepreneurial population maintained the "Challenges Remain" rating for marine life protection but showed improvements in other indicators. Entrepreneurs demonstrated a "Positive difference of 2 levels" in the trending for both indicators and a "Positive difference of 3 levels" in the illegal fishing rating.

Entrepreneurs shared similar concerns about marine protection and water cleanliness as the general population, indicating common challenges. However, entrepreneurs have broadened their knowledge and changed their habits since starting their businesses. This evolution helps influence their local environment and can contribute to better protection of marine life.

Regarding the consumption and commercialization of marine animals, entrepreneurs outperformed the general population in both rating and trend. This improvement is linked to their awareness of legal responsibilities, ensuring compliance with regulations while maintaining positive relationships with customers and suppliers. This contributes locally to addressing the challenge of illegal fishing.

These behavioural shifts among entrepreneurs are environmentally measurable through reduced participation in illegal fishing activities, adherence to marine protection norms, and influence over others in the supply chain. Their actions help stabilize fish populations and preserve marine ecosystems in the long term.

In summary, the positive comparison of 3 out of 4 indicators highlights the important role local entrepreneurs play in addressing ocean-related issues. They stand out as part of the solution, demonstrating a positive influence on marine life protection and illegal fishing.

3.2.3.5 SDG 15 – Life on Land

For SDG 15, which focuses on protecting terrestrial and freshwater biodiversity, the entrepreneurial population showed positive results. The general population received “SDG Achieved” and “On track or Maintaining” ratings for the protection of important biodiversity sites, and the entrepreneurial population mirrored these results in the survey. Regarding the illegal use of natural resources, there was no initial data for comparison, but entrepreneurs received a “Significant Challenges” rating and a “Moderately Improving” trend, highlighting a notable difference from the initial indicators.

When examining the protection of terrestrial life, entrepreneurs, like the general population, expressed concern for preserving biodiversity and maintained a consistent attitude towards this issue despite business needs. This reflects a strong sense of responsibility, influenced by national protection efforts.

Regarding the use of forestry resources, the lack of clear data in the national report resulted in partly negative ratings for entrepreneurs. On average, they continued practices that weren’t ideal for combating deforestation in non-protected areas. However, the slight improvement trend indicates that entrepreneurs are increasingly turning to sustainable and legal suppliers, suggesting long-term positive changes that could lead to improved environmental practices.

These emerging practices are environmentally relevant, as they suggest a progressive shift toward responsible sourcing of raw materials. Over time, such actions can lead to measurable

outcomes like reduced deforestation rates and increased use of certified wood or alternative materials, contributing to biodiversity conservation and sustainable land use.

Overall, while the entrepreneurial population has maintained similar positive standards as the general population, their efforts show potential for improvement. Business development is not worsening existing environmental conditions and, in some cases, is actively seeking more sustainable practices.

3.2.4 Prosperity

SDG	Indicator	UN, 2024		Survey		Comparison	
		Rating	Trend	Rating	Trend	Rating	Trend
SDG 7	Do you have access to electricity?	●	↗	●	↗	+++	=
	Do you have access to gas and/or electricity for cooking?	●	→	●	↗	++	+
SDG 8	Do you think your salary is fair?	●	●	●	↗	N/A	N/A
	Do you receive compensation for your work?	●	●	●	↗	+++	N/A
SDG 9	Do you have access to the internet and/or a mobile phone for work?	●	↗	●	↗	++	-
	Do you have access to transport?	●	●	●	↗	++	N/A
SDG 10	Do you feel there are equal opportunities?	●	●	●	↗	++	N/A
	Do you feel there is equal access?	●	●	●	↗	+	N/A
SDG 11	Is your home in good condition?	●	→	●	↗	++	+
	How many people live in your house?	●	↗	●	↗	-	=
	Is your neighbourhood in good condition?	●	↗	●	↗	-	-

Table 3.3 - Comparison of Dashboards of São Tomé's SDG 7, 8, 9, 10, and 11 results in 2024

Source - Data organised by the Author based on data from UN SDG Progress Report 2024 and field research survey results

3.2.4.1 - SDG 7 – Affordable and Clean Energy

Comparing the results of the UN report with the data collected by the entrepreneurial population, with regard to the first indicator concerning access to electricity, the indicators in the 2024 report had a rating of “Major Challenges” and trending of “Moderately Improving”, while the figures from the entrepreneurial population had a rating of “SDG Achieved” and “Moderately Improving” for the trend, which represents an improvement of 3 levels in terms of rating and maintenance of the trend. With regard to access to electricity or gas for cooking, the comparison was positive for both, with the rating going from “Major Challenges” to “Challenges Remain”, which represents an improvement of 2 levels, and from “Stagnating” to “Moderately Improving”, representing an improvement of 1 level.

This data indicates that entrepreneurs have better access to electricity for both business and personal use. This advantage provides them with, access to a wider range of equipment promoting sustainable development, ability to transition from organic to renewable resources, potential for reduced consumption of raw materials and opportunities for energy transition

It is important to note, however, that the source of the energy comes from groups of organizations that manage the generators and electricity. Electricity production in STP is not yet thermal, which means that although they have more access, most of them are not autonomous in terms of the production and use of this resource.

This reliance on shared energy sources highlights the need for further investments in infrastructure to ensure long-term sustainability and autonomy in electricity production. While access has improved, the dependence on centralized energy management groups suggests potential vulnerabilities, particularly in cases of maintenance issues, fuel shortages, or rising operational costs. Moreover, the disparity between the UN report's assessment and the data collected from the entrepreneurial population suggests that businesses may have better access to energy compared to the general population. This could be due to targeted initiatives, private investments, or business-driven solutions aimed at ensuring stable power supply for economic activities.

To further enhance energy accessibility and sustainability, the following actions could be considered like expansion of renewable energy sources by investing in solar, wind, and hydroelectric power to reduce reliance on fuel-based generators, decentralization of energy production, by Encouraging localized, small-scale energy solutions to reduce dependency on centralized networks, policy incentives for sustainable energy use by Implementing tax benefits or subsidies for businesses and households that transition to renewable energy, and infrastructure development, by strengthening the national grid and integrating more resilient energy storage systems.

In conclusion, while the entrepreneurial sector benefits from improved access to electricity, achieving widespread energy security in São Tomé and Príncipe (STP) will require systemic changes. Strategic investments in renewable energy and decentralized solutions will be crucial to ensuring that both businesses and households can sustainably achieve energy independence.

3.2.4.2 - SDG 8 - Decent Work and Economic Growth

Concerning SDG 8 (Decent Work and Economic Growth) in São Tomé and Príncipe, the analysis reveals significant disparities between the general population and entrepreneurs. While the UN report indicates "Major Challenges" for the general population regarding compensation for work, entrepreneurs reported "SDG Achieved", representing a substantial improvement of three levels. The trend for entrepreneurs is "Moderately Improving", suggesting ongoing positive changes in their working conditions.

The entrepreneurial population's perception of fair salary remains a challenge, with the indicator showing "Challenges Remain". However, the "Moderately Improving" trend indicates gradual progress in this area.

These findings highlight several benefits of entrepreneurship in São Tomé and Príncipe, Improved working conditions, because entrepreneurs are experiencing progressive enhancements in their work environment, better understanding of work value, due to business ownership provides entrepreneurs with a more comprehensive perspective on fair compensation, and increased income security, since entrepreneurs report greater certainty in receiving remuneration for their work.

Despite these positive trends, challenges persist. The country's economy is projected to remain in mitigation mode or transition to a coping phase during 2024-20251. Economic policies are focused on mitigating the impact of rising prices and maintaining macroeconomic stability amid a global economic slowdown (UNPD, 2023)

While entrepreneurship offers a promising path toward achieving SDG 8, ongoing efforts are needed to address broader economic challenges and ensure inclusive growth. The government's focus on building human and physical capital and generating economic opportunities aligns with the intention to address current employment challenges.

3.2.4.3 - SDG 9 – Industry, Innovation and infrastructure

With regard to SDG 9, the question “Do you have access to the internet and/or a mobile phone for work?”, which in the UN report has a rating of “Significant Challenges” and trending of “On track or Maintaining”, the entrepreneurial population obtained a rating of “SDG Achieved” and a trending of “Moderately Improving”, which meant that in terms of rating it improved by 2 levels, and in terms of trending there was a negative evolution of 1 level, which is curious due to these opposite variations. As for the indicator “Do you have access to transport?” where the rating was “Significant Challenges” and the trending “Information Unavailable”, the rating of the entrepreneurial population was equivalent to “SDG Achieved” and a trending of “Moderately Improving”, which represents an improvement of 2 levels in terms of rating and an improvement of “Not Applicable” because there is no term of comparison but which, like the previous indicator, allows us to say that the trend is more positive than indicated.

These discrepancies suggest that entrepreneurs in São Tomé and Príncipe are experiencing significant improvements in infrastructure and technological access compared to the general population. This can be attributed to focus on digital infrastructure, because the country has invested in improving access to the internet and mobile technologies, particularly benefiting entrepreneurs, and transport infrastructure development, although overall data is limited, entrepreneurs seem to have better access to transport, possibly due to the nature of their business or location.

Despite improvements, the country still faces “significant challenges” in industry, innovation, and infrastructure (SDG 9), as reported in previous assessments. These data gaps are due to the lack of accurate information on many SDG targets, which makes it difficult to comprehensively assess the country's progress.

These findings emphasize the importance of targeted policies to support entrepreneurship as a means of accelerating progress towards SDG 9 in São Tomé and Príncipe. However, it is crucial to address the disparities between entrepreneurs and the general population to ensure inclusive and sustainable development.

3.2.4.4 SDG 10 - Reduced Inequality

Analysing the initial indicators for the general population of São Tomé and Príncipe, we found two indicators, “Do you feel there are equal opportunities?” and “Do you feel there is equal access?” with equal values both in terms of rating (Major Challenges) and trending (Information Unavailable), which does not allow for comparison in this second parameter. On the entrepreneurs’ side, we can see that in the first indicator the result was “Challenges Remain” with a trending of “Moderately Improving”, representing an evolution of two positive levels in the rating, while in the second indicator the evolution was one positive level, moving to “Significant Challenges”. Although this progress is lower when compared to other SDG indicators, it is still a positive comparison when analysing the entrepreneurial population, because although their values are still a reality and a population that has challenges well represented in their day-to-day lives, they end up being a target group that has more opportunities and seeks to ensure that their workers also have fair and comparable opportunities and access. This evolution can be related, as contextualised above, to the level of broad knowledge of the difficulties faced by the community, customers and suppliers and the search for solutions to their reality based on other realities. However, the distance between the indicators and the fulfilment of the objectives also makes it difficult to resolve these challenges, which in many ways go beyond the physical aspect and also include the political aspect of rights.

3.2.4.4 - SDG 11 - Sustainable Cites and Communities

For the 3 indicators associated with SDG 11, which focuses on life in the cities and towns of the entrepreneurs, the UN report for the equivalent of the question “Is your home in good condition?” has a rating of “Major Challenges” and a trend of “Stagnating” while the entrepreneurs’ report has a trend of “Challenges Remain” and a trend of “Moderately Improving”, representing an improvement of 2 levels for the rating and 1 positive level for the trend. For the indicator “How many people live in your house?” the overall rating is “Challenges Remain” and the trend “Moderately Improving”, while the entrepreneurs’ report showed a 1-level “Significant Challenges” deterioration in the rating and maintained the “Moderately Improving” trend. Lastly, the third indicator “Is your neighbourhood in good condition?” had the values for the general population at their maximum with a rating of “SDG Achieved” and a trend of “On track or Maintaining”, while for the general population there was a decrease of 1 level in both indicators to “Challenges Remain” and “Moderately Improving”.

These discrepancies suggest, improved housing conditions for entrepreneurs, possibly due to higher income or investments in their homes, persistent challenges about overcrowding in entrepreneurs’ homes indicate possible economic or cultural pressures, entrepreneurs’ less

favourable perception of the conditions of their neighbourhoods, possibly due to higher expectations or location in less developed areas.

These results partially align with the goals of SDG 11, such as ensuring access to safe and adequate housing by 2030. However, São Tomé and Príncipe still faces significant challenges in this area, with the country presenting “major challenges” in seven goals, including SDG 11.

The government of São Tomé and Príncipe is adopting policies and strategies aimed at sustainable urban development but the lack of accurate information on many targets makes it difficult to comprehensively assess the country’s progress (UN HABITAT, 2021).

These findings highlight the need for targeted policies to improve housing and urban development conditions, especially for entrepreneurs, as part of efforts to achieve SDG 11 in São Tomé and Príncipe.

3.2.5. Peace and Partnerships

SDG	Indicator	UN, 2024		Survey		Comparison	
		Rating	Trend	Rating	Trend	Rating	Trend
SDG 16	Do you feel safe with the prisional system?	●	●	●	➡	+	N/A
	Have you ever accepted/made an undue payment?	●	➡	●	➡	=	++
SDG 17	Do you feel that the government invests in health and education?	●	➡	●	➡	+	-
	Do you know what the SDGs are?	●	●	●	➡	+++	N/A

Table 3.4 - Comparison of Dashboards of São Tomé’s SDG 16 and 17 results in 2024

Source - Data organised by the Author based on data from UN SDG Progress Report 2024 and field research survey results

3.2.5.1 SDG 16: Peace, Justice and Strong Institutions

The results obtained from the survey conducted among entrepreneurs reveal a significantly more positive perception of progress on SDG 16 indicators– when compared to official data reported by the UN.

Regarding the indicator related to criminal justice, the UN classified the situation with a rating of “Challenge Remaining” and a trend of “Information Unavailable”, reflecting both the persistence of challenges and the absence of concrete data on progress. However, the results of entrepreneurs gave this same indicator a rating of “SDG Achieved” and a trend of “Moderately Improving”, suggesting not only the achievement of the goal but also continued progress. This improvement represents a two-level jump in terms of rating and a significant qualitative improvement in the perception of the evolutionary trajectory.

Regarding the second indicator, focused on the perception of corruption, UN data pointed to a more critical scenario, with both parameters, rating and trending, classified as “Significant Challenges”. Entrepreneurs, on the other hand, maintained the same rating, recognising the seriousness of the problem, but identified a more positive trend, assigning it the rating “On Track or Maintaining”, which represents a two-level improvement. This distinction suggests that, although

corruption continues to be seen as a structural challenge, there is a perception that efforts to combat it are having some effect or that, at least, current levels are being controlled.

These discrepancies between official assessments and entrepreneurs sector perceptions may result from multiple factors, including direct experiences, local improvements not captured by global statistics, or different assessment criteria. Nevertheless, the data indicate that, from the perspective of entrepreneurs, there are encouraging signs of strengthening justice and institutional integrity, fundamental pillars for building more just and resilient societies.

3.2.5.2 SDG 17: Partnerships for the Goals

In the analysis of SDG 17 indicators, data collected from entrepreneurs once again reveal interesting contrasts with the official United Nations assessments. This SDG, which focuses on international cooperation, development financing, institutional capacity building and resource mobilisation, is particularly sensitive to economic actor's perceptions of the role of the state and its alignment with global agendas such as the 2030 Agenda.

The first indicator analysed, "Government spending on health and education (% of GDP)", reflects the financial commitment of governments to sectors essential to human development. According to the UN report, this indicator had a rating of "Significant Challenges" and a trend of "On Track or Maintaining", pointing to a reality that is still flawed but showing signs of progress. However, entrepreneurs gave a rating of "Challenges Remain", which represents an improvement of one level, but at the same time downgraded the trend to "Stagnating", signalling perceptions of stagnation or lack of visible progress in the short term. This divergence points to a double reading of progress in this area, on the one hand, entrepreneurs recognise some relief in the intensity of the challenges, perhaps reflecting partial improvements in public services or more benevolent perceptions of the government's budgetary effort. On the other hand, the downgrade in the trend suggests disappointment with the speed or consistency of reforms, or even a perception of recent setbacks, which are particularly sensitive in a context of budgetary constraints or economic instability.

The second indicator related with the "Index of countries", that measured the indirect measure of entrepreneurs' level of knowledge about the SDGs, assuming that greater literacy about the 2030 Agenda may translate into greater support for international cooperation. In this case, the transformation is remarkable: the rating of "Major Challenges" assigned by the UN has evolved, according to entrepreneur's perceptions, to "SDG Achieved", an improvement of three levels. At the same time, the trend has moved from "Information Unavailable" to "Moderately Improving". These results reflect a high awareness of entrepreneurs regarding the 2030 Agenda and can be interpreted as a sign of a strengthening of the private sector's commitment to global goals. The fact that perceptions have far exceeded official data suggests that awareness-raising, training and engagement

initiatives in the business sector may be having an effect, positioning entrepreneurs as active partners in the effort to implement the SDGs.

In aggregate terms, the data reveal that, in SDG 17, entrepreneurs perceptions tend to be more positive regarding support for international cooperation, but more critical regarding the practical application of public resources in key areas such as health and education. This distinction is relevant because it shows that the business sector values international integration and recognises the importance of the SDGs as a common agenda but remains cautious (and sometimes sceptical) about the efficiency and effectiveness of public investment.

Thus, the analysis of these indicators reinforces the need for active listening to the private sector, not only as a source of financing and innovation, but also as a barometer of perceptions and expectations about government action. Incorporating this view into national and international assessments can contribute to more comprehensive diagnoses and public policies that are more aligned with the economic and social reality of countries.

3.2.6 Close-ended General Analysis

The close-ended question analysis sought to quantify the contribution of local entrepreneurs in São Tomé and Príncipe to sustainable development, using specific indicators aligned with the SDGs. By comparing structured survey data from entrepreneurs with the United Nations’ 2024 SDG Progress Report for the general population, this section identifies areas of convergence, divergence, and neutrality in performance.

Overall, from the 70 indicators analysed (Table 3.8), 33 (47%) revealed a positive evolution for entrepreneurs compared to the general population, 10 (14%) showed a negative evolution, 10 (14%) remained neutral, and 17 (24%) were classified as not applicable (N/A) due to insufficient comparative data.

	Icone	---	--	-	=	+	++	+++	N/A
Comparison	Icone total	1	2	7	10	11	12	10	17
	Grand total	10			10	33			17

*Table 3.8 - General analysis comparison per level of evolution
Source - Data organised by the Author based on data from UN SDG Progress Report 2024 and field research survey results*

Among the positive results, 10 indicators improved by three levels (+++), 12 indicators by two levels (++), and 11 indicators by one level (+). These represent substantial evidence that local entrepreneurship consistently achieves higher development outcomes than the broader population. Conversely, 10 indicators recorded regressions (7 with -1 level, 2 with -2 levels, and 1 with -3 levels).

These setbacks highlight structural barriers were entrepreneurial activity, while beneficial in some respects, may increase vulnerability (e.g., traffic accidents, fossil fuel consumption). 10 indicators remained unchanged (=), reflecting areas where entrepreneurship does not substantially alter existing national dynamics, such as food consumption patterns. Finally, 17 indicators (N/A) underscore the persistent lack of reliable data for certain SDGs, which constrains a full comparison.

This distribution demonstrates that, despite contextual constraints, entrepreneurs in São Tomé and Príncipe generally perform better than the national average across nearly half of the indicators. Key positive contributions are seen in areas such as poverty reduction (SDG 1), gender equality (SDG 5), access to education (SDG 4), decent work (SDG 8), and infrastructure (SDG 9). These advances can be linked to the ability of entrepreneurs to generate income, access services, and invest in both household and community development. On the other hand, negative gaps emerge mainly in health and environmental sustainability dimensions, where entrepreneurial activity is associated with increased transport accidents (SDG 3) and higher fossil fuel dependency (SDG 13). These findings suggest that while entrepreneurship drives socio-economic inclusion, it can also introduce or reinforce environmental and safety risks when adequate infrastructure and policy frameworks are lacking.

In conclusion, the close-ended question analysis highlights that entrepreneurship in São Tomé and Príncipe acts as a catalyst of progress in most of SDG indicators, with a balance of 3 positive outcomes for every 1 negative. Nevertheless, the persistence of negative and neutral indicators, together with large data gaps, indicates the need for targeted public policies.

3.3. Open-ended questions

The open-ended component complements the statistical findings by offering a deeper, narrative-driven understanding of the experiences, motivations, and perceptions of local entrepreneurs. Drawing on open-ended responses, thematic content analysis was used to identify the entrepreneur’s views on their social, environmental, economic, peace and partnerships roles, as well as the challenges and opportunities they face. This approach captures the complexity of their contributions and sheds light on informal mechanisms, cultural values, and community-based practices that are not easily quantifiable. These insights help interpret the human dimension behind the data and provide rich context to better understand the social fabric and environmental consciousness present in entrepreneurial initiatives in São Tomé and Príncipe.

3.3.1 Open-ended questions – Quantitative Analysis

3.3.1.1 People - Social Development

SDG	Target	Number of topics relatable	Total	SDG Average
1	1.1	11	62	8.86
	1.2	10		
	1.3	10		

	1.4	5		
	1.5.	10		
	1.a	7		
	1.b	9		
2	2.1	5	29	3.63
	2.2	2		
	2.3	3		
	2.4	5		
	2.5	4		
	2.a	4		
	2.b	3		
	2.c	3		
3	3.1	5	46	3.54
	3.2	8		
	3.3	4		
	3.4	4		
	3.5	3		
	3.6	3		
	3.7	3		
	3.8	3		
	3.9	2		
	3.a	2		
	3.b	3		
	3.c	3		
	3.d	3		
4	4.1	6	41	4.10
	4.2	3		
	4.3	3		
	4.4	8		
	4.5	3		
	4.6	3		
	4.7	6		
	4.a	3		
	4.b	3		
	4.c	3		
5	5.1	10	59	6.56
	5.2	6		
	5.3	6		
	5.4	6		
	5.5	7		
	5.6	6		
	5.a	5		
	5.b	6		
	5.c	7		
Total	47	237		5.34

Table 3.9 - Data Analysis from the topics mentioned for the people targets

Source - Data organised by the Author based on data from field research survey results

Analysing the data collected for social development related to the area of people, for the 5 SDGs in this strand (1, 2, 3, 4, and 5) and their 47 targets, through the 100 responses received, entrepreneurs mentioned 237 topics that were directly related to actions taken by entrepreneurs that contribute to achieving the targets and therefore the overarching goal. Of these 237 topics (table 3.9), 62 relate to

SDG 1, 29 to SDG 2, 46 to SDG 3, 41 to SDG 4, 59 to SDG 5, with a maximum of 11 responses per indicator (target 1.1) and a minimum of 2 topics (target 2.2, 3.9, 3.a). This data allows us to make an average of topics per SDG ranging from 8.8 (SDG 1), 3.6 (SDG 2), 3.5 (SDG 3), 4.1 (SDG 4), and 6.5 (SDG 5) combining into an overall average of 5.34, which can be interpreted as each entrepreneur carrying out their entrepreneurial tasks ends up contributing without planning to the improvement of 5 sustainable development targets for the social aspect, with a greater tendency to be topics associated with gender equality problems, in addition, the distribution of topics across the different SDGs shows that entrepreneurship contributes in a transversal way to multiple dimensions of social development, including the promotion of education, the improvement of health and the reduction of inequalities. This multifaceted impact reinforces the idea that local entrepreneurs are agents of social change, capable of responding to the concrete needs of communities and driving progress in various priority areas for sustainable development. Within the 5 SDGs analysed, it is possible to find a higher average as well as a greater number of topics in SDG 1, which may indicate that entrepreneurship does in fact promote the eradication of poverty by reducing some of its associated issues, followed by gender equality issues, enabling a balance of associated functions.

This finding can be further nuanced by comparing the distribution and depth of contribution across the SDGs. For instance, although SDG 1 registers the highest number of topics (62), its average of 8.8 topics per target suggests a broad but relatively even coverage across the 17 targets associated with poverty. This reflects how entrepreneurial activity can directly or indirectly address various poverty-related dimensions, such as income generation, employment creation, and access to basic services. Also, SDG 5, with 59 topics and an average of 6.5 per target, indicates a more concentrated and intense focus, suggesting that gender-related issues are not only frequently encountered but also deeply integrated into entrepreneurial actions. This could imply that entrepreneurs are particularly sensitive or reactive to gender disparities, either by employing more women, creating women-focused initiatives, or addressing systemic gender gaps within their business models.

SDG 2 and SDG 3, with 29 and 46 topics and an average of 3.6 and 3.5, show a relatively modest level of engagement, pointing to a potentially less direct or more specialized role of entrepreneurship in areas like food security, nutrition, and healthcare. These areas may require more structured or technical interventions, limiting the spontaneous alignment of entrepreneurial activity with these targets.

Meanwhile, SDG 4 (Quality Education), with 41 topics and an average of 4.1, reflects a more balanced presence, indicating that education-related efforts are somewhat common, possibly through vocational training, knowledge transfer, or youth mentorship initiatives. This suggests that entrepreneurs often act as informal educators or skill developers in their communities, contributing to lifelong learning and human capital development.

The disparity between the maximum (11 for target 1.1) and minimum (2 for targets 2.2, 3.9, and 3.a) number of topics per indicator highlights uneven attention among targets, with some being significantly more resonant or actionable than others. This could be due to varying levels of awareness, perceived urgency, or feasibility of intervention within entrepreneurial contexts.

Overall, these comparisons demonstrate that while entrepreneurship naturally contributes to social development across all five SDGs, the intensity and distribution of impact vary, with poverty and gender equality emerging as central themes, and education, health, and hunger-related targets showing more selective engagement. This pattern underscores the potential of entrepreneurship as a dynamic, adaptable, and community-embedded tool for advancing the 2030 Agenda, especially when its latent contributions are recognized and strategically aligned with specific development goals.

3.3.1.2 Planet - Environmental protection

SDG	Target	Number of sentences relatable	Total	SDG Average
6	6.1	7	45	5.63
	6.2	7		
	6.3	5		
	6.4	5		
	6.5	5		
	6.6	4		
	6.a	5		
	6.b	7		
12	12.1	4	31	2.82
	12.2	4		
	12.3	3		
	12.4	2		
	12.5	2		
	12.6	3		
	12.7	2		
	12.8	3		
	12.a	2		
	12.b	3		
	12.c	3		
13	13.1	3	15	3.00
	13.2	4		
	13.3	7		
	13.a	0		
	13.b	1		
14	14.1	14	45	4.50
	14.2	7		
	14.3	2		
	14.4	5		
	14.5	3		
	14.6	3		
	14.7	3		
	14.a	2		
	14.b	3		
	14.c	3		
15	15.1	9	52	4.33
	15.2	5		
	15.3	3		
	15.4	4		
	15.5	4		

	15.6	4		
	15.7	4		
	15.8	4		
	15.9	4		
	15.a	4		
	15.b	3		
	15.c	4		
Total	46	188		4.06

Table 3.10 - Table Data Analysis from the topics mentioned for the planet targets

Source - Data organised by the Author based on data from field research survey results

When analysing the data from the 100 questions on the role of local entrepreneurship in environmental protection within the Planet area and examining the 46 targets across the 5 environmental SDGs (6, 12, 13, 14, and 15), entrepreneurs mentioned 188 topics in which their actions contribute to these goals (Table 3.10). Of these 188 topics, 45 are related to SDG 6, 31 to SDG 12, 15 to SDG 13, 45 to SDG 14, and 52 to SDG 15. The data reveals a maximum of 14 responses for a single indicator (target 14.1) and a minimum of 0 responses (target 13.a), suggesting that not all targets are currently being addressed.

In terms of topic distribution across SDGs, the average number of topics per SDG varies significantly: 5.6 for SDG 6 (Clean Water and Sanitation), 2.8 for SDG 12 (Responsible Consumption and Production), 3 for SDG 13 (Climate Action), 4.5 for SDG 14 (Life Below Water), and 4.3 for SDG 15 (Life on Land), leading to an overall environmental average of 4 topics per SDG. This average indicates that, on average, entrepreneurs contribute to four distinct targets related to environmental sustainability, even if not intentionally aligned with the SDG framework.

Notably, SDG 6 shows both a high total number of topics (45) and the highest average per target (5.6), suggesting that issues related to water access, cleanliness, and sanitation are not only more visible to entrepreneurs but also more directly connected to their day-to-day activities. Compared to SDG 13 (Climate Action), which has the lowest average (3) and the fewest total topics (15), the contrast highlights a potential gap in climate change awareness or prioritization among local entrepreneurs, especially in regions where immediate socioeconomic concerns may outweigh longer-term environmental threats.

Although SDG 15 (Life on Land) registers the highest number of topics overall (52), it ranks below SDG 6 in terms of average topics per target (4.3 vs. 5.6). This could indicate a broader but slightly less intensive engagement with biodiversity and terrestrial ecosystems, perhaps due to the diversity of land-based issues entrepreneurs encounter, such as agriculture, deforestation, and soil degradation. SDG 14 (Life Below Water) and SDG 12 (Responsible Consumption and Production) demonstrate different patterns. While SDG 14 matches SDG 6 in total topic count (45), its lower average (4.5) indicates slightly more concentrated responses in fewer targets. In contrast, SDG 12's relatively low

average of 2.8 topics per target suggests that responsible consumption is less embedded in local entrepreneurial practices, possibly due to limited access to sustainable materials, recycling systems, or eco-design processes in local markets.

Overall, while local entrepreneurs may not actively frame their work around environmental SDGs, their proximity to nature and reliance on natural resources naturally lead to environmentally relevant contributions. The data suggests that water and land-related issues are more integrated into local business operations, while climate-specific efforts lag, possibly due to limited awareness, education, or institutional support.

These patterns imply that targeted capacity-building or policy interventions—especially around climate literacy and sustainable production—could empower entrepreneurs to further align their work with environmental priorities. Meanwhile, their existing engagement with water, marine, and land ecosystems reinforces their potential as grassroots stewards of the environment and key actors in place-based environmental strategies.

3.3.1.3 Prosperity - Economic Growth

SDG	Target	Number of sentences relatable	Total	SDG Average
7	7.1	9	48	9.60
	7.2	10		
	7.3	10		
	7.a	10		
	7.b	9		
8	8.1	6	73	6.08
	8.2	10		
	8.3	23		
	8.4	11		
	8.5	14		
	8.6	2		
	8.7	0		
	8.8	1		
	8.9	4		
	8.1	0		
	8.a	1		
8.b	1			
9	9.1	13	61	7.63
	9.2	9		
	9.3	10		
	9.4	6		
	9.5	6		
	9.a	2		
	9.b	14		
	9.c	1		
10	10.1	7	48	4.80
	10.2	5		
	10.3	6		
	10.4	5		
	10.5	3		
	10.6	4		

	10.7	5		
	10.a	4		
	10.b	5		
	10.c	4		
11	11.1	7	35	3.50
	11.2	2		
	11.3	8		
	11.4	2		
	11.5	3		
	11.6	2		
	11.7	3		
	11.a	2		
	11.b	3		
	11.c	3		
Total	45	265		6.32

Table 3.11 - Data Analysis from the topics mentioned for the prosperity targets

Source - Data organised by the Author based on data from field research survey results

Analysing the data collected from the 100 answers to the question about the influence of local entrepreneurship on the economic growth of communities within the Prosperity dimension, we obtained an association of 265 related topics across the 45 targets of the 5 SDGs in this strand (7, 8, 9, 10, and 11) (Table 3.11). Breaking this down further, the largest number of contributions was observed in SDG 8 (Decent Work and Economic Growth) with 73 topics, followed by SDG 9 (Industry, Innovation and Infrastructure) with 61 topics, SDG 7 (Affordable and Clean Energy) and SDG 10 (Reduced Inequalities) both with 48 topics, and SDG 11 (Sustainable Cities and Communities) with 35 topics.

The data show a wide range in the number of topics per target, with a maximum of 23 topics for target 8.3 (Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, etc.), and a minimum of 0 topics for targets 8.7 (Eradicate forced labour, human trafficking, and child labour) and 8.10 (Strengthen financial institutions). This coexistence of both the highest and lowest engagement levels within the same SDG (SDG 8) highlights the divergent relevance or accessibility of specific targets to local entrepreneurs, reflecting how some issues are tightly woven into local economic dynamics, while others may remain less visible or actionable in entrepreneurial contexts.

Looking at average contributions per target, SDG 7 stands out with the highest average (9.6), suggesting that clean energy topics are highly resonant with entrepreneurial activities, possibly due to energy access issues, cost-saving motivations, or innovation opportunities in local energy solutions. SDG 9 follows with an average of 7.6, reinforcing the strong alignment between entrepreneurship and innovation, infrastructure development, and technology uptake, areas where entrepreneurs often play a catalytic role.

SDG 8, despite having the highest total number of topics (73), shows a moderate average of 6.1 per target, indicating that while the overall engagement is strong, it is concentrated in only a few high-relevance targets like 8.3. The relatively lower averages in SDG 10 (4.8) and SDG 11 (3.5) may suggest that inequality and urban sustainability challenges, although important, are less consistently addressed through local entrepreneurship or require more structural or policy-level intervention to see tangible engagement.

The overall average of 6.3 topics per SDG further confirms a strong and multidimensional relationship between entrepreneurship and prosperity, showing that, on average, each entrepreneur contributes through around five to six distinct actions or impacts on prosperity-related targets. These actions may include job creation, innovation, local service provision, support for clean energy, and infrastructure development.

In comparative terms, entrepreneurship’s impact on prosperity shows both breadth and depth, especially in areas closely linked to market dynamics and productivity. The high concentration of responses in targets like 8.3 and 9.1 (developing quality, reliable, sustainable infrastructure) indicates that entrepreneurs are not only drivers of economic activity but also active participants in shaping foundational systems that support long-term development.

This data reinforces the idea that local entrepreneurs act as engines of prosperity, especially when their efforts are recognized, supported, and aligned with inclusive and sustainable development strategies. Their influence is particularly strong in areas where there is room for creativity, innovation, and immediate impact, though some targets, especially those that require systemic policy changes or institutional frameworks, remain under-addressed.

3.3.1.4 Peace and Partnerships

SDG	Target	Number of sentences relatable	Total	SDG Average
16	16.1	3	17	1.41
	16.2	1		
	16.3	1		
	16.4	0		
	16.5	0		
	16.6	5		
	16.7	4		
	16.8	0		
	16.9	0		
	16.1	2		
	16.a	0		
16.b	1			
17	17.1	1	19	1
	17.2	0		
	17.3	1		
	17.4	0		

	17.5	1		
	17.6	1		
	17.7	0		
	17.8	0		
	17.9	1		
	17.1	1		
	17.11	1		
	17.12	0		
	17.13	0		
	17.14	0		
	17.15	0		
	17.16	6		
	17.17	0		
	17.18	0		
	17.19	0		
Total	31	36		1.21

Table 3.12 - Data Analysis from the topics mentioned for the peace and partnerships targets

Source - Data organised by the Author based on data from field research survey results

As mentioned above, separating SDGs 16 and 17 from the other three strands, People, Planet, and Prosperity, can help explain the lower levels of engagement found in these areas. These two SDGs fall under the distinct dimensions of Peace (SDG 16) and Partnerships (SDG 17), which are more institutional and systemic in nature. This separation often renders them less directly accessible or actionable by local entrepreneurs, who tend to focus on tangible, community-level issues.

In the Peace strand (SDG 16), which includes 12 targets, only 17 associated topics were identified (Table 3.12). The maximum of 5 topics was recorded for target 16.6 (develop effective, accountable and transparent institutions), while five targets received no contributions at all, namely 16.4, 16.5, 16.8, 16.9, and 16.a. This results in a low average of 1.41 topics per target, the second lowest across all SDGs. Despite this, the fact that 7 out of the 12 targets did receive some level of engagement indicates that entrepreneurs can contribute, but their contributions are more effective at the micro-scale, particularly within local or municipal governance contexts, rather than at national or global institutional levels. This reflects the structural limitations faced by entrepreneurs when engaging with issues like corruption, legal identity, or international cooperation, which often require broader policy frameworks and institutional support.

In the case of SDG 17 (Partnerships for the Goals), the data reveals a similar challenge. Among its 19 targets, only 19 topics were mentioned, resulting in a very low average of 1 topic per target, the lowest of all SDGs analysed. Even more strikingly, 11 of the 19 targets received no contributions, including 17.2 (ODA commitments), 17.4 (debt sustainability), 17.7 (technology cooperation), 17.8 (capacity-building), 17.12 to 17.19 (policy coherence, data availability, systemic issues, etc.). This

reveals a clear gap not only in engagement but also in awareness and perceived relevance of these more abstract or macro-level targets among local entrepreneurs.

Interestingly, the target with the most responses (6 topics) was 17.16, which focuses on multi-stakeholder partnerships. This highlights a key insight: while local entrepreneurs may not be familiar with or equipped to act on most targets under SDG 17, they do value and benefit from partnerships, particularly those that foster collaboration, shared knowledge, and access to networks. This suggests that the impact of partnerships is felt even without a direct alignment to the formal SDG agenda, and that fostering more inclusive and accessible partnerships could be an entry point for increasing engagement with SDG 17 overall.

These findings point to a critical gap in the translation of global agendas to local action, especially for SDGs that are structurally or diplomatically oriented. The lack of awareness about the 2030 Agenda and its global governance components makes it difficult for entrepreneurs to align their actions with these goals, despite their potential to contribute meaningfully through local influence.

Ultimately, the analysis shows that while entrepreneurship has a strong and natural connection to the social, environmental, and economic dimensions of the SDGs, its link to peacebuilding and global partnership frameworks remains weak, largely due to issues of scale, access, and knowledge. Enhancing education around SDG 16 and 17, increasing support for local institutional participation, and promoting accessible, grassroots partnerships could serve to better connect local entrepreneurship with these under-addressed but crucial areas of sustainable development.

3.3.1.5 Inter-Area Analysis.

Area	SDG				Area		
	SDG	Nr. Of Targets	Total Number of topics relatable	Average of topics per target	Total Number of Targets	Total Number of topics relatable	Average of topics relatable
People	1	7	62	8.86	47	237	5.34
	2	8	29	3.63			
	3	13	46	3.54			
	4	10	41	4.10			
	5	9	59	6.56			
Planet	6	8	45	5.63	46	188	4.06
	12	11	31	2.82			
	13	5	15	3.00			
	14	10	45	4.50			
	15	12	52	4.33			
Prosperity	7	5	48	9.60	45	265	6.32
	8	12	73	6.08			
	9	8	61	7.63			
	10	10	48	4.80			
	11	10	35	3.50			
Peace	16	12	17	1.42	12	17	1.42
Partnerships	17	19	19	1.00	19	19	1.00
Total for 5 areas (People, Planet, Prosperity, Peace and Partnerships)					169	726	3.63
Total for 3 areas (People, Planet and Prosperity)					138	690	5.24

Table 3.13 - Relation between topics and targets per SDG and Area

Source - Data organised by the Author based on data from field research survey results

After conducting the individual analyses, the consolidated results provide a clearer view of how entrepreneurial initiatives relate to the five areas of the 2030 Agenda (People, Planet, Prosperity, Peace, and Partnerships). This aggregated perspective highlights both the distribution and the intensity of entrepreneurs' contributions across different dimensions. With a total of 726 topics linked to 169 targets, the dataset illustrates a wide coverage of sustainable development.

Looking across the five areas of sustainable development (People, Planet, Prosperity, Peace, and Partnerships), the analysis reveals a total of 726 topics associated with the 169 SDG targets (Table 3.13). Of these, the People dimension, with 47 targets, generated 237 topics; the Planet dimension, with 46 targets, produced 188 topics; Prosperity, with 45 targets, was linked to 265 topics; Peace, with 12 targets, produced 17 topics; and finally, Partnerships, with 19 targets, resulted in 19 topics. When considered together, these data yield an overall average of 3.63 topics per indicator. If, however, the focus is placed exclusively on the three core dimensions most directly connected with the survey questions (People, Planet, and Prosperity) the average rises to 5.24 topics per indicator.

The results also show considerable variation in the averages across different areas. Among the five dimensions, the number of topics per target ranges between 1 and 6.32, while within the three main dimensions of sustainable development (social, environmental, and economic), the values fall within a narrower range, between 4.06 and 6.32. This relatively balanced distribution underscores the multidimensional role of local entrepreneurs in contributing to sustainable development. It suggests that, regardless of whether entrepreneurs have formal knowledge of the 2030 Agenda and its targets, their activities naturally and intuitively address diverse aspects of sustainability, responding to the tangible needs of their communities.

The People dimension, with an average of 5.34 topics per target, highlights the close connection between entrepreneurs and social issues. This result reflects their direct engagement with pressing community needs such as education, health, social inclusion, and gender equality.

In the Planet dimension, the lower average of 4.06 topics per target, despite covering almost the same number of goals (46), demonstrates a still meaningful but less intensive engagement with environmental concerns, particularly energy, water management, and ecosystem preservation. The somewhat reduced value compared to the other two dimensions may point to either resource and knowledge limitations or the perception that environmental challenges often require collective or institutional interventions beyond individual capacity.

Prosperity emerges as the dimension with the strongest entrepreneurial impact. With the highest average of 6.32 topics per target, it illustrates the natural alignment between entrepreneurial activity and economic development. Entrepreneurs in this area play a significant role in advancing goals such as decent work, economic growth, and innovation, confirming the central role of local businesses in fostering structural economic transformation.

By contrast, the Peace and Partnerships dimensions register significantly lower averages (1.42 and 1.0 topics per target), respectively. This sharp difference indicates, mainly associated with don't having a specific question associated, show also that are less directly influenced by entrepreneurial activity. Two factors may help explain this result. First, these dimensions often involve institutional, political, or diplomatic actions that exceed the immediate scope of individual entrepreneurs. Second, the survey design did not include detailed or specific questions regarding Peace and Partnerships, which may have limited the explicit identification of contributions in these areas. Nevertheless, the low incidence does not necessarily imply the absence of influence. In many cases, entrepreneurial activity may indirectly strengthen peace and partnerships by fostering local trust networks, creating opportunities for social cohesion, or participating in collaborative initiatives with external actors.

With this the inter-area analysis demonstrates that entrepreneurial contributions in São Tomé and Príncipe are spread relatively evenly across the three main dimensions of sustainable development, People, Planet, and Prosperity, while Peace and Partnerships remain underrepresented. This pattern reinforces the view that entrepreneurial practices in the local context are primarily intuitive and community-oriented, arising from immediate needs rather than from formal alignment with the SDG framework. At the same time, it highlights a potential area for policy intervention: by creating enabling mechanisms and support structures, it may be possible to encourage local entrepreneurs to play a stronger role in the institutional and cooperative dimensions of sustainable development, thereby reinforcing their capacity to contribute to the entirety of the 2030 Agenda.

3.3.2 Open-ended Question - Qualitative Analysis

The subsequent analysis grouped these topics into three interdimensional relationships, Socioeconomic, Socioenvironmental and Eco-economic with the aim of understanding how local entrepreneurship acts in an integrated and systemic way in the context of the 2030 Agenda.

3.3.2.1 – People

An analysis of the 100 qualitative responses, categorized by thematic recurrence, revealed ten dominant categories of perceived impact generated by local entrepreneurship: meeting basic needs (35), job creation, income and economic stability (29), example and community inspiration (28), support and mutual aid (25), valorisation of local culture and traditions (24), community empowerment (12), skills development (13), reduction of external dependency (4), and promotion of family security (2).

These categories reflect a multidimensional and systemic impact of local entrepreneurial initiatives, with a strong emphasis on social transformation through grassroots economic empowerment, cultural affirmation, and social cohesion. The most frequently cited themes, meeting basic needs, job creation, and community support, suggest that entrepreneurship in local contexts

responds directly to structural vulnerabilities, such as poverty, unemployment, and lack of access to basic services. This aligns directly with SDG 1 and 8, illustrating how entrepreneurial activity can serve as a de facto mechanism for economic inclusion and resilience-building.

The high incidence of responses related to community inspiration and role modelling (28) underscores the intangible yet significant influence of entrepreneurs as social leaders and agents of behavioural change. When considered alongside mentions of skills development (13), these categories reflect a secondary but crucial dimension of entrepreneurship's contribution to educational advancement and personal empowerment, corresponding to SDG 4 and SDG 10.

Further, the notable emphasis on cultural preservation and community revitalization (24 and 12, respectively) points to a deeper engagement with territorial identity and social capital formation, reinforcing the connection between entrepreneurship and SDG 11 and 16. These contributions, though less visible in conventional economic metrics, are fundamental to long-term community resilience and cohesion.

Although less frequently mentioned, reducing external dependency (4) and promoting family security (2) highlight entrepreneurial efforts to build local autonomy, self-reliance, and intergenerational stability. These elements resonate with SDG 2 through enhanced food or resource sovereignty, and SDG 5 when seen in the context of household-level well-being and safety.

Taken collectively, the diversity of themes underscores that local entrepreneurship functions as a systemic and cross-cutting instrument for sustainable development. It bridges income generation with social innovation, cultural integration, and inclusive development. The predominance of categories linked to basic needs and employment indicates a pragmatic response to socioeconomic deficits, while themes such as cultural valorisation and social inspiration suggest a transformative potential rooted in collective identity and local agency.

3.3.2.2 – Planet

From the thematic organization of 100 qualitative responses concerning the environmental dimension of local entrepreneurship, ten prominent categories emerged: cleaning and conservation (41), valuing and using local resources (30), reducing travel (22), education and changing habits (15), making full use of resources (12), protecting nature (11), raising awareness (8), creating sustainable policies and practices (7), promoting local and cultural identity (6), and encouraging the consumption of local and organic products (5).

The analysis reveals a multifaceted impact of entrepreneurial initiatives, integrating environmental sustainability, community engagement, and behavioural transformation. The most frequently mentioned categories, cleaning and conservation (41), use of local resources (30), and reduction in travel (22), demonstrate a concrete orientation toward environmental preservation and

resource optimization, aligning directly with SDGs 13 and 15. These practices reflect efforts to reduce ecological footprints, support ecosystem maintenance, and promote sustainable land use and mobility.

Educational dimensions, represented by responses on education and changing habits (15) and raising awareness (8), underscore the role of local entrepreneurship in shaping environmental consciousness and promoting sustainable behaviours, contributing meaningfully to SDG 4. These activities indicate that entrepreneurs act not only as service providers but also as change agents in local environmental education.

The mention of creating sustainable policies and practices (7) and encouraging local and organic consumption (5) reflects the role of entrepreneurship in fostering institutional innovation and responsible consumption, directly supporting the principles of SDGs 12 and 11. These categories reveal how environmental responsibility is embedded in both operational practices and consumption patterns, pointing toward a systemic shift in values and priorities at the local level.

The theme of promoting local and cultural identity (6) highlights that environmental sustainability is often pursued in tandem with cultural and community values, connecting to SDGs 11 and 8, and emphasizing that ecological consciousness is not detached from territorial identity and inclusive growth.

Finally, the presence of making full use of resources (12) and protecting nature (11) underscores a transition toward circular economic models and ecological stewardship, while the emphasis on reducing travel (22) suggests active engagement with decarbonization strategies and sustainable mobility, both central to achieving climate and environmental targets.

3.3.2.3 – Prosperity

From the thematic organization of 100 responses, ten key categories emerged as the most frequently mentioned in relation to the economic influence of local entrepreneurship: creating jobs (31), business attracts business (27), developing the local economy (18), generating income and increasing purchasing power (12), attracting new businesses and customers (15), encouraging local consumption (8), supporting savings and investment (6), setting fair prices (6), creating self-support (5), and reducing external dependence (4).

This thematic distribution affirms that local entrepreneurship functions as a central engine of economic dynamism, with effects observable at multiple levels, from individual income generation to broader economic system strengthening. The most prominent categories, job creation (31), business attraction (27), and local economic development (18), illustrate a clear orientation toward expanding employment, stimulating production chains, and reinforcing local market structures, directly supporting SDGs 8 and 9.

Responses related to generating income (12) and encouraging local consumption (8) reinforce the role of entrepreneurship in enhancing household-level economic security and promoting inclusive economic practices, thus contributing to SDGs 1 and 12. These effects suggest a bottom-up approach to poverty reduction and sustainable consumption.

The categories of attracting new businesses and customers (15) and supporting savings and investment (6) highlight the capacity of entrepreneurial ecosystems to attract capital flows and foster resilience, aligning with SDGs 17 and 10. This reflects how entrepreneurship enables collaborative growth and redistribution of economic opportunity across community segments.

Mentions of setting fair prices (6) and creating self-support (5) illustrate a commitment to equity, affordability, and autonomy, key values that support SDGs 2 and 5. These responses point to a model of economic activity that prioritizes access to resources and empowerment of marginalized groups, including women and small producers.

Finally, reducing external dependence (4) emphasizes a movement toward local economic sovereignty, buffering communities against global disruptions and reinforcing SDG 11. This orientation signals a shift toward territorial resilience through endogenous development strategies.

Overall, the diversity of thematic responses demonstrates that local entrepreneurship operates as a lever for integrated and inclusive economic development, uniting innovation, sustainability, and social justice. The predominance of categories related to job creation and business attraction indicates a strategy focused on inclusive growth, while the emphasis on local consumption, fair pricing, and self-sufficiency points to alternative models of development that balance profitability with community well-being.

3.3.2.4 – Open-ended General Analysis

		PURPOSE OF INFLUENCE		
		People	Prosperity	Planet
ORIGIN OF INFLUENCE	People	<ul style="list-style-type: none"> - Meeting basic needs - Community revitalisation - Setting an example and inspiring others <ul style="list-style-type: none"> - Family safety - Retaining people and combating migration - Support and assistance 	<ul style="list-style-type: none"> - Creation of opportunities - Reduction of external dependence - Development of skills 	<ul style="list-style-type: none"> - Appreciation of local culture and traditions - Reduced dependence on external factors
	Prosperity	<ul style="list-style-type: none"> - Job creation - Income generation/increased purchasing power - Creation of self-sustainability - Reduction of external dependence 	<ul style="list-style-type: none"> - Business Attracts Business - Development/Strengthening of the Local Economy <ul style="list-style-type: none"> - Income Generation/Increased Purchasing Power - Encouragement of Local Consumption <ul style="list-style-type: none"> - Attraction of New Businesses/Customers - Support/Encouragement of Savings - Definition of Fair Prices 	<ul style="list-style-type: none"> - Reduced dependence on foreign countries - Encouragement of local consumption
	Planet	<ul style="list-style-type: none"> - Valorisation and use of local resources - Reduction in travel - Education and change in habits - Promotion of local and organic products 	<ul style="list-style-type: none"> - Valuing and using local resources - Reducing travel - Making full use of resources 	<ul style="list-style-type: none"> - Cleaning and maintenance <ul style="list-style-type: none"> - Nature protection - Awareness and sensitisation

Table 3.14 - Relation between topics and targets per Topics and Dimensions

Source - Data organised by the Author based on data from field research survey results

The results of the analysis reveal that the themes emerging from local entrepreneurship are not confined to a single dimension of sustainable development (Table 3.14). Instead, they present clear and consistent intersections across the social, economic, and environmental spheres. The influence matrix, which articulates the origin and purpose of impact along the axes of People, Prosperity, and Planet, demonstrates that the actions initiated by entrepreneurs frequently have multidimensional consequences, reinforcing the integrated nature of sustainable development.

In the common points for the People and Prosperity (socio-economic terms), the most salient themes include the creation of opportunities, the development of skills, the generation of income, increased purchasing power, the establishment of self-sustainability, and the reduction of external dependence. These elements, which appear prominently at the intersection of the “People” and “Prosperity” dimensions, reveal the capacity of entrepreneurs to act simultaneously as social actors and economic agents. Their initiatives not only respond to the basic needs of communities, such as meeting food, housing, and employment demands, but also contribute to long-term resilience by enhancing individual and collective capabilities. This dynamic supports a process of local empowerment, where economic inclusion and social cohesion are mutually reinforcing. In practical terms, this intersection speaks directly to SDGs 1, 4, 8, and 10, showing that entrepreneurship plays a strategic role in socio-economic transformation by fostering inclusive growth, quality education and lifelong learning, decent work, and the reduction of inequalities.

In the intersection between the People and Planet (socio-environmental) terms, the analysis highlights the importance of themes such as the appreciation of local culture and traditions, the promotion of education and behavioural change, the valorisation of local and organic products, the reduction of dependence on external factors, and the use of endogenous resources. These themes reflect the connection between the “Planet” and “People” dimensions, showing that local entrepreneurs engage not only in economic activity but also in the preservation and promotion of cultural and environmental heritage. Their actions are often guided by principles that align with sustainability at the local level, such as reducing environmental impact using local products and encouraging conscious consumption. This intersection reveals a strong alignment with SDGs 11, 12, and 15, which emphasise sustainable communities, responsible consumption, and the protection of terrestrial ecosystems. Particularly in contexts such as São Tomé and Príncipe, where biodiversity and cultural identity are closely intertwined, entrepreneurship emerges as a powerful vector for fostering environmental awareness, social participation, and ecological resilience.

The intersection between the Planet and Economy (eco-economic) dimension is evidenced by themes that include reducing dependence on foreign countries, encouraging local consumption, valuing and using natural resources, reducing travel, and maximising resource use. These themes are situated at the intersection of “Planet” and “Prosperity” and suggest a convergence between economic rationality and environmental responsibility. Entrepreneurs exhibit a clear concern with productive autonomy, promoting locally based value chains and circular economy principles that reduce waste and reliance on external inputs. The optimisation of local resources and the reduction of unnecessary transport or importation not only contribute to cost efficiency but also enhance environmental sustainability. This set of practices aligns with SDGs 9, 12, and 13, pointing to the relevance of innovation, resource efficiency, and climate action within entrepreneurial strategies.

Overall, the analysis of the intersections between dimensions shows that local entrepreneurship, even when informal or lacking institutional support, operates in an integrated and systemic manner. Entrepreneurs do not separate the social, environmental, and economic spheres; rather, they articulate them through actions that respond to the immediate needs of communities while laying the foundations for structural transformation. The transversality of their practices indicates that sustainable development, when rooted in local contexts, must be understood as an interdependent and co-evolving process. The three interrelations, socio-economic, socio-environmental, and eco-economic, not only coexist but reinforce one another, creating a resilient fabric that sustains the 2030 Agenda from the bottom up. Recognising and supporting these locally embedded synergies is essential for any effective strategy that aims to promote inclusive and sustainable development in fragile and complex territories.

A transversal theme that emerges across all intersections, regardless of the origin or purpose of influence, is the reduction of external dependence. This concept appears consistently in the articulation between the social, economic, and environmental dimensions, reflecting a shared concern with autonomy, resilience, and contextual adequacy. Whether through the development of local skills and self-sufficiency, the encouragement of local consumption and production, or the valorisation of endogenous resources, local entrepreneurs actively seek to minimise reliance on foreign markets, external assistance, or unsustainable supply chains. This recurring emphasis underlines a collective aspiration to build internal capacities and reinforce territorial sovereignty, positioning local entrepreneurship as a key mechanism in fostering sustainable development from within. As such, reducing external dependence becomes not only a practical necessity but also a strategic orientation that supports integrated progress across multiple SDGs.

CHAPTER 4

4. Discussion

Introduction This chapter presents a comprehensive discussion of the main results of the study, connecting empirical findings from both quantitative and qualitative data with the academic literature on sustainable development and entrepreneurship. The aim is to critically analyse the influence of local entrepreneurs in São Tomé and Príncipe (STP) on the advancement of the 2030 Agenda across its five key dimensions: People, Planet, Prosperity, Peace, and Partnerships.

Through a comparative analysis of closed-question indicators and thematic insights from open-ended responses, the chapter explores the extent to which entrepreneurial practices contribute to the SDGs. Particular attention is given to the differentiated impact entrepreneurs have across various sectors, revealing not only areas of strong engagement, but also critical gaps.

In the section 4.1 the discussion is structured per dimension of the 5Ps framework, offering an integrated perspective on how entrepreneurship operates as a multifunctional development vector in the context of SIDS. It also identifies cross-cutting patterns that highlight systemic strengths and constraints in the entrepreneurial ecosystem of STP.

Section 4.2 identifies the central common point of the study, local entrepreneurship in São Tomé and Príncipe functions as a systemic driver of sustainable development, simultaneously advancing multiple SDGs despite resource limitations, while also revealing persistent structural challenges.

Section 4.3 formulates key policy recommendations, such as strengthening entrepreneurial ecosystems, promoting inclusive and sustainable practices, and reducing external dependence, alongside outlining future research directions in areas like climate resilience, sectoral case studies, and the use of emerging analytical methods.

Section 4.4 acknowledges the study's limitations, including sampling constraints, adaptation of SDG indicators, and issues of comparability, but underscores the value of its context-specific contributions, which provide both a baseline for future studies and actionable insights for policymakers and practitioners.

By anchoring the discussion in both empirical data and relevant literature, this chapter deepens the understanding of local entrepreneurship as a complex, dynamic, and context-sensitive phenomenon. The evidence presented lays the foundation for the final recommendations in section 4.3 and for outlining future research directions in 4.4, reinforcing the central thesis that entrepreneurs, despite resource constraints, are pivotal agents in driving sustainable and inclusive development in São Tomé and Príncipe.

4.1 Discussion per dimension

To provide a structured and comprehensive understanding of the role local entrepreneurs play in advancing sustainable development, this section explores the empirical results through the lens of the five dimensions of the 2030 Agenda: People, Planet, Prosperity, Peace, and Partnerships. Each subsection delves into how entrepreneurial practices in São Tomé and Príncipe contribute to specific SDGs associated with these dimensions. By cross-referencing data from closed and open responses with insights from the literature, the discussion highlights both the direct and indirect ways entrepreneurs engage with social, environmental, economic, and institutional development. This multidimensional approach makes it possible to identify priority areas, systemic constraints, and untapped potential, offering a nuanced portrait of local entrepreneurship as a catalyst for inclusive and sustainable transformation.

4.1.1 Influence of local entrepreneurs in People dimension

As the literature highlights, entrepreneurship is no longer seen solely as a catalyst for economic growth, but has taken on a central role as a driver of social development (Urbano et al., 2019; Ribeiro-Soriano, 2017). In São Tomé and Príncipe, the results obtained from closed and open questions confirm this dual function: entrepreneurs not only create economic value but also act directly to combat social vulnerabilities. The impact goes beyond immediate job creation to include the promotion of inclusion, community empowerment and social resilience, as also emphasised by Yani and Ausat (2024) and Ajide (2020).

Area	SDG	Qualitative Analysis			Quantitative Analysis			
		Nr. Of Targets	Total Number of topics relatable	Average of topics per target	Survey		Comparison	
					Rating	Trend	Rating	Trend
People	1	7	62	8.86			+++	++
							+++	+
	2	8	29	3.63			=	=
							+++	++
							--	-
	3	13	46	3.54			+++	=
							+++	N/A
	4	10	41	4.1			+++	N/A
							+++	++
	5	9	59	6.56			++	++
						++	++	

Table 4.1 - Entrepreneurs to be interviewed for a population of n=100
(Source: Data organised by the Author based on data from field research survey results)

SDG 1 No Poverty - The literature shows that entrepreneurship can be instrumental in reducing poverty by generating sources of income ([Henderson, 2002](#)). The data clearly show that entrepreneurs exceed the income threshold set by the UN, placing themselves above the extreme poverty level and reporting “SDG Achieved” values, while the general population remains with “Major Challenges” and a “Stagnating” trend. This demonstrates that entrepreneurship, by enabling economic autonomy, has an immediate impact on improving living conditions, reinforcing the argument that, when conditions and incentives are in place, people can break out of the cycle of poverty through self-employment. Even so, the negative fluctuation between wage bands suggests fragility in income stability, showing that entrepreneurship alone does not solve all structural vulnerabilities ([Odeyeme et al., 2024](#)). Qualitative analysis confirms this pattern: of the 237 themes raised, SDG 1 is the most mentioned (62 topics), illustrating that STP entrepreneurs are heavily involved in activities that influence multiple targets of poverty eradication. Also, from the qualitative data, this SDG is strongly supported: “meeting basic needs” (35 mentions) and “income and economic stability” (29) were the most cited themes, indicating that local entrepreneurship directly addresses core dimensions of poverty alleviation. Furthermore, support and mutual aid (25) reinforces the role of entrepreneurship in creating informal safety nets and reducing social vulnerability at the grassroots level. With this Entrepreneurship in STP serves as a powerful poverty-reduction tool, directly addressing economic deprivation through income generation and community support. However, to achieve systemic and sustained impact, complementary measures are needed to mitigate income volatility and address structural vulnerabilities

SDG 2 Zero Hunger - Entrepreneurship has been associated, especially in local contexts, with combating hunger, either through income generation or innovation in the food chain ([Toxirovna, 2024](#)). However, the results show that, in relation to daily meals, both entrepreneurs and the general population face “significant challenges” and the trend is only “moderately positive”. In contrast, in the sustainable consumption indicator, entrepreneurs show much more positive values (“SDG Achieved”), suggesting greater awareness and ability to make choices that promote sustainability, a reflection of access to resources and differentiated information. Despite this, the low number of qualitative topics for SDG 2 reaffirms that spontaneous entrepreneurial actions are still limited in this area, perhaps lacking training programmes focused on sustainable agriculture and nutrition. In the qualitative responses, “reduction of external dependency” (4) was cited as an entrepreneurial contribution. While less frequent, this suggests some entrepreneurial efforts are focused on improving food or resource sovereignty, aligning with SDG 2 through the lens of local food production, processing, or distribution. These efforts may remain underdeveloped due to the noted lack of targeted training in sustainable agriculture or nutrition. Entrepreneurship shows potential to support food sovereignty and nutrition

through sustainable practices, but its role in directly alleviating hunger remains limited without targeted interventions in food production, distribution, and education.

SDG 3 Good Health and Well-being - Access to basic health services is another critical vector, and the literature draws attention to the barriers faced by the poorest populations ([Welter et al., 2017](#)). STP entrepreneurs show “SDG Achieved” for access to services, and substantial progress compared to the population average. This suggests that, with higher income, there is also better access to health, corroborating the idea that financial empowerment can be decisive in closing social gaps. However, the higher number of road accidents among entrepreneurs highlights the risks and pressures faced by this group, bringing to light a paradox: gains in access and quality are accompanied by specific vulnerabilities associated with the daily activity of entrepreneurship. Qualitative references to “promotion of family security” (2) also subtly link entrepreneurship to broader health and psychosocial well-being, particularly through the lens of household stability and reduced economic stress. While entrepreneurship enhances health access through improved income, holistic well-being depends on addressing occupational hazards and ensuring safety nets that protect entrepreneurs from sector-specific risks.

SDG 4 Quality Education - The link between entrepreneurship and the promotion of formal and informal education is well supported in the literature ([Phan Tan, 2022](#)). In STP, data show a clear advantage for entrepreneurs in terms of literacy and access to pre-school education (“SDG Achieved” and progress trends), indicating that greater financial autonomy translates into better educational opportunities for themselves and their families. Qualitative data also suggests that entrepreneurs play a role in mentoring and knowledge transfer, acting as informal agents of education, a phenomenon also documented by Mars ([2022](#)) and Lyon and Sepulveda ([2009](#)). This is reinforced in the qualitative themes: “skills development” (13) and “example and community inspiration” (28) indicate that entrepreneurs not only invest in their own education but contribute to others’ learning, directly and indirectly, by serving as role models and informal educators in their communities. Entrepreneurship in STP strengthens educational outcomes both directly and indirectly. By supporting entrepreneurial education and mentorship networks, this impact can be scaled to benefit broader community development.

SDG 5 Gender Equality - The literature argues that entrepreneurship can be a vehicle for transforming norms and promoting gender equality ([Assaf, 2024](#); [Sundin, 2011](#)). In São Tomé and Príncipe, the jump from 2 to 3 levels between the general population and entrepreneurs in gender equality indicators reveals not only greater openness among entrepreneurs to equal opportunities, but also the effective integration of this concern into their business practices. With an average of 6.5 qualitative topics per target, SDG 5 stands out for the depth and intensity of entrepreneurs’ engagement with gender issues. This reflects sensitivity and proactivity in employing more women,

creating initiatives for vulnerable groups, or combating discriminatory practices in their own businesses. From the qualitative analysis, while not heavily cited directly, “promotion of family security” (2) and “support and mutual aid” (25) imply gender-relevant dynamics, especially as women often bear primary responsibility for caregiving and household resilience. Entrepreneurship appears to foster more equitable domestic and professional roles, contributing to SDG 5 targets. Entrepreneurship emerges as a key driver for gender transformation in STP, promoting inclusive practices and challenging discriminatory norms. Sustaining this momentum requires structural support and policy alignment.

Cross-referencing literature and results confirm that local entrepreneurship acts as a cross-cutting accelerator of social SDGs. The contribution is multifaceted: there is both breadth (achieving different goals in poverty, health, education, etc.) and depth (especially in gender and poverty). However, the uneven distribution of impact, with some goals better served than others, confirms what the literature warns about the limitations of spontaneous entrepreneurship: its action depends on access to infrastructure, capital, training and support policies ([Bruton et al., 2010](#); [Ratten, 2023](#)). While entrepreneurs are already acting as agents of change, there is significant scope to amplify and target the impact, aligning actions with the least addressed.

In summary, the results show that local entrepreneurship has a positive impact on social development in STP, especially in the areas of poverty eradication and the promotion of gender equality. However, to prove to be a truly transformative tool, it is necessary to systematise and align support for entrepreneurs with the priorities of the least addressed social SDGs, ensuring that this potential not only persists but expands to all segments of the population.

4.1.2 Influence of local entrepreneurs in Planet Dimension

The analysis of the Planet dimension allows us to understand how local entrepreneurship in São Tomé and Príncipe is directly or indirectly contributing to the environmental SDGs, namely SDGs 6, 12, 13, 14 and 15. This discussion combines empirical data with key contributions from the literature on environmental sustainability and entrepreneurship, revealing tensions, synergies and the transformative potential of local businesses in this island context.

Area	SDG	Qualitative Analysis			Quantitative Analysis			
		Nr. Of Targets	Total Number of topics relatable	Average of topics per target	Survey		Comparison	
					Rating	Trend	Rating	Trend
Planet	6	8	45	5.63			+	=
							+	+
	12	11	31	2.82			--	N/A
							N/A	N/A
	13	5	15	3			---	-
							N/A	N/A
	14	10	45	4.5			=	++
							+++	++
	15	12	52	4.33			=	=
							N/A	N/A

*Table 4.2 - Comparative Analysis for Planet Results
Source - Data organised by the Author based on data from field research survey results*

SDG 6 Clean Water and Sanitation - The literature highlights that sustainable entrepreneurship can promote equity in access to basic resources such as water and sanitation, especially when it incorporates innovative and inclusive solutions ([Cheng et al., 2021](#)). However, in fragile contexts such as Small Island Developing States (SIDS), the reach of these solutions can be limited by poor infrastructure and poorly decentralised government responsibilities ([Riti et al., 2015](#)). Quantitative results indicate that, although entrepreneurs show slight improvements in water and sanitation access indicators, these improvements are mainly personal rather than structural. Greater economic capacity allows, for example, more regular water purchases and improved sanitation facilities, which, by extension, also benefits their households and nearby communities. These observations coincide with qualitative data, where 45 topics were associated with SDG 6, with emphasis on practices of conservation, reuse of materials and promotion of hygiene, showing real, albeit limited, engagement with the SDG 6 targets. The role of entrepreneurs as micro-agents of change is evident here: they do not replace state infrastructure, but contribute to improving local conditions, confirming the literature that points to the relevance of entrepreneurship in ecological regeneration and human well-being at the community level ([Morelli, 2011](#)).

SDG 12 Responsible Consumption and Production - Sustainable production and consumption are fundamental to the ecological transition, and entrepreneurial innovation is considered a key driver of this change ([Li et al., 2022](#)). However, research data reveal significant challenges: three of the four indicators assessed for SDG 12 showed a lack of information, making clear comparisons difficult. Where data does exist, entrepreneurs perceive less equality of opportunity but better access to

resources. This perception may reflect greater critical awareness of structural inequalities, in line with studies highlighting the role of entrepreneurs as keen observers of systemic barriers ([Lejuste et al., 2024](#)). Qualitative data show that only 31 topics were associated with SDG 12, with an average of 2.8 per target, the lowest value among the environmental SDGs. The categories “total resource use” (12), “creation of sustainable practices” (7) and “promotion of local/organic consumption” (5) show intentions aligned with responsible consumption but also reveal contextual limitations: restricted access to sustainable suppliers, lack of recycling systems and low digitisation hinder changes in production practices. Thus, although potential exists, it has yet to be fully activated. Public policies and technical training are essential to unlock this local potential and align business practices with the principles of SDG 12.

SDG 13 Climate Action - The discrepancy between environmental knowledge and effective practices is clear in this SDG. Although entrepreneurs reveal greater awareness of climate change (rated “SDG Achieved”), they admit to consuming more fossil fuels since starting their business, due to logistical needs and the lack of viable energy alternatives. This paradox is consistent with the literature, which points out that in countries with poor infrastructure and few technological options, entrepreneurs find it difficult to align practices with climate goals, even if they are aware of their importance ([Lejuste et al., 2024](#)). Only 15 topics were related to SDG 13 in the open responses (average of 3 per target), reinforcing the idea that the issue of climate change is less tangible in the daily lives of entrepreneurs. However, 22 mentions of reducing travel and 15 of educational actions and changing habits show that there are indirect ways to contribute to climate action, even if they are still poorly structured. In strategic terms, this result points to the need to strengthen climate literacy and access to clean technologies in the country, recognising that awareness already exists but that the conditions for its practical implementation are lacking.

SDG 14 Life below water - This is one of the SDGs with the best relative performance by entrepreneurs. Progress was recorded in three of the four indicators analysed, with significant improvements in the perception of illegal fishing and marine life protection. According to open data, these advances reflect compliance with legal standards, awareness of conservation, and the influence of entrepreneurs on suppliers and consumers. With 45 topics mapped, SDG 14 has an average of 4.5 themes per target, with target 14.1 (marine pollution) standing out with 14 mentions. These data indicate that entrepreneurs are particularly attentive to the preservation of marine resources, which are essential to the local economy and cultural identity. This is in line with studies that highlight the role of entrepreneurship in fragile coastal ecosystems ([Riti et al., 2015](#)). Thus, local entrepreneurship is shown here as an active ally in the preservation of marine resources, contributing not only to the achievement of environmental goals but also to community resilience.

SDG 15 Life on Land – This SDG was the most frequently mentioned in the qualitative responses, with 52 topics, although with an average of 4.3 per target. Concerns range from responsible use of wood and biodiversity protection to the transition to legal suppliers. These actions, although still limited, point to a process of progressive adaptation. The final data show that entrepreneurs maintain an attitude of biodiversity protection and reveal improvements in indicators on the illegal use of natural resources. The category “nature protection” (11) complements this picture, showing a commitment that does not depend exclusively on external regulation, but also on shared values and practices rooted in the relationship with the land. This result reflects Morelli’s (2011) idea that environmental sustainability requires balance and regeneration, and that local entrepreneurs, through their direct connection to ecosystems, are in a privileged position to promote this regeneration in a localised and culturally rooted way.

The cross-analysis shows that, although local entrepreneurs in São Tomé and Príncipe do not operate directly within the SDG framework, their everyday practices have a real and measurable impact on several environmental goals. Contributions are particularly evident in the areas of water, sanitation, and terrestrial and marine biodiversity. However, challenges remain in areas such as responsible consumption and climate mitigation, mainly due to systemic and contextual limitations. Thus, entrepreneurs are emerging as environmental agents, with practices rooted in the territory and transformative potential, provided they are supported by public policies that encourage ecological transition, promote technical training and improve access to sustainable solutions.

4.1.3 - Influence of local entrepreneurs in Prosperity Dimension

The transformative role of entrepreneurship in promoting access to energy in developing contexts is widely recognised (Sagar, 2018; Adetoso et al., 2013). Local entrepreneurs tend to adopt innovative solutions that often overcome public system limitations, promoting the diffusion of renewable energy and off-grid systems, in line with the literature on endogenous development and local resilience (Iacobucci & Perugini, 2021).

Area	SDG	Qualitative Analysis			Quantitative Analysis			
		Nr. Of Targets	Total Number of topics relatable	Average of topics per target	Survey		Comparison	
					Rating	Trend	Rating	Trend
Prosperity	7	5	48	9.6			+	=
							+	+
	8	12	73	6.18			N/A	N/A
							+++	N/A
	9	8	61	7.63			++	-
							++	N/A
	10	10	48	4.8			++	N/A
							+	N/A
	11	10	35	3.5			++	+
							-	=
						-	-	

*Table 4.3 - Comparative Analysis for Prosperity Results
Source - Data organised by the Author based on data from field research survey results*

SDG 7 Affordable and Clean Energy - Entrepreneurs reported better access to electricity than the general population, with the rating rising from “Major Challenges” (UN) to “Goal Achieved” in the survey and trending “Moderately Improving”. Access to cooking energy also improved by two positions. However, dependence on centralised groups and generators still points to risks related to energy sustainability and autonomy. The thesis in the literature confirms the entrepreneurial sector, even in low-income and small-scale countries such as São Tomé and Príncipe, is able to articulate solutions and access energy resources at higher levels than the general population. However, as Hossain et al. (2021) warn, structural vulnerability remains due to dependence on shared infrastructure. The São Tomé experience indicates that completely overcoming energy challenges will depend on more robust decentralisation policies, investment in renewables and incentives for energy production autonomy, actions that can be accelerated with greater private sector involvement.

SDG 8 Decent Work and Economic Growth - The centrality of entrepreneurship to growth, job creation and wealth distribution is widely recognised in the literature (Audretsch et al., 2007; Sirojiddin, 2022). Small businesses and local enterprises are responsible for the largest share of new jobs and the inclusion of marginalised groups. The study data show that entrepreneurs perceive themselves to be in a significantly better situation in terms of remuneration and working conditions (“Major Challenges” to “Goal Achieved”), with a gradual improvement noted. Qualitative analysis highlights job creation (31 mentions), attracting new businesses (27), and strengthening local development (18) as the main contributions of entrepreneurship. These findings corroborate the

literature on the positive distributive effects of entrepreneurship ([Enaifoghe & Vezi-Magigaba, 2023](#), [Rahmaddian, 2024](#)). The emphasis on job creation indicates that local entrepreneurship is a driver of economic dynamism and combats structural unemployment in São Tomé and Príncipe. However, the persistence of challenges regarding fair wages and stability points to the need for policies that broaden the impact of entrepreneurship across the entire economy, so that gains are not restricted to clusters or privileged segments.

SDG 9 Industry, Innovation and Infrastructure - Access to technology and communication infrastructure is repeatedly cited as a driver of transformation in the business environment, innovation and competitiveness ([Kostakis & Tsagarakis 2022](#); [Khan et al., 2023](#)). There has been substantial progress in entrepreneurs' assessment of access to the internet and transport, both rising from "Significant Challenges" (general population) to "Goal Achieved" (entrepreneurs) and showing a positive trend. The open-ended questionnaire reinforces the role of innovation and infrastructure in strengthening local businesses (61 topics related to SDG 9). The virtuous relationship between entrepreneurship, infrastructure and innovation, highlighted by Leong et al. ([2022](#)), is confirmed. Entrepreneurs benefit primarily from progress in these sectors. However, the data suggest significant disparities between groups, requiring inclusive policies to expand access to technologies and infrastructure to the entire population, reducing the risk of deepening inequalities.

SDG 10 Reduced Inequalities - Entrepreneurship has the potential to reduce inequalities, both by including vulnerable groups and by stimulating social mobility ([Hossain et al., 2021](#); [Ubfal, 2024](#)). Furthermore, active participation in local production chains favours a more equitable distribution of resources and opportunities. Although there has been positive progress in the indicators for entrepreneurs ("Major Challenges" to "Challenges Remain" in opportunities and access), there is still a considerable distance to the final goal, according to the assessment of both entrepreneurs and the UN Report. In this dimension, it is noted that progress is real but limited by scale and structural barriers (political, institutional, and cultural). Entrepreneurship only reaches its real potential for reducing inequalities when accompanied by active inclusion policies, targeted financing for vulnerable groups, and institutional reforms, as indicated by Leong et al. ([2022](#)).

SDG 11 Sustainable Cities and Communities - Entrepreneurs play a key role in fostering innovative urban solutions, such as collaborative housing, waste collection and local food production ([Satar et al., 2023](#)). Entrepreneurs perceive improvements in housing conditions, but challenges such as overcrowding persist. Interestingly, they identify a deterioration in the conditions of their neighbourhoods, perhaps due to higher expectations or location in less favoured areas. Empirical evidence suggests that progress in the housing and urban domains is partially captured by the entrepreneurial population, but still insufficient to universalise decent standards. The low average attention to SDG 11 in open-ended responses may indicate that many urban challenges go beyond the

direct capacity of individual actors, requiring coordinated action between the state, the private sector and civil society ([UN HABITAT, 2021](#)).

Cross-analysis shows that local entrepreneurship is, in fact, an engine of prosperity in São Tomé and Príncipe, offering agile responses to energy, labour and infrastructure needs. This is perfectly in line with the theories of Schumpeter (1934), Audretsch et al. (2007) and endogenous development approaches. However, systemic challenges remain, especially in reducing inequalities and sustainable urbanisation, which require political and institutional coordination beyond the individual action of entrepreneurs. Qualitative data also reveal that the most effective entrepreneurial actions are strongly aligned with the SDGs most sensitive to market dynamics, innovation and job creation. Targets dependent on structural changes, such as inequality and urban sustainability, remain essential for strengthening public policies that enhance the impact of entrepreneurship.

4.1.4 Influence of local entrepreneurs in solving local peace and partnerships

An analysis of data relating to SDGs 16 and 17 reveals, in light of the literature and practice in São Tomé and Príncipe, a dual picture: local entrepreneurship has the potential to foster institutional resilience and collaboration but faces structural and scale barriers that limit its direct impact in this area.

Area	SDG	Qualitative Analysis			Quantitative Analysis			
		Nr. Of Targets	Total Number of topics relatable	Average of topics per target	Survey		Comparison	
					Rating	Trend	Rating	Trend
Peace	16	12	17	1.41			+	N/A
							=	++
Partnerships	17	19	19	1			+	-
							+++	N/A

Table 4.4 - Comparative Analysis for Peace and Partnerships Results

Source - Data organised by the Author based on data from field research survey results

SDG 16 Peace, Justice and Strong Institutions - Recent studies ([George et al., 2016](#); [Fernhaber & Zou, 2022](#)) point to the emerging role of entrepreneurship as a tool for peacebuilding, promoting social cohesion, reducing inequalities and creating opportunities, especially in fragile or post-conflict contexts ([Brück et al., 2013](#); [Dacin et al., 2011](#)). Entrepreneurs can contribute to strengthening institutions, reducing conflicts and the popular demand for transparency and justice ([Acemoglu & Robinson, 2015](#)). In the closed survey, entrepreneurs have a significantly more positive perception of criminal justice and the fight against corruption than that presented in official UN reports. For example, crime is seen as a “Goal Achieved” and “Moderately Improving”, while the UN points to “Challenges

Remain” and a lack of data. As for corruption, they recognise “Significant Challenges”, but point to a trend of “Maintenance” or “Improvement”, in contrast to the scepticism of official sources. In the open responses, this link becomes more diffuse: only 17 topics related to the 12 targets of SDG 16, with the highest incidence in 16.6 (transparent institutions). Half of the targets were not mentioned, revealing a weak relationship between entrepreneurship and some of the peace sub-themes, particularly those furthest from everyday business (legality, legal identity, etc.). These trends confirm that entrepreneurship can indeed be a “micro vector” of social reconstruction and institutional strengthening ([Peredo & Chrisman, 2006](#)), but only translates into visible impact when actions occur on a local and tangible scale: community dialogue, opportunities for young people, and pressure for transparency in nearby institutions. Thus, microenterprises tend to operate as catalysts for trust and cohesion, even if they cannot, on their own, fully align themselves with macro-institutional or national governance challenges. The positive discrepancy in entrepreneurs’ perceptions may indicate local improvements not detected by aggregate statistics ([Bosma et al., 2020](#)), impacts of business networks, or the existence of specific initiatives, but it may also reflect selective optimism on the part of those who, due to their activities, feel more integrated or benefited by existing structures.

SDG 17 Partnerships for Sustainable Development - The literature reinforces the central role of multi-actor partnerships and the ability to mobilise global resources and knowledge to leverage sustainable change ([Amri et al., 2024](#)). Entrepreneurship, especially via SMEs, can act as a bridge between local solutions and global agendas, expanding collaboration networks ([Morrison et al., 2017](#); [OECD, 2022](#)). The results reveal, however, low practical and thematic engagement of entrepreneurs with SDG 17, although there is recognition of the relevance of the SDGs (“SDG Achieved” and “Moderate Improvement” for knowledge about the 2030 Agenda), the perception of the effect of public policies (e.g., public spending on health/education) is “Challenges Remain” with a tendency toward stagnation. In the qualitative field, only 19 topics were associated with the 19 targets of SDG 17, with a predominance in 17.16 (multi-actor partnerships). Most of the targets, especially those related to technological cooperation, financial assistance, policy coherence and capacity building, were not even mentioned, revealing a gap between the discourse of global cooperation and the actual reach of local entrepreneurs. This gap shows that, even though they recognise the importance of partnerships, entrepreneurs still feel poorly integrated or informed about the institutional mechanisms of international cooperation ([Lundström & Stevenson, 2005](#)). The partnerships that really work and engage small businesses are the closest and most operational, such as local collaborations, access to regional networks or direct actions with NGOs. The more technical and macroeconomic arrangements of SDG 17 remain distant from everyday business life. In practice, the contribution of entrepreneurship to global partnerships is indirect, working best through the “translation” and

approximation of global objectives to local realities, including through training, awareness-raising and multi-actor coordination initiatives around pilot projects or territorial solutions.

In summary, in São Tomé and Príncipe, entrepreneurship has proven to be a facilitator for local peace and the promotion of partnerships, but its impact is limited by institutional factors, lack of information and distance from global mechanisms. Strengthening bridges between international agendas and local practices remains crucial for SDGs 16 and 17 to become as “actionable” as the goals associated with the economy, society, and the environment.

4.2 Discussion of the Central Common Point

Besides the referred analysis, where it's important to highlight that from the 70 close-ended indicators analysed, 33 (47%) revealed a positive evolution for entrepreneurs compared to the general population, 10 (14%) showed a negative evolution, 10 (14%) remained neutral, and 17 (24%) were classified as not applicable (N/A) and that from the open-ended questions it was found a total of 726 associated topics to the 169 targets providing an average of 4.74 of topic per indicator, the cross-sectional analysis of both open and close data reveals a common central point: local entrepreneurship in São Tomé and Príncipe acts as a cross-cutting and multifunctional vector for the advancement of the Sustainable Development Goals (SDGs), even in contexts of structural fragility. This common point is manifested in the ability of local entrepreneurs to simultaneously integrate the 5 Ps into their daily practices. Although their actions are not formally guided by the SDGs, the data reveal that their contributions simultaneously address multiple goals, aligning with the indivisibility and interconnectedness proposed by the 2030 Agenda ([UN, 2015](#); [Weiland et al., 2021](#)).

In the People dimension, entrepreneurs play a central role in poverty mitigation (SDG 1), promoting education (SDG 4) and gender equality (SDG 5). These contributions are not only economic, but also social and cultural, reinforcing a territorial development approach based on empowerment and inclusion ([Urbano et al., 2019](#); [Mars, 2022](#)). In the Planet dimension, even facing structural and technological limitations, entrepreneurs demonstrate environmentally conscious practices, especially in the areas of marine conservation (SDG 14) and responsible use of natural resources (SDG 15). This direct connection with the territory provides empirical and contextualised knowledge that favours sustainable practices adapted to the island reality ([Morelli, 2011](#)). The Prosperity dimension is perhaps where the impact is most evident, with robust contributions to economic growth, job creation (SDG 8) and access to energy (SDG 7). However, inequalities (SDG 10) and urbanisation challenges (SDG 11) persist, highlighting the need for more inclusive public policies to expand the positive effects beyond entrepreneurial hubs. Finally, although more limited, action in Peace and Partnerships (SDGs 16 and 17) reveals that entrepreneurs act as “micro-agents of institutionality”, promoting community trust, demanding transparency and forming local networks ([Dacin et al., 2011](#); [George et al., 2016](#)).

Across all intersections, there is a recurring concern with reducing external dependence, indicating a strategic orientation towards territorial autonomy, community resilience and sovereignty over resources and decisions. This is one of the most relevant conclusions of the study, local entrepreneurship, even in informal contexts, proves to be a natural mechanism for systemic integration between the dimensions of sustainable development, operating holistically and adapted to the territory. As highlighted in the literature ([Dean & McMullen, 2007](#); [Shepherd & Patzelt, 2011](#); [Neumann, 2022](#)), entrepreneurship functions not only as an economic driver but also as a social and environmental agent, capable of mobilizing local knowledge and resources to generate innovative and context-sensitive solutions. In the case of SIDS, where vulnerabilities linked to scale, external dependence and climate risks are particularly acute ([Briguglio, 2016](#); [Scobie, 2019](#)), this endogenous capacity acquires added strategic value. Local entrepreneurial activity thus emerges as a catalyst for adaptive resilience, shortening supply chains, fostering self-sufficiency, and reinforcing community identity. By integrating the economic, social and environmental dimensions in a bottom-up manner, entrepreneurship confirms its potential to act as a structuring mechanism for sustainable development, bridging the gap between global agendas such as the SDGs and the lived realities of fragile territories.

Thus, the central common point is the demonstration that, in contexts of limited resources, such as São Tomé and Príncipe, local entrepreneurship is not only a tool for generating income, but also a systemic mechanism for sustainable development. This finding reinforces the literature that points to the need for resilient and territorialised entrepreneurial systems that simultaneously consider the social, ecological and institutional dimensions of development.

4.3 Recommendations and Future Research

This study demonstrated the transformative potential of local entrepreneurship in addressing critical development challenges and promoting the SDGs in São Tomé and Príncipe. Based on empirical evidence, the analysis of thematic intersections and theoretical contributions, important recommendations emerge for policymakers, development agents and academic institutions:

1. Creating a favourable and integrated entrepreneurial ecosystem - It is essential to strengthen the entrepreneurial ecosystem by creating an environment conducive to the creation, formalisation and growth of sustainable businesses. This involves simplifying bureaucratic procedures, improving physical and digital infrastructure, and expanding access to finance through mechanisms such as microcredit, special economic zones and public-private partnerships. Such measures will reduce barriers to entry and increase the capacity of entrepreneurs to scale their businesses in a sustainable manner.

2. Promoting cross-cutting and sustainable solutions - As shown, entrepreneurs already operate in multiple dimensions in an integrated manner. Support policies should therefore favour initiatives that simultaneously address the intersections between People, Planet and Prosperity. Projects that reconcile economic value, social impact and environmental sustainability should be prioritised and encouraged with technical and financial support programmes.
3. Fostering sustainable and sectoral strategic entrepreneurship - Sectors such as agribusiness, ecotourism and renewable energy offer unique opportunities for Small Island Developing States (SIDS). The introduction of tax incentives, green subsidies and access to credit lines dedicated to sustainable innovation is recommended. Training in energy efficiency, circular economy and environmental management should complement these measures, aligning the private sector with national sustainability goals.
4. Promoting inclusive and resilient entrepreneurship - It is essential to ensure the inclusion of underrepresented groups, such as women, young people and rural communities. This can be achieved through gender-sensitive financing programmes, targeted mentoring and specific training. Equitable inclusion strengthens the diversity of the entrepreneurial ecosystem and broadens its impact in combating inequalities (SDGs 5 and 10).
5. Integrating entrepreneurship into education systems and the culture of innovation Entrepreneurial education - Should be incorporated from the earliest levels, fostering a culture of problem solving and innovation from an early age. Collaboration between schools, universities, civil society and government can expand technical and vocational training and stimulate sustainable entrepreneurship. At the same time, it is necessary to expand digital literacy and access to technology, enabling entrepreneurs to reach new markets and improve their productivity.
6. Reducing external dependence as a resilience strategy - The cross-cutting nature of this theme, present in all the intersections mapped (3.3.2.4), justifies its elevation to strategic priority. Encouraging local consumption and production, valuing endogenous resources and promoting territorial value chains are measures that strengthen economic sovereignty and community resilience, contributing to multiple SDGs simultaneously.
7. Deepening international partnerships and regional cooperation - To overcome the structural limitations typical of island economies, it is necessary to strengthen partnerships with multilateral institutions and donor organisations, facilitating access to global networks of knowledge, financing and innovation. Regional cooperation and South-South knowledge exchanges can broaden learning and generate synergies between countries with similar challenges.

Future lines of research:

1. Evaluating the effectiveness of public policies and institutional instruments - Future research should focus on assessing the effectiveness of policies to support entrepreneurship and their alignment with SDG outcomes. Particular attention should be paid to the contextual appropriateness of policy models applied in SIDS.
2. Sectoral and territorial case studies - In-depth research in the agriculture, tourism and renewable energy sectors can reveal the specific mechanisms through which entrepreneurship contributes to environmental sustainability and socioeconomic development. These studies will also help identify replicable success factors.
3. Intersection between entrepreneurship and climate resilience - There is an urgent need to examine how entrepreneurs react, adapt and innovate in the face of climate change. Longitudinal studies on the impact of climate on business opportunities and adaptive strategies will be valuable for long-term planning.
4. Analysis of identity intersectionality - Gender, ethnicity, and social class influence access to resources and entrepreneurial opportunities. Research that explores these variables in an integrated manner can improve the design of inclusion policies.
5. Use of emerging methodologies and analytical technologies - The use of big data, machine learning and geographic information systems (GIS) can increase the accuracy of entrepreneurial ecosystem diagnostics, enabling the spatial and temporal mapping of entrepreneurial activities and the formulation of more effective and territorialised policies.

The implementation of these recommendations, combined with the exploration of the proposed research directions, could strengthen the capacity of São Tomé and Príncipe, and similar contexts, to mobilise entrepreneurship as a catalyst for inclusive and sustainable development. Furthermore, continued academic research on this topic will contribute to the refinement of theoretical and methodological models in the fields of development studies, entrepreneurship, and sustainability science.

4.4 Limitations

The validity of the results in this study is subject to certain considerations and limitations. The specific focus on entrepreneurs as a distinct demographic may not fully align with broader population-wide indicators. This targeted approach provides in-depth insights into the entrepreneurial sector but may limit direct comparisons with general population data. Variations between the original SDG indicator criteria and the adapted measures used in this study could impact the comparability of datasets. This adaptation, while necessary for local relevance, may limit direct correlations with existing global assessments. The sample size of 100 entrepreneurs, while providing a solid foundation, may not

capture the full diversity of the entrepreneurial landscape in São Tomé and Príncipe. As with any self-reported data, there is a potential for bias in responses, which could affect the accuracy of certain findings. The extrapolation of findings to other contexts is heuristic rather than statistical, because while São Tomé and Príncipe shares many features with other SIDS, conclusions should be interpreted as illustrative insights rather than universally generalisable evidence. While the index construction assumes equal spacing between ordinal categories and involves mapping to dashboard levels, the analysis is explicitly qualitative and directional. These transformations should therefore be understood as heuristic devices rather than precise statistical estimators

Despite these limitations, the study offers significant value. It provides detailed insights into the entrepreneurial ecosystem in São Tomé and Príncipe, highlighting its structure, challenges, and impact. The results emphasize the unique contributions of entrepreneurs to economic growth, job creation, and innovation in the local context. While not entirely generalizable to the broader population, the study underscores the critical role of entrepreneurship in driving sustainable development and addressing social challenges. The insights gained contribute to evidence-based policymaking aimed at strengthening entrepreneurial ecosystems and enhancing their role in achieving long-term development objectives. The study enriches discussions on the potential of entrepreneurship as a catalyst for social progress within the framework of the Sustainable Development Goals. Despite limitations in direct comparability, the results provide a valuable baseline for future studies and longitudinal assessments of entrepreneurial impact on SDGs in São Tomé and Príncipe. The purposive sample provides rich exploratory evidence but cannot be interpreted as nationally representative. Future research should consider probability-based sampling or nationally representative surveys to enable population-level inference

Additionally, the adapted questionnaire and methodology offer a template for similar studies in other small island developing states or emerging economies. In conclusion, while acknowledging the limitations in generalizability and direct comparability with global datasets, this study provides valuable, context-specific insights into the entrepreneurial landscape of São Tomé and Príncipe. It highlights both the opportunities and obstacles faced by entrepreneurs, contributing to a more nuanced understanding of their role in sustainable development. These findings serve as a crucial resource for policymakers, development organizations, and researchers working towards enhancing entrepreneurial ecosystems and their contribution to achieving the Sustainable Development Goals in similar contexts.

Conclusion

The purpose of this doctoral thesis was to examine the influence of local entrepreneurship on sustainable development in São Tomé and Príncipe (STP), a Small Island Developing State (SIDS) marked by structural fragilities, institutional weaknesses, and high external dependence. Guided by the central questions “What is the influence of entrepreneurship on local development?” and “How does this local development contribute to the achievement of the Sustainable Development Goals (SDGs)?” the research employed a mixed-methods design, combining quantitative indicators with qualitative narratives to capture the multidimensional reality of entrepreneurial action in fragile contexts.

The findings demonstrate that local entrepreneurship in STP acts as a multifunctional and transformative vector whose impact extends beyond traditional economic domains. Entrepreneurs emerge not only as generators of income and employment but also as active contributors to social inclusion, gender equality, access to essential services, environmental protection, and community resilience. The analysis revealed that entrepreneurs outperformed national averages in 33 out of 70 proxy indicators (47%), while qualitative responses generated 726 topics linked to the 169 SDG targets (average of 3,63 topics per indicator when considering the 5 areas, and 5.24 when considering only the 3 areas of People, Planet and Prosperity). These results underline the systemic potential of local entrepreneurship to accelerate progress towards the 2030 Agenda.

A key conclusion is that entrepreneurial action is inherently crosscutting, rather than producing isolated effects, initiatives often generate outcomes across multiple SDGs simultaneously. This interconnectedness highlights that entrepreneurship is most effective when understood as an integrated process rooted in the territory, reinforcing the idea that sustainable development cannot be pursued through separated approaches. Another recurring theme was the strategic importance of reducing external dependence. Through practices such as promoting local consumption, mobilising endogenous resources, strengthening community production chains, and valuing traditional knowledge, entrepreneurs actively reduce vulnerabilities linked to imports, aid dependency, and volatile international markets. This orientation signals a redefinition of sovereignty that is grounded not in isolation, but in productive autonomy, resilience, and local ownership of development strategies.

The research also identified uneven impacts across the SDGs. While entrepreneurship contributes strongly to SDG 1 (No Poverty), SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 8 (Decent Work), SDG 9 (Innovation and Infrastructure), and SDGs 14 and 15 (Life Below Water and Life on Land), other areas, particularly SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 17 (Partnerships) remain underdeveloped. These gaps often stem from structural

barriers such as weak infrastructure, limited technical expertise, and exclusion from international cooperation mechanisms.

From a theoretical standpoint, this thesis reframes entrepreneurship as a systemic and multidimensional phenomenon, challenging the reductionist view that confines it to market logic. By situating entrepreneurship at the intersection of endogenous development, resilience-building, and social innovation, the study advances the understanding of how entrepreneurial ecosystems operate in fragile, insular contexts. It argues that entrepreneurship in SIDS is not merely an economic activity but a mechanism of local sovereignty-building, capable of generating pathways toward sustainable transformation.

In practical terms, the study highlights the importance of fostering an inclusive entrepreneurial ecosystem tailored to local realities. Policy recommendations include expanding access to microfinance, strengthening technical and entrepreneurial education, and developing metrics that more accurately measure entrepreneurial contributions to the SDGs. Beyond national strategies, these insights are relevant for international partners seeking to design cooperation frameworks that enhance resilience while respecting territorial specificities.

As with any empirical study, this research has limitations. The reliance on self-reported data, while methodologically justified, may influence accuracy and comparability. The adaptation of global indicators to local realities also complicates direct benchmarking against international data. Moreover, although the sample of 100 entrepreneurs is representative within STP, it may not fully capture the diversity of entrepreneurial practices. These limitations open pathways for future inquiry. Longitudinal research could assess the evolving role of entrepreneurship over time, while comparative studies across different SIDS could identify shared challenges and transferable solutions. Future work should also explore emerging areas such as digital entrepreneurship, youth and women-led initiatives, and the role of entrepreneurship in climate resilience and ecological transitions. Equally important is the need to investigate potential negative externalities of entrepreneurial activity, such as resource overexploitation, to ensure sustainability remains at the centre of local development.

In sum, this thesis confirms that local entrepreneurship, when rooted in community realities and adequately supported, is a powerful driver of sustainable transformation. In São Tomé and Príncipe, entrepreneurs act not only as economic agents but as builders of collective solutions to global challenges. Their initiatives, though modest in scale, carry strategic weight in reducing external dependence, reinforcing resilience, and shaping alternative pathways for development. The broader implication is that entrepreneurship should be recognised as a strategic pillar of national development in SIDS and other resource-constrained contexts. Supporting this role is essential not only for advancing the 2030 Agenda but also for laying the foundation of more just, resilient, and sovereign societies.

Annexes

Annex A - First page of the questionnaire regarding participants identification data

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QUESTIONÁRIO

O presente questionário tem como finalidade contribuir na recolha de informações para a pesquisa de terreno da tese do programa doutoral em Estudos Internacionais do ISCTE - IUL de Pedro Cabrita sobre a orientação Dr. Renato Pereira com o título "Influência do Empreendedorismo Local na Resolução de Problemas Mundiais - Estudo Caso do Alcance dos ODS em São Tomé e Príncipe."

DESCRIÇÃO DO INQUIRIDO

Nome _____

Data de nascimento ____ / ____ / ____ Género M __ F __

Tlf/Tlm _____ Email _____

Nacionalidade _____ Urbano _____ Rural _____

Habilitações Literárias	Região/Distrito
Creche / Jardim de Infância __	Água Grande (Cidade de S. Tomé) __
1º Ciclo (4º classe) __	Mé-Zóchi (Centro) __
2º Ciclo (6º classe) __	Lemba (Norte) __
3º Ciclo (9º classe) __	Lobata (Centro Norte) __
Secundário (12º classe) __	Cantagalo (Centro Sul) __
Faculdade __	Caué (Sul) __
Sem estudos __	Região A. do Príncipe __

Nível de instrução da mãe	Nível de instrução do pai
Sem Estudos __	Sem Estudos __
< 1º Ciclo (4º classe) __	< 1º Ciclo (4º classe) __
2º Ciclo (6º classe) __	2º Ciclo (6º classe) __
3º Ciclo (9º classe) __	3º Ciclo (9º classe) __
Secundário (12º classe) __	Secundário (12º classe) __
Faculdade __ Empreendedora __	Faculdade __ Empreendedor __

Estado Civil	Filhos
Solteiro(a) __	0 __
Casado(a) / União __	1 __
Viúvo (a) __	2 __
Divorciado(a) / Separado(a) __	3+ __

Começou a trabalhar com que idade: _____

Qual a sua experiência profissional: _____

1

Annex B - Second page of the questionnaire regarding participants business identification data



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DESCRIÇÃO DO NEGÓCIO

Nome _____

Distrito _____ Data da Fundação _____

Tipo de Negócio:

Individual _____ Coletivo _____
 Fins Lucrativos _____ Fins Não Lucrativos _____
 Empresa _____ Organização _____
 Formal _____ Informal _____

<p>Dimensão do Negócio</p> <p>Individual (1 pessoa) _____ Micro (2 a 5 pessoas) _____ Média (5 a 20 pessoas) _____ Grande (+20 pessoas) _____</p>	<p>Cargo no negócio</p> <p>Dono(a) _____ Gerente _____ Sócio _____ Colaborador(a) _____</p>	<p>Empreendedorismo de Impacto</p> <p>Ambiental _____ Económico _____ Social _____</p>
<p>Setor de Atividade</p> <p>Comércio _____ Indústria _____ Serviços _____ Construção _____ Turismo _____ Outro _____</p>	<p>Espaço do negócio</p> <p>Físico _____ Digital _____</p> <p>Clientes</p> <p>Locais _____ Nacionais _____ Internacionais _____</p>	<p>Domínio</p> <p>Produto _____ Serviço _____ Organização _____ Processo _____ Comercialização _____</p>
<p>Financiamento</p> <p>Crédito Pessoal _____ Crédito bancário _____ Microcrédito _____ Apoios Estatuais _____ Concursos e Fundos Públicos _____ Financiamento Próprio _____ Outros _____</p>	<p>Parceiros</p> <p>Locais _____ Nacionais _____ Internacionais _____</p> <p>Fornecedores</p> <p>Locais _____ Nacionais _____ Internacionais _____</p>	<p>Inovação</p> <p>Totalmente novo _____ Novo no País _____ Nova no Local _____ Já existente _____</p> <p>Tecnologia</p> <p>Nova _____ Importada _____ Tradicional _____</p>

Montante de Investimento _____

Tem responsabilidade Social _____ Se sim qual _____

Tem responsabilidade Ambiental _____ Se sim qual _____

Tem responsabilidade Financeira _____ Se sim qual _____

2

Annex C – Third page of the questionnaire regarding closed-ended questions (1/3)

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IMPACTOS E INDICADORES SOCIAIS - PERGUNTAS DE RESPOSTA FECHADA

ODS e Indicador	Perguntas	Respostas			++ / +- = / --	Comentário
		Menos de 46 / 2	46 / 2	Mais de 46 / 2		
1.1	1: Quanto recebe por dia?	Menos de 46 / 2	46 / 2	Mais de 46 / 2		Dobra/Euro
1.2	2: Quanto recebe por dia?	Menos de 70 / 3	70 / 3	Mais de 70 / 3		Dobra/Euro
2.1	3: Quantas refeições come por dia?	1	2	3 ou +		
2.7	4: Sabe se os produtos que consome são sustentáveis?	Sim	Não	Às vezes		
3.8	5: Já teve algum acidente de condução?	Sim	Não			
3.13	6: Tem acesso a serviços de saúde?	Sim	Não	Às vezes		
4.1	7: Tem encarregados em alguma creche / Jardim de Infância?	Sim	Não	Mais ou menos		
4.4	8: Qual a sua literacia?	Nenhuma	Sei Ler e/ou Escrever	Sei ler, escrever e Matemática		Indicadores recolhidos na descrição do inquirido
5.1	9: Fez algum planeamento familiar?	Sim	Não	Mais ou menos		
5.2 / 5.3	10: Homens e mulheres deviam ter as mesmas oportunidades?	Sim	Não	Às vezes / Mais ou Menos		
10.1	19: Sente que existe uma igualdade de oportunidades?	Sim	Não	Mais ou Menos		Trabalho, saúde, transportes, etc
10.2	20: Sente que existe uma igualdade de acessos?	Sim	Não	Mais ou Menos		Cadeira de rodas, deficiências, etc

3

Annex D – Fourth page of the questionnaire regarding closed-ended questions (2/3)

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IMPACTOS E INDICADORES ECONÓMICOS - PERGUNTAS DE RESPOSTA FECHADA

ODS e Indicador	Perguntas	Respostas			+ / - / =	Comentário
		Sim	Não	Às vezes		
7.1	13: Tem acesso a eletricidade?	Sim	Não	Às vezes		
7.2	14: Tem acesso a gás/petrol e/ou eletricidade para cozinhar?	Sim	Não	Às vezes		
8.1	15: Acha que o seu ordenado é justo?	Sim	Não	Mais ou Menos		
8.2 / 8.5	16: Recebe compensação pelo seu trabalho?	Sim	Não	Às vezes		
9.1	17: Tem acesso a internet e/ou telemóvel?	Sim	Não	Às vezes		
9.3	18: Tem acesso a meios de transporte?	Sim	Não	Às vezes		
11.1	21: A casa em que vive tem boas condições?	Sim	Não	Mais ou Menos		
11.2	22: Quantas pessoas vivem em sua casa?	Entre 1 e 3	Entre 3 e 5	5 ou mais		Nota: Saber qual é a dimensão da casa
11.3	23: A zona em que vive tem boas condições?	Sim	Não	Mais ou Menos		
12.1 / 12.2	24: Tem acesso as caixotes de lixo e/ou ecopontos?	Sim	Não	Às vezes		
12.5 / 12.6 12.7	25: Tem atenção à origem dos produtos que compra?	Sim	Não	Às vezes		

4

Annex E – Fifth page of the questionnaire regarding closed-ended questions (3/3)



IMPACTOS E INDICADORES AMBIENTAIS - PERGUNTAS DE RESPOSTA FECHADA

ODS e Indicador	Perguntas	Respostas			+ / - / =	Comentário
		Sim	Não	Às vezes		
6.1	11: Tem acesso a água potável?	Sim	Não	Às vezes		
6.2	12: Tem acesso a uma casa de banho?	Sim	Não	Às vezes		
13.1 / 13.2 / 13.3	26: Tenta reduzir o consumo de combustíveis fósseis?	Sim	Não	Às vezes		
13	27: Tem noção dos impactos das alterações climáticas?	Sim	Não	Mais ou Menos		
14.3	28: Costuma pescar/comprar peixe de forma não oficial?	Sim	Não	Às vezes		
14.2	29: Tenta proteger a vida marinha?	Sim	Não	Às vezes		
15.1 / 15.2	30: Tenta proteger a vida terrestre?	Sim	Não	Às vezes		
15.3 / 15.4	31: Costuma utilizar recursos naturais de forma não oficial?	Sim	Não	Às vezes		
16.3	32: Sente-se seguro com o sistema de justiça criminal?	Sim	Não	Às vezes		
16.6	33: Alguma vez já aceitou/fez algum pagamento indevido?	Sim	Não	Às vezes		
17.1	34: Sente que o Governo investe na saúde e educação?	Sim	Não	Mais ou Menos		
17	35: Sabe o que são os ODS?	Sim	Não	Mais ou Menos		

5

Annex F – Sixth page of the questionnaire regarding open-ended questions and informed consent



IMPACTOS E INDICADORES- PERGUNTAS DE RESPOSTA ABERTA

Qual o papel do(a)s Empreendedor(a)s Locais / Empreendedorismo Local no desenvolvimento social das comunidades?

Qual o papel do(a)s Empreendedor(a)s Locais / Empreendedorismo Local na proteção ambiental dos territórios das comunidades?

Qual o papel do(a)s Empreendedor(a)s Locais / Empreendedorismo Local no Crescimento Económico das comunidades?

Observações

Autorizo que os dados pessoais por mim fornecidos ao Pedro Cabrita, nesta ficha e confirmo a veracidade dos dados partilhado no presente questionário, sejam, por este, tratados e utilizados, com a finalidade de recolher informações para a investigação do programa de Doutoramento em Estudos Internacionais (ISCTE-IUL), podendo ser eventualmente comunicados e publicados, garantido contudo a proteção de cada indivíduo e suas informações. Estes dados pessoais não serão, em hipótese alguma, vendidos ou fornecidos a terceiros para outros efeitos. Os candidatos têm direito, em qualquer momento, a aceder, retificar ou mesmo eliminar os seus dados, o que pode ser feito ser feito on-line através de envio de e-mail para o endereço pcabrита@gmail.com

Data ____/____/202__

(Assinatura do Candidato)

6

Bibliographical references

- Adenutsi, A., James R. R. (2015). *Why Nations Fail: the origins of power, prosperity and poverty*. New York: Crown Publishing, 2012.
- ADB, (2021), Annual Report 2021, African Development Bank Group. Disponível em: <https://ourworldindata.org/human-development-index#citation> (Consultado em: 9 de Janeiro de 2025).
- Adegun, O. A. (2013). Entrepreneurship education and youth empowerment in contemporary Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 4(5), 746-751. <https://hdl.handle.net/10520/EJC145165>
- Adenutsi, D. E. (2023). Entrepreneurship, job creation, income empowerment and poverty reduction in low-income economies. *Theoretical Economics Letters*, 13(06), 1579-1598.
- Ademokun, F., and Ajayi, O. (2012). Entrepreneurship development, business ownership and women empowerment in Nigeria. *Journal of Business Diversity*, 12(1), 72-87.
- Adetoso, J. A., Akesinro, A. S., and Oladejo, K. S. (2013). *Entrepreneurship Education: The Way Forward to Economic and Technological Advancement of Nigeria*.
- Afrobarometer. (2021). São Tomé and Príncipe Country Profile.
- Ahmad, N., Youjin, L., and Hdia, M. (2022). The role of innovation and tourism in sustainability: why is environment-friendly tourism necessary for entrepreneurship?. *Journal of Cleaner Production*, 379, 134799.
- Aithal, A., and Aithal, P. S. (2020). Development and validation of survey questionnaire and experimental data—a systematical review-based statistical approach. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), 233-251.
- Ajide, F. M. (2020). Infrastructure and entrepreneurship: Evidence from Africa. *Journal of Developmental Entrepreneurship*, 25(03), 2050015.
- Ajide, F. M., and Dada, J. T. (2023). Poverty, entrepreneurship, and economic growth in Africa. *Poverty and Public Policy*. <https://doi.org/10.1002/pop4.368>
- Aldrich, H. (2005). Entrepreneurship. *Research in the Sociology of Work*, 15, 3-31.
- Alamouh, A. S., Ballini, F., and Ölçer, A. I. (2021). Revisiting port sustainability as a foundation for the implementation of the United Nations Sustainable Development Goals (UN SDGs). *Journal of Shipping and Trade*, 6, 1-40.
- Aljuwaiber, A. (2021). Entrepreneurship research in the Middle East and North Africa: trends, challenges, and sustainability issues. *Journal of Entrepreneurship in Emerging Economies*, 13(3), 380-426.

- Amalu, E. H., Short, M., Chong, P. L., Hughes, D. J., Adebayo, D. S., Tchuenbou-Magaia, F., Lähde, P., Kukka, M., Polyzou, O., Oikonomou, T. I., Karytsas, C., Gebremedhin, A., Ossian, C., and Ekere, N. N. (2023). Critical skills needs and challenges for STEM/STEAM graduates increased employability and entrepreneurship in the solar energy sector. *Renewable and Sustainable Energy Reviews*, 187, 113776. <https://doi.org/10.1016/j.rser.2023.113776>
- Ambos, T. C., and Tatarinov, K. (2022). Building responsible innovation in international organizations through intrapreneurship. *Journal of Management Studies*, 59(1), 92-125.
- Ambros, T. C., and Tatarinov, K. (2022). Building Responsible Innovation in International Organizations through Intrapreneurship. *Journal of Management Studies*, 59(1), January 2022. <https://doi.org/10.1111/joms.12738>
- Amri, M., Asfahani, A., Kadani, K., Arif, M., and Jamin, F. S. (2024). Community Empowerment In The Fields Of Education Entrepreneurship And The Environment In The Village. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 5(2), 3704-3712.
- Anand, A., Argade, P., Barkemeyer, R., and Salignac, F. (2021). Trends and patterns in sustainable entrepreneurship research: A bibliometric review and research agenda. *Journal of Business Venturing*, 36(3). <https://doi.org/10.1016/j.jbusvent.2021.106092>
- Anderson, A. R. (2015). The economic reification of entrepreneurship: re-engaging with the social. In *Rethinking entrepreneurship* (pp. 44-56). Routledge.
- Anderson, A.R, Obeng, B.A., 2017. Enterprise as socially situated in a rural poor fishing community. *J. Rural Stud.* 49, 23-31.
- Andergassen, R., Nardini, F., and Ricottilli, M. (2009). Innovation and growth through local and global interaction. *Journal of Economic Dynamics and Control*, 33(10), 1779-1795.
- Anh, D. B. H., Duc, L. D. M., Yen, N. T. H., Hung, N. T., and Tien, N. H. (2022). Sustainable development of social entrepreneurship: evidence from Vietnam. *International journal of entrepreneurship and small business*, 45(1), 62-76.
- Apostolopoulos, N., Al-Dajani, H., Holt, D., Jones, P., and Newbery, R. (2018). Entrepreneurship and the sustainable development goals. In *Entrepreneurship and the sustainable development goals* (pp. 1-7). Emerald Publishing Limited.
- Apostu, S. A., and Gigauri, I. (2023). Sustainable development and entrepreneurship in emerging countries: Are sustainable development and entrepreneurship reciprocally reinforcing? *Journal of Entrepreneurship, Management and Innovation*, 19(1), 41–77. <https://doi.org/10.7341/20231912>
- Assaf, A. (2024). Impact of Social Entrepreneurship on Women Empowerment through Financial Inclusion an Analytical Study from the Kingdom of Saudi Arabi. *Pakistan Journal of Life and Social Sciences (PJLSS)*, 22(1).

- Atlas de São Tomé e Príncipe (2011). Disponível em: http://atlas.saotomeprincipe.eu/0_atlasstp_indexgral.htm. Acesso em: 4 set. 2024.
- Audretsch, D. B., Carree, M. A., and Thurik, A. R. (2001). Does entrepreneurship reduce unemployment? (No. 01-074/3). Tinbergen Institute discussion paper.
- Audretsch, D. B., and Keilbach, M. (2004). Entrepreneurship and regional growth: an evolutionary interpretation. *Journal of evolutionary economics*, 14, 605-616.
- Audretsch, D. B., Grilo, I., Thurik, A. R., EIM Onderzoek voor Bedrijf and Beleid, and Max-Planck-Institut für Ökonomik (Eds.). (2009). *Handbook of research on entrepreneurship policy* (Paperback edition). Edward Elgar.
- Austin, J. E., Stevenson, H., and Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both. *Entrepreneurship Theory and Practice*, 30(1), 1–22.
- Bae, S. H., and Yoo, K. (2015). Economic modeling of innovation in the creative industries and its implications. *Technological forecasting and social change*, 96, 101-110.
- Baker, B. (2006). Post-Colonial Security Sector Reform in Africa: The Challenge of Transforming Security Sectors. *Journal of Conflict, Security and Development*, 6(1), 25–49.
- Baldacchino, G. (2006). Islands, island studies, *island studies journal*. Institute of Island Studies, University of Prince Edward Island, Canada, Vol.1(1), 3–18.
- Baldacchino, G. (2015). *Entrepreneurship in small island states and territories* (Vol. 8). London: Routledge.
- Baldacchino, G. (2017). *Entrepreneurship in small island states and territories*. Routledge.
- Balaceanu, C., Tilea D. M, Penu D., (2017). Perspectives on Eco Economics. *Circular Economy and Smart Economy. Academic Journal of Economic Studies* Vol. 3, No. 4, December 2017, pp. 105–109. ISSN 2393-4913, ISSN On-line 2457-58367.
- Ballew, M. T., Leiserowitz, A., Roser-Renouf, C., Rosenthal, S. A., Kotcher, J. E., Marlon, J. R., ... and Maibach, E. W. (2019). Climate change in the American mind: Data, tools, and trends. *Environment: Science and Policy for Sustainable Development*, 61(3), 4-18.
- Banha, F., Coelho, L. S., and Flores, A. (2022). Entrepreneurship education: A systematic literature review and identification of an existing gap in the field. *Education Sciences*, 12(5), 336.
- Banco Mundial (2012). *Doing Business in a more transparent world: Economy Profile São Tomé and Príncipe*. Washington: Banco Mundial.
- Barros, R.J. (1991). Economic Growth in a Cross Section of Countries. *Quartely Journal of Economics*, 106 (2), p. 407- 433.
- Batista, M. L. P., Macêdo, E. M., Bezerra, A. K. L., Silva, A. J. D., and Barros, R. F. M. D. (2023). The rural community in Northeast Brazil: a scenario of reflection to formulate local development and sustainable entrepreneurship policies. *Revista de administração pública*, 57, e-2022.

- Baxter, A., Chapman, D. W., DeJaeghere, J., Pekol, A. R., and Weiss, T. (2014). Youth entrepreneurship education and training for poverty alleviation: A review of international literature and local experiences. *International educational innovation and public sector entrepreneurship*, 23, 33-58. [https://doi.org/10.1108/S1479-3679\(2013\)0000023010](https://doi.org/10.1108/S1479-3679(2013)0000023010)
- Berthet, Marina Annie. (2012). Reflexões sobre as roças em São Tomé e Príncipe. *Estudos Históricos* (Rio de Janeiro), 25, 331-351.
- Bexell, M., & Jönsson, K. (2019). *Responsibility and the United Nations' Sustainable Development Goals*. *Forum for Development Studies*, 46(1), 13–29.
- Bhatt, B., Qureshi, I., and Riaz, S. (2019). Social entrepreneurship in non-munificent institutional environments and implications for institutional work: Insights from China. *Journal of Business Ethics*, 154, 605–630.
- Bishop, M., Bouhia, R., Carter, G., Corbett, J., Lindsay, C., Scobie, M., and Wilkinson, E. (2021, January 1). Towards sustained development in Small Island Developing States. ODI Working Paper.
- Bishop, M., Bouhia, R., Carter, G., Corbett, J., Lindsay, C., Scobie, M., ... and Islands, R. (2021). Towards sustained development in Small Island Developing States. ODI Working paper. London, 46.
- Booth, P., Chaperon, S. A., Kennell, J. S., and Morrison, A. M. (2020). Entrepreneurship in island contexts: A systematic review of the tourism and hospitality literature. *International Journal of Hospitality Management*, 85, 102438. <https://doi.org/10.1016/j.ijhm.2019.102438>
- Bosma, N., Hill, S., Ionescu-Somers, A., Coduras, A., Guerrero, M., Roomi, M. A., and Shay, J. (2022, February). Global entrepreneurship monitor 2021/2022 global report: opportunity amid disruption. In Expo 2020 Dubai.
- Boswell, J., Jugl, M., Sarapuu, K., Waqavakatoga, W., and Corbett, J. (2024). Policy implementation and the socio-political geography of small island contexts: challenges and opportunities for creating an enabling environment in Small Island Developing States.
- Boswell, J., Jugl, M., Sarapuu, K., Waqavakatoga, W., and Corbett, J. (2024). Policy implementation and the socio-political geography of small island contexts: Challenges and opportunities for creating an enabling environment in Small Island Developing States Overseas. Development Institute, SIDS Future Forum 2024, 27pp.
- Branzei, O., Parker, S. C., Moroz, P. W., & Gamble, E. (2018). *Going pro-social: Extending the individual–venture nexus to the collective level*. *Journal of Business Venturing*, 33(5), 551–566. <https://doi.org/10.1016/j.jbusvent.2018.02.003>
- Branski, R. M., Franco, R. A. C., and Lima Junior, O. F. (2010, January). Metodologia de estudo de casos aplicada à logística. In *XXIV ANPET Congresso de Pesquisa e Ensino em Transporte* (pp. 2023-10).
- Briguglio, L. (1995). Small island developing states and their economic vulnerabilities. *World development*, 23(9), 1615–1632. [https://doi.org/10.1016/0305-750X\(95\)00065-K](https://doi.org/10.1016/0305-750X(95)00065-K)

- Briguglio, L. (1995). Small island developing states and their economic vulnerabilities. *World Development*, 23(9), 1615–1632. [https://doi.org/10.1016/0305-750X\(95\)00065-K](https://doi.org/10.1016/0305-750X(95)00065-K)
- Brígida Rocha Brito (2010), *Turismo em Meio Insular Africano: Potencialidades, constrangimentos e impactos*, Lisboa: Gerpress, 2010.
- Brito, Brígida Rocha (2020). Tourism and nature in São Tomé e Príncipe: Opportunities for the internationalisation of a Small Island State. In: *Routledge handbook of tourism in Africa*. Routledge, 2020. p. 342-353.
- Brinia, V., Belloyiani, M., Manolopoulou, G., Tziros, G., Kasiola, E., Georgogala, S., and Marinopoulou, S. (2024). The “Education, Entrepreneurship and Cultural Heritage” Initiative: Eleusis 2023 European Capital of Culture. *Sustainability*, 16(13), 5459.
- Broek, T.A, Ketchen, D.J., Shook, C.L., Ireland, R.D., (2010). The Concept of “Opportunity” in Entrepreneurship Research: Past Accomplishments and Future Challenges. *J. Manage.* 36, 40–65.
- Brück, T., Naudé, W., and Verwimp, P. (2013). Business under fire: Entrepreneurship and violent conflict in developing countries. *Journal of Conflict Resolution*, 57(1), 3-19.
- Brueller, N. N., Carmeli, A., and Markman, G. D. (2018). Linking merger and acquisition strategies to postmerger integration: A configurational perspective of human resource management. *Journal of Management*, 44, 1793–1818.
- Brundtland, G. H., and Comum, N. F. (1987). Relatório Brundtland. *Our Common Future: United Nations*, 540-542.
- Bruton, G. D., Ahlstrom, D., and Li, H. L. (2010). Institutional theory and entrepreneurship: where are we now and where do we need to move in the future?. *Entrepreneurship theory and practice*, 34(3), 421-440.
- Bruton, G. D., Ketchen, D. J., & Ireland, R. D. (2013). *Entrepreneurship as a solution to poverty*, *Journal of Business Venturing*, 28(6), 683–689. <https://doi.org/10.1016/j.jbusvent.2013.05.002>
- Bryman, A. (2001). *Social research methods*. Oxford University Press.
- Buratti, N., Sillig, C., and Albanese, M. (2022). Community enterprise, community entrepreneurship and local development: a literature review on three decades of empirical studies and theorizations. *Entrepreneurship and Regional Development*, 34(5-6), 376-401.
- Burgelman, R. A. (1983). A model of the interaction of strategic behavior, corporate context, and the concept of strategy. *Academy of Management Review*, 8, 61–70.
- Bygrave, W. D., Zacharakis, A., Wise, S., and Corbett, A. C. (2024). *Entrepreneurship*. John Wiley and Sons.
- Cardoso, A., Sanches, D., Proença, F., Sá, I., Estrela, M. M., Moniz, M., ... and Grave, A. (2016). *Futuros Criativos—Economia e Criatividade Em Cabo Verde, Guiné-Bissau e São Tomé e Príncipe*.

- Carvalho, P., Silveira, J., and Fonseca, M. (2022). Evaluation of the UNDP Country Programme Document (CPD) for São Tomé e Príncipe–2017-2022.
- CFI, O. D. D. S. (2015). Transforming our world: the 2030 Agenda for Sustainable Development. United Nations: New York, NY, USA.
- Cheng, Y., Awan, U., Ahmad, S., and Tan, Z. (2021). How do technological innovation and fiscal decentralization affect the environment? A story of the fourth industrial revolution and sustainable growth. *Technological Forecasting and Social Change*, 162, 120398.
- CIA (2023). «São Tomé e Príncipe no CIA World Factbook». Central Intelligence Agency (CIA). Consultado em 26 de agosto de 2023.
- CIA, (2019), “São Tomé e Príncipe no CIA World Factbook”, Central Intelligence Agency (CIA). Consultado em 7 de março de 2019.
- Cohen, B., and Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of business venturing*, 22(1), 29-49.
- Cohen, R., and Kennedy, P. (2012). *Global Sociology*. Palgrave Macmillan.
- Coy, I. M. (2023). Enterprise and entrepreneurship in peripheral contexts: experiences and prospects from the caribbean small island developing states. *AD-minister*, (42), 5-30.
- Crammond, R. J. (2024). Developing intellectual property management skills and the entrepreneurial university element: an educator perspective. *International Journal of Intellectual Property Management*, 14(4), 389-409.
- Cumming, D., Walz, U., and Werth, J. C. (2016). Entrepreneurial Spawning: Experience, Education, and Exit. *Financial Review*, 51(4), 507–525. <https://doi.org/10.1111/fire.12109>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- Dacin, P. A., Dacin, M. T., & Matear, M. (2010). *Social entrepreneurship: Why we don't need a new theory and how we move forward from here*. *Academy of Management Perspectives*, 24(3), 37–57. <https://doi.org/10.5465/amp.24.3.37>
- Dacin, M. T., Dacin, P. A., and Tracey, P. (2011). Social entrepreneurship: A critique and future directions. *Organization Science*, 22(5), 1203-1213.
- Davidsson, P., and Wiklund, J. (1997). Values, beliefs and regional variations in new firm formation rates. *Journal of Economic Psychology*, 18, 179–19.
- Dean, T. J., and McMullen, J. S. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22(1), 50-76.
- Dees, J. G. (1998). Enterprising nonprofits. *Harvard Business Review*, 76, 54–69.

- de Lucas Ancillo, A., and Gavrilă, S. G. (2023). The impact of research and development on entrepreneurship, innovation, digitization and digital transformation. *Journal of Business Research*, 157, 113566.
- de Oliveira Eduardo, L. (2022). Entraves ao incumprimento das recomendações do Banco Africano de desenvolvimento a São Tomé e Príncipe sobre políticas sociais. ISCTE - Instituto Universitario de Lisboa, ProQuest Dissertations and Theses.
- Del-Aguila-Arcental, S., Alvarez-Risco, A., Jaramillo-Arévalo, M., De-la-Cruz-Diaz, M., and de las Mercedes Anderson-Seminario, M. (2022). Influence of social, environmental and economic sustainable development goals (SDGs) over continuation of entrepreneurship and competitiveness. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(2), 73.
- Denoncourt, J. (2020). Companies and UN 2030 Sustainable Development Goal 9 Industry, Innovation and Infrastructure. *Journal of Corporate Law Studies*, 20(1), 199–235. <https://doi.org/10.1080/14735970.2019.1652027>
- Dias, Á., Pereira, L., and Lopes da Costa, R. (2023). Organizational capabilities as antecedents of entrepreneurship: a basis for business practice and policy making. *Journal of African Business*, 24(1), 1-18.
- Dinerstein, E.; Olson, D.; Joshi, A.; Vynne, C.; Burgess, N. D.; et al. (2017). An Ecoregion-Based Approach to Protecting Half the Terrestrial Realm. *BioScience*, 67, 534–545. <https://doi.org/10.1093/biosci/bix014>
- Direção Geral de Ambiente de São Tomé e Príncipe (2016) “A DGA”, site oficial (Consultado a 11 de Setembro de 2024).
- Dominginhos, P., Sardinha, B., Barszczak, M., Carvalho, L. M. C., Ramalho, N., and Pereira, R. (2005). Assessing entrepreneurial education in higher education in Portugal. *Fostering Entrepreneurship: The Role of Higher Education*.
- Eduardo, L. D. O. (2022). Entraves ao incumprimento das recomendações do Banco Africano de Desenvolvimento a São Tomé e Príncipe sobre Políticas Sociais (Master’s thesis).
- Enaifoghe, A., and Vezi-Magigaba, M. F. (2023). Conceptualizing the role of entrepreneurship and SME in fostering South Africa’s local economic development. *International Journal of Research in Business and Social Science* (2147-4478), 12(4), 96–105. <https://doi.org/10.20525/ijrbs.v12i4.2444>
- Enthoven, M. (2023). Unpacking opportunity recognition for sustainable entrepreneurship. In *De Gruyter Handbook of Sustainable Entrepreneurship Research* (pp. 143-158). De Gruyter.
- Espina, M. I., Phan, P. H., and Markman, G. D. (Eds.). (2018). *Social innovation and sustainable entrepreneurship*. Cheltenham, UK: Edward Elgar Publishing.

- Europa Publications. (2022). The Europa Directory of International Organizations 2022 (24th ed.). Routledge. <https://doi.org/10.4324/9781003292548>
- FAO. (2021). Sustainable Cocoa Development in São Tomé and Príncipe.
- Fernhaber, S. A., and Zou, H. (2022). Advancing societal grand challenge research at the interface of entrepreneurship and international business: A review and research agenda. *Journal of Business Venturing*, 37(5), 106233.
- Fini, R., Rasmussen, E., and Wiklund, J. (2018). Rethinking the Commercialization of Public Science: From Entrepreneurial Outcomes to Societal Impacts. *The Academy of Management Perspectives*, 10.5465/amp.2017.0206.
- Fisker, P., Gallego-Ayala, J., Malmgren Hansen, D., Sohnesen, T. P., and Murrugarra, E. (2022). Guiding Social Protection Targeting Through Satellite Data in São Tomé and Príncipe.
- Fonseca, C. M. B., Coelho, J. C., Soares, F. B., Correia, A. M. N. G., and Soares, Z. M. G. (2020). The organic pepper (*Piper nigrum* L.) value chain in São Tomé e Príncipe under a value chain analysis for development methodology perspective. *Direct Research Journal of Agriculture and Food Science*, 8(4), 116-129.
- Fonseca, C. M. B., José Castro, C., Fernando Brito, S., Augusto Manuel Nogueira Gomes, C., and Zélia Maria Gonçalves, S. (2020). The organic pepper (*Piper nigrum* L.) value chain in São Tomé e Príncipe under a value chain analysis for development methodology perspective. *Direct Research Journal of Agriculture and Food Science*, 8(4). <https://doi.org/10.26765/DRJAFS40252693>
- Fraisl, D., Campbell, J., See, L., Wehn, U., Wardlaw, J., Gold, M., Moorthy, I., Arias, R., Piera, J., Oliver, J. L., Masó, J., Penker, M., and Fritz, S. (2020). Mapping citizen science contributions to the UN sustainable development goals. *Sustainability Science*, 15(6), 1735–1751. <https://doi.org/10.1007/s11625-020-00833-7>
- Franco, I. B., Chatterji, T., Derbyshire, E., and Tracey, J. (Eds.). (2020). *Actioning the Global Goals for Local Impact: Towards Sustainability Science, Policy, Education and Practice* (1st ed. 2020). Springer. <https://doi.org/10.1007/978-981-32-9927-6>
- Freedom House. (2023). *Freedom in the World: São Tomé and Príncipe*.
- Freiha, S. S., and Sassine, M. E. (2023). The impact of organisational justice on workplace outcomes: mediating role of social exchange construct. *EuroMed Journal of Management*, 5(2), 130-150.
- Fukuda-Parr, S., & McNeill, D. (2019). *Knowledge and Politics in Setting and Measuring the SDGs: Introduction to Special Issue*. *Global Policy*, 10(S1), 5–15.
- Garba, A. S. (2010). Refocusing education system towards entrepreneurship development in Nigeria: A tool for poverty eradication. *European Journal of Social Sciences*, 15(1), 140-150.

- Georgeson, L., & Maslin, M. (2018). Putting the United Nations Sustainable Development Goals into practice: A review of implementation, monitoring, and finance. *Geo: Geography and Environment*, 5(1), e00049.
- Giddens, A. (Ed.). (1984). *The constitution of society*. Polity Press.
- Gobena, A. E., and Kant, S. (2022). Assessing the Effect of Endogenous Culture, Local Resources, Eco-Friendly Environment and Modern Strategy Development on Entrepreneurial Development. *Journal of Entrepreneurship, Management, and Innovation*, 4(1), 118–135. <https://doi.org/10.52633/jemi.v4i1.153>
- Gonçalves, P., and Leandro, F. J. (2024). Guinea-Bissau: avoiding the reputation of being a failed state. *Janus*, 15(2).
- Grantham, H. S.; Duncan, A.; Evans, T. D.; Jones, K. R.; Beyer, H. L.; Schuster, R.; Walston, J.; Ray, J. C.; Robinson, J. G.; Callow, M.; Clements, T.; Costa, H. M.; DeGemmis, A.; Elsen, P. R.; Ervin, J.; Franco, P.; Goldman, E.; Goetz, S.; Hansen, A.; Hofsvang, E.; Jantz, P.; Jupiter, S.; Kang, A.; Langhammer, P.; Laurance, W. F.; Lieberman, S.; Linkie, M.; Malhi, Y.; Maxwell, S.; Mendez, M.; Mittermeier, R.; Murray, N. J.; Possingham, H.; Radachowsky, J.; Saatchi, S.; Samper, C.; Silverman, J.; Shapiro, A.; Strassburg, B.; Stevens, T.; Stokes, E.; Taylor, R.; Tear, T.; Tizard, R.; Venter, O.; Visconti, P.; Wang, S.; Watson, J. E. M. (2020). Anthropogenic modification of forests means only 40% of remaining forests have high ecosystem integrity - Supplementary Material. *Nature Communications*, 11, 5978. <https://doi.org/10.1038/s41467-020-19493-3>
- Graute, U. (2016). *Local authorities acting globally for sustainable development*. *Regional Studies*, 50(11), 1931–1942
- Hahn, T., Pinkse, J., Preuss, L., & Figge, F. (2015). *Tensions in corporate sustainability: Towards an integrative framework*. *Journal of Business Ethics*, 127(2), 297–316. <https://doi.org/10.1007/s10551-014-2047-5>
- Haldar, S. (2019). Towards a conceptual understanding of sustainability-driven entrepreneurship. *Corporate Social Responsibility and Environmental Management*, 26(6), 1157-1170.
- Hall, J. K., Daneke, G. A., and Lenox, M. J. (2010). Sustainable development and entrepreneurship: Past contributions and future directions. *Journal of Business Venturing*, 25(5), 439-448.
- Henderson, J., and Weiler, S. (2010). Entrepreneurs and job growth: probing the boundaries of time and space. *Economic Development Quarterly*, 24(1), 23-32.
- Henrekson, M., and Stenkula, M. (2016). *Understanding Entrepreneurship-Definition, Function, and Policy*. Studentlitteratur Ab.
- Honjo, Y., and Nakamura, H. (2020). The link between entrepreneurship and informal investment: An international comparison. *Japan and the World Economy*, 54, 101012.

- Hossain, M. S., Lim, W. M., and Islam, M. A. (2024). Women entrepreneurship: the role of education, national culture, and various supports. *International Journal of Business and Emerging Markets*, 16(3), 429-452.
- Hossain, M., and Sarkar, S. (2023). Frugal Entrepreneurship: Profiting With Inclusive Growth. *IEEE Transactions on Engineering Management*, 70(11), 3812–3825. <https://doi.org/10.1109/TEM.2021.3088589>
- Hota, P., Mitra, S., and Qureshi, I. (2019). Adopting bricolage to overcome resource constraints: The case of social enterprises in rural India. *Management and Organization Review*, 15, 371–402.
- Iacobucci, D., and Perugini, F. (2021). Entrepreneurial ecosystems and economic resilience at local level. *Entrepreneurship and Regional Development*, 33(9–10), 689–716. <https://doi.org/10.1080/08985626.2021.1888318>
- Ikart, E. M. (2019). Survey questionnaire survey pretesting method: An evaluation of survey questionnaire via expert reviews technique. *Asian Journal of Social Science Studies*, 4(2), 1.
- IMVF (2020). Os municípios e os objetivos de desenvolvimento sustentável, Manual de ação local para a transformação global; Março de 2020
- INE e UNICEF. (2020). Inquérito de Indicadores Múltiplos 2019, Relatório final. São Tomé, São Tomé e Príncipe: Instituto Nacional de Estatística e Fundo das Nações Unidas para a Infância.
- Ireland, R. D., Covin, J. G., and Kuratko, D. F. (2009). Conceptualizing corporate entrepreneurship strategy. *Entrepreneurship Theory and Practice*, 33, 19–46.
- Jayachandran, M., Gatla, R. K., Rao, K. P., Rao, G. S., Mohammed, S., Milyani, A. H., Azhari, A. A., Kalaiarasy, C., and Geetha, S. (2022). Challenges in achieving sustainable development goal 7: Affordable and clean energy in light of nascent technologies. *Sustainable Energy Technologies and Assessments*, 53, 102692. <https://doi.org/10.1016/j.seta.2022.102692>
- Juliana, N. O., Hui, H. J., Clement, M., Solomon, E. N., and Elvis, O. K. (2021). The impact of creativity and innovation on entrepreneurship development: evidence from Nigeria. *Open Journal of Business and Management*, 9(4), 1743-1770.
- Junhua, L. (2024). The role of small business in transforming the economies of small island developing States. In *International Trade Forum* (No. 1, pp. 1-1). International Trade Centre.
- Kamande, A., Walker, J., Matthew, M., and Lawson, M. (2024). The Commitment to Reducing Inequality Index 2024.
- Karani, P., and Failler, P. (2020). Comparative coastal and marine tourism, climate change, and the blue economy in African Large Marine Ecosystems. *Environmental Development*, 36, 100572. <https://doi.org/10.1016/j.envdev.2020.100572>
- Khan, M. A. I., Syed, A. J., and Azharuddin, S. (2023). Social Entrepreneurship: Driving Change and Creating Positive Societal Impact. *Social Entrepreneurship: Driving Change and Creating Positive Societal Impact*.

- Khan, S. A., Khan, V., and Khan, Mohd. A. (2023). Technology as a Catalyst for Tourism Entrepreneurship: A Critical Insight. *International Journal of Social Sciences and Humanities Invention*, 10(04), 7832–7838. <https://doi.org/10.18535/ijsshi/v10i04.01>
- Klein, P. G., Mahoney, J. T., McGahan, A. M., and Pitelis, C. N. (2013). Capabilities and strategic entrepreneurship in public organizations. *Strategic Entrepreneurship Journal*, 7(1): 70-91.
- Kohona, P. T. (2024). Sustainable Development of 39 Small Island Developing States – No Time to Wait, Inter Press Service, June 18, 2024
- Korten, D. C. (1990). *Getting to the 21st century: Voluntary action and the global agenda*. Sterling, VA: Kumarian Press.
- Kostakis, I., and Tsagarakis, K. P. (2022). The role of entrepreneurship, innovation and socioeconomic development on circularity rate: Empirical evidence from selected European countries. *Journal of Cleaner Production*, 348, 131267. <https://doi.org/10.1016/j.jclepro.2022.131267>
- Kovanen, S. (2021). Social entrepreneurship as a collaborative practice: Literature review and research agenda. *Journal of Entrepreneurship, Management and Innovation*, 17(1), 97-128.
- Kulmie, D. A., Hussein, M. S., Abdi, B. M., Abdulle, M. A., Adam, M. A., Bank, P., and Mogadishu, S. (2023). Entrepreneurship training, job creation and youth empowerment. *Asian Social Science*, 19(6), 111.
- Kurpayanidi, K. I. (2022). Institutional conditions for the development of entrepreneurship in the context of the transformation of the national economy. *Economic innovations*, 24(3 (84)), 67-76.
- Lejuste, D., Acquatella, F., and Hlady-Rispal, M. (2024). How do the managers of local businesses integrate the digital transition imperative into their strategy?. *EuroMed Journal of Management*, 6(2), 128-152.
- Leong, C., Tan, F. T. C., Tan, B., and Faisal, F. (2022). The emancipatory potential of digital entrepreneurship: A study of financial technology-driven inclusive growth. *Information and Management*, 59(3), 103384. <https://doi.org/10.1016/j.im.2020.103384>
- Li, X., Abbas, J., Dongling, W., Baig, N. U. A., and Zhang, R. (2022). From cultural tourism to social entrepreneurship: Role of social value creation for environmental sustainability. *Frontiers in Psychology*, 13, 925768.
- Liguori, E., and Bendickson, J. S. (2020). Rising to the challenge: Entrepreneurship ecosystems and SDG success. *Journal of the International Council for Small Business*, 1(3-4), 118-125.
- Lopes Dos Santos, K. (2023). Forgotten territories: The uneven geography of FDI in Africa and the case studies of Burundi, Central African Republic, Comoros, the Gambia, Guinea-Bissau and São Tomé and Príncipe. *African Geographical Review*, 42(4), 467–482. <https://doi.org/10.1080/19376812.2022.2073241>

- Luísa, Cláudia; Baião, Ana. (2022). Education for transformation. A reality in São Tomé and Príncipe.
- Lundström, A., and Stevenson, L. A. (2005). *Entrepreneurship policy: Theory and practice*. Boston, MA: Springer US.
- Lusseau, D., and Mancini, F. (2019). Income-based variation in Sustainable Development Goal interaction networks. *Nature Sustainability*, 2(3), 242-247.
- Lüdeke-Freund, F. (2020). Sustainable entrepreneurship, innovation, and business models: Integrative framework and propositions for future research. *Business Strategy and the Environment*, 29(2), 665–681. <https://doi.org/10.1002/bse.2396>
- Lyon, F., and Sepulveda, L. (2009). Mapping social enterprises: past approaches, challenges and future directions. *Social Enterprise Journal*, 5(1), 83-94.
- Mair, J., and Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36-44.
- Manigandan, R., and Raghuram, J. N. V. (2024). Innovation capability as a catalyst: unravelling the mediating effect between entrepreneurial orientation and firm performance in family businesses. *International Journal of Work Innovation*, 5(1), 1-21.
- Manning, S., and Vavilov, S. (2023). Global development agenda meets local opportunities: The rise of development-focused entrepreneurship support. *Research Policy*, 52(7), 104795.
- Markman, G. D., Waldron, T. L., Gianiodis, P. T., and Espina, M. I. (2019). E Pluribus Unum: Impact Entrepreneurship as a solution to grand challenges. *Academy of Management Perspectives*, 33(4), 371–382. <https://doi.org/10.5465/amp.2019.0130>
- Martins, Gilberto de Andrade. (2006). *Estudo de Caso: Uma estratégia de pesquisa*. São Paulo: Atlas.
- Mars, M. M. (2022). Community and cultural entrepreneurship and value co-creation in the local food marketscape. *Sustainability*, 14(24), 16744.
- Mckeever, E., Jack, S., Anderson, A. (2015). Embedded entrepreneurship in the creative reconstruction of place. *Journal of Business Venturing*, 30, 50–65.
- Méndez-Picazo, M. T., Galindo-Martín, M. A., and Castaño-Martínez, M. S. (2021). Effects of sociocultural and economic factors on social entrepreneurship and sustainable development. *Journal of Innovation and Knowledge*, 6(2), 69-77.
- Mikheeva, V. I. (2019, December). Small Island Developing States'(SIDS) Problems in the Focus of Sustainable Developing Goals (SDGs). In *Institute of Scientific Communications Conference* (pp. 1354-1359). Cham: Springer International Publishing.
- Minniti, M. (2010). What do we know about the patterns and determinants of female entrepreneurship across countries?
- Minniti, M. (2008). *The role of government policy on entrepreneurial activity: Productive, unproductive, or destructive?* *Entrepreneurship Theory and Practice*, 32(5), 779–790. <https://doi.org/10.1111/j.1540-6520.2008.00255.x>

- Mishra, K. K., and Barik, B. (2025). From tradition to sustainability: the mediating effect of environmental attitude and concern for the environment in the relationship between green consumption values and purchase intention for handloom products in India. *International Journal of Business and Emerging Markets*, 17(2), 215-229.
- Mishra, M. K., Kumar, S., and Upadhyaya, A. (2024). Environmental values mediate the relationships between the selected factors and the green entrepreneurial switching intentions. *International Journal of Work Innovation*, 5(2), 143-163.
- Morelli, J. (2011). Environmental sustainability: A definition for environmental professionals. *Journal of Environmental Sustainability*, 1(2011), 19-27.
- Moroz, P.W.; Branzei, O.; Parker, S.C.; Gamble, E.N. (2018). Imprinting with purpose: Prosocial opportunities and B Corp certification. *Journal of Business Venturing*, 33, 117–129.
- Morrison, C., Ramsey, E., and Bond, D. (2017). The role of social entrepreneurs in developing community resilience in remote areas. *Journal of Enterprising Communities: People and Places in the Global Economy*, 11(1), 95-112.
- Muñoz, P., and Cohen, B. (2018). Sustainable Entrepreneurship Research: Taking Stock and looking ahead. *Business Strategy and the Environment*, 27(3), 300–322. <https://doi.org/10.1002/bse.2000>
- Naudé, W. (2007). *Peace, prosperity, and pro-growth entrepreneurship*. UNU-WIDER Research Paper, No. 2007/02. <https://doi.org/10.1093/acprof:oso/9780199543429.003.0008>
- Naudé, W. (2010). Entrepreneurship, developing countries, and development economics: New approaches and insights. *Small Business Economics*, 34, 1–12.
- Naudé, W. (2011). *Entrepreneurship is not a binding constraint on growth and development in the poorest countries*. *World Development*, 39(1), 33–44. <https://doi.org/10.1016/j.worlddev.2010.05.005>
- Neumann, T. (2022). Impact of green entrepreneurship on sustainable development: An ex-post empirical analysis. *Journal of Cleaner Production*, 377, 134317.
- Nguyen, C. N., Rossi, M., Vilaine, L., and Hamieh, M. B. (2024). Creating opportunities: social entrepreneurship and disability employment. *International Journal of Business and Emerging Markets*, 16(5), 1-18.
- Nor, A. I. (2023). Improving employee performance and public service delivery through training and development: Case of civil service of Federal Government of Somalia. *International Journal of Business and Management*, 18(2), 145-145. <https://doi.org/10.5539/ijbm.v18n2p145>
- Odeyemi, O., Oyewole, A. T., Adeoye, O. B., Ofodile, O. C., Addy, W. A., Okoye, C. C., and Ololade, Y. J. (2024). Entrepreneurship in Africa: A review of growth and challenges. *International Journal of Management and Entrepreneurship Research*, 6(3), 608-622.

- Okolie, U. C., Ehiobuche, C., Igwe, P. A., Agha-Okoro, M. A., and Onwe, C. C. (2022). Women entrepreneurship and poverty alleviation: Understanding the economic and socio-cultural context of the Igbo women's basket weaving enterprise in Nigeria. In *Entrepreneurship and the Informal Sector* (pp. 8-27). Routledge.
- Ong, D., Shang, L., Chandra, Y., Hamidi, M., and Wahab, H. A. (2021). The role of social entrepreneurship for youth purpose development. *Journal of Asian Public Policy*, 14(2), 272-290.
- Ortiz García, P., and Olaz Capitán, Á. J. (2021). Entrepreneurship for people with disabilities: From skills to social value. *Frontiers in Psychology*, 12, 699833.
- Ostrom, E. (1990). *Governing the Commons: The evolution of institutions for collective action*. Cambridge University Press.
- Ostrom, E., Burger, J., Field, C. B., Norgaard, R. B., and Policansky, D. (1999). Revisiting the Commons: Local Lessons, Global Challenges. *Science*, 284(5412), 278-282. <https://doi.org/10.1126/science.284.5412.278>
- Owen, R. J., Bessant, J. R., and Heintz, M. (Eds.). (2013). *Responsible innovation* (Vol. 104). Chichester: Wiley.
- Peredo, A. M., and Chrisman, J. J. (2006). Toward a theory of community-based enterprise. *Academy of Management Review*, 31(2), 309-328.
- Peredo, A. M., and McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41(1), 56-65.
- Phan Tan, L. (2022). Bibliometrics of social entrepreneurship research: Cocitation and bibliographic coupling analyses. *Cogent Business and Management*, 9(1), 2124594.
- Phillips, W., Lee, H., Ghobadian, A., O'Regan, N., and James, P. (2015). Social innovation and social entrepreneurship: A systematic review. *Group and Organization Management*, 40(3), 428-461.
- Pontes, C. A. C. S. (2022). Política de criação de empregos e rendimentos. Ensaio sobre o desemprego jovem em São Tomé e Príncipe. Master's thesis. Universidade de Évora.
- Popkova, E. G., De Bernardi, P., Tyurina, Y. G., and Sergi, B. S. (2022). A theory of digital technology advancement to address the grand challenges of sustainable development. *Technology in Society*, 68, 101831.
- Pounder, P., and Gopal, N. (2021). Entrepreneurship and small island economies. *Organizations and Markets in Emerging Economies*, 12(2), 415-439.
- Prasetyo, P., Azwardi, A., and Kistanti, N. (2023). Gender equality and social inclusion (GESI) and institutions as key drivers of green entrepreneurship. *International Journal of Data and Network Science*, 7(1), 391-398.

- Prokopenko, O., Chechel, A., Koldovskiy, A., and Kldiashvili, M. (2024). Innovative models of green entrepreneurship: Social impact on sustainable development of local economies. *Economics Ecology Socium*, 8(1), 89-111.
- Qu, M., and Zollet, S. (2023). Neo-endogenous revitalisation: Enhancing community resilience through art tourism and rural entrepreneurship. *Journal of Rural Studies*, 97, 105-114.
- Rai, S. M., Brown, B. D., and Ruwanpura, K. N. (2019). SDG 8: Decent work and economic growth – A gendered analysis. *World Development*, 113, 368–380. <https://doi.org/10.1016/j.worlddev.2018.09.006>
- Raman, R., Leal Filho, W., Martin, H., Ray, S., Das, D., and Nedungadi, P. (2024). Exploring Sustainable Development Goal Research Trajectories in Small Island Developing States. *Sustainability*, 16(17), 7463. <https://doi.org/10.3390/su16177463>
- Raman, R., Subramaniam, N., Nair, V. K., Shivdas, A., Achuthan, K., and Nedungadi, P. (2022). Women Entrepreneurship and Sustainable Development: Bibliometric Analysis and Emerging Research Trends. *Sustainability*, 14(15), 9160. <https://doi.org/10.3390/su14159160>
- Rashid, L. (2019). Entrepreneurship Education and Sustainable Development Goals: A literature review and a closer look at fragile states and technology-enabled approaches. *Sustainability*, 11(19), 5343. <https://doi.org/10.3390/su11195343>
- Ratten, V. (2023). Entrepreneurship: Definitions, opportunities, challenges, and future directions. *Global Business and Organizational Excellence*, 42(5), 79-90.
- Redclift, M. (1991). The multiple dimensions of sustainable development. *Geography*, 76(1), 36-42.
- Ribeiro-Soriano, D. (2017). Small business and entrepreneurship: Their role in economic and social development. *Entrepreneurship and Regional Development*, 29(1-2), 1–3.
- Ribeiro, B. E., Smith, R. D., and Millar, K. (2017). A mobilising concept? Unpacking academic representations of responsible research and innovation. *Science and engineering ethics*, 23(1), 81-103.
- Ricciardi, F., Rossignoli, C., and Zardini, A. (2021). Grand challenges and entrepreneurship: Emerging issues, research streams, and theoretical landscape. *International Entrepreneurship and Management Journal*, 17(4), 1673-1705.
- Robertson, J., Pitt, L., and Ferreira, C. (2020). Entrepreneurial ecosystems and the public sector: A bibliographic analysis. *Socio-Economic Planning Sciences*, 72, 100862.
- Rumasukun, M. R., and Noch, M. Y. (2023). Strengthening Communities through SME Development: A Qualitative Analysis of Management Strategies. *Golden Ratio of Community Services and Dedication*, 3(2), 59-68.
- Sanches, Edalina Rodrigues, et al. (2022). African exceptions: democratic development in small island states. *Journal of International Relations and Development*, 1-25.

- Santhi, N., and Kumar, S. R. (2011). Entrepreneurship challenges and opportunities in India. *Bonfring International Journal of Industrial Engineering and Management Science*, 1(1), 14-16.
- Samara, G., and Terzian, J. (2021). Challenges and opportunities for digital entrepreneurship in developing countries. *Digital Entrepreneurship*, 283, 283-302.
- Santacreu, A. M. (2015). Innovation, diffusion, and trade: Theory and measurement. *Journal of Monetary Economics*, 75, 1-20.
- Santiago, Ludmila Cirana Afonso. (2012). Empreendedorismo em São Tomé e Príncipe: avaliação do potencial empreendedor jovem. Master's Thesis. ISCTE-Instituto Universitario de Lisboa (Portugal).
- Schaefer, K., Corner, P. D., and Kearins, K. (2015). Social, Environmental and Sustainable Entrepreneurship Research: What Is Needed for Sustainability-as-Flourishing? *Organization and Environment*, 28(4), 394–413.
- Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Business strategy and the environment*, 20(4), 222-237.
- Schumpeter, J. A., and Swedberg, R. (2013). *Capitalism, socialism and democracy*. Routledge.
- Seibert, G. (2016). São Tomé and Príncipe 1975-2015: Politics and economy in a former plantation colony. *Estudos Ibero-Americanos*, 42(3), 987.
- Seibert, G. (2022). O teatro popular Tchiloli em São Tomé: Origem quinhentista ou oitocentista? *Ler História*, 80, 93–111.
- Seneler, C., Dabic, M., Owaishiz, A., and Daim, T. (2019). Exploring Entrepreneurship in the Academic Environment. In 2019 Portland International Conference on Management of Engineering and Technology (PICMET) (pp. 1-5). IEEE.
- Shane, S., and Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Shane, S. (2009). *Why encouraging more people to become entrepreneurs is bad public policy*. *Small Business Economics*, 33(2), 141–149. <https://doi.org/10.1007/s11187-009-9215-5>
- Shepherd, D. A., and Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking “what is to be sustained” with “what is to be developed.” *Entrepreneurship Theory and Practice*, 35(1), 137–163.
- Sikdar, S. K. (2003). Sustainable Development and Sustainability Metrics. *AIChE Journal*, 49(8).
- Simba, A., Ogundana, O. M., Braune, E., and Dana, L. P. (2023). Community financing in entrepreneurship: A focus on women entrepreneurs in the developing world. *Journal of Business Research*, 163, 113962.
- Si, S., Ahlstrom, D., Wei, J., and Cullen, J. (2021). Introduction: Business, entrepreneurship and innovation toward poverty reduction. In *Business, entrepreneurship and innovation toward poverty reduction* (pp. 1-20). Routledge.

- Si, S., Hall, J., Suddaby, R., Ahlstrom, D., and Wei, J. (2023). Technology, entrepreneurship, innovation and social change in digital economics. *Technovation*, 119, 102484.
- Sirojiddin, S. (2022). Small Business and Private Entrepreneurship Is a Place to Provide Employment. *Journal of Academic Research and Trends in Educational Sciences*, 115–119.
- Stefan, A., Jack, S., Farmer, J., and Steinerowska-Streb, I. (2021). Are They Really a New Species? Exploring the Emergence of Social Entrepreneurs through Giddens’ Structuration Theory. *Business and Society*.
- Stervinou, S., Bayle-Cordier, J., Narvaiza, L., Aragón, C., and Iturrioz, C. (2021). Exploring the interplay between context and enterprise purpose in participative social entrepreneurship. *Entrepreneurship and Regional Development*, 1–31.
- Stubbs, W. (2017). Sustainable Entrepreneurship and B Corps. *Business Strategy and the Environment*, 26(3), 331–344.
- Sunny, S. A., and Shu, C. (2019). Investments, incentives, and innovation: Geographical clustering dynamics as drivers of sustainable entrepreneurship. *Small Business Economics*, 52(4), 905–927.
- Sreenivasan, A., and Suresh, M. (2023). Exploring the contribution of sustainable entrepreneurship toward sustainable development goals: A bibliometric analysis. *Green Technologies and Sustainability*, 1(3), 100038.
- Tiny, D. D. S. P. (2015). Sustentabilidade das finanças públicas: Evidências empíricas em São Tomé e Príncipe.
- Toxirovna, T. S. (2024). The socio-economic importance of entrepreneurship. *Journal of Multidisciplinary Bulletin*, 7(1), 316-318.
- Tremblay, D., Fortier, F., Boucher, J. F., Riffon, O., and Villeneuve, C. (2020). Sustainable development goal interactions: An analysis based on the five pillars of the 2030 agenda. *Sustainable Development*, 28(6), 1584-1596.
- Ubatela, Wilsa Kaina Managem Fernandes, et al. (2022). Qualidade da assistência e humanização do cuidado à saúde da mulher no período de parto no contexto de São Tomé e Príncipe, África Subsaariana. *Research, Society and Development*, 11(3).
- Ubfal, D. (2024). Supporting Women-Led Businesses: Narrative Review of Recent Causal Evidence. The World Bank Research Observer.
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development* (A/RES/70/1).
- United Nations. (2016). *SDG toolkit to engage European NGOs at national and European level on the Sustainable Development Goals*.
- United Nations. (2017). *UN metrics and indicators for the SDGs*.

United Nations. (2018). *Work 4 progress (W4P): Promoting entrepreneurship for job creation*.

United Nations. (2020). *São Tomé e Príncipe anuncia graduação a país de renda média para 2024*.

United Nations. (2016). *ODS – 17 objetivos para transformar o nosso mundo*. Centro de Informação Regional das Nações Unidas para a Europa Ocidental.

United Nations. (2024a). *Entrepreneurship for sustainable development: Report of the Secretary-General*.

United Nations. (2024b). *Sustainable development report*.

United Nations, Department of Economic and Social Affairs [UN DESA]. (2022). *The sustainable development goals report 2022*. United Nations.

United Nations Development Programme [UNDP]. (2017). *Human development index*.

United Nations Development Programme [UNDP]. (2022). *São Tomé and Príncipe: Country programme document 2022–2026*.

United Nations Development Programme [UNDP]. (2023). *Entrepreneurship for sustainable development: Mobilizing local actors for the SDGs*.

United Nations Development Programme [UNDP], United Nations Human Settlements Programme [UN-Habitat], & Global Taskforce. (2016). *Primer módulo de capacitación sobre localización de los ODS*. Local2030. <https://www.local2030.org/library/348/3/Guia-para-el-capacitador-Primer-Modulo-de-Capacitacion-sobre-Localizacion-de-los-ODS.pdf>

United Nations Human Settlements Programme [UN-Habitat]. (2021). *Documento do Programa-País do UN-HABITAT em São Tomé e Príncipe*. Escritório Regional para África.

United Nations Industrial Development Organization [UNIDO]. (2019). *Achieving the SDGs through entrepreneurship and innovation*.

United Nations Economic Commission for Africa [UNECA]. (2022). *Unlocking the potential of South-South cooperation in Africa*.

United Nations Educational, Scientific and Cultural Organization [UNESCO]. (2024). *São Tomé and Príncipe: Education country brief*. International Institute for Capacity Building in Africa.

United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States [UN-OHRLLS]. (2015). *Small island developing states in numbers: Climate change edition*. United Nations.

Urbano, D., Alvarez, C. (2014). Institutional dimensions and entrepreneurial activity: An international study. *Small Business Economics*, 42, 703–716.

Violante, Alexandre Rocha. (2022). Política externa, política de defesa e cooperação sul-sul como grande estratégia na África Ocidental: um estudo de caso em Cabo Verde e São Tomé e Príncipe.

- Walston, J., Ray, J. C., Robinson, J. G., Callow, M., Clements, T., Costa, H. M., et al. (2020). Anthropogenic modification of forests means only 40% of remaining forests have high ecosystem integrity. *Nature Communications*, 11, 5978.
- Weiss, T. G., and Daws, S. (2007). World politics: Continuity and change since 1945.
- Welter, F., Baker, T., Audretsch, D. B., and Gartner, W. B. (2017). Everyday entrepreneurship—a call for entrepreneurship research to embrace entrepreneurial diversity. *Entrepreneurship Theory and Practice*, 41(3), 311-321.
- Welter, F., and Smallbone, D. (2011). Institutional perspectives on entrepreneurial behavior in challenging environments. *Journal of Small Business Management*, 49(1), 107-125.
- Williams, C. C., & Youssef, Y. (2014). *Is informal sector entrepreneurship necessity- or opportunity-driven? Some lessons from urban Brazil*. *Business and Management Research*, 3(1), 41–53. <https://doi.org/10.5430/bmr.v3n1p41>
- Williams, C. C., & Kadir, A. (2018). *Explaining cross-national variations in the prevalence of informal sector entrepreneurship: Lessons from sub-Saharan Africa*. *Journal of Developmental Entrepreneurship*, 23(2), 1–17.
- Williams, T. W. (2024). Owning Health Equity Entrepreneurship, Capital, and Community-Owned Health. *Seton Hall Law Review*, 55(1), 3.
- Wood, M. S., and McKinley, W. (2020). The Entrepreneurial Opportunity Construct: Dislodge or Leverage? *Academy of Management Perspectives*.
- World Bank Group. (2020). Memorando Econômico do País para São Tomé e Príncipe.
- World Bank. (2022). São Tomé and Príncipe Systematic Country Diagnostic Update.
- World Economic Forum (WEF). (2024). New Report Measures Quality of Growth for New Economic Era.
- World Meteorological Organization (WMO). (2025). State of the Global Climate 2024.
- Yani, A., and Ausat, A. M. A. (2024). Strategies for Community Empowerment through Social Entrepreneurship to Support Sustainable Economic Development. *Jurnal Terobosan Peduli Masyarakat (TIRAKAT)*, 1(4), 211-220.
- Yeboah, S., Gyan, S., and Bright, J. (2023). Harmonizing FDI and local entrepreneurship: Strategies for inclusive growth.
- Yin, R. K. (2001). *Estudo de Caso, planejamento e métodos*. 2nd edition, São Paulo: Bookman.
- Yunus, S. (2020). Social network, trust, and collective action of Aceh farmers in increasing welfare. *International Journal of Psychosocial Rehabilitation*, 24(2), 184-192.
- Zhang, J. A., Edgar, F., Geare, A., and O’Kane, C. (2016). The interactive effects of entrepreneurial orientation and capability-based HRM on firm performance: the mediating role of innovation ambidexterity. *Industrial Marketing Management*, 59, 131-143.

- Zhang, Y., Liu, Y., and Cooper, S. C. L. (2018). Local government as institutional entrepreneur: Public–private collaborative partnerships in fostering regional entrepreneurship. *British Journal of Management*, 29(4), 670-690.
- Zhang, J., and Zhao, W. (2024). New product development is possible with green patent: the moderating role of technological advancement and sustainable development goals. *International Journal of Intellectual Property Management*, 15(2).