ISSN 1980-0827 – Volume 19, Number 4, Year 2023

# Integration of the Sustainable Development Goals in the sustainability management of the orange juice sector in Brazil

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ISSN 1980-0827 – Volume 19, Number 4, Year 2023

#### ABSTRACT

The current economic model has led natural resources to exhaustion and, with this, the pressure from customers and other stakeholders for companies to act in a more sustainable way grows. In order to meet this demand and seeing the potential benefits arising from the adoption of sustainable practices, such as greater proximity to their stakeholders and greater stability in times of crisis, some sectors begin to show engagement in the theme. Therefore, over the last decades, some concepts that aim to bring the corporate world closer to sustainable practices have been presented and have undergone evolutions. The orange juice sector in Brazil, an area in which the country is a global spotlight, presents engagement on the subject? In view of the above, the objective of the research was to verify how the largest companies in the orange juice sector adhere to the United Nations Sustainable Development Goals (SDGs), as stated in the 2030 Agenda. The methodology used is characterized as qualitative, bibliographical, descriptive and documental. The results show that the largest companies in the sector have made efforts to promote the integration of the Sustainable Development Goals (SDGs) in business management, however, this process occurs at different paces.

**KEYWORDS:** SDGs. Sustainable Management. Orange Juice.

#### **1 INTRODUCTION**

Brazilian and world society is attentive and concerned about the threats presented by the devastation of the environment, climate change, poverty and pollution, among other things, which put at risk the survival of the human species on the planet (BARCELOS, 2019). Given the above, Veiga (2015) argues that people seem to be aware that development must be compatible with the preservation of nature.

Faced with this reality, many companies invest in a sustainable and socially responsible culture (BARAIBAR-DIEZ; SOTORRIO, 2018). Society expects from the productive sector a commitment to a sustainable mode of production (FIGGE; HAHN, 2021). This leads to the efforts of companies to contribute to a more sustainable world, socially and environmentally (BARROS; GUERRAZZI, 2016).

For Elkington (2012) corporate sustainability presupposes harmony between the financial, environmental and social dimensions. It is up to companies to reconcile these dimensions, with the purpose of contributing to a fairer world, because there is no possibility to thrive in an environment with growing hunger and poverty, increased inequalities and opportunities, climate change and destruction of the planet. Effectively, the productive sector can contribute to the socio-environmental transformation of the planet.

Sartori, Latrônico and Campos (2014) state that there is a growing concern with sustainability, resulting in the fact that the productive sector has applied strategies, such as clean production, pollution control, environmental management, social responsibility, among others, to intentionally contribute to sustainable development.

Despite this evolution, Moçato et al. (2019) demonstrate that the real promotion of sustainability will only be possible when organizations decide to incorporate the concept of sustainability into organizational strategies in order to achieve the best sustainable mode of production.

As the main model element of business practices guiding sustainability in the twentyfirst century, the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) (ALMEIDA FILHO; LAUAR 2021), were promulgated by 193 member states of the United Nations, including Brazil.



Given the above, the guiding questions of the research are: do the largest Brazilian companies in the orange juice sector demonstrate, through practical actions, adherence to the Sustainable Development Goals (SDGs)? What is the degree of adherence to the SDGs? Do Brazilian companies in the orange juice sector make explicit their commitment to a socially and environmentally fairer world?

The objective of the research was to verify how the largest companies in the orange juice sector adhere to the United Nations Sustainable Development Goals (SDGs), as stated in the 2030 Agenda.

### **2 LITERATURE REVIEW**

### 2.1 Sustainable development and sustainability

The word sustainability can be defined as the quality or condition of what is sustainable and the system model that has conditions to maintain or conserve (OLIVEIRA et al., 2017). Therefore, for an activity to be considered sustainable it is necessary that it can exist forever. A sustainable society is one that applies this concept to its natural resources, exploiting them in a sustainable way (MIKHAILOVA, 2004).

According to the definition presented by the World Commission on Environment and Development (WCED, 1987, S.P.) sustainable development is "[...] one that meets the needs of the present without compromising the ability of future generations to meet their own needs." Thus, it is clear that changes need to occur in the way society produces and consumes its goods and services.

The discussion on the theme of sustainable development and sustainability began to gain strength from the 1970s (FROEHLICH, 2014). With the arrival of the 2000s, it is possible to observe that socio-environmental responsibility began to gain more space in the strategic planning of companies. Most executives come to see sustainable practices as essential to the profitability of companies. However, it is important to note that some points remain a little loose (MOURA-LEITE; PADGETT, 2011).

From the year 2004 the ESG model appears. In recent years this model has gained greater visibility and one of the factors that contribute to this fact is that organizations and the capital market have understood that considering environmental, social and corporate governance issues can contribute to better risk management and better financial results in the medium and long term. In addition, there is pressure for companies and financial institutions to stop focusing only on short-term returns, and also to move closer to issues related to sustainability (BOFFO; PANTALANO, 2020). According to Syed (2017), the adoption of ESG factors in investor decision-making causes a decrease in inefficiencies in the decision-making process, as well as improving the overall conduct of companies by considering the interests of all stakeholders.

The performance of the private sector is impacted by the choices of both investors and consumers. Individuals who are more informed and concerned about issues such as climate change, international standards of conduct and more diverse work environments have led organizations to bring issues to the decision-making agenda. Based on this scenario, the



ISSN 1980-0827 - Volume 19, Number 4, Year 2023

capital market has been adapting and developing products and services focused on the ESG model. The number of companies that claim to operate following the ESG model is also increasing. With this, several bodies, including the *Global Reporting Initiative* (GRI), the *Sustainability Accounting Standards Board* (SASB) and the *Task Force on Climate-related Financial Disclosures* (TCFD), have developed methods for evaluating and communicating information related to ESG items and material topics encompassing all sectors of the company (BOFFO; PANTALANO, 2020).

However, the greatest force related to sustainable development and sustainability emerged from the year 2015 with the document "Transforming Our World: The 2030 Agenda for Sustainable Development" (SILVEIRA et al., 2022). In the writing on the Sustainable Development Goals (SDGs), also known as the Global Goals, an "action plan for people, for the planet and for prosperity" was established (UNITED NATIONS BRASIL, 2015, s. p.). This set of far-reaching universal and transformative actions and policies was given the mission of guiding national policies and international cooperation activities during the fifteen years following January 1, 2016, thus until December 31, 2030.

The 2030 Agenda for Sustainable Development contains five essential elements, known as the "5 Ps of the 2030 Agenda": *Planet*, People, *Prosperity, Peace* and *Partnership*. The first three pillars demonstrate the environmental, social and economic dimensions of sustainability, while the last two highlight the political and institutional dimensions, which guide the effectiveness of the governance of the global agenda (ROSATI; FARIA, 2019). However, it is important to note that one of the principles defended by the initiative is that the evolution in relation to the achievement of the proposed goals is only possible through cooperation between the private sector, NGOs, society and government (ROMA, 2019). SDG number 17, "Partnerships and means of Implementation", for example, seeks to present guidelines that aim to strengthen and bring new opportunities for global unity in the search for sustainable development, considering sectors such as finance, technology, training, trade and systemic issues (SILVA, 2021).

However, there are still several controversies about the term development, such as the fact that some aspects link it to the concept of economic degrowth. An issue that is not confirmed, considering that one of the SDGs, but specifically SDG number 8, is entitled as "Decent Work and Economic Growth" (VEIGA, 2017). In this same sense, SDG number 9 entitled "Industry, Innovation and Infrastructure" cites, among the goals linked to it, the incentive of an inclusive and sustainable industrialization process, which aims to expand the participation of the industrial sector both in the Gross Domestic Product (GDP) and in the generation of jobs in each country, taking into account the characteristics of each nation. However, it is important to reinforce the sustainable character that permeates the entire document and that values the sustainable management and conscious use of natural resources. This point is also made explicit in SDG number 12, entitled "Responsible Consumption and Production" (UN, 2016).

### 2.2 Adherence to the Sustainable Development Goals

Schramade (2017) presents, in his study, an option for evaluating companies in



relation to their practices aimed at contributing to the SDGs. The author states that, even if the amount of data available on the subject is still scarce, the model can be used. The analysis is carried out about the practices of targets related to the SDGs, where their commitment, initiatives and investments seem to have a considerable impact in a positive way. Situations are also observed in which the commitment to the goals seems little relevant, and when the little commitment of the organization seems to create relevant risks.

From this analysis, the author believes that it is possible to identify phases in which organizations may be in relation to their progress in incorporating the SDGs into their business and strategies. The phases would be 4 and are described in Board 1.

They probably mention the SDGs;							
They do not yet have indicators for monitoring and disseminating their							
contributions;							
They may have internal discussions about how the SDGs relate to the							
organization.							
SDGs are also considered in the value chain and not only for the products and							
services marketed directly by the company;							
Important questions for the phase: Which SDG presents risks and							
opportunities for the organization? How do they affect your position in the							
market? How well prepared is the company to face the competition? What							
problems does society expect the company to solve? What is essential to							
maintain operations? How does the company seek to satisfy the needs of its							
employees in relation to the sense of purpose?							
It presents a quantitative approach, understanding the financial effects for the							
organization when contributing to a certain SDG, for example.							
Setting priorities: what SDGs and their goals should the company focus on?							
How to contribute to the SDGs and maintain the profitability of the company?							
What specific goals of the organization do the SDGs impact? Which indicators							
can provide the necessary monitoring?;							
For initiatives to have significant impacts, it is important that they are present							
not only in the organization's strategy and budgets, but also in management							
incentives.							
Carry out the reporting of the progress achieved through indicators, linked							
goals and history allowing comparability.							

Source: Adapted from Schramade, 2017

The adoption of sustainable practices based on the ESG model can be observed in several business and industrial sectors, including the orange juice industry. Brazil is the country that stands out the most in relation to the production and commercialization of this product in the world (KALAKI; NEVES, 2017). In Brazil, the citrus sector has been gaining strength in the international market and today exports a large portion of what it produces. The orange grown in Brazil stands out for having favorable characteristics for the production of juice, this has made the country responsible for 60% of the global production of orange, and 80% of this production is destined to the processing of juice (PEREIRA, 2018).

It is worth mentioning that the national orange juice production sector is largely concentrated in the state of São Paulo and among a few large companies. This characteristic of the sector is mainly due to the importance of economies of scale for the process. It can be said that since the 1970s the citrus agro-industrial sector was formed by about five large companies. In recent years, this concentration has been reinforced, where up to 90% of the



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Brazilian orange juice industry is formed by three organizations, namely: Sucocítrico Cutrale, Citrosuco and Louis Dreyfus Commodities (PALMIERI, 2018).

Brazil is in first place in the world production of juice, with a considerable difference compared to the second country on the list, the United States. In addition to representing a large share in the production of orange juice in relation to other countries, the orange juice industry and the cultivation of the fruit are also important for the national economy. The activities of the sector generate income for rural producers, direct and indirect job vacancies and collect taxes (PALMIERI, 2018). According to data published by the National Association of Orange Juice Exporters (CitrusBR), in the year 2020 the sector was responsible for the generation of about 38,300 direct and indirect jobs. In the state of São Paulo alone, the segment was responsible for 10.23% of all vacancies generated by agriculture in the state (CITRUSBR, 2021).

However, agriculture and, consequently, the cultivation of oranges, brings impacts to the environment and its natural resources. The technological development ended up enabling an increase in the obtaining of profits by the sector, but to the detriment of the environment and health of the population (MACEDO; VIEIRA, 2022). According to de Silva et al. (2016), the practice of agriculture (which includes the cultivation of oranges) presents several challenges in the field of sustainability. Among these challenges, we can mention: i) food waste (from its cultivation to its distribution) and impacts on natural resources (water resources, land misuse and biodiversity); ii) the processing of fruit juices is responsible for the generation of large amounts of waste, which, when are not well used and are disposed incorrectly, can cause damage to the health of the population and environmental impacts (SILVA et al., 2016); iii) the sector's production model, characterized by the stimulus to the use of agricultural machinery, agrochemicals and fertilizers, brings direct impacts to flora, fauna and population both rural and urban (WACHEKOWSKI et al., 2021); iv) monoculture, with a focus on the export of commodities, has led many small farmers to lose space and migrate to urban regions; v) food waste, which is a threat that needs to be tackled in all areas of the sector; vi) much of the production is destined for export, making the production for the domestic market not follow the demand of the Brazilian population (ALVES, 2019); vii) exacerbated use of water resources, especially in the stage of fruit cultivation for irrigation (ANA, 2021).

However, it is worth remembering that, since much of the citrus production is destined for export, both of the fruit and of the juice produced, it is important that Good Agricultural Practices (GAP) are adopted in the processes (FERRACINI et al., 2005). According to the Food and Agriculture Organization of the United Nations (FAO, 2016), GAP can be understood as the principles to be implemented from cultivation to post-production processes of fruit derivatives, taking into account economic, social and environmental sustainability. Also, according to the agency, the implementation of these principles has come to be valued by several importing countries of agricultural products and their derivatives in recent years.

In order to meet the expectations of markets, internal and external, increasingly demanding in relation to sustainable issues, the sector has invested in the theme in recent years (CITRUSBR, 2017; KALAKI; NEVES, 2017). Furthermore, as it has a complex and important production chain for the country's socioeconomic development and due to the various stages present in its process, many challenges and opportunities for sustainable practices in the



sector can be found. (KALAKI; NEVES, 2017).

In view of the content exposed, it can be said that the orange juice industry in Brazil can bring contributions in the pursuit of the objectives proposed in the 2030 Agenda. Thus, this article seeks to evaluate the sustainable practices presented by three large companies in the sector, and how they relate to the SDGs proposed by the UN.

### **3 METHODOLOGY**

This research is characterized by having a qualitative approach, since it seeks to bring information, in an in-depth way, on the subject in question. The objective is to facilitate the understanding of the topics studied (GODOY, 1995). Regarding its objectives, it is a descriptive work, in which a range of information was presented, aiming to clarify the theme addressed (GIL, 2017).

As for the stage of data collection and analysis, it is a bibliographic and documentary study (GIL, 2019), which was complemented with procedures called as analytical description (BARDIN, 2016) and construction of the explanation (YIN, 2015). The objective of a bibliographic study is to bring knowledge about what is already known about the subject (GODOY, 1995). In its documentary stage, it was sought to represent the analyzed documents differently from that found in their original forms, aiming to facilitate their interpretation, as well as defined this type of approach by Bardin (2016). The process was complemented by the use of analytical description and construction of the explanation. The analytical description can be understood as the presentation of the results found, at the same time that they are analyzed, "The analytical description works according to systematic and objective procedures of description of the content of the messages" (BARDIN, 2016, p. 41). The construction of the explanation is a procedure that aims to validate the study, comparing it with previously studied theoretical information (YIN, 2015).

The documents analyzed in this article were the sustainability reports and other publications focused on the theme of sustainability, published by the three largest companies in the orange juice sector in Brazil, namely: Citrosuco, Louis Dreyfus and Cutrale. The analyses performed were based on the previously studied literature, more specifically the SDG integration analysis model proposed by the author, Schramade.

### **4 RESULTS AND DISCUSSION**

### 4.1 Results, characterization of the companies studied

The national orange juice production sector is largely concentrated in the state of São Paulo and among a few large companies. This characteristic of the sector is mainly due to the importance of economies of scale for the process. It can be said that, since the 1970s, the citrus agro-industrial sector was formed by about five large companies. In recent years, this concentration has been strengthened, so much so that, currently, 90% of the Brazilian orange juice industry is formed by three organizations, namely: Sucocítrico Cutrale, Citrosuco and Louis Dreyfus Commodities (PALMIERI, 2018).



Citrosuco is one of the largest orange juice industries in Brazil and, since 2012, the result of the merger between the orange juice businesses of the Fischer and Votorantim groups. The company has commercial offices in several countries and 28 own farms, 25 of which are dedicated to orange cultivation. Among the industrial plants owned by the organization is the one considered the largest in the world, located in the city of Matão (SP) (CITROSUCO, 2021).

The Louis Dreyfus Company (LDC) is present in the agricultural market through the processing and marketing of products in the sector. Nationally, it operates throughout the production chain, that is, from the cultivation of products to the marketing of agricultural commodities and derived products, among them: sugar, grains, coffee, cotton, juices, rice and oilseeds. It has been present in Brazil since the 1940s and globally is present in 80 countries and, in harvest periods, reaches about 17,000 employees (LDC, 2022).

Sucocítrico Cutrale LTDA was founded in 1967 and is a 100% national company. It operates throughout the orange juice production chain and in harvest periods, the company says it reaches the mark of 18,000 employees and service providers. Its production is largely intended for sale to other countries, especially countries located in North America, Europe and Asia (CUTRALE, 2016).

#### 4.2 Discussion, adherence to the SDGs

With regard to adherence to the SDGs, as proposed by Schramade (2017), it should be noted that among the companies studied, only Citrosuco presents in its publication's direct mentions of the SDGs. Although it does not use the terms SDGs in their goals or relate them to their sustainable actions in a specific way, it is possible to identify themes and points in common among the publications of the LDC company. With regard to Cutrale, as it is the organization that publishes the least amount of information about its contributions to a more sustainable world, it was framed in the initial phase presented by the author and will begin this analysis.

Starting with the company Cutrale, on its "sustainability" page, the company reports support for 11 (eleven) social projects. It is possible to observe brief descriptions of the actions carried out by each of them, and quantitative information is not presented that allows the monitoring of the results achieved. On the same page, there is a publication about the delivery of a new effluent treatment and composting plant. It is informed that the investment destined to such a project, located in the city of Ribeirão Bonito, was R\$35 million. The action also contributed to the reforestation of 17 hectares, in addition to other areas already existing on the site, aimed at environmental protection.

According to Carlos Otero de Oliveira, the company's corporate director, it is a time ly investment that reveals Cutrale's vision of sustainability and environmental preservation. Of the 41.23 hectares acquired by the company, 14.76 hectares were used to build the station and also organic composting (CUTRALE, 2016, s.p.).

Some items that were not located in the research conducted on the company Cutrale were considered for this analysis, such as: publication of a sustainability report, data and indicators that allow the monitoring of results of the sustainable practices adopted and mentions of the SDGs.



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According to IBCG (2016), transparency and accountability on the part of organizations are two of the basic principles related to corporate governance and contribute to the reduction of conflicts of interest among stakeholders. In addition, SDG 12, entitled "Sustainable Consumption and Production", provides as one of its goals "To encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle" (NAÇÕES UNIDAS BRASIL, 2023, s.p.).

Thus, it is considered that the organization would be framed in phase 1, entitled Exploring the SDGs. Despite not presenting the information in a more cautious way, there is the intention to contribute to the community through supported social actions and investment in a project of effluent treatment, composting and environmental protection. In addition, there is an effort to seek to bring the theme of sustainability closer to instruments such as the mission, vision and values of the organization. It is believed that, if in the future, data are presented that allow the monitoring of the evolution of the projects and the real incorporation of these provisions in the company's strategy, there will be considerable progress in the role of Cutrale in the search to contribute to a more sustainable world and the 2030 Agenda, proposed by the UN.

The results found in the publications of the Louis Dreyfus Company (LDC) allow us to identify actions that can contribute to the evolution of the 2030 Agenda and to follow it, although no direct connections between the actions and the existing SDGs are presented. It is observed the existence of sustainable practices that cover not only the operation of the organization, but also the entire value chain involved. The involvement of the value chain is one of the points cited by the author Schramade (2017) as being important for the integration of the SDGs by organizations. Indicators are presented that allow monitoring the status in relation to sustainable actions, as well as the historical basis of these data, allowing comparability over the last few years. Table 1 is an example of information presented in relation to issues relevant to the theme of sustainability and the SDGs, bringing data from recent years and comparison between them.

Table 1 - Environmental In Global	2018	2019	2020	2021	21vs. 18	21 vs. 19	21 vs. 20
Energy (kWh/MV)	17,54	16,21	15,66	15,72	-10,40%	-3%	0,40%
GHG (tCO <sup>2</sup> /MT)	0,043	0,042	0,034	0,034	-21,90%	-19,40%	-1,20%
Water (m³/MT)	0,55	0,49	0,49	0,52	-4,30%	7,20%	7,50%
Solid Waste (kg/MT)	1,14	0,48	0,29	0,23	-79,70%	-51,70%	-21,40%

ntal Indicator

Source: Adapted from LDC, 2021.

The theme of diversity and inclusion is also addressed by the company. Some goals and their statuses are presented. Some examples can be cited, such as: access to training focused on the theme, and which seeks to combat unconscious tendencies of employees (goal: 100% of employees had access - goal achieved), perception related to equal opportunities and treatment (goal: 75% of workers - goal achieved), perception regarding acceptance as individuals (goal: by 90% of employees - in progress - status in 2021: 87%). Table 2 presents data related to gender distribution by region in the years 2020 and 2021.



Gender	Asia (	North)	•	South utheast)	Euro Middl	ope, e East	North A	America		merica orth)	Latin A (Sout	merica h and	Glo	bal
					and A	Africa					We	est)		
Woman	45	46	20	21	39	39	26	27	23	26	15	15	25	27
Man	55	54	80	79	61	61	74	73	77	74	85	85	75	73

Source: Adapted from LDC, 2021.

It can also be noted, both in the sustainability report published by the company, as well as in the other information presented on its website, that risks and opportunities that are linked to sustainable issues are identified. An example is the fact that the organization has obtained funding, in which it receives benefits according to the evolution of its projects focused on the theme. According to Schramade (2017), identifying opportunities that would be linked to sustainable issues and that can contribute to the integration of the SDGs is an important step in the evolution of the incorporation of the 2030 Agenda in the company's strategies. Thus, it is believed that the LDC company can be related to phase 2, proposed by the author of the study, Exposures, Risks and Opportunities of the SDGs. And it can be said that, with evolution in linking the organization's strategies to the SDGs and their goals, understanding which objectives of the company can impact on the advancement in relation to each objective proposed in the 2030 Agenda, and with incentives for the management of the organization to seek such scopes, there will be progress of the LDC for the next phase presented.

Unlike Cutrale and LDC, Citrosuco presents in its publications content focused on the SDGs and their goals. Boards 2 and 3 point out themes considered relevant to the organization and relate them to specific SDGs.

Topics	SDG
Healthy Products	SDG 2. Zero hunger and sustainable agriculture
	SDG 3. Health and well-being
	SDG 12. Responsible consumption and production
Healthy people	SDG 4. Quality education
	SDG 5. Equality and gender
	SDG 8. Decent work and economic growth
	SDG 10. Reducing Inequalities
Healthy Planet	SDG 6. Drinking water and sanitation
	SDG 7. Clean and affordable energy
	SDG 13. Action against global climate change
	SDG 15. Terrestrial life
Responsible Governance	SDG 9. Industry, innovation and infrastructure
	SDG 16. Peace, justice and effective instruction

Board 2 – Who we are: much more than juice.

Source: Adapted from Citrosuco Sustainability Report, 2021.



	Buard 5 – 3DG Themes and Su	J-themes
Themes	Subthemes	SDG
Climate Resilience	CO <sup>2</sup> emissions	SDG 13. Action against global climate change
Fostering biodiversity	Environmental conservation	SDG 15. Terrestrial Life
Rationally manage water	Water Use Efficiency/Water	SDG 6. Drinking water and sanitation
resources	Capitation	
Driving social	Reduction of social	SDG 8. Decent work and economic growth
transformation	vulnerability/Strengthening of	
	Public Policies	
Diversity, Equity, Inclusion	Leadership - women and black	SDG 5. Gender Equality; 10 - Reduction of
	people /Professional development	Inequalities
	people with disabilities	
Sustainable Value Chain	100% of sustainable fruit supply	SDG 12. Responsible Consumption and
		Production

Board 3 – SDG	Themes and	Sub-themes
Douid 3 3D0	riferites unu	Sub themes

Source: Adapted from the Citrosuco Sustainability Report, 2021.

In addition, targets set for 2030 and the current status of each are presented, as explained in Board 4. Also, it is stated that such goals are incorporated into the strategic planning of the organization.

Themes	2030 Target	Status 2020/2021
Climate	Reduce CO <sup>2</sup> emissions by 28%	Scope 1 emissions: 406 kton
resilience <sup>1</sup>	(Scope 1 emissions)	
		Scope 2 emissions: 300 kton
	Net removal of 1.6 MM ton of $CO^2$	
	(Scope 2 emissions)	Scope 3 emissions: 374 kton.
Fostering	Structured biodiversity conservation	Two biodiversity projects (CitroApis on 4 farms
biodiversity	projects for 100% of the hectares	and animal sighting on 25 farms).
	destined for environmental	
	projection	
Rationally	Rationalize water abstraction in	Annual grant capture of 40 million m <sup>3</sup> in 8
managing	100% of critical watersheds.	selected farms of critical watershed regions;
water		16,089 irrigated hectares
resources	Increase by 20% the efficiency of	
	water use in industrial operation	Industrial operations: 2.3m <sup>3</sup> /ton of water
	(m³/ton).	consumed.
Driving social	Reduction of greater social	16 territories of operation with +15 projects
transformation	vulnerability in 100% of the	focused on the area of Education, Citizenship and
	prioritized territories where we	strengthening of public policies, totaling more
	operate, through an integrated	than R\$2 million in annual investment.
	agenda of social action and	
	strengthening of public policies.	

Board 4 – Commitments to Sustainable Actions 2030 and status 2020/2021

<sup>&</sup>lt;sup>1</sup> Emissions can be classified into: scope 1, emissions released into the atmosphere as a direct result of the company's own operations; scope 2, indirect emissions from electricity purchased for the company's own use; scope 3, indirect emissions not included in scope 2 that occur in the company's value chain.



Diversity,	30% of women and/or blacks in	16% women and black people in leadership
	,	
Equity,	leadership (supervisors above)	(supervisors above)
Inclusion		
	Ensure the evolution of the	5% of PWDs 16% of career development.
	professional career of people with	
	disabilities, ensuring learning and	
	growth.	
Sustainable	100% of sustainable fruit supply	100% own fruit certified with SAI Platform gold
Value Chain		level
		43% of fruit from third-party producers certified
		according to SAI Platform, Rainforest or
		Fairtrade.

ISSN 1980-0827 – Volume 19, Number 4, Year 2023

Source: Adapted from Citrosuco, 2021.

A point that deserves to be highlighted is the adherence to the UN Global Compact, which reinforces a global commitment in the search for a more sustainable performance. Indicators for monitoring sustainable actions are presented, both in the sustainability report and in the other publications on its website, as well as data that allow the comparison of progress over the years. The sustainability report follows internationally known standards, and an independent verification was carried out, which is published at the end of the report. The preparation and publication of sustainability reports promote better monitoring of the sustainable practices adopted and, when audited by external agents, contribute even more to this purpose (DERCHI; ZONI; DOSSI, 2021).

In the declaration presented by the external verification, there are points of improvement identified, such as: presenting the impacts caused by the organization, both in biodiversity, as well as those that its agricultural operations provoke in local communities. Regarding the disclosure of history that allows the comparability and monitoring of the results of the practices adopted, as cited by Schramade (2017), it can be observed that, in some points, the information is given based on the last 3 or more harvest periods. Some examples in which this situation occurs: number of records in the conduct channel, percentage of individuals in governance by gender, percentage of PWDs in the company, water resources capture and water consumption, among others.

Thus, it is believed that the Citrosuco company can be allocated in phase 4 cited by Schramade (2017), and that, if it continues to evolve in its sustainable actions and linking the m to the company's strategic planning, it still has much to contribute to the 2030 Agenda and can serve as an example for other market agents.

In view of the above, board 5 presents a summary of the results and establishes parallels between the companies studied.



ISSN 1980-0827 – Volume 19, Number 4, Year 2023

Category	Citrosuco	LDC	Cutrale
Sustainability page	YES	YES	YES
Code of conduct	YES	YES	NOT FOUND
Institutional mission (with mentions in the field of sustainability)	YES	YES	YES
Publication of sustainability report	YES	YES	NOT FOUND
Sustainability report following recognized standards	YES	NOT FOUND	NOT FOUND
Audit/Verification of the sustainability report	YES	NOT FOUND	NOT FOUND
Quantitative results of sustainable practices	YES	YES	NOT FOUND
Comparability factor of results	YES	YES	NOT FOUND
Adherence to the UN Global Compact	YES	NOT FOUND	NOT FOUND
ESG Commitments	YES	NOT FOUND	NOT FOUND
Organ/Foundation focused on the search for a more sustainable world	NOT FOUND	YES	NOT FOUND
Development of renewable energy matrix	YES	YES	NOT FOUND
Control of the use of water resources	YES	YES	NOT FOUND
GHG Emission Control	YES	YES	NOT FOUND
Certifications	YES	YES	YES
Goals stipulated for evolution in the field of sustainability	YES	YES	NOT FOUND
Relationship between sustainable practices and SDGs	YES	NOT FOUND	NOT FOUND
Status of the evolution of the stipulated goals	YES	YES	NOT FOUND
Sustainable practices focused on the value chain	YES	YES	YES
Partnership with other companies for sustainable projects	NOT FOUND	YES	NOT FOUND
Control of the use of agrochemicals	YES	YES	NOT FOUND
Contributions to social projects	YES	YES	YES
Actions focused on diversity	YES	YES	NOT FOUND
Actions aimed at small partner farmers	YES	YES	NOT FOUND

Board 5 - Summary of results found - Citrosuco, Louis Dreyfus and Cutrale.

Source: survey data, 2023.

#### **5 CONCLUSION**

This article sought to describe and analyze how the Sustainable Development Goals proposed by the UN are integrated into the sustainability strategies adopted by the largest orange juice companies in Brazil. Such information was sought in the sustainability reports, and other publications on the subject, existing on the websites of the companies mentioned. Thus, and based on the model proposed by the author Scramade, we sought to analyze how the integration of the SDGs is in relation to the sustainable practices adopted by the 3 organizations.

It was observed that the process of incorporation of the SDGs exists in a betterdefined way by the company Citrosuco, which has goals and indicators linked to these objectives, in addition to being related to the company's strategy. The LDC would be in an intermediate phase, since although it does not deal with the SDGs explicitly, it incorporates pertinent themes in its sustainability management strategy. The company Cutrale would be in an initial stage, in which it demonstrates the intention to contribute with topics pertinent to the 2030 Agenda, but still performs few actions and does not disclose information that allows monitoring. Therefore, despite the sector's engagement in relation to the theme, it is perceived that the integration of the SDGs by the largest orange juice companies in the country happens at considerably different paces.

As opportunities for future studies, we can mention the comparison with the integration of the SDGs by companies from another sector, which is also engaged in the topic. Furthermore, carrying out analyzes based on models presented by other authors can reveal gaps and interesting insights for greater understanding of the topic.



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