

Sustainability in Federal Universities: An analysis based on management reports

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ABSTRACT

In the current context, environmental and social sustainability is crucial for higher education institutions. Brazilian federal universities play an important role in training leaders and producing knowledge for a sustainable future. There is a growing interest in incorporating sustainable practices into the strategies of these institutions. This study analyzes the 2022 management reports of federal universities, highlighting how these institutions are implementing and prioritizing sustainability in their operations and management, reflecting the need for governance and accountability practices.

Keywords: Sustainability, Governance, Management Reports.

INTRODUCTION

In the current global context, characterized by a growing recognition of the importance of environmental and social sustainability, attention to the integration of these principles into the policies and practices of higher education institutions becomes increasingly pressing. Starting from the principle that educators, or professionals of knowledge, organize themselves to meet the needs of the time, according to the relationships that are being established in society, it becomes important to reinforce the role of the university for the needs in the formation of society. (MANEIA, 2016)

Brazil's federal universities play a significant role in training future leaders and professionals, as well as in producing knowledge and research that can positively influence society and the environment. In this sense, a pertinent question arises about the extent to which these institutions are incorporating sustainability into their management strategies and contributing to a more sustainable future. According to ZUTSHI et al. (2018), in the last decade, the interest of universities in incorporating sustainability and sustainable development into their processes and programs has increased significantly. Antunes, Nascimento and Queiroz (2018) highlight that education for sustainability arises from the need to chart new paths to face the problems that afflict society. They emphasize the importance of reflecting on the possibilities that education offers to deal with these issues, thus promoting a fairer society for current and future generations.

For JUNIOR et al. (2023), the role of universities in the implementation of the Sustainable Development Goals (SDGs) transcends mere institutional governance and the internal application of the

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ODS. Higher education institutions position themselves as significant sources of knowledge and experimentation, where interaction can contribute to the generation and dissemination of knowledge, serving as a basis for action in favor of the SDGs.

For Kestin et al., (2017), there is a direction demonstrating that universities play an essential role in providing students with knowledge, skills and motivation to understand and address the Sustainable Development Goals (SDGs), in the context of an "education for sustainable development" approach (SDG 4). The author also states that universities can perform various activities to support the implementation of the SDGs. Among them are building partnerships, identifying challenges, developing solutions, monitoring practices, and providing advisory and consulting services to various sectors. In addition, universities can commit themselves to the dissemination and application of knowledge in society.

The growing urgency for concrete and effective action to address environmental and social challenges requires universities to not only understand, but also internalize and prioritize sustainability principles in all facets of their operations. Considering the relevance of sustainability and the transformations that are necessary in the environmental, social and economic spheres, this study raises a critical question: how are federal universities in Brazil actually implementing and prioritizing sustainability in the development of their activities and in their management?

Within this perspective, the focus falls on the management reports for the year 2022, which serve as a reflection of the policies, guidelines, and practices adopted by federal universities. Exploring these reports allows for a detailed analysis of institutional approaches towards sustainability, as well as the identification of tangible measures that are being implemented to promote a more resilient and responsible future.

GOVERNANCE AND ACCOUNTABILITY IN THE BRAZILIAN PUBLIC SERVICE

Public governance differs from other models by the way it treats citizens, actively involving them in the formulation of public policies. According to Secchi (2009), while the bureaucratic model sees the citizen only as a user of public services and the managerial model considers him a client whose needs must be met, public governance sees citizens and organizations as partners or stakeholders. From this perspective, the public sphere develops horizontal relationships of collaboration and coordination with these *stakeholders*, promoting a more inclusive and participatory model (SECCHI, 2009, p. 363).

Governance in the public service is essential to ensure transparency, efficiency, and effectiveness in the management of public resources and in the provision of services to society. It involves the implementation of control, *accountability*, and risk management practices that ensure that the decisions and actions of public managers are carried out responsibly and in line with the interests of society.



The accountability process requires public institutions to disclose financial and non-financial information, allowing their stakeholders to evaluate and analyze the processes and results obtained (CATÓLICO, 2012, p. 60). This makes it possible to hold public managers accountable for their actions, ensuring transparency and integrity in public administration.

In Brazil, the Federal Court of Accounts is the body responsible for assisting the National Congress in external control of public management, having competence to judge the accounts of public administrators responsible for management in the three branches (BRASIL, 2022). Therefore, it is directly linked to the *accountability* processes of Brazilian public managers.

In the private sector, the Annual Management Report is widely considered one of the best communication vehicles between companies and the target audience, being used as a decision-making tool by its stakeholders or stakeholders.

In the Public Administration, as well as in the private sector, the Management Report is a means to communicate to society information about the management of a public entity, detailing how its resources are being used and presenting the entity's performance. This report serves as a model for accountability to the population and to the Federal Court of Accounts (TCU).

The Management Reports presented by Brazilian federal universities are annual documents that detail the budgetary, financial, patrimonial and performance execution of these institutions. These reports serve to show how public resources were used, the results achieved, the activities developed, and the achievement of the established goals. They include information on teaching, research, extension, infrastructure, and performance indicators, promoting transparency and accountability in public administration.

The evolution in the form and content of the reports presented to society is something constantly on the agenda of the control bodies. According to the TCU website, in 2020, the preparation of the Management Report (RG) in the form of an Integrated Report (IR) was made official through Normative Instruction 84/2020. This change was based on the International Integrated Reporting Framework, initially developed by the International Integrated Reporting Framework and now maintained by the International Financial Reporting Standards Foundation (IFRS). IFRS is a global not-for-profit and public interest organization, created to develop high-quality, understandable, applicable and globally accepted accounting and sustainability standards. The goal of Integrated Reporting is to transform the way organizations are accountable to stakeholders by placing value creation at the heart of reporting.

SUSTAINABILITY IN THE UNIVERSITY ENVIRONMENT

It is important to highlight that universities play a crucial role in the generation of knowledge and experimentation, contributing significantly to the promotion of more sustainable actions (CORBARI et al.,



2021). The deepening and discovery of how they are performing the actions related to the Sustainable Development Goals is fundamental to add science to the decision-making process of the managers responsible for the inclusion of the theme in the institutional routine.

Brazilian universities have implemented policies and initiatives that range from the efficient management of natural resources, such as water and energy, to recycling programs and the incorporation of sustainable principles into academic curricula. In addition, university extension projects focused on sustainability allow students and researchers to collaborate with society in the search for innovative solutions to local and global environmental problems. According to Amaral, Martins and Gouveia (2015), higher education institutions (HEIs) can contribute significantly to the sustainable development of society, the training of future leaders and the awareness of sustainability practices, keeping the focus on their fundamental activities, such as teaching, research, operations and communication through reports.

Regarding sustainability, management reports are key to assessing sustainability in public organizational operations, promoting transparency, accountability, and the implementation of practices that sustain long-term development.

OBJECTIVE

By shedding light on the degree of commitment and effectiveness of sustainability in federal universities, this study seeks not only to assess the current state, but also to contribute to broader discussions on the role of public institutions of higher education in building a sustainable future.

METHODOLOGY

From this context, the present study sought to analyze in depth how Brazilian federal universities approach sustainability in their activities and decisions, using the management reports for the year 2022 as a reference for the analysis.

Vergara (1997) states that the objectives of the investigation are only achieved with the collection, treatment and, subsequently, with the interpretation of the data, seeking to ensure the correlation between objectives and ways of achieving them.

More specifically, this study proposes to identify and collect the 2022 management reports of federal universities in Brazil to map the current approaches of universities in relation to sustainability, examining everything from the language and narratives present in the reports to the tangible actions and measures outlined for the promotion of environmental and social sustainability.

The present study has a descriptive character, since it consists of the observation, analysis and characterization of a certain reality, in order to aggregate information about facts or phenomena investigated and establish possible relationships between the variables (GIL, 2008). The choice of this



approach is due to the need to understand and interpret the practices and implementation of policies aimed at sustainability reported by institutions.

In relation to the universe and the sample, Vergara (1997) and Gil (1999) define the universe as a set of elements (organizations, products, people, etc.) that have the characteristics to be studied. On the other hand, the sample is a part of this universe, selected based on some criterion of representativeness.

In order to cut out the vast universe of federal higher education institutions, a selection was made for a more in-depth analysis of the 12 most recent universities that had management reports for the year 2022 published. Newer universities sometimes have greater flexibility to adopt innovative practices and policies. They tend to be more dynamic in implementing new approaches, including those related to sustainability, due to less institutional inertia.

The sample was composed of management reports of these federal universities, publicly available on the official websites of the institutions or in government databases.

The management reports were collected and organized in a digital database. Each report has been reviewed to extract relevant information on sustainability practices, including but not limited to environmental, social, and economic initiatives.

In order to achieve the proposed objective, the content analysis was carried out in two main stages: coding and interpretation.

Regarding coding: the data were coded into thematic categories related to sustainability.

A careful design necessary to identify more precisely within the management reports, which actions were described by the university itself as being oriented towards sustainability, was the selection for complete reading of the exclusive chapters on sustainability within the reports, so reports that did not have particular chapters on the subject were excluded.

From the reading of the materials available on the institutional websites, it was possible to highlight within the specific chapters, reports of the sustainability actions carried out by each institution in the year 2022. After the highlights, the catalog of all the actions disclosed by the Universities examined was concentrated in a Microsoft Excel spreadsheet, to facilitate comparison purposes.

By collecting data, a variety of answers are obtained that need to be organized for proper analysis. This is done by grouping them into various categories. Selltiz et al. (1987) state that, for these categories to be useful in data analysis, they must follow some basic rules: 1) the set of categories must be derived from a single classification principle; 2) the set of categories must be exhaustive; and 3) the categories must be mutually exclusive.

Thus, considering the comprehensive division between the actions reported in the reports, a broad segmentation was created, whose criterion is the need to fit within a broader area. Thus, no action



described in the analyzed reports was isolated. This enabled better identification and visualization, with 100% of the actions described in the reports could be involved in one of the segmented groups.

In order to verify the possible correspondences and dissimilarities, it was decided to distribute the actions found in the following categories of analysis: education, planning, control, technology, infrastructure, collective applicability and administrative actions. In addition, we established a link between each area and the tripod of sustainability, thus allowing us to identify which dimension of sustainability the category is most interconnected with.

Each action can be mapped to one or more dimensions of the sustainability tripod, providing a clear and structured view of the performance of universities in terms of sustainable development.

Educational Actions – This group of actions promotes awareness and education on environmental and social issues, enabling the academic and local community to adopt sustainable practices, thus relating mainly to the social dimension. In this segment, several actions carried out by the institutions were placed, with a focus on sustainable development, such as awareness lectures, workshops and workshops for the dissemination of sustainable practices, technical visits aimed at learning about the environment, Environmental Education projects, Training Programs for employees in the use of materials and waste management.

Planning Actions – The actions described as institutional planning focus on the efficient management of financial resources, avoiding waste and promoting long-term economic sustainability, in line with the economic dimension. In this segment, actions such as the preparation of management plans related to sustainability, creation of projects seeking energy efficiency, studies on possible improvements in the institution's treatment of the environment, creation of working groups or formation of teams focused on sustainable issues were highlighted.

Control and Monitoring Actions – These actions are mainly aimed at reducing environmental impacts, controlling the consumption of natural resources and waste management, directly related to the environmental dimension of the sustainability tripod. This category included actions related to control instruments, such as waste monitoring, energy consumption, disposable materials, water consumption, measurement and inspection programs, waste disposal, reuse of materials used in daily life, inspection and monitoring of institutional indicators.

Technological Development Actions – Sustainable technologies can reduce operating costs and create new accessible opportunities, aligning with the economic dimension considering the tripod of sustainability. In this segment, actions aimed at managing and improving sustainability performance were included, such as the adoption of applications, construction of systems, development of techniques, use of technologies in general that aim to reduce consumption, greater efficiency and protection of the environment.



Infrastructure Actions - Sustainable infrastructure projects, such as green buildings, minimize environmental impact through energy efficiency, use of sustainable materials, and proper waste management, directly related to the environmental dimension. In this segment, actions directly linked to the improvement of sustainability were listed, such as sustainable works, adaptation of integration spaces, sustainable renovations, sanitization of environments, implementation of photovoltaic plants, afforestation, creation of treatment plants, replacement of lamps, air conditioners or infrastructure objects aiming at better energy performance.

Collective Applicability Actions – These actions strengthen community engagement and social responsibility, promoting cohesion and community development, strongly aligning with the social dimension. In this segment, actions linked to projects that involve the community in some way, usually linked to extension, with a sustainable purpose, were placed, which can be practical community projects, planting programs, selective collections, solidarity projects, cleaning of public spaces, institutional partnerships.

Administrative Actions – Administrative efficiency reduces operating costs, improving the financial sustainability of the institution, aligning with the economic dimension. In this segment, internal actions related to administrative processes aimed at lower environmental impact were distributed, such as the adoption of sustainable contractual clauses, the execution of sustainable purchases, the use of bidding devices aimed at sustainable objectives, obtaining environmental licenses and certifications, and obtaining sustainable seals.

Regarding interpretation: The thematic categories were analyzed to identify patterns and trends in the reported sustainability practices. The interpretation of the data sought to understand how federal universities are integrating sustainability into their practices and which areas of emphasis for each of the institutions analyzed.

An analysis was carried out, seeking the differences and similarities between the achievements of the institutions analyzed, aiming to highlight possible trends within the major areas highlighted as a criterion of separation.

DEVELOPMENT – RESULTS AND DISCUSSIONS

Among the researches to be found in the reports, the exclusive chapter on sustainability, it was identified that only 4 (four) of these universities that have already issued their reports did not explicitly identify as such their actions and results for the year 2022, as evidenced by Chart 1.

It is important to emphasize that the reading and analysis aimed to identify within these groups, actions explicitly characterized as linked to sustainability. Given the breadth of the theme, it is necessary to restrict the focus to movements intentionally characterized as focused on sustainability.

Table 1 – List of Institutions, years of creation and particular sustainability chapters

Institution	Year of Creation	Do you have a particular chapter on sustainability?
Federal University of Northern Tocantins (UFNT)	2019	No
Federal University of Agreste de Pernambuco - UFAPE	2018	No
Federal University of Delta do Parnaíba - UFDPAr	2018	No
Federal University of Catalão (UFCAT)	2018	No
Federal University of Western Bahia - UFOB	2013	yes
Federal University of Southern Bahia - UFSB	2013	yes
Federal University of Cariri - UFCA	2013	yes
Federal University of South and Southeast of Pará - UNIFESSPA	2013	yes
Federal University of Latin American Integration - UNILA	2010	yes
Federal University of Afro-Brazilian Lusophony - UNILAB	2010	yes
Federal University of the Southern Border - UFFS	2009	yes
Federal University of Western Pará - UFOPA	2009	yes

Source: authored by the authors

Of the universe of 12 universities surveyed, 8 of them demonstrate some degree of commitment to sustainability and, to a greater or lesser extent, do so before society in their *accountability* process, allocating entire chapters linked to actions aimed at sustainable development. This reflects a common trend of integrating sustainability as a core element of their operations and management.

Regarding the tripod of sustainability, considering the categories and their direct links, it was possible to observe that the economic dimension was the one that presented the most actions in its area, with a total of 78 actions focused on this theme, as identified in chart 2. In summary, the high number of actions within the economic dimension reflects a conscious strategy of Brazilian federal universities to ensure financial and operational sustainability. These actions can be key to maintaining the long-term viability of institutions and allowing them to continue to invest in sustainable initiatives in other dimensions, creating a virtuous cycle of sustainable development.

Table 2 – List of the number of actions of each institution by dimension of sustainability.

Dimension x Universities	No. of Shares								TOTAL
	UNILAB	UFOPA	UNILAB	UNIFESSPA	UFCA	UFOB	UFSB	UFFS	
Social Dimension	0	3	3	2	1	2	10	13	34
Environmental Dimension	2	3	12	2	1	4	1	19	44
Economic Dimension	2	12	12	2	3	3	6	31	78

Source: authored by the authors

Chart 3 presents a quantitative view of the actions related to sustainable development carried out by Brazilian federal universities already distributed in the carefully established thematic categories. This distribution helps to identify which areas of action are more or less emphasized by each university, allowing for a comparative examination of the focus and priorities of sustainable development across institutions.

Table 3 - List of the number of actions of each institution by theme

Thematic categories x Universities	No. of Shares								
	UNILAB	UFOPA	UNILAB	UNIFESSPA	UFCA	UFOB	UFSB	UFFS	TOTAL
Educational Actions	0	1	3	1	0	0	7	9	21
Planning Actions	1	10	2	0	1	1	5	6	26
Control Actions	1	0	4	0	1	1	0	10	17
Actions of Des. Technological	0	0	5	1	0	0	0	12	18
Infrastructure Actions	1	3	8	2	0	3	1	19	37
Collective Applicability Actions	0	2	0	1	1	2	3	4	13
Administrative Actions	1	2	5	1	2	2	1	13	27

Source: authored by the authors

Analyzing the sustainable actions carried out by the 08 federal universities, similarities and differences were identified, highlighting the actions that can serve as an example for other organizations.

ENVIRONMENTAL EDUCATION AND AWARENESS

Environmental education and awareness programs are not demonstrated in the UFOB, UFCA and UNILAB reports. The other universities surveyed carry out campaigns and activities to sensitize the academic community about the importance of sustainability, demonstrating an educational approach to sustainability. Whether in congresses, lectures, workshops or extension programs, the propagation of ideas about the need for environmental preservation, inclusion, well-being, diversity and other topics related to the Sustainable Development Goals, is present in daily life according to the reports. Highlight for the performance demonstrated by UFSB, which presented 7 events directly linked to the dissemination of knowledge about sustainability and environmental awareness and UFFS, which listed 9 activities, among them, training of civil servants on sustainable management, a program to encourage the use of alternative and collective transport and dissemination of the sustainability booklet with general guidelines for sustainable practices. UNILA, with 3 citations to sustainable institutional actions linked to knowledge dissemination practices, was more generalist, citing only that it promotes awareness programs and campaigns, without highlighting any particular event.



PLANNING ACTIONS

Only UNIFESSPA did not highlight actions related to planning and sustainability. The other institutions surveyed demonstrated activities related to the construction of the Sustainable Logistics Plan, preparation of several annual plans, such as Annual Maintenance for the water and sewage network (UFOPA), development of the Solid Waste Management Plan (UFSB, UNILA and UFCA). UFOPA was the one that presented the most measures related to institutional planning, and in addition to the aforementioned plans, it admitted to being preparing specific annual plans aimed at the maintenance of drinking fountains, fire extinguishers, hydrants and water reservoirs.

Planning allows for the clear definition of goals and actions, structuring the path to achieving sustainability in an organized manner. These planning processes allow for the integration of various processes within the institution, ensuring that sustainability actions are comprehensive and coordinated. An action that differed from the others and that only appears in a report was that of UNILAB, which created an Energy Efficiency and Environmental Management Division, determining an administrative section within its organizational chart, to meet the institution's environmental demands.

CONTROL AND MONITORING ACTIONS

Although we highlighted control actions in the study, these citations were little noticed, which demonstrates a wide field of exploration for the next plans of the institutions. Monitoring consumption indicators is a fundamental piece to help institutional managers in decision-making and UNILAB, UFOB, UFCA, UFFS and UNILA were the only ones that proved prominence in this area. Actions related to the monitoring of water and energy consumption was the most common, but also the concern with the control of the use of disposables was informed in the reports. UFFS was the one that showed the greatest concern with this area, and stated that it carries out control and monitoring activities for the disposal of oils and fats, periodic diagnosis of the electrical network, survey and periodic monitoring of the situation of hydraulic installations and reuse of paper for draft. UNILA and UFCA in this aspect showed an activity different from the others, the decrease in the use of disposable cups or utensils. UFCA has even communicated actions to monitor fuel consumption indicators, notably a key action for fleet managers who wish to reduce their impacts on the environment.

Waste management is crucial for organizations because it promotes environmental sustainability, reduces operating costs, and minimizes negative impacts on the environment. By implementing effective recycling, composting, and waste reduction practices, organizations not only comply with environmental regulations but also improve their reputation and social responsibility. Waste management is therefore a common area of action. Universities such as UFOPA, UFOB, UNIFESSPA, UFCA, UFFS and UNILA



mention initiatives such as recycling, composting, sewage treatment, selective collection and the reduction of solid waste.

TECHNOLOGICAL DEVELOPMENT ACTIONS

Regarding the use of technologies, only UNIFESSPA, UFFS and UNILA stated that they have actions that touch on sustainability and technology, with UNIFESSPA even demonstrating 5 activities aimed at the use of technology in reducing impacts on the environment and the community. The complete implementation of electronic processes, use of a VOIP communication network, and the use of paper towel dispensers by the lever method were some of the actions that draw attention to this theme. UFFS, on the other hand, cited specific actions, such as the use of software for printing management and savings, presence sensors with photocells in some areas and the use of electronic certifications of academic proofs. The absence of specific information on technological actions in the institutions surveyed suggests the need for greater emphasis and transparency in the documentation and dissemination of these actions. Technologies play a crucial role in promoting sustainability, and institutions can benefit significantly from integrating advanced technologies into their sustainable management practices.

INFRASTRUCTURE ACTIONS

Universities, such as UFFS, UNILA, UFOB, UFSB, UNILAB and UNIFESSPA, highlight the implementation of energy efficiency measures, such as the use of LED lighting, solar energy systems, and energy consumption reduction programs. This common focus on energy efficiency demonstrates a collective effort to reduce carbon footprint and operating costs. It is interesting to observe that being the same universities with recent creations and, therefore, in a period of maturation in terms of their physical structure, this aspect envisions the possibilities of greater savings and increased productivity with the use of alternative technologies for energy use. UFFS cited 19 actions in this area, with great evidence for differentiated projects such as: afforestation with preference for plants that require lower water consumption, use of rainwater (creation of cisterns and storage boxes for use in cleaning sidewalks and other external areas), reuse of water from distillers (some campuses) along with rainwater harvesting and actions to turn off lights, air conditioners and stabilizers at the end of the day. Water was even included as a goal by SDG 6, which establishes objectives related to drinking water and basic sanitation. Projects and activities aimed at more efficiency in the use of water, reuse and preventive and corrective maintenance of sewage systems are some of the pillars for exploration among the universities surveyed.

UNILA also demonstrated in its Management Report some different actions regarding Infrastructure, such as the registration of parking spaces for people with disabilities in parking lots and supervision of their use; installation of access ramps, and installation of access handrails.



ACTIONS OF COLLECTIVE APPLICABILITY

Collective applicability programs promote the involvement of the academic and local community, raising awareness of sustainable practices. The comparison of collective applicability actions reveals a variety of initiatives focused on recycling, selective collection and environmental preservation. While all institutions share a commitment to sustainability, they differ in the approach and focus of their actions. The importance of these actions lies in community engagement, waste reduction, and the promotion of responsible environmental practices. Only UNILA and UNILAB did not present in their reports actions related to this object. The great positive highlight among the universities surveyed was due to UFOPA, which presented interesting initiatives such as planting ornamental seedlings, by servers and collaborators, to improve landscaping, creation of eco-living spaces on the Campi and actions to clean the UFOPA beach. UFSB and UFFS highlighted the creation of voluntary delivery ecopoints for waste that is difficult to recycle (electronics, batteries, etc.) as being important institutional activities in terms of sustainability for the year 2022. UNIFESSPA even cites a successful program that stood out, Biofertilizante, which uses social technologies for sustainability using cattle waste for the production of natural gas on rural properties in the region. These practices aim to minimize environmental impact and promote sustainability on campus.

ADMINISTRATIVE ACTIONS

The analysis of administrative actions reveals a common focus on legal compliance and the search for quality certifications. Institutions differ in the specificity of their actions, with some focusing more on licensing processes and others on obtaining efficiency seals. The importance of these actions lies in ensuring compliance, promoting efficiency, and ensuring transparency and accountability in institutional management. UFFS was the institution that most found actions within this approach, with visibility for decisions such as the requirement that bidding and direct contracting processes carried out at UFFS undergo a feasibility study for the adoption of sustainable criteria, the articulation, in some city halls, of the increase in the number of lines and the frequency of buses and also the adoption of the UFFS Furniture Standardization Manual, focused on environmental issues. UFSB also presented an important administrative action, as it obtained the A Seal of the National Program for Energy Efficiency in Buildings (PROCEL EDIFICA) for the institution's infrastructure projects. It is essential that Universities organize themselves administratively aiming at continuous improvement in terms of their contractual and asset management, as the licensing and contract renewal processes ensure that institutions operate within legal and regulatory standards, minimizing legal and environmental risks. UNILA cited a singular action when it highlighted in a report that it now requires proof of the origin of the wood, when acquiring goods and contracting works and services. In the meantime, UFOPA highlighted as a sustainable action, that it concluded the bidding to hire a company to build a sports complex, aiming here not only at the



environmental characteristic of sustainability, but also at the social one when the project is executed. This area of analysis (administrative actions) was the only one in which all institutions that have chapters dedicated to sustainability in their Management Reports presented at least one action aimed at this category.

In general, we can say that although some extend a little more on the subject, such as UFFS, UFSC, UNILA and UFOPA, the fact that the institutions surveyed mostly highlight an entire chapter on sustainability and try to synthesize the actions carried out in 2022 are already advances in terms of the insertion of development in the management agenda. It is worth noting that the highlight among the analyses was UFFS, which presented an extensive list of actions, even if without extending on the results and consequences of them. It is noted that there was a concern of the management to present to society a diverse range of sustainable actions carried out in 2022 by this university. Considering only what was presented, UFCA and UNILAB were the ones that least included actions related to sustainability in their reports, having short chapters on the subject.

FINAL CONSIDERATIONS

In view of the above, the study of the reports in an integrated manner allows us to conclude that the collective efforts of higher education institutions not only strengthen sustainability in their internal operations, but also contribute significantly to the sustainable development of the communities and regions where they are inserted.

The federal universities analyzed demonstrate a shared commitment to sustainability, albeit with variations in their specific approaches. It should be noted that as much as the Federal Court of Accounts recommends a standard management report, the content and the form of presentation of the activities of each institution are arbitrary. Although there are other sustainable actions in the field of higher education that happen in a non-systematic way, and, therefore, not recorded in the Management Reports as such, it should be noted that these actions produce a positive effect for organizational sustainable development. An example of this is affirmative actions, which, although present in the reports presented by universities, through the various policies of social inclusion, respect for diversity and reduction of student dropout, are not related as being of a sustainable nature, although they positively affect some Sustainable Development Goals. Thus, after analyzing the reports, it is possible to observe that the sustainability theme is more linked to the inclusion of policies and actions that deal with energy efficiency, cost reduction, creation and adaptation of plans, preservation and environmental management, and, therefore, identifying to a lesser extent the actions within the social dimension.

What was reflected by the reports regarding similarities indicates a common tendency to prioritize energy efficiency, waste management and the legal obligations linked to the creation of sustainable plans



and the inclusion of sustainability in official documents. As for the differences, it is possible to note that they reflect the unique needs and contexts of each institution, each one has issues related to the environment in particular, such as the community in which they are inserted, the exclusive local aspects, and also the management priorities for that specific year.

Even though they were created in new contexts, most of the universities in the study are characterized by the dismemberment of larger institutions. As an example, UFBA (Federal University of Bahia) had a campus in Barreiras, an inland city in the west of the state, which was dismembered from UFBA giving rise to UFOB (Federal University of Western Bahia). In these processes of dismemberment, the technical staff and the physical structure were maintained, initially changing only the autonomy regarding resources and academic and administrative management. Although it is already detached from its original University, there is the possibility that some important variables, such as the culture and principles already established initially, have pointed to a trend and the new university is just repeating what was already practiced.

Based on these analyses, a comparative study between more consolidated institutions is suggested, to assess whether the new institutions are really promoting innovation in terms of institutional sustainability management. Although the presentations of the chapters of the Management Report that highlight sustainability are mostly still timid in relation to other topics within the same report, it is possible to infer that it is an important kick-off for institutions to be concerned with demonstrating their actions and results in the area of sustainability to society in an organized and methodical way.



REFERENCES

- Amaral, L. P., Martins, N., & Gouveia, J. B. (2015). Quest for a sustainable university: A review. *International Journal of Sustainability in Higher Education*, 16(2), 155-172.
- Antunes, J., Nascimento, V. S., & Queiroz, Z. F. (2018). Educação para sustentabilidade, interdisciplinaridade e as contribuições da mediação para a construção coletiva do conhecimento. *Remea – Revista Eletrônica do Mestrado em Educação Ambiental*, 35(1), 260-278. <https://doi.org/10.14295/remea.v35i1.7310>.
- Brasil. Tribunal de Contas da União. (2022). *Conhecendo o Tribunal / Tribunal de Contas da União* (8th ed.). TCU, Secretaria-Geral da Presidência.
- Castro, E. M. N. V., Silva, E. R., & Castro, K. N. V. (2020). Educação ambiental para além do capital: Um desafio do século XXI. *Revista Brasileira de Educação Ambiental (REVEBEA)*, 15, 507-527. <https://periodicos.unifesp.br/index.php/revbea/article/view/10839/7880>. Accessed April 20, 2024.
- Católico, D. F. (2012). Revelación y divulgación de la información financiera y no financiera de las universidades públicas en Colombia. *Revista Facultad de Ciencias Económicas: Investigación y Reflexión*, 20(1), 57-76. <http://www.redalyc.org/articulo.oa?id=90924279005>. Accessed March 29, 2024.
- Corbari, S. D., Dorado, A., Kniess, C. T., & Freitas, L. (2021). O papel das instituições de ensino superior no alcance dos Objetivos de Desenvolvimento Sustentável (ODS). Instituto de Estudos Avançados da Universidade de São Paulo. <http://www.iea.usp.br/pesquisa/projetos-institucionais/usp-cidades-globais/artigos-digitais/o-papel-das-instituicoes-de-ensino-superior-no-alcance-dos-objetivos-de-desenvolvimento-sustentavel-ods>. Accessed April 20, 2024.
- Gil, A. C. (1999). *Métodos e técnicas de pesquisa social* (5th ed.). Atlas.
- Gil, A. C. (2008). *Como elaborar projetos de pesquisa* (5th ed.). Atlas.
- Kestin, T., Van Den Belt, M., Denby, L., Ross, K., Thwaites, J., & Hawkes, M. (2017). *Getting started with the SDGs in universities*. Sustainable Development Solutions Network.
- Manéia, A. (2016). A responsabilidade ambiental da Universidade na formação humana. *Revista Eletrônica em Gestão, Educação e Tecnologia Ambiental*, 20(1), 274-282.
- Tribunal de Contas da União. (2024). *Relatório de Gestão*. <https://portal.tcu.gov.br/contas/contas-e-relatorios-de-gestao/prestacao-de-contas/relatorio-de-gestao.htm>. Accessed [Date of Access].
- Junior, J., Corbari, S., Kniess, C., Nogueira da Silva, G., Piontkewicz, S., Melo, M., Silveira, A., Jr, O., Sobral, M., Jr, A., Fernandez, F., Dutra, A., Birch, R., Guerra, J. B. A., & Sampaio, C. (2023). Proposed mapping and evaluation model of sustainable development goals in graduate programs in environmental sciences in Brazil. *International Journal of Sustainability in Higher Education*, 24. <https://doi.org/10.1108/IJSHE-07-2022-0230>.
- Secchi, L. (2009). Modelos organizacionais e reformas da administração pública. *Revista de Administração Pública*, 43(2), 347-369. <http://bibliotecadigital.fgv.br/ojs/index.php/rap/article/view/6691/5274>. Accessed March 29, 2024.



Selltiz, C., et al. (1987). Métodos de pesquisa nas relações sociais (2nd ed., Vol. 3). EPU.

Veiga, J. E. da. (2010). Sustentabilidade: A legitimação de um novo valor. Editora Senac São Paulo.

Vergara, S. C. (1997). Projetos e relatórios de pesquisa em administração. Atlas.

Zutshi, A., Creed, A., & Connelly, B. L. (2018). Education for sustainable development: Emerging themes from adopters of a declaration. *Sustainability*, 11(1), 156. <https://doi.org/10.3390/su11010156>.