

The Competitive Advantages of Implementing an ESG Agenda

As Vantagens Competitivas da Implementação de uma Agenda ESG: Um Estudo de Caso

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Abstract

This case study shows how an ESG agenda generates a competitive advantage at Cooxupé Cooperative. The practices implemented by the cooperative are related to the three pillars (environmental, social, and governance), the SDG focus, the metrics that support them, and the strengths and areas for improvement of the cooperative. From an in-depth analysis of practices between 2012 and 2022, it was possible to observe that, in terms of the environmental area, there is an effort to use renewable energy sources and collect pesticide packages for correct disposal, reducing costs compared to non-renewable sources and supporting members to existing decrees. Regarding the social aspect, the cooperative's participation in sustainability programs and certifications, as well as the reinforcement of family farming, have improved the recognition of cooperative members at national and international levels, fostering their socioeconomic development. In terms of governance, there is a tendency to better structure its sustainability indicators and fiscal and administration councils, bringing less risky positions and clear, transparent communication to its members and stakeholders, instilling confidence in its operations. Furthermore, the cooperative's creation of a protocol focused exclusively on sustainability has facilitated member access to certifications and generated greater collaboration throughout the supply chain.

Keywords: Coffee supply chain; Sustainable development; ESG; Competitive advantage.

Resumo

Este estudo de caso mostra como a agenda ESG (ambiental, social e governança) gera uma vantagem competitiva para a Cooperativa Cooxupé. As práticas implementadas pela cooperativa estão relacionadas aos seus três pilares (ambiental, social e governança), o foco nos ODS, as métricas que as sustentam, e os pontos fortes e áreas de melhoria da cooperativa, que fazem parte dessa narrativa. A partir de uma análise aprofundada das práticas entre 2012 e 2022, foi possível observar que, na área ambiental, há um esforço para utilizar fontes de energia renováveis e coletar e descartar embalagens de pesticidas, reduzindo custos em comparação com fontes não renováveis e apoiando os membros de acordo com os decretos vigentes. Socialmente, a participação da cooperativa em programas de sustentabilidade e certificações, bem como o reforço da agricultura familiar, melhoraram o reconhecimento dos membros da cooperativa em níveis nacional e internacional, promovendo seu desenvolvimento econômico. Em termos de governança, há uma tendência para estruturar melhor seus indicadores de sustentabilidade e os conselhos fiscal e administrativo, adotando posições menos arriscadas e garantindo uma comunicação clara e transparente com seus membros e partes interessadas, instilando confiança em suas operações. Além disso, a criação de um protocolo focado exclusivamente na sustentabilidade facilitou o acesso dos membros às certificações e promoveu uma maior colaboração ao longo da cadeia.

Palavras-chave: Cadeia produtiva do café; Desenvolvimento sustentável; ESG; Vantagem competitiva.

1 Introduction

Agribusiness is recognized as one of the most significant sectors in Brazil's economy, accounting for 25% of the country's Gross Domestic Product (GDP) by 2022. Brazil focuses on exporting agricultural commodities and is one of the world's largest producers and exporters of several products, such as soybeans, corn, cotton, beef, pork, sugar, and coffee.

However, considering the 2019/2020 Brazilian harvest, which produced approximately 49 million bags, national production needs to increase by around 40% to meet both domestic and international demand. To meet the growing demand for coffee, it is vital to ensure a sustainable production process. This means that economic, social, and environmental factors should be balanced to create value that benefits everyone involved, as the Triple Bottom Line model proposes. By doing this, organizations can build a solid business model that benefits shareholders, stakeholders, and society (Elkington, 1999; Hart, 2013).

The ESG (environmental, social, and governance) concept complements sustainable matters by providing more detailed criteria for assessing a company's sustainability and corporate social responsibility performance, mainly from a financial perspective. This approach supports companies in deepening their knowledge of these aspects while aligning with the Sustainable Development Goals outlined in the UN's 2030 Agenda (Fernandes & Linhares, 2017; Global Compact, 2004; United Nations, 2015).

To ensure the growth of agribusiness organizations and generate a competitive advantage, they must consider ESG criteria while doing their strategic planning. This will enable them to tackle a wide range of issues. Agents will face several dilemmas in coffee growing, such as the absence of government policies and legislation, complex processes, unclear sustainability principles and measures, and inadequate communication and collaboration gaps between parties (Guimarães *et al.*, 2022).

2 Literature Review

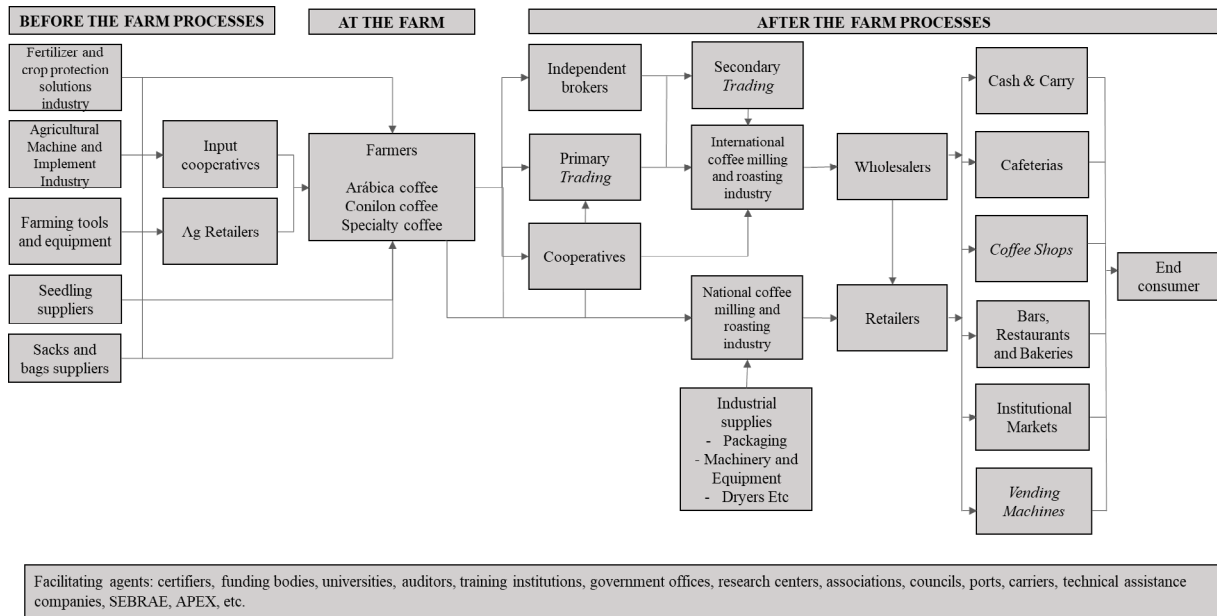
2.1 Brazil's coffee production chain

In Brazil, the coffee production chain comprises numerous agents and processes: the chemical, machinery and equipment, tools, and personal protective equipment industries; seedling suppliers; sacks and bags suppliers; agricultural cooperatives and retailers; coffee farmers and industrial input industries; roasters; soft drink manufacturers; trading companies; and brokers.

There is also the participation of facilitating agents, such as certifiers, funding bodies, auditors, carriers, technical assistance companies, training and research

institutions, associations, councils, and ports (Neves & Nogueira, 2015). In addition, cooperatives play an important role at all stages. They can help cooperative members acquire inputs, buy, store, and process the coffee they produce, or even sell it on the national and international markets, thus increasing their member's competitiveness (Reis, 2009).

Figure 1. Brazil's coffee production chain



Source: Neves & Nogueira (2015).

Brazil occupies an essential role in the coffee supply chain. It is the world's largest coffee producer and exporter, supplying domestic and foreign markets and exporting to countries such as the United States, Germany, Italy, Belgium, and Japan (CECAFÉ, 2023; MAPA, 2023). Based on the expected world coffee consumption until 2030, with an average growth rate of 2.0% per year, the demand is estimated to reach around 207.94 million bags. However, when we consider in the 2019/2020 Brazilian harvest, which produced only approximately 49 million bags, national production will be pressured to meet both demands by 40% (CECAFÉ, 2021, FIESP, 2018).

The coffee industry is among the pioneers in implementing sustainability certifications on a global scale (Reinecke *et al.*, 2012). These certifications focus on specific and complementary aspects of the Triple Bottom Line, as Pinto *et al.* (2014) noted. Such certifications include Organic, Rainforest Alliance, UTZ Certified, Fairtrade, and Common Code for the Coffee Community Association (4C) (Silva *et al.*, 2021).

2.2 Sustainable Development

The concept of sustainable development was established during the 1972 United Nations Conference on Environment and Development. This concept aims to define premises for future global development. It views development from a perspective that meets the needs of the current generation without compromising the ability of future

generations to fulfill their own needs (Becker & Roos, 2012).

Sustainable development encompasses three key elements - economic growth, environmental protection, and social equality (Barbosa, 2007). This concept is supported by a change in the paradigm of companies, which previously focused solely on profit. This shift in perspective has led to the Triple Bottom Line. This sustainable management model balances the economic, environmental, and social dimensions, measuring the value they generate or destroy in all three dimensions (Elkington, 1999). Complementing this model, studies suggest that companies should seek eco-efficiency in their decisions, producing more with quality, generating less pollution, and using fewer natural resources to ensure sustainability (Almeida, 2002).

2.3 The importance of ESG in agribusiness

Companies are now adopting sustainability practices to stay competitive in the new market model, which the COVID-19 pandemic has reinforced. So, adherence to sustainability practices is relatively recent. The concept of ESG is a driver for sustainability that follows the same essence portrayed by Elkington in the Triple Bottom Line. The ESG acronym represents the environmental, social, and governance components associated with sustainability, which refers to the practices that companies adopt to positively impact the environment, stimulate social development, and assure the integrity of their operations.

These practices provide non-financial information linked to sustainability and reveal elements of value in the medium and long term (Fernandes & Linhares, 2017). They can also guide and support companies in contributing to the SDGs proposed by the UN's 2030 Agenda (Romero, 2021) by balancing the dimensions of sustainable development (United Nations, 2015).

The Brazilian Ministry of Agriculture, Livestock and Food Supply (MAPA in Portuguese) conducted the Agribusiness Projections survey in 2021. The survey states that Brazilian agricultural production is expected to increase by 20% by 2030. This growth will create a greater need for sustainability. To guarantee the continuity and growth of companies in the sector, they must adopt strategies and business models that align with ESG practices.

Organizations considering ESG criteria in strategic planning increase their capacity to respond to trends and maintain market competitiveness (Ling *et al.*, 2007). Companies incorporating sustainable practices into their business strategy can gain a competitive edge. This includes cost reduction and increased profits in both the medium and long term, greater productivity, an improved brand image, a higher brand value, an expanded customer base, and increased customer loyalty (Berlato *et al.*, 2015).

Investing in ESG practices in agribusiness allows for modernizing the production chain. It also helps farmers apply for ESG-sustainable certifications or seals for their

products. This, in turn, proves that they follow the principles of sustainability. As a result, they gain access to various benefits such as lower interest rates, access to new markets, increased profitability per harvest, and opportunities to attract new investors (Climate Fieldview, 2022).

3 Materials and Methods

This study consists of qualitative research based on secondary data. It follows a content analysis, with an analysis of communications, which aims to obtain indicators (quantitative or not) that allow inferences to be made about the conditions of production/reception (inferred variables) of these messages (Bardin, 2011). This technique is structured in three phases: 1) pre-analysis, 2) exploration of the material, categorization, or coding, and 3) treatment of the results, inferences, and interpretation (Bardin, 2011).

The paper followed two steps in its development to address our primary objective: demonstrate how including ESG practices contributed to Cooxupé Cooperative's competitive advantage, considering its market and dynamics. Step 1 - Secondary data collection: The data was collected directly from the cooperative's website, which provides public access to its annual reports (the cooperative annual reports from 2012 until 2022 were consulted), accompanied by the opinions of the independent auditors and the audit committee. Each report has three sections: Management, Socio-environmental, and Financial; for each section, the main actions and themes of the year were summarized.

In addition, the cooperative's sustainability protocol, also available on its website, known as the Generations Protocol, was consulted. Step 2 - Secondary data analysis: From the data mining of Stage 1, the management report was first analyzed to identify and describe the profile of the cooperative members and point out the financial benefits of the coffee programs they participate in. The socio-environmental report was analyzed. To follow a more logical structure, the analysis was organized in chronological order, highlighting themes such as issues related to the cooperative's internal actions, agribusiness and the coffee chain, cooperativism, sustainability, visits to the cooperative, performance, financial and regional impact, social actions and training for employees and cooperative members. Finally, the financial report was analyzed, and some financial indicators (net income, profit, and investments) were compared between the periods.

Based on the secondary data collection and analysis, the authors were able to understand the cooperative's actions, facilitating the creation of a summary table with the leading practices according to ESG criteria, the relationship of each one with the SDGs, the metrics, and the competitive advantages generated from them. In the case of the Generations Protocol, some figures were specifically used to illustrate its proposal and how it is expected to work.

4 Results

4.1 About the Cooperative

The Cooxupé Cooperative started as an agricultural credit cooperative in 1932. It transformed into the Regional Cooperative of Coffee Growers in Guaxupé in 1957 and began receiving, processing, and trading coffee. It currently has over 18,000 members and operates by receiving coffee from more than 300 municipalities located in the South of Minas Gerais State, Cerrado Mineiro, Matas de Minas, and Vale do Rio Pardo (located in the state of São Paulo) for export. In 2022, the members' coffee was exported to over 50 countries across five continents.

Between 2012 and 2022, there was a strengthening of the participation of family farming and small producers in the cooperative's representation (98%); investment in new coffee programs focused on sustainability and specialty coffees, resulting in significant financial returns for its members; dedication to participating in and promoting sustainability programs and events collaborations with companies, institutions, associations, and sector experts to expand the operations, context, and socioeconomic development of its members substantial investment in the professional development of its employees and associates through partnerships with institutions, universities, and companies; the promotion of social actions among its employees, cooperative members and the communities in which it is involved; and a better performance on financial indicators, registering constant evolution.

4.2 ESG Practices and Generations Protocol

4.2.1 Environmental

The cooperative is committed to sustainability by producing top-quality coffees (specialty coffees) while striving for eco-efficiency (Almeida, 2002), less pollution, and the responsible use of natural resources. The cooperative has implemented several measures to achieve these goals, including adequately disposing of crop protection solutions packaging. These measures help reduce costs, comply with crop protection use regulations, and make it easier for cooperative members to follow sustainable practices.

Cooxupé has distinguished itself through robust environmental practices, particularly waste and effluent management. The cooperative has implemented effective systems for separating, recycling, and treating solid and liquid waste at its coffee processing units. Additionally, it has invested in effluent treatment stations to ensure that wastewater is processed before being released back into the environment, thereby reducing the contamination of water resources.

Moreover, Cooxupé focuses on water conservation and soil protection. The cooperative has developed efficient irrigation techniques and water reuse systems to

conserve this vital resource while implementing direct planting methods and soil cover practices to prevent erosion and improve soil health. Investments in renewable energy sources, such as solar power and biomass, have also been a priority to reduce the carbon footprint and promote energy sustainability.

Education and certification are also critical components of Cooxupé's environmental actions. The cooperative offers training programs to its members on sustainable practices and pursues stringent environmental certifications, such as Rainforest Alliance and organic, to ensure adherence to high environmental standards. Additionally, Cooxupé participates in projects to recover degraded areas and promotes sustainable management of protected areas to preserve local biodiversity. These actions benefit the environment, enhance the cooperative's market position, and contribute to a more sustainable development of the coffee industry.

4.2.2 Social

According to Silva, Oliveira, and Alves (2021), Sustainability Programs and Certifications demonstrate the importance of sustainable practices and favor recognition in national and international markets, bringing considerable financial returns to participating cooperative members. Meanwhile, the environmental education center and family farming demonstrate the value of sustainable practices in partnership with the community. They show how increasing production quantity and quality is possible while promoting cooperative members' socio-economic growth.

The cooperative's participation in the Cup of Excellence, the world's foremost coffee quality contest, is worth mentioning. This participation enhances the brand's reputation and attracts new audiences. Additionally, the cooperative offers internship and apprenticeship programs, scholarships for employees, and training for employees and cooperative members. These programs foster motivation, and engagement among professionals while providing management and negotiation skills for cooperative members. The cooperative donates to charities, strengthening its relationship with the communities in which it operates. Lastly, Cooperative Day helps enhance partnerships with other cooperative entities.

Cooxupé is distinguished by its community development initiatives, which aim to improve infrastructure and quality of life in the areas where the cooperative operates. Projects such as building schools and health centers and improving basic infrastructure significantly impact local communities, contributing to socioeconomic growth and overall well-being. It is committed to promoting gender equality and social inclusion by supporting the equitable participation of women and marginalized groups in its activities. The cooperative also supports local entrepreneurship through financing and consulting and invests in education and ongoing training for children and youth. These actions reinforce Cooxupé's commitment to sustainable development and social support, creating a positive and lasting impact on the communities in which it operates.

4.2.3 Governance

Cooxupé adopts a clear and transparent governance structure, with a Board of Directors overseeing strategic and operational decisions. The cooperative implements stringent compliance and ethics policies to ensure adherence to laws and regulations and regularly conducts internal and external audits. These measures ensure integrity in operations and build trust in the financial information provided. Additionally, Cooxupé promotes financial transparency by publishing detailed and accessible reports, allowing members and stakeholders to assess the cooperative's financial health. Active participation in decision-making is encouraged through general assemblies and committees, ensuring that decisions reflect the interests and needs of the members.

The cooperative also invests in risk management to identify and mitigate potential threats to its operations and develops and updates operational policies and procedures to ensure consistent and efficient practices. Ongoing training for leaders and managers enhances governance capabilities, while regular communication with stakeholders ensures that their expectations and concerns are addressed. These practices guarantee effective and sustainable governance, promoting accountability and trust within the cooperative.

The consultancy provided by TOTVS helps the cooperative establish ESG indicators, which improves the clarity of its actions and helps it take less risky positions. In addition, the supervisory and board of directors are valuable allies in increasing transparency in their processes. They have introduced accounting procedures and an audit committee, demonstrating professional management. This has increased credibility in the market and improved communication with stakeholders (Global Compact, 2004).

Table 1 demonstrates how Cooxupé's ESG practices are strategically aligned with various Sustainable Development Goals (SDGs) and contribute to significant competitive advantages. The environmental practices help reduce costs and environmental impacts, social practices enhance community engagement and professional development, and governance practices ensure transparency and effective management. Collectively, these practices support sustainability and strengthen Cooxupé's market position and operational resilience.

Table 1. ESG Practices

ESG Criteria	Practices	Link to the Sustainable Development Goals (SDG)	Competitive Advantage
Environmental	Energy efficiency	SDG 7. Clean and Affordable Energy	Lower costs for renewable energy than the ones associated with fossil fuels
Environmental	Crop protection solutions packaging collection and disposal	SDG 6. Clean Water and Sanitation SDG 12. Sustainable Consumption and Production Patterns	More adherence of cooperative members to decrees regulating the use of crop protection solutions
Environmental/ Social	Sustainability programs and certifications	SDG 12. Sustainable Consumption and Production Patterns SDG 2. Zero Hunger and Sustainable Farming	Access for cooperative members to more competitive markets Access to a premium price Increased value for products Financial transfer to cooperative members
Environmental/ Social	Environmental Education Center	SDG 15. Sustainable use of Terrestrial Ecosystem	Better reputation Closer relationships with the communities in which it operates
Environmental/ Social	Family farming	SDG 8. Decent Work and Economic Growth SDG 10. Reduced Inequalities	Improved productivity and coffee's higher quality Sustainable production
Social	Attendance at the Cup of Excellence	SDG 12. Sustainable Consumption and Production Patterns	Increased brand value Improved brand image Reach new audiences
Social	Internship and Apprenticeship Programs	SDG 8. Decent Work and Economic Growth	Greater training, motivation, and engagement of professionals

ESG Criteria	Practices	Link to the Sustainable Development Goals (SDG)	Competitive Advantage
Social	Employee scholarships	SDG 4. Quality Education	Greater training, motivation, and engagement of professionals
Social	Training for employees and members	SDG 4. Quality Education	Greater training, motivation, and engagement of professionals Greater training for cooperative members in management and negotiation Better relationship with cooperative members
Social	Donation to charities	SDG 2. Zero Hunger and Sustainable Farming SDG 3. Good Health and Well-Being	Closer relationship with the communities in which it operates
Social	Cooperating Day	SDG 4. Quality Education	Partnerships with cooperative organizations Closer relationships with the communities in which it operates
Governance	TOTVS Consultancy	SDG 16. Peace, Justice, and Strong Institutions	Clarity in actions Risk reduction
Governance	Supervisory Board and Board of Directors	SDG 16. Peace, Justice, and Strong Institutions	Professional management Credibility Better communication with stakeholders
Governance	Generations Protocol	SDG 16. Peace, Justice, and Strong Institutions	Enabling cooperative members to access sustainability certifications and programs

Source: prepared by the authors.

Cooxupé's environmental practices, such as improving energy efficiency and managing crop protection solutions, align with Sustainable Development Goals (SDGs) 7, 6, and 12. These practices contribute to reduced energy costs and environmental impact while ensuring regulatory compliance and enhancing the cooperative's sustainability credentials. Additionally, initiatives like sustainability certifications and establishing an Environmental Education Center improve market access, product value, and community relations, further strengthening Cooxupé's competitive position.

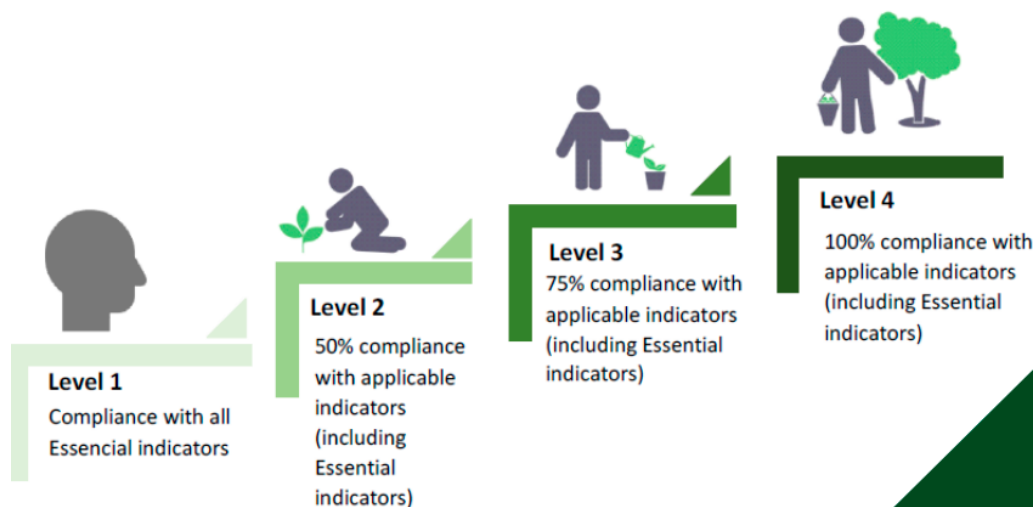
Regarding social practices, Cooxupé engages in activities such as participating in the Cup of Excellence, offering internship and apprenticeship programs, and providing scholarships and training. These efforts support SDGs 8, 4, and 3 by enhancing brand value, professional development, and community engagement. Such initiatives improve employee motivation, skill levels, and overall performance while fostering more robust relationships with local communities and contributing to the cooperative’s social responsibility profile.

On the governance front, the Generations Protocol aligns with SDG 16. It ensures effective management and credibility, improves stakeholder communication, and facilitates access to sustainability certifications for cooperative members. Cooxupé’s ESG practices support sustainability and enhance its market competitiveness and operational resilience.

4.2.4 Generations Protocol

In 2022, Cooxupé created the Generations Protocol to show their commitment to providing coffee that is ethically and environmentally sustainable. This initiative is being carried out in partnership with SCS Global Services, a well-established third-party certification organization with over 40 years of experience in environmental, sustainability, and food quality certification. The goal of this program is to evaluate the sustainability performance of its members through four levels and to ensure that they meet the requirements set out by the certification body. Third-party visits and verification processes will be conducted to ensure compliance. The program aims to make it easier for cooperative members to obtain sustainability certifications and programs while increasing transparency in sustainability principles and measures. It will also help to tackle communication and collaboration gaps between all parties involved in the supply chain. (Climate Fieldview, 2022, Guimarães *et al.*, 2022).

Figure 2. Generations Protocol Sustainable Levels



Source: Cooxupé (2023).

Focused on the three pillars of economic development, social responsibility, and commitment environment, Generations is subdivided into ten target areas and requirements that aim to guide and support Cooxupé associates towards more sustainable practices, economic growth of its members, and the well-being of the community and the environment. The areas are: property management, child labor, labor conditions, health and safety, housing conditions, biodiversity and conservation, soil and nutrient management, planting protection, waste management and energy and emissions.

5 Conclusions

Implementing ESG practices within the Cooxupé Cooperative can have many benefits. For instance, these practices can help reduce operations costs, help cooperative members meet government standards, gain access to more competitive markets, and charge premium prices. They can also increase the value of products and enable financial transfers through sustainability programs.

Additionally, ESG practices can improve the cooperative's performance in the market, strengthen its relationship with the local communities, increase productivity and quality of sustainable production, attract new audiences, promote training and engagement of professionals and cooperative members, develop partnerships with cooperative entities, bring more transparency in its actions, reduce risks, enhance credibility in the face of competition, improve communication with stakeholders, and make it easier for cooperative members to access certifications and sustainability programs.

The cooperative's advantages are primarily focused on ensuring the well-being and development of its members. All of this is aimed at fostering the development of a sustainable production chain that is even more structured and efficient. This research contributes to the idea that companies must assess their economic, environmental, and social impacts by establishing structured sustainability metrics for non-financial and financial information (Elkington, 1999; Fernandes & Linhares, 2017).

Furthermore, the study reveals crucial managerial implications: First, the importance of enhanced strategic planning, effective adaptation to future trends and demands, and the relevance of support for the team to ensure that all can achieve and maintain sustainability standards. Additionally, strategic communication is needed to convey the commitment to sustainability and engage stakeholders. Recognized for its well-structured ESG practices in the coffee-growing and agribusiness sector, Cooxupé can, by applying these insights and addressing the recommended research areas, continue to advance its ESG practices, reinforce its competitive position, and promote sustainable development in the coffee industry. Other recommendations for the coffee industry could be strengthening supply chain transparency, investing in member

training and support, fostering community engagement and development, adopting and promoting certification programs, developing and supporting innovation in ESG practice, and strengthening risk management frameworks.

Future research could focus on critical areas like “Long-Term Impact Assessment” (investigate the long-term economic, environmental, and social impacts of ESG practices on cooperative members). This includes assessing the sustainability of benefits and identifying any emerging challenges as practices evolve and “Competitive Advantage Analysis” (explore how ESG practices create competitive advantages in the coffee-growing sector, especially regarding future market demands and trends).

This could involve analyzing how these practices influence market positioning and profitability); “Benchmarking and Best Practices” (compare the Cooxupé Cooperative’s ESG practices with those of other leading cooperatives and organizations. This benchmarking can reveal innovative strategies and potential areas for development). “Generations Protocol Application” (Studying the application of the Generations Protocol in detail. Research could track how it is implemented across different levels within the cooperative, evaluate its effectiveness, and determine how it supports members’ progression toward sustainability).

To fully evaluate the sustainability and ESG criteria of the Generations Protocol, it is crucial to understand how it will be applied over the next few years. This will help determine how cooperative members are divided among the indicated levels and how the cooperative supports them in their journey toward sustainability. The authors believe that it is essential to understand the competitive advantages that could be generated based on the future needs of coffee growing. To achieve this, they recommend direct contact with the cooperative and its members through interviews and face-to-face visits to identify different situations and closely observe the practical application of the protocol.

References

- Almeida, F. (2022). *Sustainability: A good deal*. Nova Fronteira, Rio de Janeiro, RJ, Brazil.
- Barbosa, P. R. A. (2007). *São Paulo Stock Exchange Corporate Sustainability Index (ISE-BOVES-PA): evaluating its suitability as a benchmark for improving company sustainability management and forming investment portfolios guided by corporate sustainability principles*. Master thesis, Universidade Federal do Rio de Janeiro, RJ, Brazil.
- Bardin, L. (2011). *Content analysis*. São Paulo, Brazil.
- Becker, E. L. S. & Roos, A. (2012). Environmental education and sustainability. *Electronic Journal of Environmental Management. Education and Technology*, 5(5): 857–866. <https://doi.org/10.5902/223611704259>.

- Berlato, L. F., Saussen, F. & Gomez, L. S. R. (2016). A corporate sustainability as a competitive advantage in branding. *DAPesquisa*, 11(15): 24-41.
- Cecafé. (2021). *Brazilian Coffee Exporters Council: Monthly report December 2021*. <http://www.consorcioquesquisacafe.com.br/images/stories/noticias/2021/dezembro/CECAFE-Relatorio-Mensal-DEZEMBRO-2021.pdf>.
- Cecafé. (2023). *Brazilian Coffee Exporters Council: Monthly report February 2023*. <https://www.cecafe.com.br/publicacoes/noticias/exportacao-de-cafe-do-brasil-cai-33-em-fevereiro-para-24-milhoes-de-sacas-20230309/>.
- Climate Fieldview. (2022). *ESG in Agribusiness: What is it, how does it work, and what are its impacts?* <https://blog.climatefieldview.com.br/esg-no-agronegocio>.
- Cooxupé. (2012). Regional Cooperative of Coffee Growers in Guaxupé. *Annual report 2012*. <https://www.cooxupe.com.br/documentos/relatorio.pdf>
- Cooxupé. (2013). Regional Cooperative of Coffee Growers in Guaxupé. *Annual report 2013*. <https://www.cooxupe.com.br/wp-content/uploads/2017/06/Relat%C3%B3rio-de-Gest%C3%A3o.pdf>
- Cooxupé. (2017). Regional Cooperative of Coffee Growers in Guaxupé. *Annual report 2017*. https://www.cooxupe.com.br/wp-content/uploads/2018/03/relatorio_cooxupe_2017_16_web.compressed.pdf
- Cooxupé. (2018). Regional Cooperative of Coffee Growers in Guaxupé. *Annual report 2018*. https://www.cooxupe.com.br/wp-content/uploads/2019/04/relatorio_cooxupe_2018.pdf
- Cooxupé. (2019). Regional Cooperative of Coffee Growers in Guaxupé. *Annual report 2019*. <https://www.cooxupe.com.br/wp-content/uploads/2020/03/Relatorio-Cooxupe-2019.pdf>
- Cooxupé. (2020). Regional Cooperative of Coffee Growers in Guaxupé. *Annual report 2020*. <https://www.cooxupe.com.br/wp-content/uploads/2021/03/Relatorio-de-Gestao-2020-2.pdf>
- Cooxupé. (2022). Regional Cooperative of Coffee Growers in Guaxupé. *Annual report 2022*. https://www.cooxupe.com.br/wp-content/uploads/2023/04/Relatorio-2022_.pdf
- Cooxupé. (2023). Regional Cooperative of Coffee Growers in Guaxupé. *Generations Protocol*. <https://www.cooxupe.com.br/wp-content/uploads/2023/10/PROTOCOLO-GERACOES.pdf>.
- Elkington, J. (2009). *Cannibals with forks*. New Society, Canada.
- Embrapa. (2018). *2030 Perspective: the future of Brazilian agriculture*. Embrapa Publisher, Brazil.
- Fernandes, J. L. B. & Linhares, H. C. (2017). *Analysis of the financial performance of ESG investments in emerging and developed countries*. https://bdm.unb.br/bitstream/10483/19501/1/2017_Helo%c3%adzadaC%c3%a2maraLinhares.pdf.
- Fiesp. (2018). *Federation of Industries of the State of São Paulo*. FIESP Outlook. Projections for Brazilian Agribusiness in 2025. FIESP, Brazil.
- Global Compact. (2004). *Who Cares Wins – Connecting financial markets to a changing world*. https://pt.scribd.com/fullscreen/16876740?access_key=key-16pe23pd759qalbnx2pv.

- Guimarães, Y. M., Eustachio, J. H. P. P., Leal Filho, V., Martinez, L. F., Valle, M. R. do & Caldana, A. C. F. (2022). Drivers and barriers in sustainable supply chains: The case of the Brazilian coffee industry. *Sustain. Prod. Consum.*, 34, 42–54.
- Hart, S. (2013). *Wealth in poverty*. Ideia Sustentável. <https://www.ideiasustentavel.com.br/wp-content/uploads/2014/01/Entrevista-Especial.pdf>.
- Ling, A. *et al.* (2007). *Global food & beverages: integrating ESG*. Goldman Sachs.
- MAPA. (2023). Ministry of Agriculture, Livestock and Food Supply. Brazil is the world's largest producer and second-largest consumer of coffee. <https://www.gov.br/agricultura/pt-br/assuntos/noticias/brasil-e-o-maior-produtor-mundial-e-o-segundo-maior-consumidor-de-cafe>.
- Neves, M. F. & Nogueira, J. G. A. (2015). *Strategies for Coffee Growing in Brazil*. Atlas, Brazil.
- OCB. (2023a). Organization of Brazilian Cooperatives. *Yearbook of Brazilian cooperatives*. <https://anuario.coop.br/brasil/numeros-do-cooperativismo-por-ramo>.
- OCB. (2023b). Organization of Brazilian Cooperatives. *Yearbook of Brazilian cooperatives*. <https://anuario.coop.br/ramos/agropecuaria>.
- OCB. (2023c). Organization of Brazilian Cooperatives. *Sustainability is the theme of International Cooperative Day 2023*. <http://ocbms.org.br/noticia/sustentabilidade-e-o-tema-do-dia-internacional-do-cooperativismo-2023/8377/>.
- Pinto, L. F. G. *et al.* (2014). Group certification supports an increase in the diversity of sustainable agriculture network-rainforest alliance-certified coffee producers in Brazil. *Ecological Economics*, 107, 59-64.
- Reinecke, J., Manning, S. & Von Hagen, O. (2012). The Emergence of a Standards Market: Multiplicity of Sustainability Standards in the Global Coffee Industry. *Organization Studies*, 33(5-6): 791-814.
- Reis, G. R. (2009). *Corporate use of Brazilian land and the new spatial dynamics: the circuit of coffee production and cooperation circles in southwest Minas Gerais*. Master's thesis. Universidade Estadual Paulista, Brazil.
- Romero, R. V. F. S. (2021). *The financial market's adherence to the SDGs through ESG practices: Santander Private Banking case study*. Undergraduate-thesis. Universidade Federal de Uberlândia, Brazil.
- Silva, J. F., Oliveira, M. B. P. P., & Alves, R. C. (2021). Coffee labeling and sustainability certifications: their meaning and importance for society. *CC&T Magazine*, 38(2), 19.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. <https://sdgs.un.org/2030agenda>.
- USDA. (2023). United States Department of Agriculture. *Graphical Query: Stats by Country*. <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home/statsByCountry>.