



Year VI, v.1 2026 | Submission: 02/03/2026 | Accepted: 04/03/2026 | Publication: 06/03/2026

ESG and Agribusiness: Pathways to a Sustainable Future

ESG and Agribusiness: Pathways to a Sustainable Future

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Summary

This article aims to present the pillars of sustainability, drawing on the history of international multilateral meetings dedicated to the study of the environment, seeking greater sustainability in the world. Next, it addresses ESG principles and their relationship to agribusiness. Finally, it discusses issues related to financing the agricultural sector and best practices respecting ESG principles, as well as the challenges and opportunities for agribusiness from an ESG perspective.

Keywords: Agribusiness; ESG; COP International Meetings; Challenges and Opportunities for Agriculture; Agriculture and ESG

Abstract

This article aims to present the pillars of sustainability, using the history of international multilateral meetings that were dedicated to the study of the environment, seeking greater sustainability in the world. Then, address ESG issues and their relationships with agribusiness. Finally, address issues related to financing the agribusiness sector and best practices respecting ESG requirements, as well as discussing the challenges and opportunities for agribusiness from an ESG perspective.

Keywords: Agribusiness; ESG; COP International Meetings; Challenges and Opportunities for agriculture; Agro and ESG

1. Introduction

The concept of ESG (*environmental, social and governance*) or ASG (environmental, social and (governance) has had a significant impact on how companies do business, being a fundamental guideline in the pursuit of sustainability and corporate responsibility. The first mention of the acronym ESG appeared in the report *Who Cares Wins : Connecting Financial Markets to a Changing World 2*, developed by the Global Compact in 2004, which gave greater importance to the project. The importance of environmental and social issues in the corporate sphere, beyond solely the pursuit of... profit.

In 2020, at the World Economic Forum in Davos, Switzerland, business leaders... to understand that it was necessary to pay attention not only to the interests of the shareholders. (*shareholders*), but to the interests of the people who are affected by and who affect the business, the called *stakeholders*.³

¹ The Who Cares Wins report, originating from the Global Compact, is not a regulatory instrument but a voluntary initiative that provides guidelines for promoting sustainable growth and citizenship through committed and innovative corporate leadership.

² ATCHABAHIAN, Ana Cláudia Ruy Cardia. ESG Theory and practice for true sustainability in business. São Paulo: Saraiva Educação SA, 2022, p.14

³ CRUZ, Augusto. Introduction to ESG: environment, social and corporate governance. São Paulo: Scortecci, 2022.



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From this perspective, in the same year, another significant event marked the global landscape of Investments, featuring Larry Fink, CEO of BlackRock. In a targeted communication.

To shareholders, Fink positioned sustainability as a paradigm shift in modern finance, recognizing its relevance in the corporate sphere and highlighting the management of Climate risks and the fight against poverty as a central component of companies' investment strategies.⁴

Along this path, in his 2022 letter, Larry Fink reinforces that in the global world... Interconnected, it is imperative for a company to generate value and be recognized by all its stakeholders. *stakeholders*, to ensure a sustainable return for their shareholders. Through an approach In effective *stakeholder capitalism*, capital is distributed efficiently, enabling... Companies achieve sustainable profits and, consequently, generate and preserve value over time.⁵

For this purpose, this three-dimensional model encourages organizations to incorporate Practices that respect the environment, promote social justice, and adopt transparent management. and ethics. Its importance has expanded significantly, transcending national borders, becoming an essential element in business strategies across various fields, including agribusiness.

Agribusiness, a vital sector for the global economy, faces unique challenges in relation to... Sustainability. Agricultural activity is commonly associated with environmental impacts. significant factors, such as deforestation, excessive water consumption, and greenhouse gas emissions. Contribute to the greenhouse effect. Social issues, such as decent working conditions and safety. Food, too, puts the sector in a delicate position in the search for sustainable alternatives. Furthermore, transparent and ethical management strengthens the trust of *stakeholders*, including investorseven end consumers, which is crucial in an economic landscape where corporate reputation is at stake. It has become a valuable asset.

In this vein, as agribusiness, throughout its entire chain, advances on its journey of With the integration of ESG principles, it becomes clear that this is not just a passing trend. but a necessary evolution within the sector. By embracing the challenges and transforming them into Opportunities: agribusiness can lead by example, demonstrating that it is possible to combine

[https://www.google.com.br/books/edition/Introdu%C3%A7%C3%A3o_ao_ESG_meio_ambiente_social/n4RfEAAAQBAJ?hl=pt-BR&gbpv=1&dq=Introdu%C3%A7%C3%A3o%20ao%20ESG%3A%20meio%20ambiente%2C%20social%20e%20governan%C3%A7a%20corporativa.%20\(2022\).%20\(np\)%3A%20Scortecci.&pg=PA1934&printsec=frontcover](https://www.google.com.br/books/edition/Introdu%C3%A7%C3%A3o_ao_ESG_meio_ambiente_social/n4RfEAAAQBAJ?hl=pt-BR&gbpv=1&dq=Introdu%C3%A7%C3%A3o%20ao%20ESG%3A%20meio%20ambiente%2C%20social%20e%20governan%C3%A7a%20corporativa.%20(2022).%20(np)%3A%20Scortecci.&pg=PA1934&printsec=frontcover)

⁴JUNIOR, Alberto Amaral. (The sources of international environmental law. In: ZAVANELLA, Fabiano, FELMINGO, Fabrício, MATTOS, Henrique Araújo Torreira de and SOUZA, Lucas Monteiro de (coord) Themes of International Law, Labor Law and International Labor Law: Studies in homage to Carlos Roberto Husek. São Paulo: LTr Editora, 2023. p. 30

⁵ [Larry Fink's Annual Letter to CEOs 2022 | BlackRock](#). Accessed on: April 6, 2024

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Productivity and profitability combined with care for the environment and social well-being, establishing foundations for a future in which agribusiness not only prospers economically, but also contributes in a way significant for building a more equitable society and a healthier planet for all future generations.

2. The three pillars of sustainability and the history of international meetings on sustainability.

2.1 The Three Pillars of Sustainability

The concept of the three pillars of sustainability was introduced in the late 1990s by John Elkington, in the publication of the book entitled *Cannibals with Forks: The Triple Bottom Line of 21st century business*. Elkington was looking for tools to measure sustainability, creating a framework for measuring company performance, known as the *Triple Bottom Line* (TBL) or tripod of sustainability.⁶

In this vein, companies must commit to focusing on three main aspects: social, environmental and economic. These three dimensions – often summarized as the 3 Ps: “*People, Planet and Profit*” or “people, planet and profit” encourage organizations to go beyond the traditional... seeking financial profit, while also considering the environmental impact of its operations and the well-being of its employees being part of the communities with which they interact.

From this perspective, the connection between the three pillars of sustainability and the concept of ESG is... Significant. ESG can be seen as an evolution or a more structured way of measuring the components of the *triple bottom line*, providing a more detailed and quantifiable *framework* for to assess how companies are performing in each of these areas.

It is pertinent to state that the integration of the three pillars of sustainability with the ESG *framework* ... It offers companies a comprehensive model for evaluating and improving their performance in crucial areas for sustainable development. By adopting a holistic approach that encompasses these three pillars, organizations not only contribute to a more sustainable world, but also... They position themselves more favorably in the eyes of investors, consumers, and other stakeholders. Interested parties who value sustainability and corporate responsibility.

2.2 History of international meetings on sustainability

The trajectory of international conferences dedicated to sustainable development and to Environmental issues highlight the importance of the three pillars of sustainability: environmental, social, and economic. Such world meetings have played a decisive role in defining objectives, common ideals, policy formulation, and fostering joint efforts toward shared goals.

⁶ ALVES, Ricardo Ribeiro. ESG: The present and the future of companies. Petrópolis/RJ: Editora Vozes, 2023.

<https://www.google.com.br/books/edition/ESG/4u7EEAAQBAJ?hl=pt-BR&gbpv=1&pg=PT34&printsec=frontcover>



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sustainable. Next, we will explore how certain international conferences influenced each of the aspects of the sustainability tripod.

2.2.1 Stockholm Declaration

The United Nations' Stockholm Declaration of 1972 became known as the first major international event with the scope of discussing environmental issues. Later, in 1987, the United Nations resumed the debate on environmental issues, where the Norwegian Minister Gro Harlem Brundtland, chairing the World Commission on the Environment and Development published the *Brundtland Report*, called *Our Common Future*, which coined the concept of sustainable development: Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs .

According to Rafaela Aiex Parra's diction, in some sections of the Report it is possible to envision the need for integration between environmental, social, and economic solutions, striving for better solutions to poverty and inequality, and beginning to see potential. Productive development, with its equitable distribution of wealth and environmental justice, is the path to development. sustainable.¹⁰

2.2.2 ECO 92

The United Nations Conference on Environment and Development, more known as ECO 92 or Earth Summit, held in Rio de Janeiro in 1992, represented the first event that established tangible goals for signatory countries, considered a milestone. This was an unprecedented event for the global discussion on sustainability, bringing together delegations from 172 countries.¹¹ The central purpose of the discussion was the development of a model for economic growth that would align with the preservation of ecological balance. Throughout the event, the expression "Sustainable development" has gained prominence and recognition, contributing to the dissemination and A broader understanding of this concept globally.

Among the main results, a comprehensive action plan was drawn up aimed at... To promote sustainable development in the 21st century, as outlined in Agenda 21. This document

⁷ LAGO, André Aranha Corrêa do. Stockholm, Rio, Johannesburg: Brazil and the three United Nations environmental conferences. Brazil, Instituto Rio Branco (IRBr), 2007, p. 32

⁸ PARRA, Rafael Aiex. Agribusiness, Sustainability and the 2030 Agenda: The Relationship Between Green Economy, Forest Code and Judiciary. Londrina/PR: Thoth Publishing House, 2020. p. 45

⁹ OUR COMMON FUTURE. (1991). Getúlio Vargas Foundation Publisher, Rio de Janeiro, RJ. P. 46

¹⁰ PARRA, Rafael Aiex. Agribusiness, Sustainability and the 2030 Agenda: The relationship between green economy, forest code and judiciary. Londrina/PR: Editora Thoth, 2020. P 45

¹¹ LAGO, André Aranha Corrêa do. Stockholm, Rio, Johannesburg: Brazil and the three United Nations environmental conferences. Brazil, Rio Institute Branco (IRBr), 2006, p. 52.

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It outlined a series of goals designed to prepare global society to face the challenges.

imminent challenges of the future. It covered a range of critical issues, including combating poverty, reducing excessive consumption patterns, protecting against the destruction of the ozone layer, tackling deforestation, mitigating ocean pollution, and properly managing waste disposal. toxic substances, among other fundamental aspects.

2.2.3 Kyoto Agreement

The Kyoto Protocol, formally established during the Third Conference of the Parties (COP3) of the United Nations Framework Convention on Climate Change (UNFCCC) on 11 December 1997, in Kyoto, Japan, marked a turning point in the international fight against climate change. For the first time, this agreement introduced quantitative and mandatory measures to reduce greenhouse gas (GHG) emissions are directed towards developed countries, based on the principle of "common but differentiated responsibilities".¹²

Thus, the Kyoto Protocol established variable emission reduction targets for the signatory countries, thus recognizing the different capacities of countries to contribute to the The fight against climate change. While the European Union has committed to a reduction of With an 8% reduction in its emissions, the United States, despite having signed the protocol, has not ratified it. theoretically committing to a 7% reduction, and Japan to 6%. To facilitate the To meet these goals, the protocol introduced flexible market mechanisms, such as... Emissions Trading, Joint Implementation (JI), and the Clean Development Mechanism (CDM), which allowed the trading of carbon credits and encouraged investment in emission reduction projects, both in developed and developing countries.¹³

This international agreement represented a milestone in global climate governance. establishing a precedent for coordinated action against climate change and paving the way a path to future negotiations and agreements, such as the 2015 Paris Agreement. Despite its limitations, such as the non-participation of the United States and challenges in engaging developing countries, The Kyoto Protocol played an essential role in promoting policies and regulations. national climate initiatives, raising awareness about the importance of mitigating emissions of Reducing greenhouse gases and encouraging the development of clean and renewable technologies. His legacy.

¹² BRAMANTE, Ivani Contini, CARLOTO, Selma, BRAMANTE, Simone. ESG+i: Environmental, Social and Corporate Governance. São Paulo: LTr Editora, 2023. P. 61

¹³ SOUZA, SLVB. Carbon Credits within the Scope of the Kyoto Protocol. Curitiba: Appris Publishing House, 2023.

https://www.google.com.br/books/edition/Os_Cr%C3%A9ditos_de_Carbono_no_%C3%82mbito_do_Pr/1739DwAAQBAJ?hl=pt-BR&gbpv=1&dq=Os%20Cr%C3%A9ditos%20de%20Carbono%20no%20%C3%82mbito%20do%20Protocolo%20de%20Kyoto.&pg=PT14&printsec=frontcover

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This is seen in the significant contribution to the structure of international climate governance that it continues to evolve today.

2.2.4 Paris Agreement

The Paris Agreement, adopted on December 12, 2015 during COP21 in Paris, France, This represents a historic milestone in the global fight against climate change. This agreement, which entered into force... Effective November 4, 2016, it marks a significant shift in the global approach to mitigate climate change, with a renewed focus on limiting the temperature increase. global and in adapting to climate impacts, involving a wide range of actors, including countries from all economic spheres and sectors of society.

The pact approved the 2030 Agenda for Sustainable Development, which, among the 17 Established goals, Sustainable Development Goals (SDGs), number 13 deals with... actions against global climate change. Furthermore, the Paris Agreement establishes ambitious goals for combating climate change, focusing primarily on limiting the increase in global temperature, aiming to keep this increase well below 2°C above pre-industrial levels, with efforts to restrict it to 1.5°C, seeking to prevent drastic consequences such as events Extreme weather events, biodiversity loss, and rising sea levels. This goal is fundamental. to mitigate the most severe effects of climate change and ensure a safer and more secure future Sustainable for the planet. ¹⁴

In addition to limiting global warming, the Paris Agreement emphasizes the importance of to increase the capacity of countries to adapt to the adverse impacts of climate change, promoting resilience and sustainable development with low greenhouse gas emissions greenhouses, without compromising food production. To achieve these goals, the agreement also highlights the need to align financial flows with low-risk development trajectories. Carbon and climate resilience, involving both public and private financial support, is essential for the global transition to sustainable, low-carbon economies.¹⁵

2.2.5 Conferences of the Parties (COPs)

The Conferences of the Parties (COPs), held under the auspices of the Framework Convention on Human Rights, The United Nations Framework Convention on Climate Change (UNFCCC) constitutes the main international forum for

¹⁴ [Paris Agreement.pdf \(un.org\)](#). Accessed on April 27, 2024.

¹⁵ NUNES, Matheus Simões. Brazil in the Paris Agreement on Climate Change: Energy • Decoloniality • Degrowth. São Paulo: Editora Dialectics, 2022.

https://www.google.com.br/books/edition/O_Brasil_no_Acordo_de_Paris_sobre_mudan/vdhpEAAAQBAJ?hl=pt-BR&gbpv=1&dq=O%20Brasil%20no%20Acordo%20de%20Paris%20sobre%20mudan%C3%A7as%20clim%C3%A1ticas%3A%20Energia%20E2%80%A2%20Decoloniality%20E2%80%A2%20Decrescimento&pg=PT22&printsec=frontcover



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negotiations dedicated to addressing the issues of global climate change. Since its Inaugurated in 1995 with COP1 in Berlin, these conferences have developed remarkably. in terms of scope and complexity. This progress reflects increased recognition. global awareness of the urgent need for action in the face of the climate emergency.

The Conferences of the Parties (COPs) are crucial for defining global goals for combating climate change, with particular emphasis on the Paris Agreement, and on mobilizing resources. financial, exemplified by the creation of the Green Climate Fund. These meetings also have expanded participation beyond states, including cities, regions, and the private sector, in global climate agenda. However, they face the challenge of raising the ambition of the Contributions. Nationally Determined Contributions (NDCs) to limit global warming to 1.5°C, ensure Effective implementation of the Paris Agreement, ensuring adequate climate finance for countries. in development and promote climate justice, balancing the needs of different countries. developed and under development.

For your information, the 28th Conference of the Parties (COP28) took place in 2023. held in Dubai, which stood out for its innovative approach to conferences. previous ones. COP 28 marked a significant turning point by including the food sector in the global discussions.

In this context, COP28 emphasized the urgent need to change the way production and food consumption, aiming to reduce deforestation and greenhouse gas emissions. greenhouse. In addition, it launched the promotion of sustainable agricultural practices and food systems. robust as a crucial component of global efforts to combat climate change.¹⁶

During the conference, important milestones were established, such as the beginning of the end of the era. fossil fuels and the inclusion of food in the Global Balance Sheet of the Paris Agreement, in addition to Signing of the Emirates Declaration on Sustainable Agriculture by 159 countries, committing to integrate food and food systems into their National Contributions Determined (NDCs) until 2025.

Among the proposed initiatives, the global roadmap launched by the FAO (*Food and Agriculture Organization of the United Nations*) stands out. (*Agriculture Organization*), United Nations Food and Agriculture Organization, Aiming to promote sustainable food systems, the Pasture Conversion Program Degraded areas implemented by Brazil and the creation of the Alliance of Leaders for the Transformation of Food Systems. These commitments, aligned with the financial commitments made for driving the transition towards more sustainable food systems indicates a shift transformative in the sector.

¹⁶ [COP 28: What was achieved and what happens next? | UNFCCC](#). Accessed on April 22, 2024.



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In Brazil and in agribusiness specifically, international commitments and COP 28

These ideas resonated within the Ecological Transformation Plan, as part of the Acceleration Program.

Growth (PAC) launched on April 11, 2024¹⁷, which has six axes: (i) finance

sustainable; (ii) technological densification; (iii) bioeconomy; (iv) energy transition; (v) circular economy; and (vi) infrastructure and climate adaptation.¹⁸

This report summarizes the main topics of the green package, analyzing the initiatives of each axis, its potential benefits for sectors and companies, as well as the risks involved. Among the

These measures include a regulated carbon market and the creation of technological innovation hubs in universities, the expansion of forest concession areas, the electrification of bus fleets, the

Promoting recycling and public works to reduce the risk of natural disasters.

Through this directive, the Ministry of Finance released a survey.

detailing each of the actions in the six areas and the current status of each measure. Some have already been implemented.

They materialized, as the first issuance of green bonds in the international market (Bonds

Sustainable Sovereigns), raising US\$2 billion in the international market directed towards

environmental projects, such as supporting the Climate Fund, or promoting actions in the social area,

such as initiatives to combat poverty; others are under discussion in the National Congress, such as

Selective taxation within the tax reform and the creation of the Regulated Carbon Market.

In this sense, it is important to highlight that agribusiness is at the heart of these...

transformations, with the responsibility for the effective implementation of these commitments and the

integrating sustainable practices into food systems on a global scale, aiming to

tackling the climate crisis.

3 The three pillars of ESG in agribusiness: From applicability to the sector

The fundamental importance of agribusiness to the country's economic progress is undeniable.

which increases the emphasis on environmental, social, and governance practices. In this context, the

Adopting ESG practices in agribusiness not only contributes to environmental sustainability but also...

It promotes social well-being, but also opens new markets and ensures the sector's sustainability. From this perspective,

This chapter aims to provide an in-depth analysis of the three pillars of ESG as applied to...

agribusiness.

3.1 Environmental Pillar

The environmental aspect in agribusiness encompasses a range of practices and strategies.

¹⁷ [Federal Government launches New PAC and Ecological Transition Plan — Ministry of Environment and Climate Change \(www.gov.br\)](https://www.gov.br/ambiente-e-clima/pt-br/assuntos/planos-e-projetos/planos/planos-ecologicos/planos-ecologicos-2024). Accessed on 04/21/2024

¹⁸ [Brazilian sustainable taxonomy.pdf \(www.gov.br\)](https://www.gov.br/ambiente-e-clima/pt-br/assuntos/planos-e-projetos/planos-ecologicos/planos-ecologicos-2024) Accessed on 21.04.24



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carefully designed with the aim of minimizing the negative impact of agricultural activities.

in the environment, while simultaneously promoting sustainability. This is achieved through

from a series of initiatives, including pollution reduction, effective waste and effluent management,

promoting reductions in greenhouse gas (GHG) emissions, conserving natural resources, using water prudently, and

improving energy efficiency.¹⁹ The implementation of methods

Sustainable development is vital to overcoming environmental obstacles, ensuring continuity and...

long-term prosperity of the sector.

Among sustainable practices in agribusiness, precision agriculture stands out.

A significant transformation in resource management in agricultural production, incorporating technologies.

advanced geographic information systems. These tools enable farmers

Monitoring and adjusting the use of agricultural inputs in real time enables more effective application of water,

fertilizers, and pesticides.²⁰ This precision not only improves efficiency and

productivity on rural properties, but it also contributes to reducing operational costs and

environmental impacts, minimizing resource waste and promoting more sustainable agricultural practices.²¹

On the other hand, there are also projects that encourage the implementation of technologies.

productive low-carbon emission systems, especially integrated crop-livestock systems

Integrated Crop-Livestock-Forestry Systems (ILPF), Agroforestry Systems (SAFs), and the Recovery of Degraded Pastures (RPD).

Agroforestry systems (AFS) integrate forest species and agricultural crops and, occasionally, animals in a...

same system, mimicking natural ecosystems and offering benefits such as improved infrastructure.

soil improvement, increased biodiversity and carbon sequestration, as well as providing income diversification for

farmers.²²

In this context, Integrated Crop-Livestock-Forestry Systems (ICLFS) are a production strategy.

which has been gaining prominence in the Brazilian agricultural landscape in recent years. This approach

Innovation consists of combining different production systems, encompassing activities.

agricultural, livestock, and forestry activities within the same area. The main objective of this system

Integrated management aims to optimize land use, raising productivity levels within the same area.

using inputs more efficiently, diversifying production, generating more income and

¹⁹ PARRA, Rafaela Aiex and MAESTRI, Loris El Hadi. ESG in Agribusiness and the Leading Role of Green Bonds and the Carbon Market as a Response. to Cine Verde. In: PARRA, Rafaela Aiex (Organizer). LAW APPLIED TO AGRIBUSINESS. 3rd ed. Londrina/PR: Thoth, 2022, p. 486

²⁰ COSTA, Aron Vitor Fraiz. Economic Analysis of Precision Agriculture (PA): The Role of Institutions in the Development of Agribusiness Brazilian. Londrina: Thoth Publishing House, 2023. p. 71

²¹ Precision Agriculture (PA) for the sustainability of the Brazilian agricultural, livestock and forestry production system - Embrapa Portal. Accessed on April 4, 2024.

²² Agroforestry systems - Embrapa Portal Accessed on 03/27/2024



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Job opportunities. It is an alternative for small, medium and large rural properties.²³

In this context, with the increasing adoption of ILPF (Integrated Crop-Livestock-Forestry Systems) in Brazil, the potential of this system becomes evident. strategy to promote more efficient, profitable and sustainable agriculture, contributing to the Developing Brazilian agribusiness in a balanced and responsible way.

Indeed, the recovery of degraded soils through practices such as crop rotation Direct planting and other methods are also important ways to revitalize unproductive land, contributing to... The conservation of biodiversity and ecosystem services.

Agroforestry systems (SAFs), integrated crop-livestock-forestry systems (ILPFs), and strategies for the recovery of degraded areas represent... Key approaches to promoting sustainability in agribusiness.

Additionally, environmental certifications and labels validate the commitment to best practices. sustainable agriculture, offering consumers more conscious choices and minimizing negative impacts on the environment, in addition to allowing greater traceability of the agro-industrial chain by the *stakeholders* themselves (producers, suppliers and end consumers).²⁴

Regarding production traceability, it is crucial to highlight its critical importance in guaranteeing transparency and effectiveness in management, which, in turn, contributes significantly to the Increased competitiveness in the global market. This aspect becomes even more relevant in light of... increasing demands from consumers and investors, who require high standards of quality and sustainability in the products they choose to support and finance.

In this context, the adoption of ESG criteria in agribusiness should be integrated into all... phases of the agro-industrial chain, including activities related to the production and distribution of inputs, as well as the production, storage and processing phases of agricultural products, being, Therefore, coordinated action among all agents involved in agribusiness is essential in order to to ensure respect for environmental legislation and innovative practices aimed at minimizing impacts. negative aspects and promote sustainability.

3.2 Social Pillar

The social aspect in the agricultural sector encompasses a diverse set of practices. and approaches aimed at improving the quality of life and well-being of people and communities impacted by agricultural operations. This component is essential to ensure growth. The economic benefits generated by agribusiness should be equitable and not contribute to the deepening of social injustices or disparities.

With regard to human and labor rights, companies operating in agribusiness have the

²³ [Integrated Crop-Livestock-Forestry Systems - Embrapa Portal](#). Accessed on April 21, 2024.

²⁴ PARRA, Rafaela Aiex and MAESTRI, Loris El Hadi. ESG in Agribusiness and the Leading Role of Green Bonds and the Carbon Market as a Response. to Cine Verde. In: PARRA, Rafaela Aiex (Organizer). LAW APPLIED TO AGRIBUSINESS. 3rd ed. Londrina/PR: Thoth, 2022, p. 484



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responsibility to ensure safe and healthy work environments, promote equality of

To provide opportunities without discrimination based on gender, race, or origin, and to combat child and forced labor.

The implementation of rigorous health and safety policies, along with the promotion of

Fair hiring practices are fundamental to ensuring the protection of workers' rights.

workers and promote an ethical and legal work environment.

The adoption of these practices and policies by agribusiness companies is essential not

not only for compliance with legal and ethical obligations, but also for building a chain

of sustainable value. This contributes to improved worker satisfaction and productivity.

It strengthens relationships with communities and enhances the company's reputation and competitiveness.

in the global context, highlighting the importance of sustainable and responsible commitments in the sector.

agricultural.

3.3 Governance Pillar

Corporate governance is a topic that has been gaining increasing relevance in

various sectors of society, especially in companies. However, to understand the scope of

Governance, initially, requires understanding its concept. Consequently, one can define

Corporate governance as a system by which companies and other organizations are managed.

monitored and encouraged, involving the relationships between partners, board of directors, management,

supervisory and control bodies, and other stakeholders.²⁵

Therefore, corporate governance is the entire process of managing and monitoring this management.

considering the principles of corporate responsibility (fiscal, social, labor, community,

environmental, societal), interacting with the environment and *stakeholders*, in pursuit of long-lasting

sustainability.²⁶

It is well known that the social and environmental responsibility of companies requires policies of

Sustainable development, increasing productivity without adding more damage to the environment.

environment and social actions that retain qualified professionals to support growth and

Business efficiency, organizational climate, diversity, and inclusion. Therefore, as a decisive point.

In order to achieve socio-environmental objectives, governance plays a leading role, because

It will be the guiding rudder, directing and overseeing socio-environmental practices.

In this regard, actions related to a company's sustainability are necessary for its success.

Effective implementation requires governance (*compliance* and process regulation), or

In other words, the existence of governance bodies or even monitored working groups

by the Board of Directors for discussion of sustainability strategies and their

²⁵ [governanca19_prova05.indd \(egov.df.gov.br\)](#) Accessed on 22.04.24

²⁶ GONZALEZ, Roberto Sousa. Corporate Governance. The transformative power of companies. São Paulo: Trevisan, 2012, p. 10.



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Implementation. The same applies to social actions linked to the company.

It is worth highlighting that, in addition to the importance of governance bodies for best practices, there are... The need for external recognition of the governance applied. At this point, so-called capitalism of *stakeholders* (*stakeholder capitalism*), which mobilizes all actors involved in decision-making processes and business activity, such as Consumers, investors, civil society—it reflects a new form of global economic relationship.

In this regard, *stakeholders* closely monitor compliance with ESG criteria. demanding ethical and transparent behavior from companies that preserves the environment and respects uphold human rights and collaborate to reduce negative impacts on society.

Therefore, the economic growth of companies must be linked to business practices. transparent, ethical and socially connected, producing a trustworthy business environment, forming a healthy business environment (IBCG, 2017).

4. Financing Best Practices in Agribusiness

Financing in agribusiness is essential to leverage sustainable practices. In essence, sector financing plays a key role, developing solutions that not only They facilitate the transition to more sustainable production methods, but also bring viability to the rural producers.

In agribusiness, it stands out as one of the most revolutionary sectors, both in terms of technological advancements and the approaches adopted for its financing. This is a misconception. to consider this vital economic sector as trapped in obsolete methods, a legacy of the past. colonial Brazil, and limit it solely to farming and animal husbandry activities. This view It ignores the vast and complex structure that defines it, which ranges from the production of inputs, passing through through agriculture, agro-industry, distribution, storage, logistics, and marketing in national and international scope. It also includes commodities and futures markets, in addition to specialized financing mechanisms, structured through specific public policies.²⁷

Among the most promising financing mechanisms are loans. carbon, green investment funds, low-interest loans for projects Sustainable, and *green bonds*. Each of these instruments has its own characteristics. Unique features that make them suitable for different types of projects and funding needs. within agribusiness.

Green bonds and *Sustainability-linked Bonds* (SLBs) represent significant advances. in directing financial resources towards projects with positive environmental and social impacts,

²⁷ BURANELLO, Renato Macedo. Private financing system for agribusiness. São Paulo: Quartier Latin, 2009, p. 40.



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reflecting a growing commitment to the ESG agenda in the corporate world. While the Greens Bonds finance specific projects that promote sustainability, while SLBs link costs from company financing to achieving specific ESG targets, with financial penalties applicable if such targets are not met. This "step-up" mechanism in the interest rate serves as a powerful incentive for companies to improve their ESG performance.

In the specific context of agribusiness, Law No. 13.986/2020 introduced the Product Certificate Rural Green (CPR-V), an innovation aimed at financing the conservation of native vegetation in rural properties. Unlike traditional green bonds, the CPR-V is a bond that formalizes an agreement for the commercialization of environmental services, offering a way to reconcile agricultural activity with the reduction of environmental impacts. This title represents a promise of future delivery of environmental services, becoming a tradable asset for companies interested in investing in environmental preservation or in voluntary carbon offsetting.

These financial innovations, such as Green Bonds, SLBs, and CPR-V, not only provide the necessary means to advance the ESG agenda and environmental sustainability, but also they represent a paradigm shift in corporate finance and agribusiness, highlighting the vital importance of the financial sector in promoting a more sustainable future.

It is also important to highlight the relationship between ESG and tax incentives, as is the case in the renewable energy sector. Tax incentives are an important factor when linked to success in companies' compliance with the ESG agenda. In a survey released by PwC (*Tax ESG*) More than 80% of participants consider tax incentives relevant or very relevant for the implementation of ESG practices in its sector of activity, stating that these incentives could contribute to preserving the environment and promoting access to rights, goods and services for various segments of society.²⁸

Therefore, the importance of funding and incentives for maintenance is evident and promoting sustainability in agribusiness. These financial mechanisms are essential for rural producers and agricultural companies have the resources needed to invest in clean technologies. Environmental conservation and efficiency in the use of natural resources. Therefore, innovation Financial support, coupled with government assistance through tax incentives, constitutes a... A fundamental strategy to ensure the sustainable development of agribusiness.

²⁸ [Tax ESG \(pwc.com.br\)](https://www.pwc.com.br). Accessed on April 7, 2024.



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5 Challenges and opportunities for agribusiness from an ESG perspective.

The agricultural sector represents a backbone for the economy, projecting itself with a robust expectation of progress in the coming decades and assuming a position of relevance in global stage due to its impressive production capacity.

Brazil has the capacity to produce enough food to feed seven times its population, guaranteeing the planet's food security, with Brazilian exports in 2023...

Agribusiness exports reached US\$166.55 billion, representing 49% of the export agenda.²⁹ Important It is worth mentioning that all this production occurs while maintaining 66.3% of its territory covered by native forests.³⁰ This fact underscores the immense potential of the country to continue being recognized as an agro-environmental nation.

It is crucial to reiterate that, in order to strengthen international competitiveness, it is essential... to persist in studies and research focused on sustainability, productivity, and technological innovation. since financing the sector will also require an ongoing commitment to preservation.

environmental.³¹

Therefore, there are some challenges faced in implementing the ESG Agenda by The first would be regarding the applicability of ESG criteria in the face of numerous companies. indicators. To delve into the topic, it is necessary to understand that in recent decades, the The growing concern with sustainability and corporate responsibility has driven the Development of methodologies and standards for the preparation of sustainability reports. These These tools aim to help companies communicate their performance more consistently. comparable and transparent, providing relevant information to investors, *stakeholders* and the society in general. Among the main methodologies and standards used globally for the Regarding the dissemination of information related to sustainability, examples include: (i) Global Reporting Initiative (GRI); (ii) Task Force on Climate-related Financial Disclosures (TCFD); (iii) Carbon Disclosure Project (CDP); and International Sustainability Standards Board (ISSB).

The Global Reporting Initiative (GRI) is one of the most globally recognized methodologies. for sustainability reporting. Created in the late 1990s, the GRI provides a set of comprehensive set of indicators and standards for voluntary reporting, allowing companies communicate their performance in a consistent and comparable manner. Over the years, the The methodology has undergone significant updates, incorporating important topics such as

²⁹ [Brazilian agribusiness exports closed 2023 with US\\$166.55 billion in sales — Agência Gov \(ebc.com.br\)](#). Accessed on April 7, 2024.

³⁰ BURANELLO, Renato Macedo. **Rural product certificate**: agricultural markets and production financing. Londrina, PR: Thoth, 2021, p. 18

³¹ BURANELLO, Renato Macedo. **Rural product certificate**: agricultural markets and production financing. Londrina, PR: Thoth, 2021, p. 18



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biodiversity and delving into aspects relevant to corporate governance.

As of 2015, the Task Force on Climate-related Financial Disclosures (TCFD) developed recommendations to assist companies in disclosing financial information related to climate. The main objective is to report potential financial risks to investors associated with climate change, allowing for a more accurate and transparent assessment. Currently, the TCFD falls under the umbrella of the International Financial Reporting Standards (IFRS), reinforcing its relevance on the global stage.

The Carbon Disclosure Project (CDP), created in the early 2000s, is a methodology internationally recognized for sustainability reporting, with a specific focus on dissemination of information related to carbon emissions and change management climate. In addition, the methodology covers aspects related to water security, Deforestation and social and governance issues.

Finally, the International Sustainability Standards Board (ISSB), created within the framework of COP26 According to IFRS, it has stood out as an initiative for the global standardization of disclosure of Financial (accounting) and non-financial (ESG aspects) reporting. In 2022, IFRS and GRI They signed a collaboration agreement aimed at harmonizing methodologies and creating a baseline global for the disclosure of data on corporate sustainability. In 2023, the following were launched. First sustainability standards - IFRS S1 (general requirements for disclosure of information) financial disclosures related to sustainability) and IFRS S2 (climate-related disclosures).

It is important to emphasize that sustainability reports should reflect the actions. Priorities adopted by companies to control and mitigate their impacts. For this, it is necessary a structured project that demonstrates the initiatives resulting from mapping the materiality of The organization and its public commitments to reduce its externalities. However, the absence The absence of a single, globally eligible ESG criterion for companies or a single certification makes it difficult for... consumers and investors can identify which companies effectively meet the requirements of sustainability.

It is important to highlight that the diversification of patterns and the lack of a uniform metric represent significant obstacles to validating the genuine commitment of corporations to Sustainability, providing fertile ground for *greenwashing*. This practice, which consists of False or exaggerated environmental claims seriously threaten to undermine the confidence of *stakeholders* and compromise the essence of the ESG agenda. In view of this, the creation and Adoption of clear, transparent, and universally recognized sustainability standards. Only. Through this approach, it will be possible to overcome current challenges and ensure integrity and success. of sustainability efforts, not only in agribusiness, but in all spheres of activity. corporate.



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Another relevant point concerns compliance with international requirements, which range from This aligns with Brazilian environmental legislation. A concrete example is the Regulation for Products Free from Deforestation, known as *the European Union Deforestation-Free Regulation (EUDR)*, Edited by the European Union (EU) on May 31, 2023.

The EUDR aims to prohibit the import and trade of certain commodities originating from areas deforested areas after December 31, 2020, regardless of whether the deforestation was legal. This The regulation directly affects Brazilian agribusiness, given that the EU is a trading partner. significant for Brazil, especially for products such as cattle, coffee, soybeans, cocoa, and palm oil, wood, among others. The requirements will be enforced starting December 30, 2024. This gives producers a short timeframe to adapt.

The adoption of monitoring and traceability systems for the production chain will represent... an important step in this direction, especially in the soybean and cattle production chains, and in other *commodities*, such as coffee.

Currently, Brazil has a history of animal health traceability, with systems in place. such as Sisbov (Brazilian System for Identification and Certification of Bovine and Buffalo Origin) and the GTA (Electronic Animal Transit Guide) issued by the Agricultural Management Platform (PGA) from the Ministry of Agriculture and Livestock (Mapa). The Soy Moratorium, a voluntary pact of Zero deforestation for soy production in the Amazon biome, in which the signatory companies do not... They trade, acquire, or finance soy originating from deforested areas in the Amazon biome, after July 2008 also reflects this movement towards more sustainable production. However, the country still lacks a unified national monitoring and traceability system. and the implementation of these practices throughout the production chain faces challenges, especially in in terms of costs and short-term viability, which may disproportionately impact small businesses. producers.³²

It is important to emphasize that Brazil positions itself as a pioneering agro-environmental nation. standing out for its advanced legislation in terms of sustainability and conservation, being a One of the few countries with a defined legal reserve, an important conservation tool. environmental protection as foreseen by the Brazilian Forest Code (Law 12.651/2012), acting as a mechanism for the maintenance of biodiversity and ecosystem services.

Even with a history of significant efforts in environmental preservation and in Implementing sustainable practices is essential for international competitiveness and requires a commitment. Continuing with sustainability, productivity, and the incorporation of digital technologies, it emphasizes... The complexity of the global dynamics in which Brazil is embedded, especially in the agricultural sector.

³² Brazilian Environmental Policies and the New European Union Regulation for Deforestation-Free Products: Opportunities and Challenges - CPI (climatepolicyinitiative.org). Accessed on April 7, 2024 .

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The need to move forward with these initiatives remains paramount, given the constant pressure. international. This pressure manifests itself not only in terms of environmental demands, but also through economic and trade barriers, as demonstrated, among other things, by recent regulations imposed by the European Union. Such measures reflect a global trend of The importance of sustainability, which transcends environmental boundaries and intertwines with other issues. economic factors are requiring Brazil to continuously adapt to new market demands. International.

Thus, the intersection between technological advancement, sustainability, and development Economic issues emerge as a vital field for ensuring not only the preservation of the environment, but also the maintenance and expansion of the Brazilian presence in global markets.

6 Conclusion

Brazil plays a crucial role in the international context of sustainability. especially with regard to agribusiness and environmental preservation. As one of the largest As the world's food producers and exporters, the country has a responsibility to lead the transition. for more sustainable and low-carbon food systems.

In view of this, the Ecological Transformation Plan, launched as part of the Program of The Growth Acceleration Program (PAC) demonstrates Brazil's commitment to aligning its efforts. with the goals established at COP28 and the Paris Agreement. By structuring the plan around six axes comprehensive, the Brazilian government recognizes the need for a systemic approach to To address the challenges of climate change and promote sustainable development.

Clearly, Brazil's active participation in global discussions and initiatives reinforces their leadership role in the search for innovative and collaborative solutions. Furthermore, the Implementation of concrete measures, such as the issuance of green bonds and the creation of a market. regulated carbon emissions demonstrate the country's determination to mobilize financial resources and to establish effective mechanisms for ecological transition.

However, Brazil also faces significant challenges in meeting the targets. ESG, including execution risks, operational difficulties, and potential political resistance. For To overcome these obstacles, it is essential to have an open and transparent dialogue with society. civil society, the private sector, and the international community, seeking strategic partnerships and sharing Experiences and best practices.

Ultimately, the success of Brazil and agribusiness in promoting sustainability and fulfilling its international commitments will have a significant global impact. to inspire through actions and demonstrate the viability of a sustainable development model and



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Inclusive, the country can inspire other nations to follow the same path, contributing to the

Building a more resilient and prosperous future for all.

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