USE OF SUSTAINABLE DEVELOPMENT OBJECTIVES FOR THE FORMULATION OF STRATEGIC ACTIONS: A CASE STUDY OF A PUBLIC HEALTH SCHOOL

Carlos Augusto Correia Lima Reis ^a, ^b, Flávia Ramos Guimarães ^a, Murilo Barbosa Salles ^a, Filipe Cardoso Brito ^b, Aloisio Santos Nascimento Filho ^b

Abstract: Several organizations struggle to effectively adopt the 2030 Agenda as a comprehensive planning guide. This study aims to illustrate how a public health school utilizes this document as a guiding framework for developing its strategies. To achieve this, a descriptive case study was conducted, comparing the institution's planning documents with the 2030 Agenda to confirm its integration. Based on this alignment, the institution established the objective of enhancing its sustainable logistics system. This objective encompassed the incorporation of socio-environmental requirements into the risk management matrix and their practical implementation in a specific area of the institution. By implementing these measures, the institution successfully identified the risk level as being between medium and low, enabling the inclusion of sustainability considerations in the decision-making process.

Keywords: 2030 Agenda; Sustainable Development Goals; Strategy; Strategic Objectives; Risk Management.

USO DOS OBJETIVOS DE DESENVOLVIMENTO SUSTENTÁVEL PARA A FORMULAÇÃO DE AÇÕES ESTRATÉGICAS: ESTUDO DE CASO DE UMA ESCOLA DE SAÚDE PÚBLICA

Resumo: Diversas organizações adotam a Agenda 2030 como norteadora no planejamento, contudo, esse engajamento permanece desafiador. Este estudo tem o objetivo de descrever como uma escola de saúde pública utiliza esse documento como norteador na elaboração de suas estratégias. Para isso, foi realizado um estudo de caso tipo descritivo. Os documentos institucionais de planejamento foram confrontados com a Agenda 2030, confirmando sua inclusão no texto. Partindo do planejamento, foi estabelecido o objetivo de aprimoramento do sistema de logística sustentável, incorporando requisitos socioambientais na matriz de gestão de risco e sua aplicação em uma área da instituição. Essa aplicação permitiu identificar o risco entre médio e baixo, permitindo a inclusão da sustentabilidade na tomada de decisão.

Palavras-chave: Agenda 2030; Objetivos de Desenvolvimento Sustentável; Estratégia; Objetivos estratégicos; Gestão de Risco.

^a National School of Public Health Sergio Arouca, Fiocruz, Brazil,

^b Cimatec , Senai, Brazil

1. INTRODUCTION

The 2030 Agenda [1] of the United Nations Organization – UNO, is a commitment signed among its member states, containing seventeen objectives and 169 goals related to the theme of sustainability, between 2015 and 2030. The Government of several countries has used the agenda's objectives to subsidize public policies, as well as numerous public and private organizations adopt it as a guiding document for their planning, unfolding the objectives at the institutional level.

An exploratory search conducted in Google Scholar, using the Boolean descriptors and operators, company OR organization OR objectives OR goals OR actions OR "sustainable development objectives" AND "Agenda 2030", applied in the title field, identified about 780 papers published between 2015 and 2023, which suggests academic interest in the theme and the relevance of the research. Although the academic literature on the subject gives greater importance to the role of governments rather than public or private organizations as agents promoting the Sustainable Development Goals (SDGs), there are examples that highlight the public organizations that use the SDGs to develop their strategies, such as the Institutional Development Plan of the Federal University of Ceará [2].

The 2030 Agenda is an opportunity to align organizational objectives with global sustainable development goals. Organizations can contribute to achieving the SDGs through their strategies, which unfold into strategic actions. In addition, companies' engagement in the 2030 Agenda can bring benefits to themselves, such as increased competitiveness, improved productivity, reduced business risks, improved image, among others. These benefits are recognized by 98% of leaders of large corporations, according to Accenture's 12th study with the UNO Global Compact, published in 2023 [3]. Other studies and reports also recognize the importance of sustainability, especially in large organizations, where 98% report the topic in their reports [4,5].

However, despite the growing engagement of organizations in the 2030 Agenda, there are still challenges to be overcome. Many companies still do not have a clear understanding of the SDGs and how they apply to their activities. A study carried out in 113 countries, including Brazil, in 2021, by the consultancy Accenture [6], interviewing 1122 directors and presidents of organizations that are part of the UNO Global Compact, revealed a catastrophic scenario. Business leaders are far from incorporating global goals into their strategies, especially with regard to environmental issues.

Given the indicators of the technical reports analysed and the relevance of organizations for the deployment of the SDGs in strategic actions, this investigation aims to describe how the National School of Public Health Sergio Arouca – NSPH, a Brazilian institution in the health education sector, has been using the 2030 Agenda to guide the construction of its goals and strategic actions related to sustainability.

2. METHODOLOGY

In order to describe how a teaching and research institution in the health area has been adopting the 2030 Agenda as a guiding element for the elaboration of its strategies, a descriptive case study was conducted.

The case study is a research methodology that offers a solid theoretical framework for conducting studies and has been widely used and accepted in several areas of research, such as health and education, among others. According to Yin [7], the case study is an empirical research strategy that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly defined. It is a research technique that offers a detailed and in-depth understanding of a specific case, allowing the researcher to analyse and understand what occurs in the context of the case. In this way, the case study is an approach that can be used to answer complex questions that have multiple variables and that cannot be easily explained through other research strategies. The objective of the case study is to elucidate how the decisions were taken, highlighting the reasons, the way of implementation and the results [8]. The study stages are: planning, collection, analysis and result.

For the planning, the National School of Public Health Sergio Arouca – NSPH, was chosen for convenience, which is a technical-scientific unit of the Oswaldo Cruz Foundation - Fiocruz, located in Manguinhos, in the city of Rio de Janeiro, with operations in the teaching segment, research and health services, focused on the Unified Health System - UHS. The guiding question aims to identify how NSPH aligned its objectives with the 2030 Agenda and what results it brought.

In the collection phase, data were collected from institutional documents, without involving other human beings, in addition to the authors themselves. Thus, there was no need for submission to the Research Ethics Committee. The study took place between November 2021 and November 2022.

In the analysis, the subunit chosen to verify whether the use of the adjusted institutional document reflects the alignment between the 2030 Agenda and the strategic objectives, with regard to sustainability, was the pharmacy sector of the Professor Hélio Fraga Reference Center - PHFRC, reference in high-resistance tuberculosis, and which, despite belonging to the School, is located in the Curicica neighbourhood, in the same city. The institutional documents analysed in order to verify the alignment were the risk management methodology and other strategic documents from NSPH and Fiocruz.

Finally, the results of using the risk management document, adjusted to reflect the institutional agreement with the SDGs, were evidenced through a technical report.

3. RESULTS AND DISCUSSION

In order to meet the two guiding questions proposed in the methodology, the presentation of the results was structured in two sections: the alignment between the SDGs and the institutional objectives; and how these objectives unfold into strategic actions.

3.1. Alignment between SDGs and institutional objectives

NSPH used to promote adjustments between the SDGs, of the 2030 Agenda, with its strategic objectives, a document prepared by the School itself, called the Participatory Institutional Planning Notebook [9], which is a didactic material with the purpose of guiding stakeholders in strategic planning.

This document contains the proposed stages for carrying out the planning, containing the following methodological phases: 0) General presentation, which presents the participants and the reference documents; 1) Presentation of the organizational identity, which presents the mission, vision and values; 2) Context analysis, which analyses strengths, weaknesses, threats and opportunities; 3) Definition of the strategy, which defines positioning of NSPH before the generic strategy options; 4) Elaboration of objectives; 5) Construction of the strategic plan, which breaks down the objectives into actions; 6) Monitoring and improvement, which tracks actions over time and incorporates, if necessary, emerging strategies.

The purpose is not to describe all the steps or phases, but those that contributed to the agreement between the SDGs and the objectives of the organization. However, initially it is necessary to show that these stages were elaborated in order to reflect characteristics proposed for the NSPH strategy development model. The proposed alignment is associated with the systemic characteristic, based on the General Theory of Systems [10], which understands the organization as an open system, receiving and generating influences from the environment in which it operates. Thus, phase 0, general presentation; and phase 5, construction of the strategic plan, bring the innovation of elaborating a systemic planning, receiving external orientations that start to guide the planning, such as the 2030 Agenda, and generating actions outside the School, respectively related to the phases described.

This methodological step 0 or pre-phase, which is contained in the guiding document of the planning, was complemented by seminars with the objective of presenting the documents and reinforces the need to elaborate the objectives aligned with them. In addition to the 2030 Agenda, other documents were used to guide planning, with emphasis on the commitments of the Director of the Live Programme and the Fiocruz Guidelines [11,12]. Their contributions to the elaboration of the institutional objective are described in table 1.

Table 1. Document analysis

Agenda 2030	Fiocruz Guidelines	Live Programme	
SDG 12. Ensure sustainable production and consumption patterns	THESES 8 and 9	Commitment 4: NSPH must be aware of sustainability risks	
12.4 achieve environmentally sound management of chemicals and all wastes and reduce	8.5 strengthen the institutional integrity agenda for the consolidation of the Integrity, Risk and Internal Control Management Policy, in order	Propose to the Deliberative Council an institutional sustainability debate agenda, improving the Sustainable	

their release to air, water and soil to minimize their negative impacts on human health and the environment. 12.5 reduce waste generation through prevention, reduction, recycling and reuse.	to enhance the sustainability of Fiocruz. 9.8 reinforce role of Fiocruz as a promoter of the implementation of the 2030 Agenda in all its units and activities. 9.14 reduce the impacts of its activities on the environment, ensuring sustainability	NSPH project based on the definition of a plan of sustainable strategies (strategies, objectives and physical and budgetary goals and risk analysis).
--	---	---

Source: study data

From the analysis of the documents, the objective of improving the sustainable logistics system was elaborated, transformed into actions described in the next section.

3.2. Strategic Objectives and Actions

The analysis of the documents revealed two interconnected themes that were integrated to formulate a strategic action aimed at enhancing sustainable logistics. These themes, sustainability and risk management, led to the proposed action of incorporating sustainability parameters into the existing risk management framework.

Risk management at the institution follows the Fiocruz Risk Management Guide [13], which provides a general perspective of the Risk Matrix based on probability and impact axes. Utilizing a generic matrix offers the advantage of applicability across various fields of knowledge. However, it also poses the disadvantage of subjectivity, as individuals within the same group may hold different opinions regarding the definition of high risk and high impact, for instance.

To mitigate this subjectivity, a new Risk Matrix was introduced, incorporating a description column that integrates sustainability criteria into the socio-environmental requirements. Tables 2 and 3 outline the application of sustainability criteria for event frequency and risk impact, respectively. This new matrix aims to enhance objectivity and ensure a more comprehensive consideration of sustainability in the risk management process.

Table 2. Description of sustainability risk frequency

Category	Weights	Frequency description	
Remote or rare	1	Unexpected events	
Unlikely	2	Events annual expected	
Occasional	5	Monthly expected events	
Likely	8	Weekly expected events	
Frequent	10	Daily expected events	

Source: survey data

Table 3. Description of the impact of the sustainability risk

Category	Weight	Description of Effects on the Environment	Description of Social Effects
Light	1	Local and reversible effects of little concern. No soil, air and/or water contamination. Immediate mitigation.	No exposure to effects to the surrounding community
Moderate	2	Moderate local and reversible effects. No soil, air and/or water contamination with mitigation involving third-party actions.	Light exposure of the surrounding community, without physical contact with the event and/or its effects.
Serious	5	Reversible effects on the surroundings of the institution. No soil, air and/or water contamination.	Community exposure to effects, with physical contact with the event and/or its effects.
Critique	8	Reversible contamination of soil, air and/or water in the institution's area or surroundings.	Occurrence of cases of mild or moderate health impairment in the surrounding community.
Catastrophic	10	Contamination of soil, air and/or water that is difficult to reverse, with or without loss of biodiversity in the institution and/or surroundings.	Compromise of the community's water, energy or food supply or occurrence of serious or fatal cases in the surrounding community.

Source: survey data

From the adequacy of the Risk Matrix, with the integration of risk and sustainability, the action of applying the adjusted instrument in the pharmacy sector of PHFRC was carried out. The result of the application is presented in the adjusted risk management methodology, in Table 4.

Table 4. PHFRC pharmacy sustainability risks

Risk Description	Proba bility (P)	Impac t (I)	Risk P X I	Level of Inherent Risk	Existing barrier
Due to the rupture of the packaging, it can lead to spillage of the medicine, causing environmental contamination.	1	1	1	Low Negative Risk	Medicine storage procedure
Due to heavy rainfall, the pharmacy may flood and contaminate the environment.	1	5	5	Low Negative Risk	Contingency plan including flooding and physical structure of the Pharmacy
Due to the lack of knowledge on the part of the patient, it can lead to misuse of the drug, resulting in improper disposal of the drug.	5	1	5	Low Negative Risk	Pharmaceutical guidance
Due to the lack of knowledge on the part of the patient, it can lead to the misuse of the medicine, resulting in an inappropriate use of the medicine.	2	5	10	Medium Negative Risk	Pharmaceutical guidance

Source: [14] (adapted)

The inherent risk level identified between medium and low, associated with the existing barriers, led the pharmacy managers to accept the risks, without the need for new mitigating actions, being periodically monitored in order to verify if there was any change in the perception of the level of risk.

4. CONCLUSION

The study demonstrated how an organisation can use the 2030 Agenda as a guiding document to define its strategic goals and then break them down into actions. The incorporation of a sustainability scale into risk management, applied to a department of the NSPH, the PHFRC, not only enabled the development of strategies, but also contributed to the practice of sustainability and helped to implement the 2030 Agenda in the institution.

It is important to note that the findings of this case study at the NSPH are specific to this institution. Therefore, further research is recommended to explore how other institutions integrate sustainability into their strategies. By examining the practices of different organisations, researchers can contribute to a broader understanding of how sustainability is linked to strategic goals in different contexts.

Acknowledgments

The first three authors are grateful for the scholarship designed to carry out the project "Support to the Institutional Development of the National School of Public Health Sergio Arouca: Looking to the Future", by the Fiocruz Support Foundation - FSF (number of the grant process ENSP-037-FIO-18).

5. REFERENCES

₁UNO. UNITED NATIONS ORGANIZATION. Transforming Our World: the 2030 Agenda for Sustainable Development. **AmbientalMente Sustentable**, New York, v. 25, no. 1, p. 171–190, 1st Jan. 2018.

₂MATOS, F.; PAIVA, M. B. M. Agenda 2030 and the sustainable development goals: challenges for the Federal Government's Institutional Development Plan. **Federal University of Ceará**, Fortaleza, p. 23, 2022.

₃ACCENTURE. United Nations Organization Global Compact-Accenture CEO Study. **Unlocking Global Pathways to Resilience, Growth, and Sustainability for 2030**, New York, n. 12, 2023.

4JONES, P. *et al.* The sustainable development goals and information and communication technologies. **Indonesian Journal of Sustainability Accounting and Management**, [S. I.], v. 1, no. 1, p. 1-15, 2017.

5KPMG. Sustainability Report 2017-2018. [S. l.: s. n.], 2017.

- 6ACCENTURE. **Accenture CEO Study, Sustainability UN Global Compact**, [S. I.], no. Special edition, 2021.
- ₇YIN, R. K. **Case Study:** Planning and methods. 2nd. ed. Porto Alegre: Bookman, 2001.
- ₈SCHRAMM, W. **Notes on Case Studies of Instructional Media Projects**. [*S. I.*], 1971.
- 9REIS, C. A. C. L. *et al.* Participatory Institutional Planning Notebook-NSPH [ENSP]. Rio de Janeiro, v. 1, p. 24, 2023.
- ₁₀BERTALANFFY, L. von. **General system theory:** Foundations, development, applications. [*S. I.*]: G. Braziller, 1968.
- 11NATIONAL SCHOOL OF PUBLIC HEALTH [ENSP]. **Live Programme: Management 2021-2025**. Rio de Janeiro: NSPH [ENSP], 2021. Available at: https://informe.ensp.fiocruz.br/assets/anexos/32e95955414b027200f7733ceb1c487 e.PDF>. Acessed on: 26th May 2023.
- 12OSWALDO CRUZ FOUNDATION [FIOCRUZ]. **Fiocruz Internal Congress: Final report**. Rio de Janeiro: OCF [Fiocruz], 2021. Available at: https://congressointerno.fiocruz.br/files/documentos/IX%20Congresso%20Interno%20Fiocruz%20%20Relat%C3%B3rio%20Final.pdf. Acessed on: 27th May 2023.
- 13MOREIRA, M. dos S.; LIMA, J. de C.; OLIVEIRA, S. A. B. **Fiocruz Risk Management Guide**. Rio de Janeiro: OCF [Fiocruz], 2019.
- ¹⁴MENEZES, M. **Technical Activity Report. Support to the Institutional Development of the National School of Public Health Sergio Arouca: Looking to the Future**. Rio de Janeiro: NSPH [ENSP], 2021.