



**Sustainable practices in a higher education institution: an approach to implementation difficulties in the Garanhuns academic unit of the Federal rural University of Pernambuco**

**Práticas sustentáveis em uma instituição de ensino superior: uma abordagem das dificuldades de implementação na unidade acadêmica Garanhuns da Universidade Federal rural de Pernambuco**

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## Abstract

Higher Education Public Institutions can be understood as major consumers of goods and services, in the case of Brazil. To lessen the negative impacts of their activities, these entities have a primary role in the dissemination and implementation of sustainable ideas in their administrative routines. Thus, this study investigated the main difficulties faced by public actors in adopting sustainable practices in their administrative routines. The case study methodology was used as methodological strategy, and the research was classified as descriptive, applied in nature and of qualitative approach. The unit of analysis chosen was the Garanhuns Academic Unit of the Federal Rural University of Pernambuco (UAG/UFRPE). For data collection, semi-structured interviews were conducted with 12 servants representatives of strategic sectors of UAG/UFRPE. The data collected through the interviews were analyzed using content analysis. The results showed that the main difficulties in adopting sustainable practices in the workplace were administrative, budgetary and cultural, with the most critical obstacles being the lack of knowledge and training factors on sustainable actions and the scarcity of effective institutional policies. From these results, it is concluded that it is necessary to overcome these difficulties to implement effective sustainable management in the Unit.

**Keywords:** Public Administration. Sustainable Management. Sustainability. Institutions of Higher Education.

## Resumo

Instituições Públicas de Ensino Superior podem ser entendidas como grandes consumidores de bens e serviços, no caso do Brasil. Para diminuir os impactos negativos de suas atividades, estas entidades têm um papel primordial na disseminação e implementação de idéias sustentáveis em suas rotinas administrativas. Assim, este estudo investigou as principais dificuldades enfrentadas pelos atores públicos na adoção de práticas sustentáveis em suas rotinas administrativas. A metodologia do estudo de caso foi utilizada como estratégia metodológica, e a pesquisa foi classificada como descritiva, aplicada na natureza e de abordagem qualitativa. A unidade de análise escolhida foi a unidade acadêmica Garanhuns da Universidade Federal Rural de Pernambuco (UAG/UFRPE). Para a coleta de dados, foram realizadas entrevistas semi-estruturadas com 12 servidores representantes de setores estratégicos da UAG/UFRPE. Os dados coletados através das entrevistas foram analisados utilizando análise de conteúdo. Os resultados mostraram que as principais dificuldades na adoção de práticas sustentáveis no local de trabalho foram administrativas, orçamentárias e

culturais, sendo os obstáculos mais críticos a falta de conhecimento e fatores de capacitação sobre ações sustentáveis e a escassez de políticas institucionais eficazes. A partir destes resultados, conclui-se que é necessário superar estas dificuldades para implementar uma gestão sustentável eficaz na Unidade.

**Palavras-chave:** Administração Pública. Gestão Sustentável. Sustentabilidade. Instituições de Ensino Superior.

### Introduction

The unsustainable consumption of natural resources, resulting from the economic development model, inherited in large part from the industrial revolution, caused a series of significant and worrying transformations in the natural environment. These transformations can be attributed to the widespread waste in the production, distribution, consumption, and disposal cycle, which are associated with global environmental problems, such as the increase in global temperature, the extinction of several animal species, the devastation of forests, the reduction of potable water and others, direct consequences of industrialization (MACIEL; FREITAS, 2014; RUFINO; ANDRADE, 2014).

Many public and private institutions have been concerned with achieving goals and showing greater care with environmental issues, to satisfy the demands of consumers and society, in addition to meeting the laws and inspections (HAYASHI; SILVA, 2015). These organizations felt pressured to contribute to environmental preservation, due to concern about the limits of the planet, leading to the establishment of new forms of management (ASSUNÇÃO, 2016).

Regarding Brazilian public sector, Cavalcanti et al. (2017) state that it is responsible for handling more than 20% of the national Gross Domestic Product (GDP), being considered a major consumer of goods and services. This fact reinforces the need for Brazilian public institutions to implement a socio-environmental management system that promotes sustainable actions to reduce the impacts arising from their daily activities (PEGORIN; SANTOS; MARTINS, 2014).

In this sense, the Brazilian government has developed programs and laws that standardize and guide public managers in the implementation of sustainable actions in their routines, such as, for example, the Environmental Agenda in Public Administration (A3P);

Solidarity Selective Collection (CSS); and Decree No. 7,746/2012, which instituted the Sustainable Logistics Management Plan (PLS), as we may discuss about throughout the paper.

The adoption of sustainable practices in the public sector's daily activities characterizes a continuous improvement process that results in resource savings and positive effects on the environment. In this process, Higher Education Institutions (HEIs) play an essential role in the dissemination of sustainable thinking, throughout their courses, and they ought to be an example to the society and implement the concepts of sustainability their work routines (GAZZONI et al., 2018). Although universities contribute to the production and dissemination of knowledge about sustainability, in most cases they do not internalize sustainable practices in the management of their campuses (MAIO, 2017).

Gazzoni et al. (2018) state that, for the successful implementation of sustainability in a public educational institution, it is necessary that, in addition to encouraging their managers involved, other members involved ought to incorporate and disseminate sustainable objectives and ideas. So, it is necessary to depict the difficulties faced by these institutions in the adoption of sustainable actions, to delineate policies that can be implemented to overcome these obstacles.

With these concerns in mind, the present study aims to investigate what are the main difficulties faced by public actors in the adoption of sustainable practices in their administrative routines, using the Academic Unit of Garanhuns, from the Federal Rural University of Pernambuco, located in the countryside of state.

## Theoretical Framework

### 2.1 Sustainability in the public sector

In order to present a more holistic, inclusive and understandable definition of sustainability, Boff (2017, p. 107) proposes that:

[...] sustainability is every action aimed at maintaining the energetic, informational, physical-chemical conditions that support all beings, especially the living Earth, the community of life, society and human life, aiming at its continuity and still meet the needs of present and future generations, in such a way that natural goods and services are maintained and enriched in their capacity for regeneration, reproduction and co-evolution.

In the context of organizations, sustainability is understood as the ability to comply with legislation aimed at management actions related to the environment, safety, and

occupational health, seeking competitiveness and economic sustainability (REZENDE, 2015). With the objective of guiding the management of companies in relation to sustainability, Elkington (1997) proposed the concept of the Triple Bottom Line, known as the Sustainability Tripod, illustrated by Figure 1. From this tripod, the author defines that sustainability can only be established when there is a balance between three pillars: social, environmental, and economic.

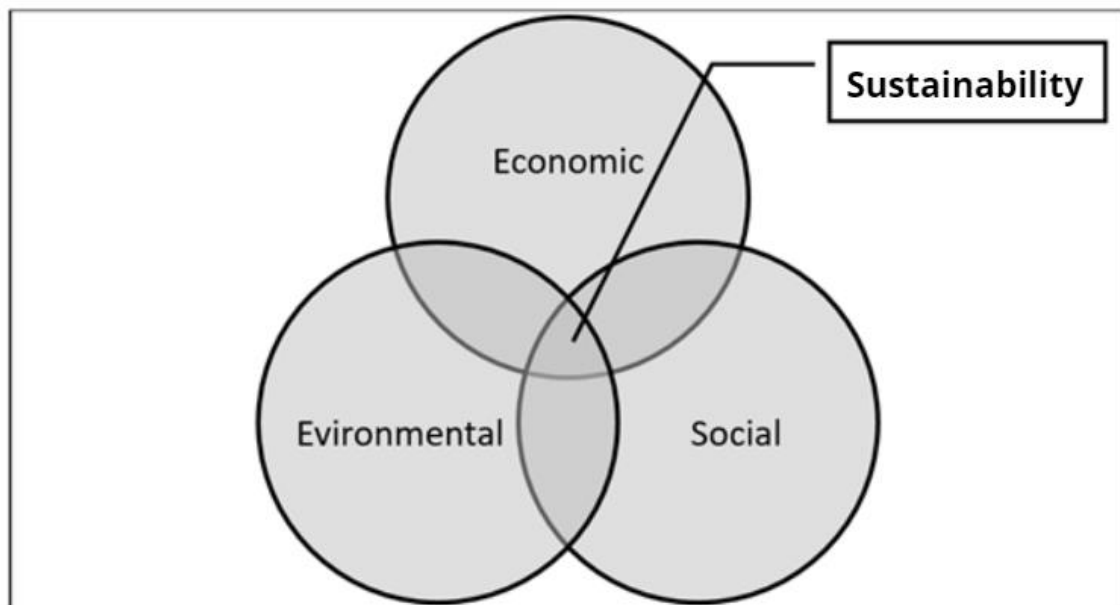


Figure 1 - Triple Bottom Line Approach  
Source: adapted from Rodrigues (2015)

The social pillar refers to the concern with the social impacts of innovations on human communities (power and equity, social mobility, social management and cultural identity); the environmental pillar addresses concerns about environmental impacts caused by the indiscriminate use of natural resources and pollutant emissions; and finally, the economic pillar concerns to the concern with economic efficiency, through obtaining profit and competitive advantages in the markets where organizations operate (BARBIERI et al., 2010).

With regard to the adoption of sustainable practices by Brazilian public bodies, we can mention the Magna Carta of 1988, which, in its article 255, already warned about the environmental issue and about the responsibility of the Public Power to defend and preserve the environment for present and future generations (BRASIL, 1988). According to Soares et al. (2017), this norm demonstrates that, at that time, the environmental issue was already the subject of concern and concern on the part of Brazilian public administrators.

In this logic, the Brazilian Public Administration has developed programs and laws that standardize and guide public managers in the adoption of new sustainability references in their work routines. Among them are those already mentioned: CSS, PLS and A3P; in addition to these, one can mention the Public Spending Efficiency Program (PEG); Sustainable Public Procurement (CPS) and the Sustainable Esplanada Project (PES). With regard specifically to the A3P, it was created in 1999 by the Ministry of Environment (MMA), due to the need to include all public entities in the context of environmental management, thus meeting the principles of efficiency and environmental balance, established in the Brazilian Constitution (BRASIL, 2017).

To achieve this goal, the A3P is based on six priority thematic axes: rational use of natural resources and public goods; proper management of waste generated; quality of life in the work environment (QVT); sustainable tenders; awareness and training of servants; and sustainable buildings (BRASIL, 2016). Based on these axes, public managers plan sustainable practices to be adopted in their bodies (CARVALHO; SOUSA, 2013). However, the guiding axes are illustrative and not exhaustive, and each institution can adapt them to its reality, through the suppression or inclusion of actions (ARAÚJO, 2018).

## **2.2 Sustainability in Higher Education Institutions**

HEIs have great power of influence in society, since they are responsible for training professionals who will intervene in the development of human life and the planet. Thus, they are recognized as essential organizations in the dissemination of sustainability to the community in which it operates and other public and private institutions.

According to Fouto (2002), HEIs can influence society in promoting sustainability through four levels of intervention: 1) Education of decision makers for a sustainable future; 2) Investigation of solutions, paradigms and values that serve for a sustainable society; 3) Operation of university campuses as models and practical examples of sustainability on a local scale; and 4) Coordination and communication between the previous levels and between these and society.

Regarding the concept of sustainable university, Viegas (2014) explains that an HEI inserted in a context of sustainability is one that employs values and care for the environment, with the well-being of individuals who live in its surroundings and with the efficient use of their financial resources. The author adds that a HEI that seeks sustainability in its practices must: clearly expose, in its official documents, the commitment to sustainable development;

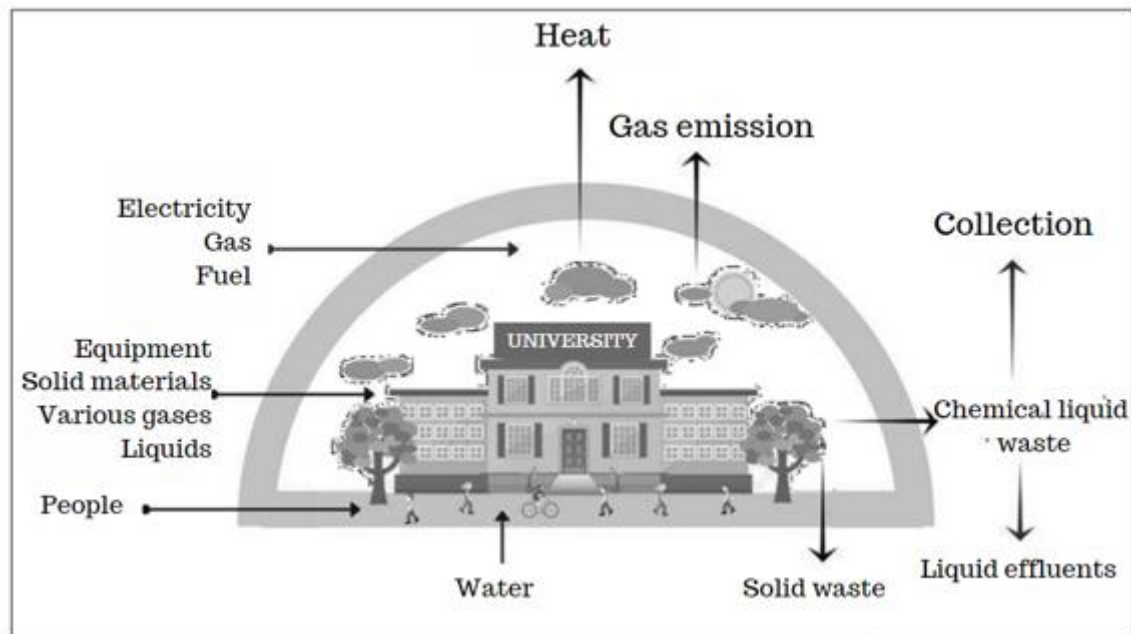
encouraging its students to critically reflect on socio-environmental problems; adhere to the concept of sustainability in subject teaching and research; plan sustainable actions and policies; increase student support services that demonstrate sustainability; and encourage cooperation agreements at local and global levels, with a view to enriching sustainable practices.

On the role of universities in promoting sustainable development, Tauchen and Brandli (2006, p. 504) argue that there are two currents of thought:

The first highlights the educational issue as a fundamental practice for HEIs, through training, to contribute to the qualification of their graduates, future decision makers, so that they include concern for environmental issues in their professional practices. The second current highlights the position of some HEIs in implementing EMSs on their university campuses, as models and practical examples of sustainable management for society.

The first line of thought defends the role of HEIs in promoting sustainable development, through teaching, research and extension practices, seeking to raise awareness and form a critical socio-environmental sense in their students. While the second defends the duty of HEIs to serve as an example, implementing sustainable practices in their administrative routines.

For the functioning of university campuses, it is necessary to use human and natural resources and, as a result of their activities, a series of waste is generated. In this sense, Tauchen and Brandli (2006) compare HEIs to a small urban nucleus, which involves, in addition to teaching, research and extension activities, the administrative activities responsible for its operation, through restaurants, accommodation, convenience centers, among others. Based on this, Figure 2 presents the main flows of a university campus:



**Figure 2 – Main flows of a university campus**

Source: adapted from Tauchen and Brandli (2006)

According to Ameer and Othman (2011), the concern with the adoption of sustainable precepts must be reflected in the strategic planning of sustainable institutions, so that intentions of this nature are operationalized through the adoption of a long-term approach and a set of broader range of responsibilities. From this perspective, Ávila, Madruga and Beuron (2016) explain that the strategic planning of universities is summarized in the Institutional Development Plan (PDI).

### 2.3 Difficulties Pointed out in the Literature for the Insertion of Sustainable Actions in Organizations

According to Pereira (2016), in the public sector, difficulties in adopting sustainable practices can be external and internal. The author explains that, regularly, the main external obstacle is purely economic, since there is a lack of government stimulus to finance expenditures aimed at changes and transformations. The internal difficulties, highlighted by the author, includes lack of information from management, who prefer not to adopt practices without proper knowledge; divergence in decision-making, due to different opinions of different managers; and lack of interest on the part of civil servants to participate, either due to lack of time or because they did not find their involvement important.

For this bias, Monteiro and Camelo (2015) highlight the following obstacles to the adoption of sustainable actions recommended by the A3P: a) lack of in-depth knowledge



about the Agenda; b) lack of trained personnel to promote sustainable actions; c) lack of legal or financial incentive from the federal government to carry out sustainability actions; d) servants' lack of interest in engaging in actions that promote sustainable development; e) lack of time for public servants to participate in projects aimed at sustainability; and f) lack of sensitivity of the public servants to environmental issues.

Gaspar (2018), on the other hand, noted that the main obstacles to the inclusion of sustainability criteria in public works are linked to the lack of suppliers of sustainable goods; the slower perception of the process; the lack of specialists in the team; organizational culture and the higher cost of sustainable products.

With regard to the difficulties of inserting sustainable practices in HEIs, Brandli et al. (2010) highlight the following: the highly bureaucratic system and the rigid hierarchy; the lack of socio-environmental awareness and commitment of the actors involved (teachers, students and technicians); and the lack of short- and long-term institutional policies.

While Bizerril, Rosa and Carvalho (2018) when studying the management processes of a university, observed that the main institutional characteristics that can hinder the implementation of organizational sustainability are: personal resistance to change; budget constraints; high workload and lack of incentives; among others. In addition, Rocha, Garcia and Onody (2018) pointed out these factors as barriers to the adoption of sustainable actions in public HEIs: unavailability of time; lack of support from superiors; servant resistance; and lack of knowledge about specific legislation.

Given this introductory discussion, Chart 1 presents a summary of the main difficulties found in the literature in focus, followed by the scholars who point them out.

DIFFICULTIES		AUTHORS
Administrative nature	Lack of knowledge and training of the actors involved regarding sustainable topics	Monteiro & Camelo (2015); Pereira (2016); Rocha, Garcia & Onody (2018)
	Lack of trained personnel to promote sustainable actions	Monteiro & Camelo (2015); Gaspar (2018)
	Lack of short- and long-term institutional policies	Brandli et al. (2010); Bizerril, Rosa & Carvalho (2018)
Budget nature	Lack of financial support from the government	Monteiro & Camelo (2015); Pereira (2016)
	Higher cost of sustainable products	Gaspar (2018); Bizerril, Rosa & Carvalho (2018)
Cultural nature	Highly bureaucratic system and rigid hierarchy	Brandli et al. (2010); Pereira (2016); Rocha, Garcia & Onody (2018)
	Lack of time and interest on the part of public servants to adopt measures and participate in projects aimed at sustainability	Brandli et al. (2010); Monteiro e Camelo (2015); Pereira (2016); Bizerril, Rosa & Carvalho (2018); Rocha, Garcia & Onody (2018)

	Resistance to changes	Bizerril, Rosa e Carvalho (2018); Rocha, Garcia e Onody (2018)
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**Table 1 – Main difficulties for the insertion of sustainable actions in public agencies**

Source: our elaboration (2019).

### Methodology

To achieve the proposed objectives, the research has a descriptive character, as it aims to describe the characteristics of a given population or phenomenon or even establish the relationship between variables (GIL, 2011). Regarding its nature, it is classified as qualitative, since it seeks to describe, analyze and classify dynamic processes experienced by social groups, in addition to contributing to the process of change in a given group (RICHARDSON, 2008). As for the type of procedure adopted for the investigation process, a case study was carried out, as it is the one that best fits the research object. The case study can be conceptualized as an empirical approach that seeks to analyze a current phenomenon, within its specific context, in which several sources of evidence are used (YIN, 2001).

The Academic Unit of Garanhuns (UAG), one of the campuses of the Federal Rural University of Pernambuco (UFRPE), was chosen as the focus unit of analysis for this study. The choice of UAG/UFRPE is justified because it is a federal institution, which must adopt sustainable management, serving as an example for the others, as it was the first university extension campus of the Higher Education Expansion and Interiorization Program created in the country. It is important to note that UAG was recently dismembered from UFRPE and is in a transition period for the implementation of the new university, namely the Federal University of Agreste de Pernambuco (UFAPE).

Therefore, the data collection took place through semi-structured interviews, from 10/19/2018 to 12/03/2018, aiming to raise the main difficulties for the adoption of sustainable practices at UAG/UFRPE. The semi-structured interview is a data collection instrument that aims to understand the meaning that an interviewee attributes to questions and situations, and must be conducted through a script, in which the researcher is free to add new questions (MARTINS; THEÓFILO, 2009). In this sense, for the elaboration of the script for these interviews, the literature about sustainability was used. We interviewed 12 civil servants, chosen because of their strategic functions or positions, with greater power of influence on the adoption of sustainable practices at UAG/UFRPE, as described in Table 2.

**One servant per function / sector**

General and Academic Direction	
Administrative Direction	
University Veterinary Hospital - HVU	
Personnel and SCDP (travel control) Sector	
Information Technology Sector	
Asset Management and Warehouse Sector	
Transport Sector	
Purchasing and Bidding Sector	
Headquarters Engineering Sector	
Representative of the UAG/UFRPE Sustainability Commission	
Accessibility Center	
Laboratories	

**Table 2 - Subjects who were interviewed and their respective sectors**  
 Source: our elaboration (2019).

From the 12 interviews carried out, 11 were recorded and then transcribed. Only one of the servants did not allow the recording of the interview. Therefore, their responses were recorded on paper, concomitantly with the interview.

Subsequently, for the analysis of data from the interviews, the content analysis technique was used, defined by Bardin (2016, p. 48) as:

[...] a set of communication analysis techniques aimed at obtaining, through systematic procedures and objective description of the content of messages, indicators (quantitative or not) that allow the inference of knowledge related to the conditions of production/reception (inferred variables) of these messages.

This type of analysis is chronologically organized into three phases: 1) Pre-analysis – which aims to operationalize and systematize the ideas, establishing interpretation indicators, through the choice of material to be analyzed and a superficial reading of this material (RICHARDSON, 2008); 2) Exploration of the material – which basically consists of coding, categorization and quantification of information according to rules previously established in the previous phase (BARDIN, 2016); and 3) Treatment of results, inference and interpretation – which aim to capture the manifest and latent contents contained in all the collected material (SILVA; FOSSÁ, 2015). It is worth mentioning that the present research followed these phases.

To facilitate the use of the content analysis technique, Meireles and Cendón (2010) state that it is necessary to create categories related to the research objectives. According to Bardin (2016), categories are rubrics or classes that bring together a group of elements with common characteristics under a generic title. The author also points out that the criteria for

defining categories can be semantic (thematic), syntactic (verbs, adjectives, etc.), lexical (classification of words according to their meaning) and expressive (for example, categories that classify language problems).

From this context, using the thematic criterion and according to the proposed objectives, the categories of analysis arranged in Table 3 were defined for this study.

CATEGORIES
Difficulties of an administrative nature
Difficulties of a budgetary nature
Difficulties of a cultural nature

Table 3 – Analysis categories  
**Source: our elaboration (2019).**

Finally, after defining the categories, aiming to preserve the anonymity of the interviewees and better organize the data, the alphanumeric coding of the interviewees was carried out, from E1 to E12.

### Analysis and Discussion of Results

This section presents the results obtained through the data collected from the interviews, aiming to describe the main difficulties for the adoption of sustainable actions in that Unit.

#### 4.1 Administrative Nature

The two difficulties of an administrative nature most pointed out by the interviewees, for the implementation of sustainable practices in the work environment, were the lack of knowledge about these actions and the lack of training that would help and sensitize these individuals to contribute to sustainability in their work sectors. This can be confirmed in the following excerpts:

[...] there are things that you can give sustainability, but, as you don't have knowledge, you don't know and end up not doing it (E1).

We have this difficulty in training, for the university, for the institution to think, within its objectives, sustainability and work, provide the means of training so that the entire body of employees works in this direction as well (E2).

It is precisely, perhaps, the lack of knowledge of many sustainable practices, which we have, because there is no training (E3).

[For] people who do not work daily thinking about sustainability, it is difficult to know which sustainable practices to adopt and how to contribute to this in our sector (E4).

The difficulty that I see is perhaps the lack of information that you don't have. I think this is the main problem (E5).

It is clear that for an efficient implementation of sustainability in the organization, it is essential to involve and train the actors involved in the process, so that they come to know which actions can be applied to their work reality. Therefore, the importance of training that promotes individuals' socio-environmental awareness is highlighted. In this sense, a study developed by Araujo (2018), at the UFPE University, in the same region, pointed out that the greatest motivation for implementing socio-environmental management plans is precisely the promotion of socio-environmental awareness in the academic community.

In relation to having qualified personnel for the promotion of sustainability, one of the interviewees explained: "In terms of manpower specialized in this issue, we have a huge range of teachers here, far beyond qualified and who can multiply knowledge, mainly for the actions to be applied (E6)".

In view of this, it is clear that there are qualified personnel for the socio-environmental training of the servers. However, other interviewees highlighted that one of the obstacles to the implementation of other practices, aimed at life QWL and the rational use of goods (equipment maintenance), is precisely the lack of qualified human resources, as can be seen below:

One difficulty is the issue of machine maintenance. Because we don't have a quantity of qualified human resources to do this, today we end up not doing it, we end up not doing it (E1).

I think that one difficulty is the lack of public servants who could, for example, provide care for health prevention, health promotion activities. So, you don't have, for example, a physical education professional who can work with the public servants. So, so that we could promote, for example, a walk or reserve a part of the time to make available for a preventive activity, ergometric exercises, work exercises for the servers. But we don't have the professional who could do it. So, in that sense, which is very difficult, you don't have staff (E2).

However, the comparison between the two preceding excerpts, which present a difference of opinion as to whether or not the Unit has qualified human resources to promote sustainability, allows us to interpret that there are different situations. In the case of E6's report, already mentioned, it is stated that there are servants who have theoretical knowledge about sustainability. This suggests that they could multiply this knowledge through

environmental education courses, for example. On the other hand, in the excerpts of E1 and E2, above, it is noted that not only a conceptual issue stands out, that is, it is not just about the need to have servants who understand aspects of sustainability, but, above all, it highlights if the very absence of professionals to execute policies, programs and services that would collaborate for the sustainable management.

The issue of the lack of institutional policies that encourage sustainability within the UAG/UFRPE campus was the third most cited difficulty by respondents. This difficulty was pointed out by Blandli et al. (2010) as one of the main obstacles to the inclusion of sustainability in universities, when studying the results presented by representatives of 25 HEIs located in Latin America.

In this sense, the interviewees highlighted that there is still a need to prioritize and implement at UAG/UFRPE both a general policy focused on sustainability, as well as more specific policies, directed, for example, to themes such as QWL. This can be inferred from the following excerpts:

I think we can't be hypocritical; I think we need to prioritize; in fact, this is the most important thing. We must sit down, we have to focus, we have to prioritize, right? So that we can institutionalize the practices [...]. I think this is missing, there is a lack of priority on the institutional part, to implement a policy aimed at sustainable development [...] (E6).

Another thing that I can mention as a difficulty is that what we need is not even to grow, it is to be born in relation to the quality of life of the servant. As for having a policy. The university does not encourage almost anything in this regard (E5).

Another fact observed is that UFRPE has several programs that work with sustainable practices, focused on the management of waste generated, however, due to the lack of a more general institutional policy, these programs do not dialogue with each other. And, their actions are seen in a more specific way, being developed in isolation, in certain sectors or campuses, not taking place globally for the entire institution. This fact can be analyzed in the following statement:

[...] we depend on programs that can be supported by the institution and financed by the institution. So, today at UFRPE we have several programs [...]. But the problem is that these programs don't talk to each other. So, if you have different programs linked to the environmental area, and you cannot link these programs together, they are done, they are carried out, but in the form of cells. So, we have hospital material collection cells, chemical products collection cells, recycling cells, but they are cells, you cannot implement them at a global level within the institution. So that's why you hardly ever see the impact because these are not things that are interconnected. So, it gets complicated (E6).

In addition to the administrative obstacles found in the literature and mentioned in Table 1, other difficulties were identified in the interviews for the insertion of sustainable practices on campus. One of them was the lack of more sustainability-oriented planning, as seen in the following excerpts:

The difficulty is... The campus is new, it was not planned in its implantation. If it had been I assure you it would have been very easy. So today we must adapt, this is the great difficulty. [...] if we had already started with these practical actions, there would be no difficulty. If I think about water collection, water reuse is expensive. If I had thought about it from the beginning, it would have already been included in the work, it was already in operation and it would only be maintenance (E7).

Another is that we do not have a strategic plan focused on the environment. Regarding the materials purchased, there must be a strategic plan, so that we have standardization. Regarding [the] contracts, we must have a strategic plan focused on this area (E6).

Although the servants perceive that there is no institutional planning focused on this theme, it should be noted that, even in an incipient way, this planning exists and is delimited in the institution's PDI. Thus, it appears, in this case, that there may be an ineffectiveness in the execution of what is listed in this planning document. The difficulties presented in the excerpts above were also found by Gaspar (2018), when studying the challenges for the insertion of sustainability criteria in public works.

#### 4.1.2 Budgetary Nature

Regarding difficulties of a budgetary nature, one of the obstacles observed is the lack of financial incentives from the federal government:

Another obstacle is that what is needed is not just something from within the institution. Does the government have support? There is, but still "lame". In the same way that we don't have a policy focused on this sustainable development here, we also don't have a policy focused on the government level, specific, focused, with separate headings exclusively for federal public bodies to apply in that area. That's why we are in deficit. the question of investment requires that the top also have a vision focused on sustainable development, a strong ministry that can act and spread it to the rest of the pyramid (E6).

This affirmation reinforces what Monteiro and Camelo (2015) points out, e.g., that the lack of budgetary incentives on the part of the government is one of the critical factors for the implementation of the socio-environmental practices advocated in the A3P.

On the other hand, one of the interviewees argued that one of the main challenges is the high cost of sustainable products:

[...] the cost of a sustainable product is also higher, you know? And then, as we have, for example, to buy at the lowest price, usually that product if we didn't foresee in the notice there, in the term of

reference that the product must be sustainable, when you go to buy it if it has a sustainable one, certainly it will be more expensive than what is not sustainable. So, we generally cannot buy, because we are forced to buy at the lowest price. And the lowest price will never be sustainable (E3).

Regarding this theme, Araujo (2018) elucidates that the budget constraints have been obstacles pointed out by many interviewees, since it makes it difficult to adopt sustainable actions that require high initial investments, as is the case of actions related to energy efficiency, systems rainwater collection, effluent treatment systems, among others.

### 4.1.3 Cultural Nature

As for the difficulties of a cultural nature, this research did not find obstacles related to the bureaucratic system and the rigid hierarchy, as shown in Chart 1. However, regarding the lack of interest of servants in adopting actions aimed at sustainability, the following excerpts stand out:

As for the servant, I don't see any difficulty, where we arrive, where we talk, everyone supports, everyone gives ideas of what to do (E7).

With respect to the body of servants in general, this philosophy, this culture, I cannot say about the totality, but the large percentage is sensitive to this environmental issue [...]. The issue of taking care that you are not polluting, of taking care that you consume in a restricted way, in a rational way, so that you harm the environment as little as possible, this concern exists, I see it in the servants here (E6).

Three other difficulties of a cultural nature, mentioned in the interviews, were immediacy in carrying out the activities; resistance to change (“institutional immobilization”); and the lack of communication and information about sustainable actions already implemented in the institution, but which are not disseminated to the entire community.

Given the context presented, it is noted, according to the perception of respondents, that the main difficulties for the insertion of sustainable practices within the UAG/UFRPE, are primarily of an administrative, budgetary and cultural nature. However, it was observed that the most critical obstacles are linked to the lack of knowledge and training, in addition to the scarcity of effective institutional policies focused on the subject.

Table 5 presents a summary of the main difficulties encountered in the implementation of sustainable practices at UAG/UFRPE:

DIFFICULTIES	
	Lack of knowledge and training of actors regarding sustainability actions
	Shortage of qualified professionals to promote sustainable practices
	Lack of institutional policies aimed at sustainability
	Ineffectiveness in executing the plan



<b>Administrative Nature</b>	Lack of physical structure to implement sustainable actions
	Lack of suppliers of sustainable materials
	Reduced number of servers
<b>Budget Nature</b>	Lack of government financial incentive
	High cost of sustainable products
	budget constraint
<b>Cultural Nature</b>	Immediacy in carrying out activities
	Lack of communication that results in the absence of disclosure of sustainable actions
	Resistance to change

**Table 5 - Main difficulties encountered in implementing sustainable practices at UAG/UFRPE**

Source: survey data (2018).

## Conclusions

This research aimed to investigate what are the main difficulties faced by public actors in the adoption of sustainable practices in their administrative routines, using the Academic Unit of Garanhuns (UAG) of the Federal Rural University of Pernambuco (UFRPE) as a case study institution.

From the results obtained, it is concluded that the main difficulties for the insertion of sustainable practices within the UAG/UFRPE are of an administrative, budgetary, and cultural nature, with the most critical obstacles being the lack of effective institutional policies aimed at sustainability and the lack of knowledge and training of the actors involved in relation to this theme.

With this, it is inferred that it is essential to create awareness and training mechanisms on the referred topic. In addition, it is admitted that it is urgent to implement a global policy, within the institution, aimed at the sustainability of administrative routines, which goes beyond the theoretical level of planning and is effectively put into practice, since, in the medium and long term, the implementation of sustainability will bring social, environmental, and economic benefits.

In this way, it is expected that this research has contributed to the identification of the main obstacles to the implementation of sustainable actions in public bodies, based on the case of UAG/UFRPE. In addition, it is expected that the study will promote the start for the improvement of the sustainable management of the analyzed campus, by identifying the main difficulties for the adoption of sustainable precepts and, with this, serve as a basis for the establishment of measures aimed at institutional sustainability.

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