



## Teaching, research, extension and management: UNIFAP's contribution to the SDGS of the 2030 agenda

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### ABSTRACT

This study analyzes the integration of the Sustainable Development Goals (ODS) of the 2030 Agenda in UNIFAP academic practices between 2005 and 2021. The study aims to confront the academic practices of UNIFAP in the period from 2005 to 2021 with the ODS of the 2030 Agenda,

aiming to perspective to what extent the institution contributes to the implementation of these objectives in the local context and identify possible impediments that affect its implementation capacity. A descriptive and exploratory approach was used, employing bibliographic and documentary techniques to collect and classify the actions related to the ODS. The list of keywords prepared by the Institute of Applied Economic Research (IPEA) in collaboration with the National Council of Justice (CNJ) was used to classify the actions. The results show that UNIFAP is a strategic apparatus in the promotion of the ODS, focusing its efforts on the challenges presented by ODS 8, 4, 16 and 3, followed by ODS 9, 11, 15 and 10. On the other hand, ODS 17, 14, 12, 2, 5, 13, 6, 7 and 1 receive less attention. It is important to emphasize that the parts of UNIFAP academic system have contact with the ODS in different ways, revealing the disarticulation between their functions and the rupture of the inseparability between teaching, research, extension and management.

**Keywords:** University, Sustainable development, Agenda 2030, Sustainable Development Goals.

## 1 INTRODUCTION

The 2030 Agenda for Sustainable Development is one of the most comprehensive global agreements in recent history, emerging after more than 50 years of discussions on strategies and new alternative concepts to development. It represents the current global declaration to achieve sustainable development and addresses today's most pressing challenges.

The implementation of the 2030 Agenda requires profound transformations in society, in the economy and in man's relationship with the biosphere, as well as significant efforts by various sectors and governments to avoid the skepticism that already affects some strategic protagonists (MARTINE; ALVES, 2015). To advance in the realization of the Agenda, it is essential that the Agents act in a broad and articulated way at various levels, with a collaborative, inter and transdisciplinary participation.

Still, it requires a territorial approach that involves local governments, municipalities and communities, especially in areas where the impacts of unsustainability are more intense (BORGES;

BAZZOLI; SERPA, 2021). The territorialization of the Agenda allows the adaptation of the goals according to the characteristics and realities of each region. In this sense, universities play a crucial role in leading efforts and implementing the SDGs at the regional and local level, as they are closely linked to their local communities and are responsible for education, innovation and culture.

To become an engine of innovation and sustainable development, the university needs to align itself with the Sustainable Development Goals (SDGs) and make a strategic alignment between its institutional goals and the SDGs. This requires the reorientation of academic systems, with a systemic approach that integrates teaching, research, extension and management, acting in a coordinated and cohesive manner in all areas of the institution.

For this, it is necessary to reflect critically on the traditional structure of universities, enabling them to respond effectively to the current demands of society in terms of sustainability. In addition, it is important to organize projects and programs based on the problems that the 2030 Agenda seeks to solve, in order to generate more positive results.

The optimized results of teaching, research, extension and university management are directly linked to the reorientation of these processes, based on the real problems faced by society. By adopting this perspective, the Federal University of Amapá (UNIFAP) reveals its strategic importance, enabling new discussions on the implementation of the 2030 Agenda in regional and local contexts, especially in the Amazon Region.

UNIFAP has a privileged position in the Amazon Region to promote actions in favor of the fulfillment of the 2030 Agenda. Its proposal of education inseparable between teaching, research and extension should foster the formation of citizens capable and engaged in solving real problems faced by the Amapaense society. In this way, it becomes a strategic device, because it can direct its academic system to the absorption of the SDGs, in order to meet the yearnings of society for changes and improvements in the quality of life of citizens.

This study aims to analyze UNIFAP's contribution to the implementation of the Sustainable Development Goals (SDGs) of the 2030 Agenda in the context of Amapa, identify possible impediments that affect its implementation capacity and highlight the most urgent regional challenges that may be unassisted by university action. To achieve this objective, specific objectives were established that involve the analysis of the activities recorded in the teaching, research, extension and management of UNIFAP in relation to the 17 SDGs of the 2030 Agenda, as well as the evaluation of the processes and articulations of the academic system of the university with the 2030 Agenda.

This study is organized into three chapters, the first presents the introduction; the second chapter presents the development, which includes the discussion on UNIFAP's contribution to the implementation of the 2030 Agenda; and the third chapter presents the final considerations. The

contribution of the study is not limited only to UNIFAP, but also to other institutions that face similar challenges in terms of planning, management and control, and can be an instrument to analyze and reformulate public educational policies, aiming at global challenges, promoting the implementation of the SDGs and social, economic, environmental and institutional sustainability.

## **2 DEVELOPMENT**

This study focuses on the Federal University of Amapá (UNIFAP), created by Law 7,530 on August 29, 1986, through Decree 98,977 on March 2, 1990. It is a public institution of higher education, linked to the Ministry of Education (MEC), whose objective is to promote education, research and extension, aiming at the formation of citizens and the social, economic, environmental, technological and cultural development of the Amazon Region (UNIFAP, 2015). With only 33 years after its effective installation, it is one of the newest federal universities in the country, acting as a place of denunciation and awareness, presenting solutions to the real problems faced by the Amapaense society and its surroundings.

According to the Institutional Development Plan (2020-2026), UNIFAP offers 52 undergraduate courses, 13 master's programs, four doctoral programs and 16 specializations, totaling 11,340 students enrolled in undergraduate, graduate, distance education programs and in the National Program for Teacher Training of Basic Education (PARFOR) (UNIFAP, 2021). It is composed of 508 technical servers, 654 permanent teachers and 77 substitutes. In 2020, it received a budget allocation of R\$ 233,898,964.38 (UNIFAP, 2021). This budget is allocated to the headquarters located in Macapá, as well as to the campuses and poles in the municipalities of Santana, Mazagão, Oiapoque and Vitória do Jari.

To achieve the objectives of the study, the collection, analysis and discussion of data were organized into four axes: teaching, research, extension and management, relating them to the SDGs of the 2030 Agenda. For this purpose, a variety of primary and secondary data sources were used.

To focus on the critical parts of the university's functioning, the activities were grouped into four axes: teaching, research, extension and management, subdivided into groups of activities. This characterized the study as a bibliographic and documentary research (GIL, 2008), with an approach oriented to the social, economic and environmental challenges of the SDGs (SDSN, 2017). At the end of data collection and treatment, the diagnosis presented the total number of actions distributed by axis and groups of activities, as shown in Table 1.

Table 1. Quantitative data by axis.

AXIS	OBJECT OF THE ANALYSIS	No. OF RECORDS	%
TEACHING	Group 1 – CC	2118	53,02%
	Group 2 – CBT	1975	
RESEARCH	Group 1 - Research Projects	1339	25,16%
	Group 2 - Theses and Dissertations	603	
EXTENSION	Extension Projects	939	12,16%
MANAGEMENT	Group 1 - Training Actions	336	9,66%
	Group 2 – Resolutions	509	
<b>TOTAL ACTIONS DIAGNOSED</b>		<b>7819</b>	
<b>TOTAL CLASSIFIED SHARES</b>		<b>7720*</b>	

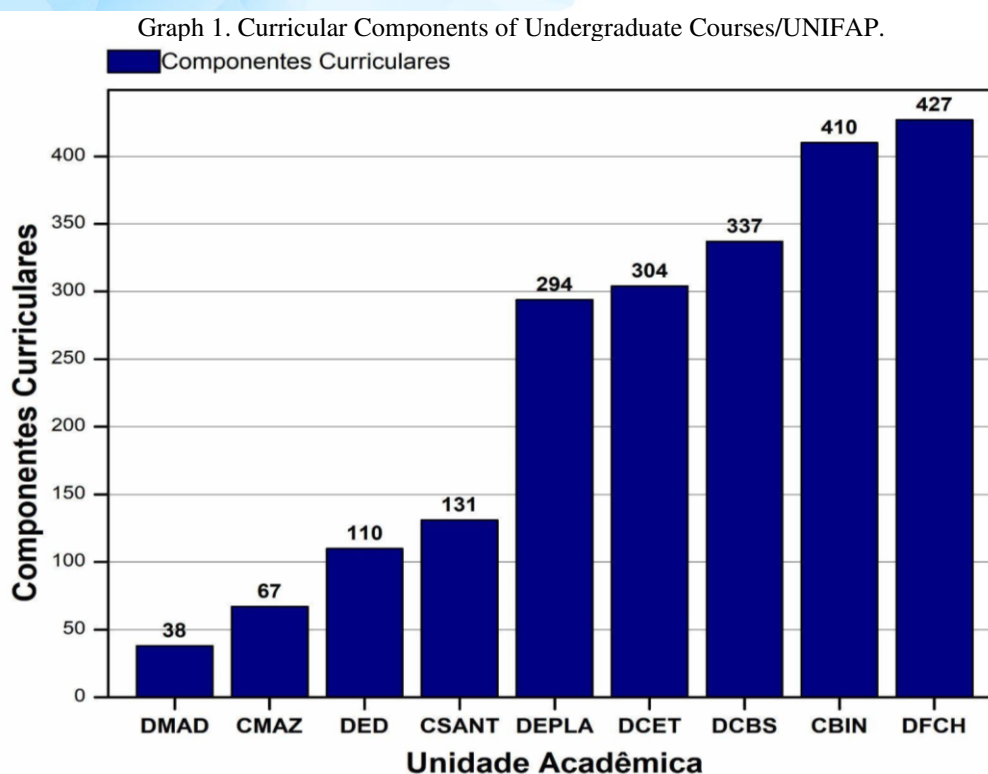
Source: Prepared by the author (2022).

The analysis of the results indicates that UNIFAP has been striving to incorporate the principles of sustainable development in its academic activities. However, the university's contact with the SDGs of the 2030 Agenda occurs in a fragmented and disjointed way between its functions, resulting in a differentiated absorption of the SDGs in each of the analyzed Axes, as evidenced in the analysis carried out in each of the axes addressed.

## 2.1 TEACHING AXIS – GROUP 1 – CURRICULAR COMPONENTS (CC) OF UNIFAP'S FACE-TO-FACE UNDERGRADUATE COURSES

The aim of formative evolution and teaching-learning processes is to provide students with the knowledge, skills, competencies and academic and professional experience necessary to address and implement solutions related to the SDGs. They also motivate students to understand and address these challenges, while mobilizing and empowering both students and non-students (SDSN, 2017).

In this axis, only the mandatory CC of 44 undergraduate courses were considered, totaling 2,118 curricular components. Graph 1 shows the result of the collection of CC by Academic Unit/Campus.

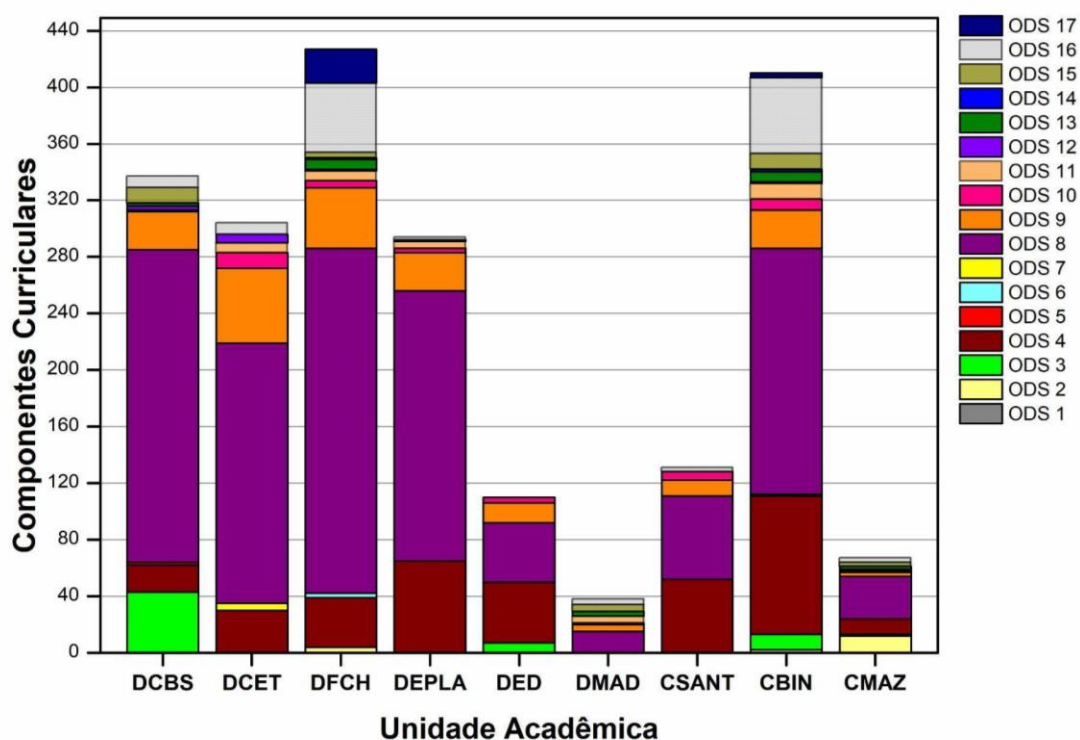


Source: DCP UNIFAP (2021). Organized by the author (2022).

Based on this, the academic units are classified according to the number of courses in each of them: Department of Philosophy and Human Sciences - DFCH (10), Campus Oiapoque - CBIN (8), Department of Biological and Health Sciences - DCBS (6), Department of Exact Sciences and Technologies - DCET (7), Department of Letters and Arts - DEPLA (6), Campus Santana - CSANT (3), Department of Education - DED (2), Mazagão Campus - CMAZ (1) and Department of Environment and Development - DMAD (1).

Thus, the distribution of CC among the academic units presented the following configuration: DFCH 20.16%, CBIN 19.36%, DCBS 15.91%, DCET 14.35%, DEPLA 13.88%, DED 5.19%, CSANT 6.19%, CMAZ 3.16% and DMAD 1.79%. After analyzing the WC in relation to the 17 SDGs, it was possible to identify the objectives addressed in this group of activities, which are represented in Graph 2.

Graph 2. Classification of the Curricular Components of Undergraduate Courses/UNIFAP by SDG.



Source: DCP (2021). Organized by the author.

Among the SDGs analyzed, the most addressed in this group of activities were SDG 8, with a significant highlight of 54.77%, followed by SDG 4 with 16.67%, and SDG 9 with 9.92%. SDG 16 also appears in the analysis, with an approach rate of 6.19%.

However, the isolated analysis of the academic units reveals that the occurrence of the SDGs varies according to the priorities of each unit. For example, SDG 3 and 15 prevail in DCBS, SDG 3 in DED, SDG 10 in DCET, SDG 17 in DFCH, SDG 2 in CMAZ, and SDGs 13 and 15 in DMAD.

The academic units have expertise, consistent performance and promote specific SDGs, as in the case of DCET and CBIN, which together bring together 47.5% of the CCs related to Goal 11, 27.5% and 20%, respectively. For Objectives 13 and 16, the actions are concentrated in the DFCH and CBIN. In Objective 13, the two units have the same percentage of shares, 31.81%, while in SDG 16, CBIN concentrates 41.22% of CC and DFCH 37.40%.

The CMZ is responsible for the high frequency of Goal 2, concentrating 12 of the 18 CHDs diagnosed on this campus, even though it has only one course. Likewise, DCET is responsible for the 5 CCs corresponding to Objective 7.

The lack of connectivity between areas can lead to teaching processes disconnected from larger systems, resulting in problems visualized interdependently, separate, hierarchical and competitive (CORTESE, 2003, p. 16-18).

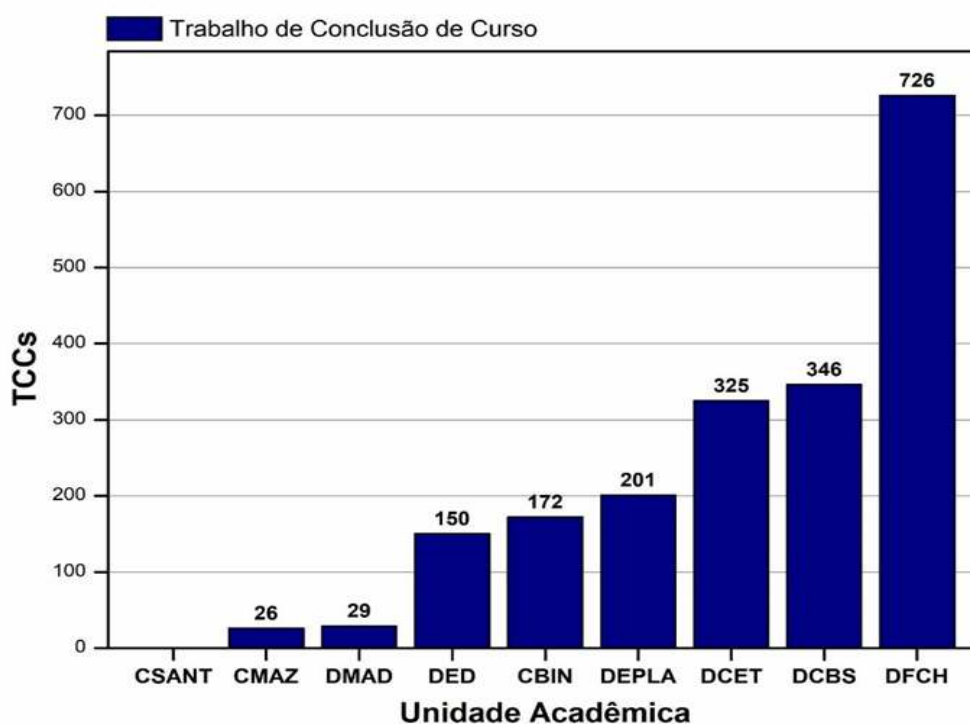
The analysis classified the absence of WC corresponding to Goal 1 (0.0%), and low frequency of SDG 5 (0.9%), SDG 14 (0.14%), SDG 6 (0.19%), followed by SDG 7 (0.24%), 12 (0.57%) and 2 (0.85%), in which the sum does not exceed 1% of the CC analyzed. Thus, it is important to visually highlight the SDGs with lower participation in the activities analyzed.

The Education Axis - Group 1 devotes priority attention to the SDGs related to the Prosperity Element, focusing on the Economic Dimension of the 2030 Agenda, contemplating SDGs 8 and 9. Then we highlight the Social Dimension - People Element, with prioritization of SDG 4, and finally addresses the Partnership Element - Political and Institutional Dimension. On the other hand, the SDGs that also represent the Social Dimension (7, 6 and 5) receive less emphasis in this group. It is important to emphasize that it was not possible to analyze the increase or reduction of actions in this set of SDGs.

## 2.2 TEACHING AXIS – GROUP 2 – COURSE CONCLUSION WORKS (TCC) DEFENDED IN THE PERIOD 2005-2021

The Course Conclusion Work (TCC) is a compulsory subject at UNIFAP that aims to encourage students to engage in research activities and scientific investigation. To evaluate which SDGs are addressed in undergraduate students' research, the TCCs of UNIFAP courses from 2005 to 2021 were examined, totaling 1,975 papers. Graph 3 shows the distribution of these studies by academic unit.

Graph 3. Total Final Papers analyzed.

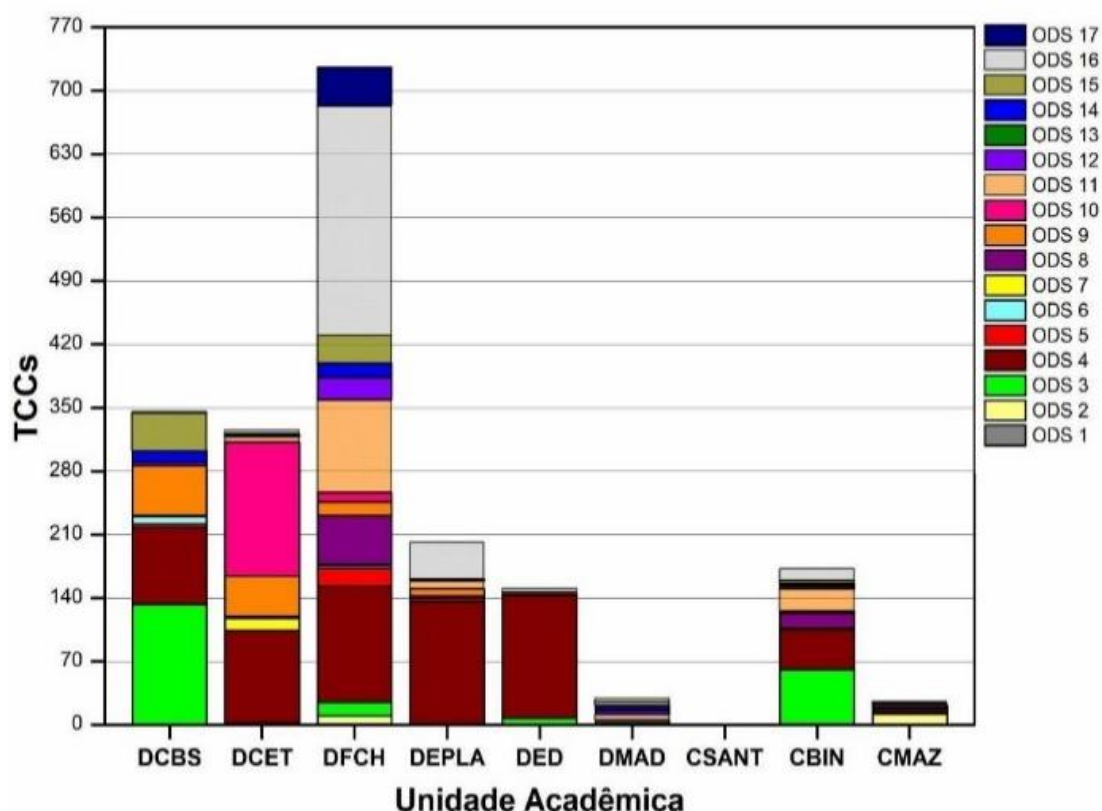


Source: UNIFAP Courses Website and Repository (2021). Organized by the authors (2022).

A limitation found in the data collection of this group of activities was the lack of availability of information in the public consultation platforms. Therefore, the numbers presented do not reflect the actual academic production of UNIFAP during the period analyzed. However, the number of actions identified still represents a significant portion and can provide prognosis when compared to the objectives of the 2030 Agenda.

By crossing the course conclusion papers with the 17 SDGs, it was possible to obtain the configuration presented in graph 4.

Graph 4. Organization of SDGs by Academic Unit of the Teaching Axis (TCC).



Source: UNIFAP Courses Website and Repository (2021). Organized by the authors (2022).

The distribution of the SDGs among the units is heterogeneous and fragmented, with higher and lower frequency of certain SDGs depending on the area of knowledge of the courses aggregated in the unit. This movement is also observed in CC. Overall, SDG 4 is the most frequent. However, excluding this SDG from the analysis, the higher occurrence of the SDGs is distinct in each unit: SDGs 3, 9 and 15 in the DCBS; SDGs 7, 9 and 10 in DCET; SDGs 16, 11 and 8 in the DFCH; SDG 16 in DEPLA; SDG 3 in the DED; SDG 6 in DMAD; SDGs 3, 11 and 8 in CBIN and SDG 2 in CMZ.

It is worth mentioning that there is a predominance of DFCH works related to SDG 5. In general, the four SDGs most frequently are: SDG 4 (32.10%), SDG 16 (16.30%), SDG 3 (11.19%) and SDG 10 (8.05%), followed by SDG 11 (7.65%) and SDG 9 (6.28%).

While the CC focus mainly on the Economic Dimension, the TCC have as a highlight the Social Dimension (Well-being) represented by SDGs 4, 3 and 10, in addition to presenting a high frequency in the Political and Institutional Dimension (SDG 16). On the other hand, the SDGs of the Social and Environmental Dimension have a lower frequency, with SDG 1 (0.05%), SDG 6 (0.71%), SDG 7 (0.71%) and SDG 13 (0.25%) being the least addressed by CBT.

The reality evidenced in this analysis is in line with the objectives of professional training and aligns with the model proposed by Jorgensen (2019). There is a higher frequency of the SDGs of the Economic Axis (USA, 2018), related to the Prosperity Element - Economic Dimension (BARBIERI, 2019), while the SDGs of the Social Dimension or Well-being, represented by the People Element, have a lower occurrence. These results reflect the institutional priorities of UNIFAP's teaching activities and are essential for the revision and reformulation of undergraduate curricula, in addition to offering a prognosis for the promotion of scientific investigations and the strengthening of priority themes in academic research.

The actions needed to balance the distribution of the SDGs among teaching activities include the creation and reformulation of educational programs at various levels of education, from graduation to the training of technical staff. It is important to train and guide students, teachers and technicians with knowledge and skills aimed at promoting changes aligned with the principles of the DS (FLEIG; BIRTH; MICHALISZYN, 2021; SDSN, 2020), especially those that correspond to the local reality and that do not have prominence within the teaching activities of UNIFAP.

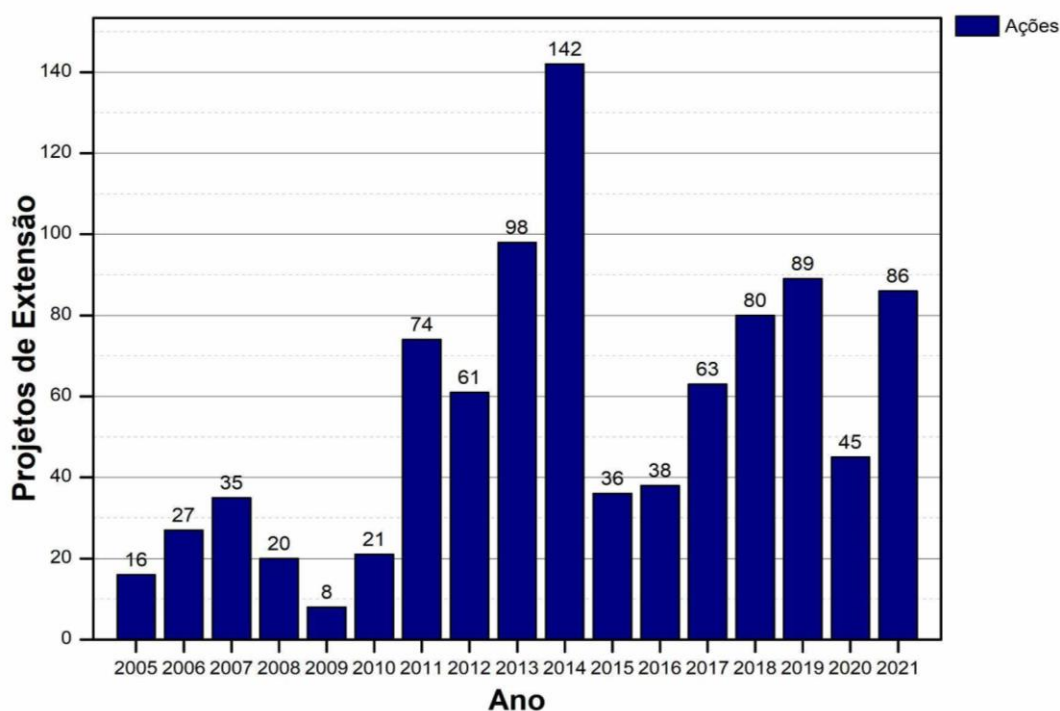
### **3 EXTENSION AXIS - EXTENSION PROJECTS REGISTERED IN THE PERIOD 2005-2021**

To achieve successful implementation of the SDGs, it is essential that universities take social leadership, promote intersectoral dialogue and design policies based on the 2030 Agenda, as well as strengthen public commitment to it (SDSN, 2017). At UNIFAP, university extension is seen as an inseparable activity of teaching and research, which materializes through courses, programs and projects, as well as complementary activities that promote the integration of the institution with the local or regional community.

The objective of UNIFAP's integration with the community is to bring problems closer to solutions and implement new alternatives through dialogue and joint action, improving the living conditions of people served by extension programs and projects and reinforcing the university's commitment to social welfare (UNIFAP, 2019).

According to the survey, the actions in the Extension Axis corresponded to 12.16% of the total actions identified, which is equivalent to 939 projects registered in the period from 2005 to 2021. Graph 5 shows the number of projects distributed per year in the interstitium.

Graph 5. Number of registered extension/UNIFAP projects (2005-2021).



Source: PROEAC (2021). Organized by the author (2022).

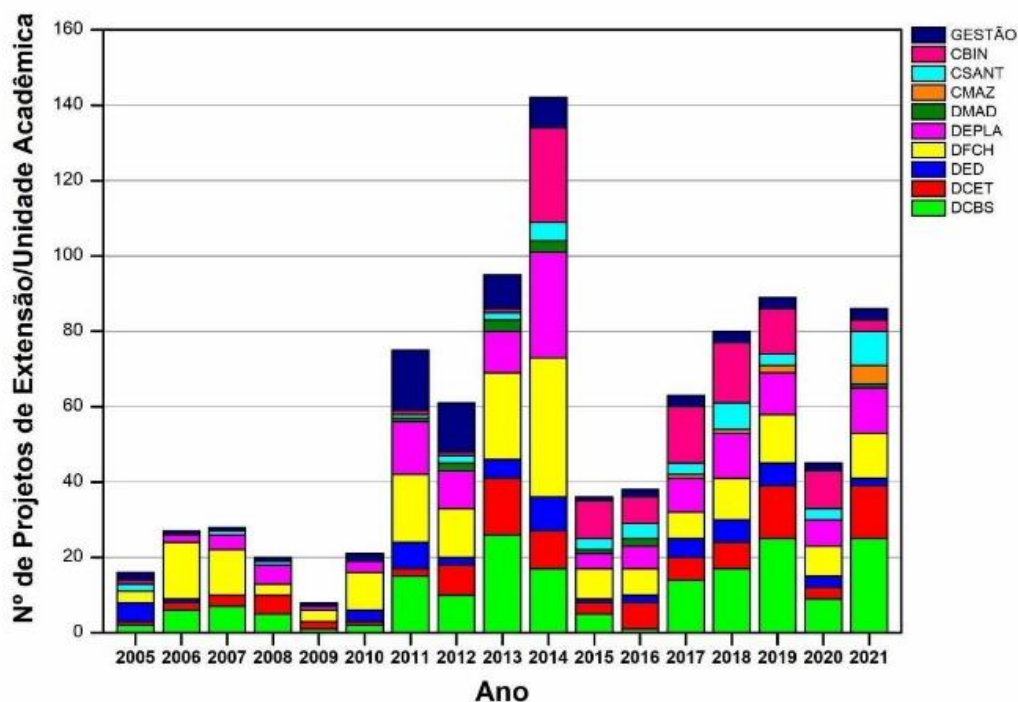
Graph 5 shows a notable increase in UNIFAP's extension activities, mainly driven by the REUNI program. In 2013 and 2014, there was a peak in the number of registered actions, associated with the implementation and effective operation of the Oiapoque Campus. Despite the challenges faced, UNIFAP's extension policy showed significant advances both in quantitative and qualitative terms between 2006 and 2014.

The data reveal, however, a weakening in UNIFAP's extension capacity in recent years, which not only harms the university, but also affects numerous social groups that depend on this dialogue to have their demands met by the government. This weakening coincides with the period of disinvestment in public policies in the country, demonstrated by Constitutional Amendment 95/2016, which impacted federal educational institutions, including UNIFAP (FERREIRA, 2022, p. 161; GOERGEN et al., 2019, p. 2).

Despite the recovery in project registrations from 2017, in 2021, the number of active projects is lower than the number of registrations in 2013, indicating a weakening in public investment capacity, which did not accompany the expansion of UNIFAP. This situation puts the institution in a vulnerable position, holding it responsible for eventual failures (GOERGEN et al., 2019). In addition, analyses of university management reports showed that the abrupt drop in the number of shares in 2015 and 2016 was a result of strikes in those years. In 2020, the decrease in the number of registrations was a consequence of the health crisis caused by Covid-19.

The academic units play a fundamental role in the promotion of UNIFAP's extension projects, as shown in Graph 6, which shows the significant participation of these units in the conduct of these projects.

Graph 6. Extension Projects by Academic Unit/UNIFAP (2005-2021).



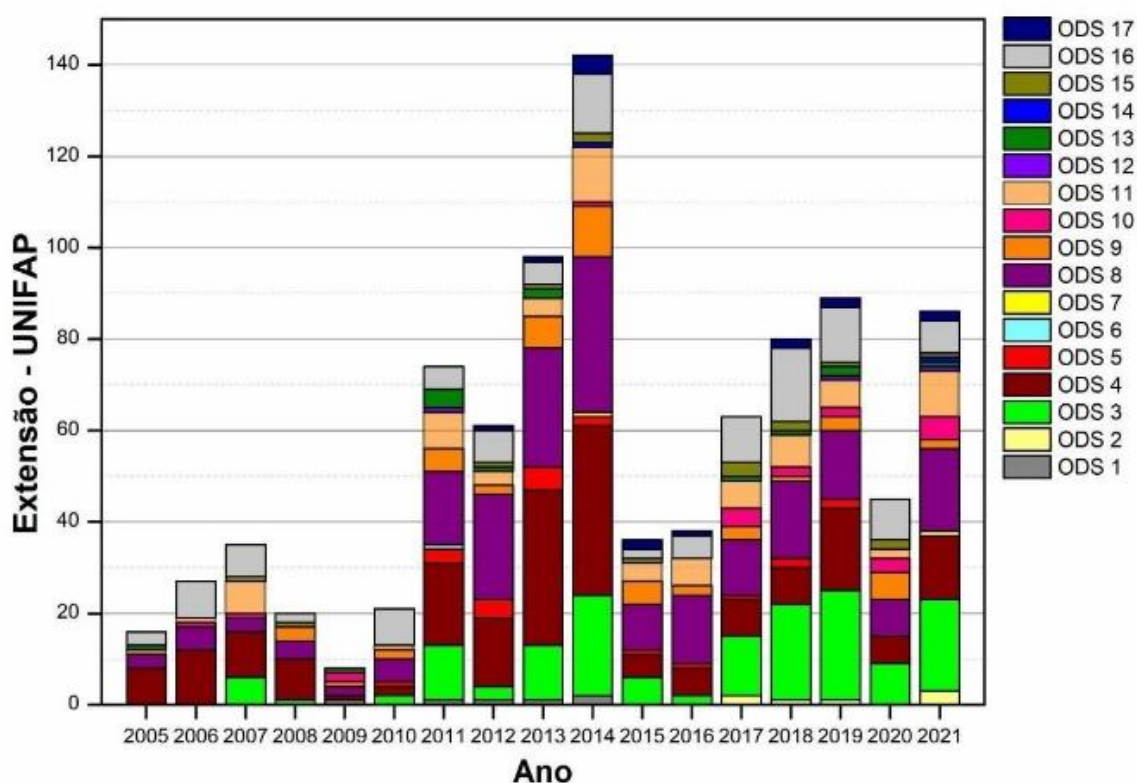
Source: PROEAC and SIGAA (2021). Organized by the author (2022).

The distribution of extension projects is influenced by the number of courses and the workforce of the academic units, which results in an effective participation of all of them. However, in certain periods, some units stand out, as is the case of DFCH and DCBS, which accumulate most of the registered projects. The management of the university also plays an important role in this distribution, having conducted 71 projects over the period investigated.

Since its implementation in 2014, the Oiapoque Campus has had a significant participation in extension projects, surpassing the production of the departments of the headquarters campus. However, from 2018, there was a drop in the shares registered in all units, being more pronounced in the Oiapoque Campus. This demonstrates the impacts of the university's defunding, which has weakened its performance in recent years (PINHEIRO; FERREIRA; FREITAS, 2022).

By analyzing the relationship of extension projects with the Sustainable Development Goals (SDGs) of the 2030 Agenda, it was possible to observe the distribution of these objectives as shown in Graph 7.

Graph 7. Distribution of SDGs by year. Extension Axis.



Source: PROEAC and SIGAA (2021). Organized by the author (2022).

The most present SDGs among the registered projects are SDG 8, with 23%, followed by SDG 4, with 22.47%, SDG 3, with 16.29%, and SDG 16, with 8.31%.

The Mazagão Campus stands out in the design of projects aimed at meeting SDG 2, as evidenced by the data analysis. On the other hand, the SDGs with the lowest number of registered projects are SDG 6 (0.11%), SDG 7 (0.21%), SDG 14 (0.21%) and SDG 12 (0.32%), followed by SDG 1 (0.64%) and SDG 2 (0.75%), both with less than 1% of registered actions.

The configuration of the SDGs in the UNIFAP Extension differs from the model proposed by Jorgensen (2019), with priority given to SDG 3 to the detriment of SDG 9 and notoriety for SDG 11, indicating a focus on the Social Dimension (Well-being) and diverging from the teaching activities analyzed (BARBIERI, 2020; USA, 2018). The SDGs of the Economic Dimension (8) and the Political and Institutional Dimension (16) also receive priority, while the SDGs of the Environmental and Social Dimension are less frequent (BARBIERI, 2019).

While there are similarities between SDG priorities in extension and education, there are significant differences, with four of the five most important SDGs remaining at the level of importance in both activities. At the base of the five SDGs with the lowest occurrence, only three are repeated in this position, and SDG 5 has a greater inversion of priority, with a more expressive position in extension than in teaching.

The dialogical relationship between university and society is fundamental to transform the academic process, stimulate interdisciplinarity and interprofessionality and articulate the basic functions of the university, breaking with disciplinary fragmentation (CABRAL; GEHRE; MELARA, 2020).

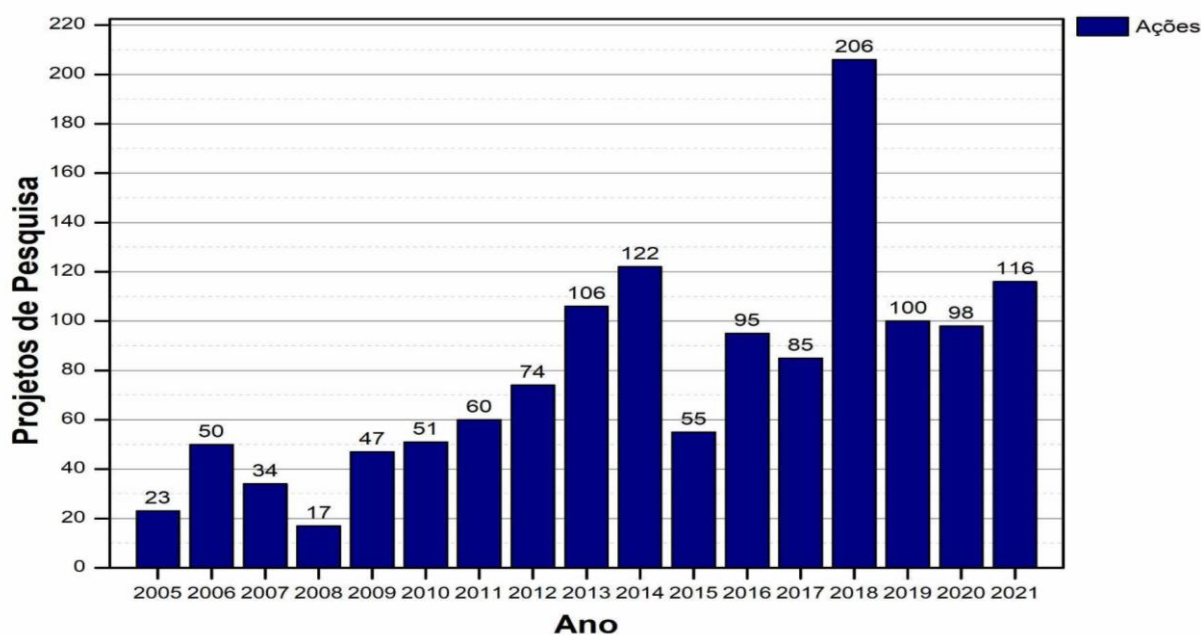
The analysis of institutional priorities in UNIFAP's extension activities revealed a lack of articulation with teaching and a reduction in the extension capacity of the institution in recent years. Therefore, it is essential to reevaluate and reformulate the institution's extension policy, with initiatives to strengthen the priority themes and foster projects and programs in the SDGs with less occurrence.

### 3.1 RESEARCH AXIS – RESEARCH PROJECTS REGISTERED IN THE PERIOD 2005-2021

UNIFAP is committed to promoting and consolidating teaching, research and extension actions contextualized with local realities, in addition to encouraging scientific research and technological innovation. As highlighted by SDSN (2017), research is key to providing the necessary knowledge that supports the implementation of the SDGs. Therefore, fostering and diversifying investment in research is crucial to generate innovative solutions, train professionals committed to sustainable development and consolidate the transformations necessary for the implementation of the 2030 Agenda.

According to the research carried out, the data of the Research Axis were divided into two groups: Group 1, which includes research projects, and Group 2, which includes theses and dissertations from graduate programs at the *stricto sensu* level. The number of research projects exceeded the number of extension projects by more than 5%, totaling 1,339 projects, as shown in Graph 8.

Graph 8. Number of Research Projects Registered/UNIFAP (2005-2021).



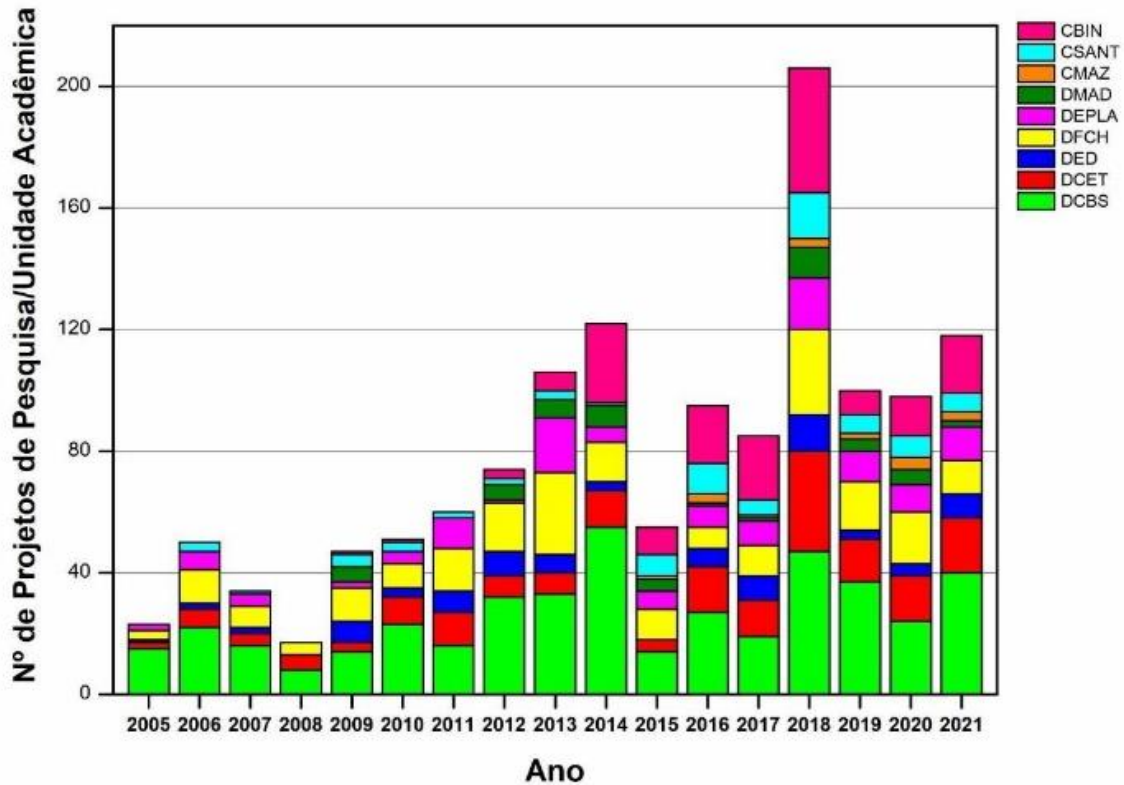
Source: DPQ, SIGAA (2021). Organized by the author (2022).

Since the implementation of REUNI in 2008, research at UNIFAP has had a positive impact on its development. However, according to Ferreira (2022, p. 161) and Goergen et al. (2019, p. 2), Graph 8 shows that in recent years there has been a decrease in the number of research actions, at the same time that the extension reached the peak of actions in 2018. This decline coincides with the expansion of disinvestment in public policies in the country, represented by Constitutional Amendment 95/2016, which mainly affected federal educational institutions.

Although the university has recovered project records as of 2018, the number of active projects in 2021 is still lower than the number of 2014 registrations. This suggests that, despite the significant advances achieved with the expansion, public investment has not kept pace. In addition, despite the record number of research projects in 2018, 2019 presented a deficit of more than 50%.

Despite the health crisis, research production at UNIFAP has remained stable, but UNIFAP's current production is still lower than in 2014. Likewise, the academic units play an important role in the promotion of extension projects, as shown by Graph 9, which shows the degree of participation of these units in the conduct of the projects.

Graph 9. Research Projects by Academic Unit/UNIFAP (2005-2021).



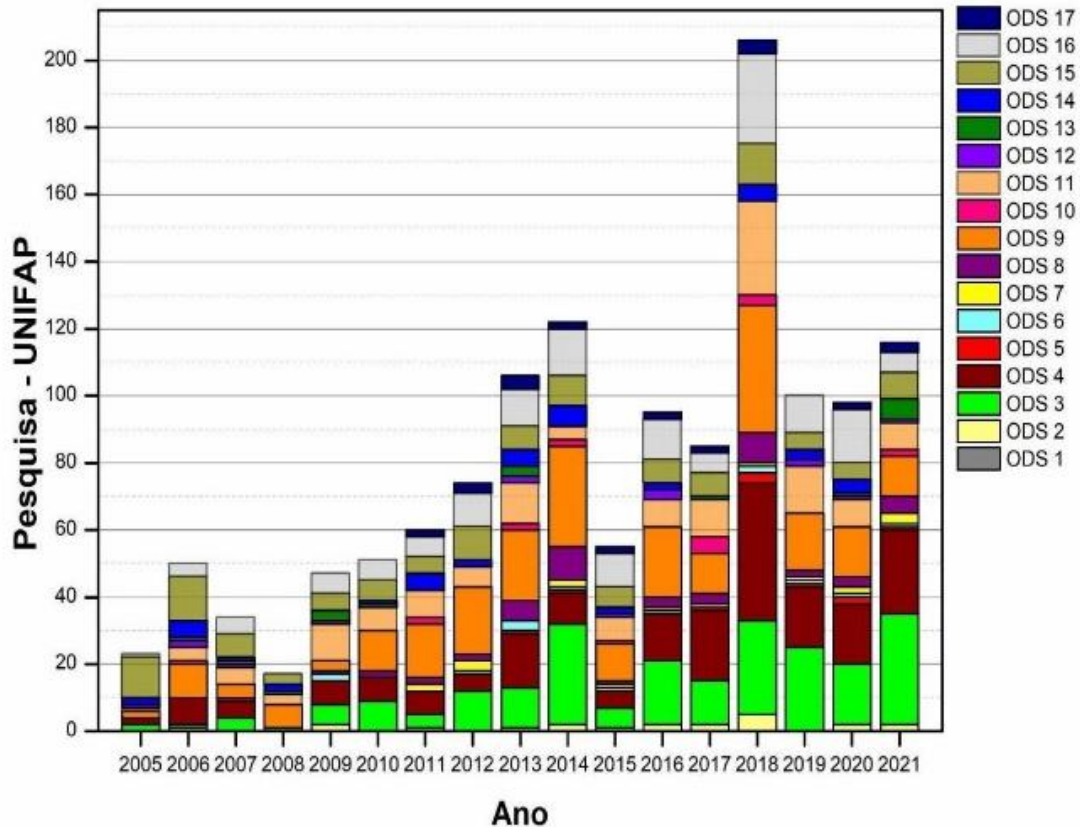
Source: DPQ and SIGAA (2021). Organized by the author (2022).

The effective participation of all academic units is fundamental for the registration of research projects, which is linked to the number of courses and the workforce of each unit. Although some units stand out in conducting these activities in certain periods, such as the DCBS, responsible for the largest number of projects (32.96%), followed by the DFCH (15.88%) and the DCET (13.20%), it is important to highlight that the Oiapoque Campus deserves special attention due to its massive representation in the records of research projects since its creation in 2014.

In 2017 this Campus surpassed the production of the Headquarters departments, consolidating its leading role in research production. But, as of 2018, the pace of research production at the Oiapoque Campus has slowed, as has the case with extension actions. This analysis again highlights the protagonism of the Oiapoque Campus, but also points out the impacts of the university's defunding, which has weakened its performance in recent years. As a result, the Oiapoque Campus faces numerous difficulties, especially related to the infrastructure and the difficulty of fixing the UNIFAP workforce in the municipality of Oiapoque (PINHEIRO, FERREIRA; FREITAS, 2022).

When comparing the research projects with the SDGs of the 2030 Agenda, the configuration of the distribution of the objectives by unit occurred as shown in Graph 10.

Graph 10. Research Projects by SDG/UNIFAP (2005-2021).



Source: DPQ and SIGAA (2021). Organized by the author (2022).

Figure 2 reveals that UNIFAP research projects have an unequal distribution in relation to the SDGs of the 2030 Agenda. Among the SDGs with the highest occurrence, SDG 1 stands out with 18.75%, followed by SDG 3 with 16.65%, SDG 4 with 15.53% and SDG 16 with 11.28%. SDGs 11 and 15 also have relevance, with 10.83% and 9.48%.

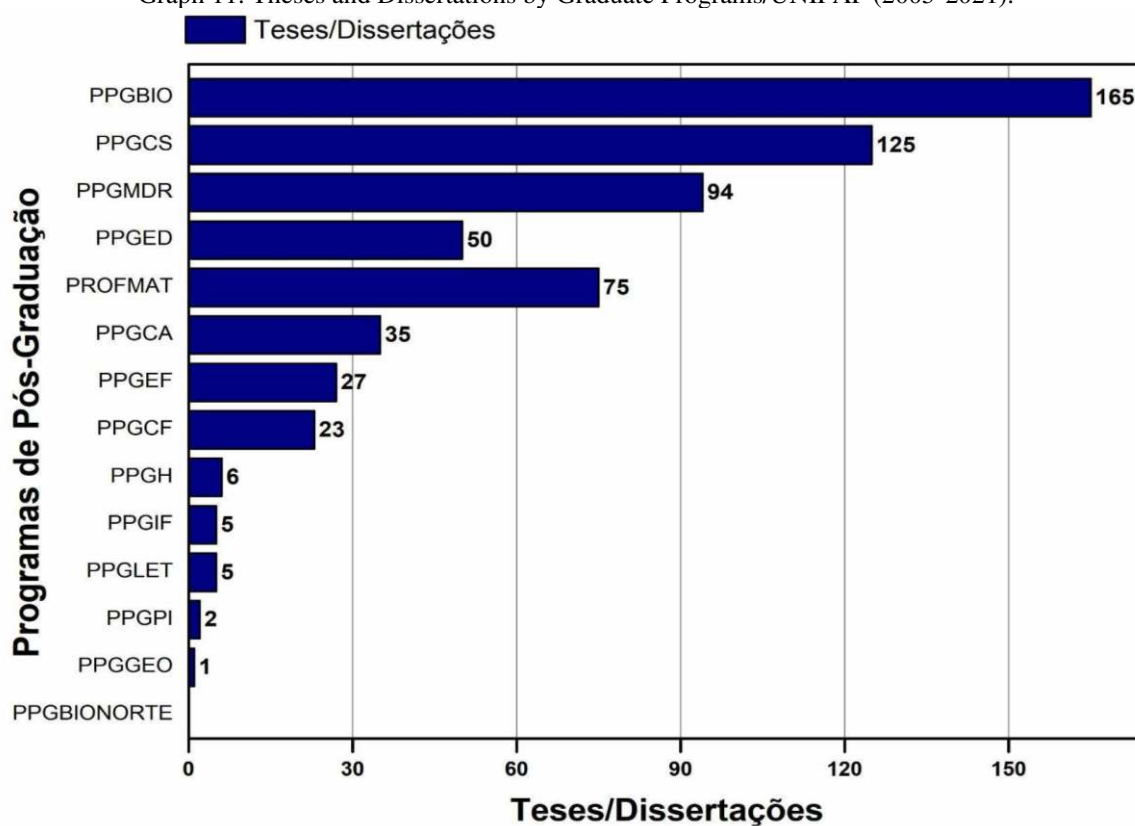
The prioritization of the SDGs varies between the research projects and the axes of Extension and Teaching of UNIFAP. While the Extension focuses on SDGs 8, 4, 3 and 16, the Research prioritizes SDGs 9, 3, 4 and 16, maintaining a consistent frequency in SDGs 3, 4 and 16. And SDG 8 has been the priority in Extension projects, while SDG 9 prevails in Research projects. The analysis also revealed that nine SDGs together bring together only 10.38% of the registered projects, evidencing the lack of projects to address SDGs 1 (0.00%), SDG 5 (0.75%), SDG 6 (1.05%), SDG 10 (1.12%), SDG 7 (1.27%), SDG 13 (1.34%), SDG 2 (1.57%) and SDG 17 (1.94%).

The Research Projects prioritize the SDGs that make up the People Element - Social Dimension, such as SDGs 4 and 3, accompanied by the Economic Dimension (SDG 9) and Institutional Policy (SDG 16). On the other hand, SDGs 7, 6 and 5 that belong to the People Element - Social Dimension are less emphasized in Research Projects, as well as in the Teaching Axis.

### 3.2 RESEARCH AXIS – THESES AND DISSERTATIONS APPROVED IN THE PERIOD 2005-2021

To identify the final production of *stricto sensu* graduate programs offered and/or maintained by UNIFAP (2005 to 2021), data were collected in Group 2 - Theses and Dissertations. The collection of data in this group was hampered by the lack of information on institutional platforms. As a result, the number of papers identified does not represent the actual production of UNIFAP during the period surveyed. Even so, as shown in Graph 11, the number of papers diagnosed represents a significant percentage, which can provide insights when compared to the SDGs of the 2030 Agenda.

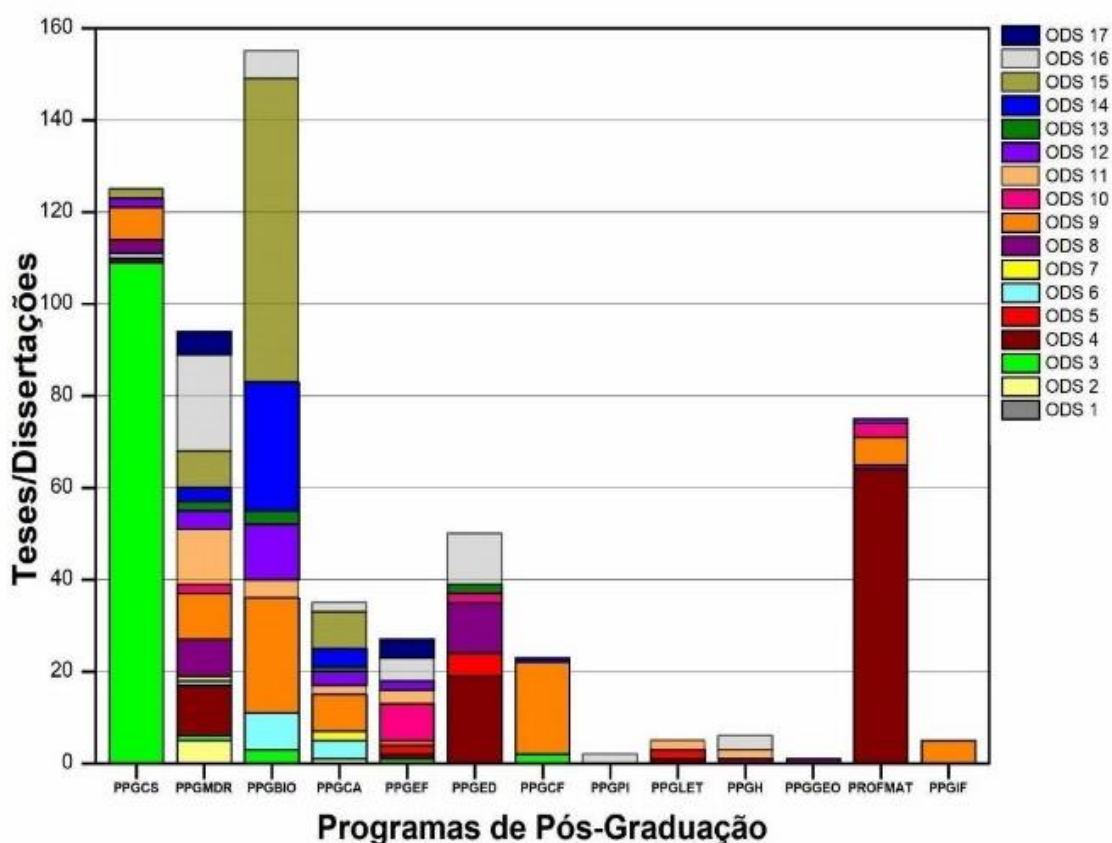
Graph 11. Theses and Dissertations by Graduate Programs/UNIFAP (2005-2021).



Source: UNIFAP Courses Website and Institutional Repository (2021). Organized by the author (2022).

Among the graduate programs, the PPGBIO, PPGCS, PPGMDR and PROFMAT stood out with greater representativeness in the diagnosis. When analyzing the distribution of the objectives of the 2030 Agenda in the works, the following configuration by program was verified, as shown in Graph 12.

Graph 12. Theses and Dissertations by SDG (2005-2021).



Source: UNIFAP Courses Website and Institutional Repository (2021). Organized by the author (2022).

The scientific production of UNIFAP presents a diversity of areas of knowledge and lines of research that prioritize certain SDGs according to the graduate program (Graph 12). In the analysis by program, the PPGCS focuses its production on SDGs 3, 9 and 8; the PPGMDR stands out in SDGs 16, 11 and 4; the PPGBIO prioritizes SDGs 15, 14 and 9; the PPGCA focuses on SDGs 15, 9 and 14; the PPGEF meets SDGs 10, 16 and 4 as a priority; the PPGED has an emphasis on SDGs 4, 8 and 11; the PPGCF presents a higher occurrence of studies focused on SDGs 9 and 3; the PPGPI prioritizes SDG 16; the PPGLT has a higher occurrence in SDGs 5 and 11; the PPGH emphasizes SDGs 3 and 11; PPGEO prominently promotes SDG 8; PROFMAT works with priority on SDGs 4 and 9; and the PPGIF prioritizes its work on SDG 9.

In general, studies focusing on SDG 3 (19.24%) have a higher concentration on PPGCS, followed by SDG 4 (16.9%) with prevalence on PROFMAT and PPGED; SDG 15 (13.93%) presents production concentrated in PPGBIO and PPGCA; and SDG 9 (13.60%) has significant participation of PPGBIO, PPGCF, PPGMDR and PPGIF.

The analysis of the research works reveals a prioritization of the SDGs of the Social Dimension (SDGs 3 and 4), in addition to the SDGs of the Environmental Dimension (SDG 15) and the Economic Dimension (SDG 9). On the other hand, there is a low occurrence of studies related to SDG 1 (0.0%),

SDG 2 (1%), SDG 13 (1.33%), SDG 7 (0.50%), SDG 5 (1.49%), and SDG 17 (1.49%), evidencing a lack of scientific initiatives that address these problems.

The portrait of the research at UNIFAP presents a different configuration from that proposed by Jorgensen (2019), but points to a greater balance in the approach to the dimensions of the Agenda. The SDGs of the five dimensions of the Agenda are considered priorities in the research, with emphasis on the Social Dimension, which is also prioritized in the Extension, with constancy of priority of SDGs 3 and 4. However, in the Teaching Axis the situation is opposite, which evidences a distinction in the treatment of each of the SDGs by the axes.

Although the occurrence of the SDGs in the research is similar to the other axes, it does not figure the same priority. SDGs 14, 15 and 5 reinforce this finding, being the ones that receive greater notoriety in the order of priority of actions. While SDGs 14 and 15 highlight the importance of the Environmental Dimension (BARBIERI, 2020; USA, 2018) in the UNIFAP survey, SDG 5 loses significant priority when compared to extension projects. Therefore, the portrait of this axis pointed to the institutional priorities related to research activities at UNIFAP, demonstrating a deficiency in the articulation with extension and teaching and reduction of research capacity in recent years.

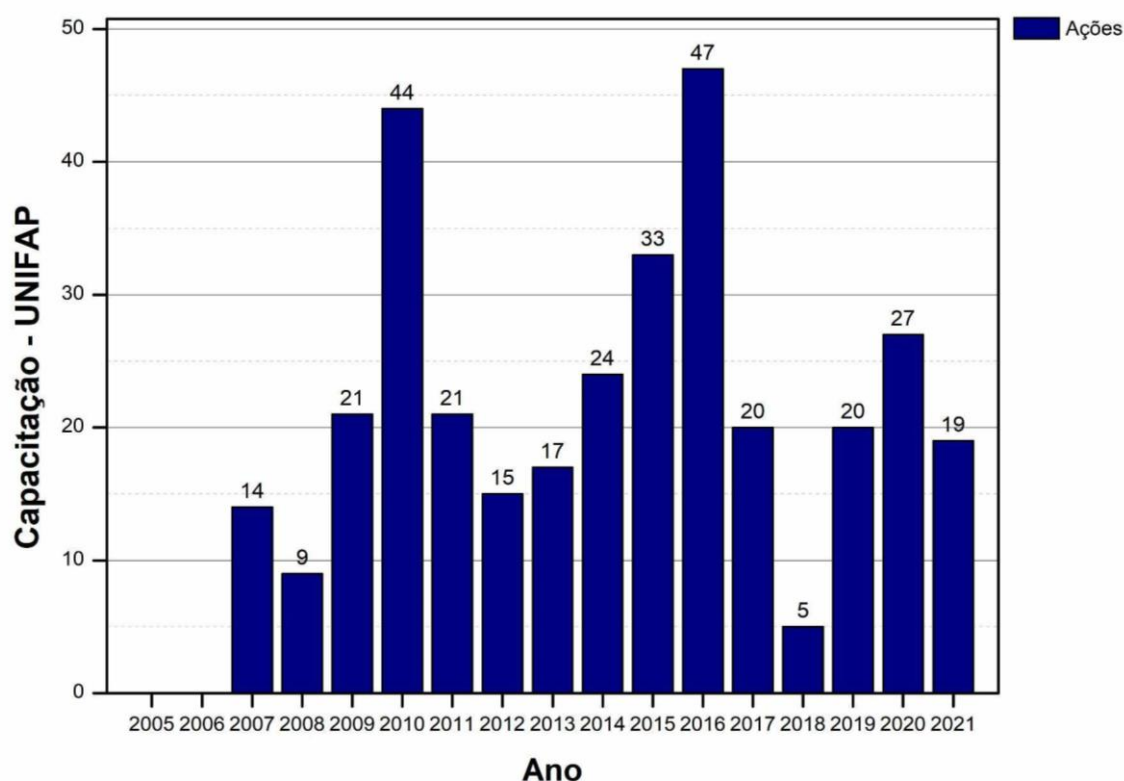
The prognosis is a key piece for the reassessment and reformulation of the research policy in the institution, through initiatives that strengthen the priority themes and fostering research focuses to address the SDGs with less occurrence. Finally, it is the responsibility of research to empower people and institutions to innovate and present solutions to the SDGs, expand diversity in research and foster academic training focused on sustainable development research, strengthening compliance with the 2030 Agenda (SDSN, 2017). Alternatives should be explored to boost research at the institution.

### 3.3 MANAGEMENT AXIS – GROUP 1 – TRAINING ACTIONS CARRIED OUT IN THE PERIOD 2005-2021

The connection between the parts of the university system is crucial for the promotion of the 2030 Agenda, with all functions - Teaching, Research, Extension and Management - being relevant in this process (CORTESE, 2003).

Between 2007 and 2021, 336 training actions were identified in the annual reports of UNIFAP's Division of Training and Professional Education (DCEP), as shown in Graph 13.

Graph 13. Training Actions carried out by UNIFAP 2005-2021.



Source: DCEP (2021). Organized by the author (2022).

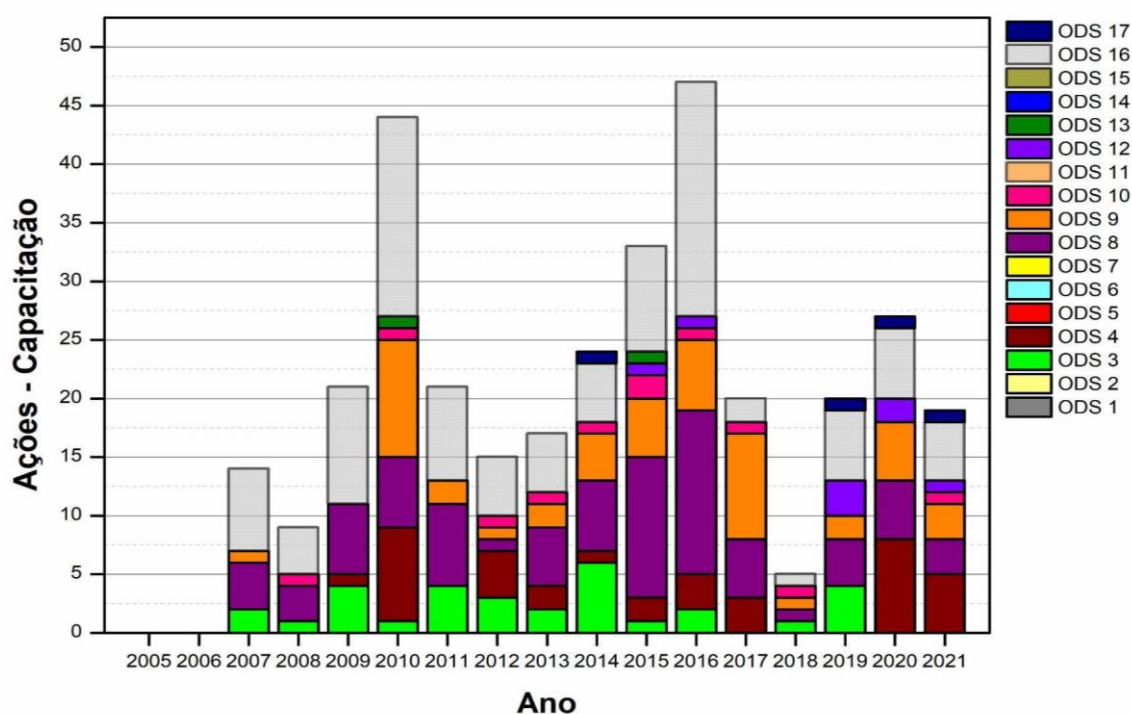
The data collection of this Group did not occur in 2005 and 2006, since the regulatory framework of the training program was approved only in 2007. The number of training actions was increased due to the offer of courses at the headquarters and the implementation and operation of courses at the Mazagão, Oiapoque and Santana Campi in 2013/2014 and 2015, respectively (UNIFAP, 2014).

The year 2016 registered the highest number of training actions in the period investigated, despite budget limitations. Although 2020 was an atypical year for universities, training actions continued to be developed in considerably greater numbers than in other years due to the use of technologies for continuity of courses and remote training actions.

However, despite the significant increase in training actions from 2008, the number of actions in 2021 was lower than the number of actions in 2014. This finding highlights the impacts of disinvestment in public policies in the country materialized by Constitutional Amendment 95/2016 (FERREIRA, 2022, p. 161; GOERGEN et al., 2019, p. 2).

When comparing UNIFAP's training actions with the SDGs of the 2030 Agenda, the configuration of the distribution of the objectives occurred as evidenced in Graph 14.

Graph 14. Classification of Training actions carried out by UNIFAP 2005-2021.



Source: DCEP (2021). Organized by the author (2022).

Capacity building actions prioritize SDG 16 (32.7%), SDG 8 (24.4%), SDG 9 (15.2%) and SDG 4 (11%), followed by SDG 3 (9.2%). This distribution follows the scheme proposed by Jorgensen (2019) and presents the same frequency of priority that the SDGs appear in the Education Axis, with the exception of the order of priority of SDGs 8 and 16.

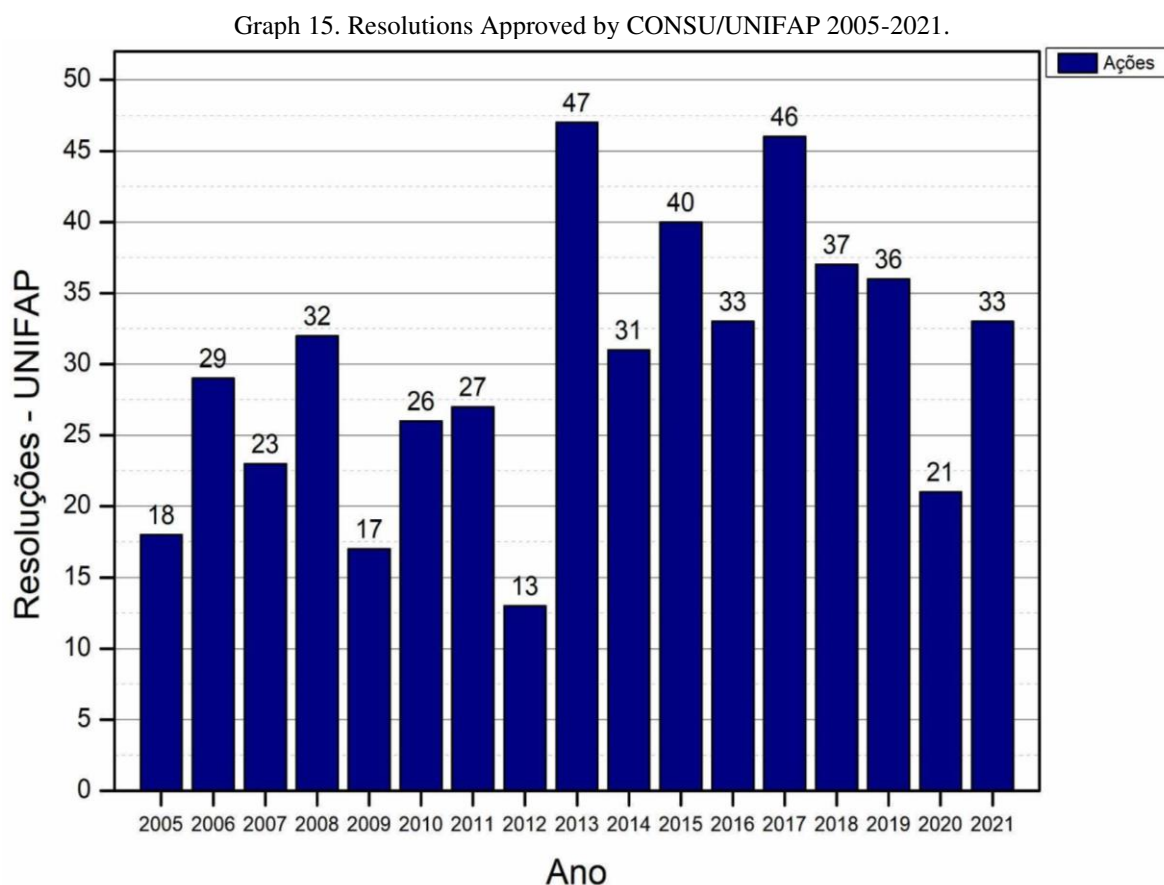
It is important to note that although SDG 3 was a priority in years prior to 2019, the current survey did not identify capacity building actions that focused on this theme during the context of the pandemic (2020/2021).

The analysis showed that UNIFAP's training actions have priority in the attention to the SDGs of the Economic Dimension (SDGs 8 and 9), Institutional Political Dimension (SDG 16) and Social Dimension (SDG 4). However, there was a lack of actions to address SDGs 1, 2, 5, 6, 7, 11, 14 and 15, in addition to the low occurrence of actions aimed at SDGs 13, 17, 12 and 10.

It is noteworthy the absence of an approach to the SDGs in the analyzed axis, considering the relevance of these objectives for the promotion of SD. This gap in UNIFAP's performance in relation to these issues in its management is evident. And although this axis has the capacity to promote SDG 17, it is worrisome to observe that this objective is among those of lower occurrence in the activities analyzed in this group.

### 3.4 MANAGEMENT AXIS – GROUP 2 – RESOLUTIONS ADOPTED IN THE PERIOD 2005-2021

This survey was composed of 509 resolutions, covering the period from 2005 to 2021, as shown in Graph 15.



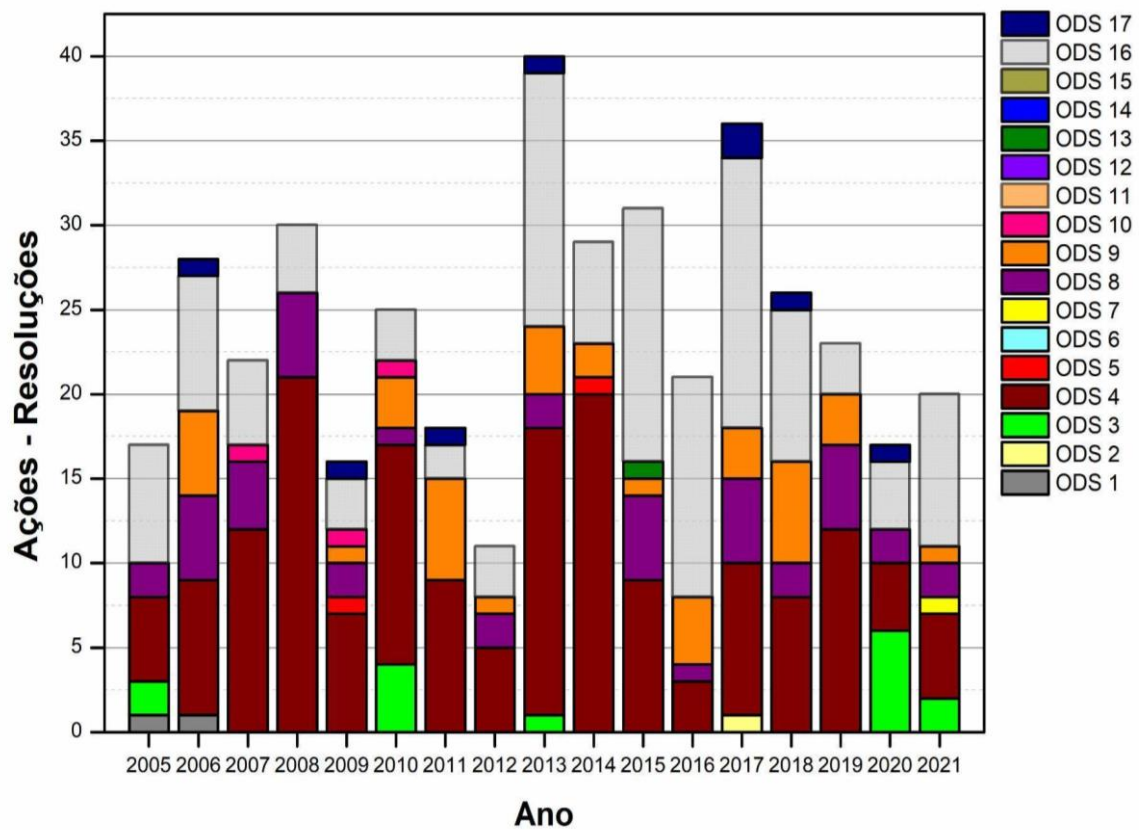
Source: SIGRH (2021). Organized by the author (2022).

In relation to Chart 15, it is possible to observe a significant reduction in the actions of CONSU in the years 2012 and 2020. In the first case, this reduction was related to strikes at UNIFAP. The reduction observed in 2020 due to the Covid-19 pandemic, which made several activities planned for the exercise unfeasible (UNIFAP, 2020).

On the other hand, the year 2013 concentrated the largest number of actions, during which time new courses were installed at the headquarters (Administration, Computer Sciences, Civil Engineering, Physical Therapy and Theater) and at the Mazagão Campus, and the following year at the Binational Campus (Biological Sciences, Law, Nursing, Geography, History, Letters and Pedagogy) (UNIFAP, 2013).

When relating the UNIFAP Resolutions with the SDGs of the 2030 Agenda, the configuration of the distribution of the objectives was as shown in Graph 16.

Graph 16. Classification of the Resolutions Approved by CONSU/UNIFAP 2005-2021 by SDGs.



Source: SIGRH (2021). Organized by the author.

82 resolutions with duplicate or repeated content were excluded from the classification, as well as 17 resolutions that did not apply to any of the SDGs. In addition, the resolutions have an emphasis on meeting mainly SDGs 4 (32.81%), SDG 16 (24.56%), SDG 8 (8.84%) and SDG 9 (7.86%).

The decisions of the CONSU of UNIFAP have as their main focus issues related to the access and permanence of students and formulation/reformulation of the pedagogical projects of courses aimed at improving the services provided by the university to the academic community and the external public (SDG 4), as well as measures to promote the decent work of servers (SDG 8) and fostering innovation through the Graduate Programs, related to Research and Development processes (SDG 9).

Group 2 of the Management Axis follows the model proposed by Jorgensen (2019), with activities oriented primarily to meet the SDGs of the Economic Dimension (SDGs 8 and 9), followed by the SDGs of the Institutional Political Dimension (SDG 16) and the Social Dimension (SDG 4), which are also the priorities of the Education Axis. Resolutions have a lower occurrence in SDGs 2, 7, 13, 1 and 5 (0.20% and 0.39%). The frequency of Resolutions focused on SDGs 6, 11, 12, 14 and 15 was absent, which evidences a deficiency of UNIFAP Management in working on certain objectives.

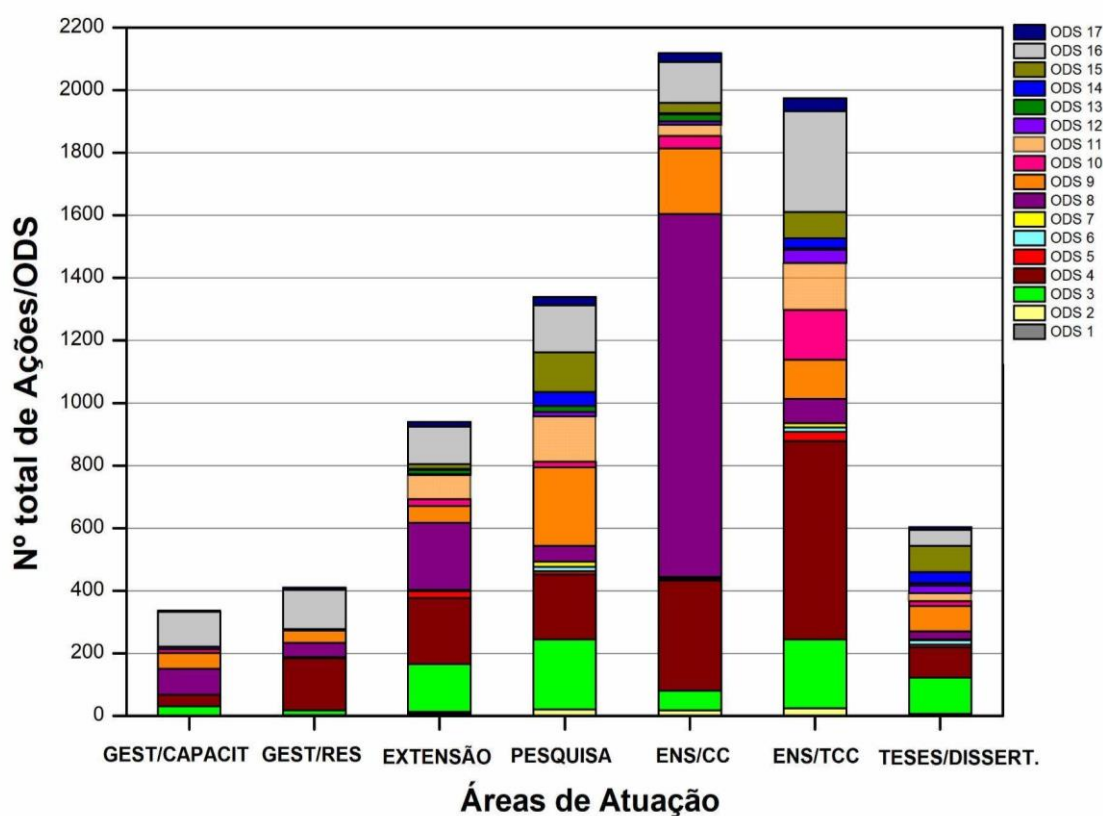
The analysis of the Management Axis reveals the institutional priorities following the model proposed by Jorgensen (2019). The priorities are concentrated in the SDGs of the Economic Dimension - Prosperity (8 and 9), Social Dimension (4 and 3) and Institutional Political Dimension (16). However, the low occurrence of the SDGs of the Environmental Dimension (SDGs 15 and 14) highlights the deficiency of Management in relation to these objectives. The high adherence to the Teaching Axis is also demonstrated, while the articulation with research and extension is deficient.

Given this, the prognosis presented is crucial for the reassessment and reformulation of the management policy in the institution. It is necessary to strengthen the priority themes and to foster themes that are absent or with low frequency in the Council's training and actions. And University Management can contribute to the promotion of the SDGs through the inclusion of actions in different aspects, such as finance, university services, facilities, acquisitions and academic management (SDSN, 2017).

#### 4 UNIFAP SITUATIONAL OVERVIEW WITH GLOBAL DATA FROM 2005 TO 2021

After testing the level of absorption of the SDGs in the activity groups, it was found that their absorption occurs with different frequency and priorities, as shown in Graph 17.

Graph 17. Total actions per axis x SDGs (2005-2021).



Source: UNIFAP (2021). Organized by the authors (2022).

Figure 1 reveals that the Management Axis highlights SDGs 16, 4, 8 and 9, with 235, 204, 127 and 91 actions, respectively. The Extension Axis presents prevalence of SDGs 8, 4, 3 and 16, with 216, 211, 153 and 119 projects, respectively. In the Survey, SDGs 3, 9, 4 and 15 have a higher occurrence, with 339, 333, 305 and 211 actions, respectively. In turn, the Education Axis stands out for actions focused on SDGs 8, 4, 16 and 9, with 1,238, 987, 453 and 334 actions, respectively.

Figure 1. Prevalence of SDGs by axis.



Source: Prepared by the author (2022).

The distribution of the SDGs in the four axes of UNIFAP evidences a differentiation of priorities that compromises the connection between the parts of the academic system and the inseparability of their functions. It is observed that each axis has the capacity to foster certain SDGs, either by the nature of its activities or by the affinity with specific objectives. However, this strategy has strengthened the compartmentalization and fragmentation of academic production, generating liquid solutions that end up aggravating problems instead of solving them (CORTESE, 2003, p. 16-18; JORGENSEN, 2019, p. 4).

To achieve effective solutions to the problems of unsustainability, it is essential that there is a connection between the parts of UNIFAP's academic system and an integrated and synchronized policy

for the production and socialization of knowledge. Although some SDGs are repeated more or less frequently in the four axes, there is still a distinction in the treatment of actions, especially between Research and Extension, which distances them from Management and Teaching (UNIFAP, 2014).

Although there are SDGs that are repeated with greater or lesser frequency of similar priority in the four axes analyzed, there is still a distinction in the treatment of actions, especially between Research and Extension, which distances them from Management and Teaching. This extract of priorities is more evident when the 17 SDGs are grouped into the four Axes, as shown in Figure 2.

Figure 2. Four axes of the research and occurrence of the SDGs.



Source: Prepared by the authors (2022).

Figure 2 shows how SDG priorities vary on each axis. The higher up and to the left, the greater the occurrence of ODS on the axis, and the further down and to the right, the lower. With the exception of the alignment of priorities between Teaching and Management, there is a differentiation in the SDGs

that occupy the bottom and the top when compared to the other functions, which indicates which have been the priorities of each axis and which SDGs receive less attention.

By outlining an overview of the absorption of the SDGs in UNIFAP as a whole, Figure 3 shows that SDGs 4, 8, 16 and 3 are the most prevalent, followed by SDG 9. SDGs 11, 15, 10, 14, 17 and 12 have significant representation, with more than 100 actions, while SDGs 1, 7, 6, 13, 5 and 2 have an occurrence of less than 1% (100 actions). The distribution of the SDGs highlights the need for an integrated and synchronized policy for the production and socialization of knowledge at UNIFAP.

Figure 3. Overview UNIFAP.



Source: Prepared by the authors (2022).

The portrait pointed out that UNIFAP has as a priority the SDGs of the Social Dimension (SDGs 3 and 4), followed by the Economic Dimension (SDGs 8 and 9) and the Political and Institutional Dimension (SDG 16), with lower priority for the SDGs focused on the Environmental Dimension and Social Dimension. The SDGs were divided into two quadrants based on the degree of occurrence and priorities in the diagnosis, in order to point out the strengths (most frequent) and weaknesses (with lowest occurrence) of UNIFAP and the parts of the system analyzed. For this definition, the quadrants (S) and (W) of the SWOT were used referring to the elements of the internal environment, as evidenced in Figure 4:

Figure 4. SWOT analysis.



Source: Prepared by the author (2022).

The identification of strengths and weaknesses is fundamental to evaluate and reformulate university management strategies. The portrait of UNIFAP revealed what are the institutional priorities of each part of the system and the whole, with no standard configuration for the functioning of the university in relation to the 2030 Agenda, as suggested by Jorgensen (2019).

On the contrary, the configuration of priorities is aligned with the regional context and reality. According to Borges, Bazzoli and Serpa (2021), it is the contextualization of the Agenda that allows

it to be adjusted to regional problems. In this sense, the prognosis is fundamental to reassess and reformulate UNIFAP's policy in relation to the SDGs of the 2030 Agenda, through initiatives to strengthen priority themes and foster issues that are absent or with low occurrence in UNIFAP's processes.

It is important to highlight that there is currently a global effort to articulate initiatives to implement the 2030 Agenda. In this context, it is essential that institutions adopt strategies to engage organizations, researchers, students, public managers and civil society, in order to promote understanding of the 17 SDGs and their goals, as well as other relevant themes for each territory that are not contemplated in the Agenda (SDSN, 2017).

The understanding of the concept of SD highlights the need for States to develop public policies and government programs aimed at achieving this type of development. However, it is important to note that practical measures should be adopted at the local level. Therefore, it is crucial that the local apparatus takes the lead for the implementation of the 2030 Agenda (CARVALHO, 2020).

In this scenario, it becomes evident the prominent role that universities play, since education, research, innovation and leadership are fundamental to face the problems related to the SDGs. Consequently, any of the SDGs are unlikely to be achieved without the active involvement of universities (SDSN, 2017), which must take the lead to assist governments, businesses and civil society.

## **5 FINAL CONSIDERATIONS**

The SDGs of the 2030 Agenda present a number of challenges that require positive changes in societies, economies and interactions with the biosphere. In this sense, education, research, innovation and leadership play a key role in addressing these challenges, and universities are important players in driving these changes. The SDGs have an indivisible and transversal character that requires an articulated approach, in which solutions are developed considering the interdependence between the different problems. This requires connectivity between the different parts of the university system.

While there is no standard formula for the uptake of the SDGs by universities, their performance will depend on a number of factors, including their size, context, strengths in research and training, budget availability, values, priorities and local needs. Unfortunately, the intensification of disinvestment in public policies in the country, which has been a trend in recent years, has significantly affected the ability of public universities to act in Brazil. This compromises its ability to implement the 2030 Agenda.

By analyzing UNIFAP's role in promoting the SDGs of the 2030 Agenda over 16 years, it is concluded that the Institution is an important device for meeting these goals. Its processes promote

policies and actions that corroborate its role as promoter of the SD, in the Amazon Region. However, it is worrisome to note that UNIFAP's priorities in addressing the SDGs are focused on solving the challenges present in some specific areas, while others receive less attention.

Institutional efforts are focused on solving the problems present in SDGs 8, 4, 16, 3, followed by SDGs 9, 11, 15 and 10, while SDGs 17, 14, 12, 2, 5, 13, 6, 7 and 1 receive less attention. This inequality of attention reveals a disarticulation between the functions of the university and a rupture of the inseparability between teaching, research, extension and management. And, even after a process of exponential growth in quantitative and qualitative terms since 2008, the intensification of the process of public disinvestment has hampered the institution's capacity to act in the last seven years.

It is imperative to highlight the need for greater articulation between UNIFAP's functions in the conduct of the SDGs, mainly through the coordination of actions at the strategic level of the institution. This can be achieved by stimulating interdisciplinary and transversal collaboration between Teaching, Research, Extension and Management. The maintenance of the fragmentation of academic production and efforts compromises the capacity and scope of responses to regional problems.

The study in question offers an opportunity to discuss the incorporation of the 2030 Agenda by UNIFAP and reflect on the university we want for the future. It is essential that UNIFAP's senior management dialogue with the academic community and society about new perspectives for the incorporation of the Agenda by the university and its institutionalization, considering that UNIFAP can be a guiding instrument of policies and strategies to boost its role as promoter of SD in the regional context through the fulfillment of the SDGs. And it is crucial to reflect on how UNIFAP's strategic planning instruments, such as the PDI, deal with issues related to SD.

These considerations are not restricted to UNIFAP, but apply to every organization that lives with the problems of low planning, management and control, and those that are willing to present solutions and answers to current challenges and that aim to improve the quality of life of people and a fairer and better society for all.

## REFERENCES

- Organização das nações unidas, onu. Os 17 objetivos. Departamento de assuntos econômicos e sociais das nações unidas (undesa), 2021. Disponível em: <https://sdgs.un.org/goals>. Acesso em: 17 dez. 2021.
- Martine, g.; alves, j. E. D. Economia, sociedade e meio ambiente no século xxi. Revista brasileira de estudos populacionais, rio de janeiro, v. 32, n. 3, p. 433-460, set./dez. 2015.
- Borges, h. R. P. S. S.; bazzoli, j. A.; serpa, s. A. Objetivos de desenvolvimento sustentável, experiências e relatos: uma contribuição acadêmica. Novas edições acadêmicas, 2021.
- Ferreira, d. R. S. A. Modo de regulação neoliberal e o fundo público no brasil (2010-2020): a emenda constitucional n. 95/2016 e o financiamento do ministério da educação. 189 f. 2022. Tese (doutorado em educação) - faculdade de educação, universidade federal de goiás, goiânia, 2022.
- Goergen, p.; pino, i.; sguissardi, v.; adrião, t. Stoco, s.; almeida; l. A educação no atual cenário político mundial. Dossiê. Educação e sociedade, campinas, v. 40, e0229217, 2019.
- Jannuzzi, p. M. Da agenda de desenvolvimento do milênio ao desenvolvimento sustentável: oportunidades e desafios para planejamento e políticas públicas no século xxi. Bahia análise & dados, salvador, v. 28, n. 2, p.6-27, jul.-dez. 2018. Disponível em: <http://www.cge.rj.gov.br/interativa/wp-content/uploads/2019/07/texto-complementar-3.pdf>. Acesso em: 25 set. 2022.
- Santos, b. S. Prefácio. *In*: santos, b.s.; almeida filho, n. (org.). A universidade no sec. Xxi: para uma universidade nova. Coimbra: almedina; 2008.
- Universidade federal do amapá. Plano de desenvolvimento institucional (pdi): 2015-2019. Macapá, 2015. Disponível em: [www2.unifap.br/pdi/files/2009/08/pdi-2015-2019-unifap.pdf](http://www2.unifap.br/pdi/files/2009/08/pdi-2015-2019-unifap.pdf). Acesso em: 20 jan. 2021.
- Guimarães júnior, j. C.; duque, r. C. S.; souza, a. S.; silva, l. C. A.; unten, h. R.; santos, d. A.; oliveira, r. C. N. J.; souza, t. L. V.; santos, j. D. F.; santos, a. M. Uma análise da educação superior no norte do brasil. Research, society and development, p. 1-9, 2022.
- Universidade federal do amapá. Relatório de gestão 2021. Macapá, 2021. Disponível em: [www2.unifap.br/deplan/relatorios-de-gestao/](http://www2.unifap.br/deplan/relatorios-de-gestao/). Acesso em: 16 out. 2022.
- Sustainable development solutions network, sdsn. Acelerando a educação para os ods nas universidades: um guia para as universidades, faculdades e instituições de ensino superior e terciárias. Austrália, nova zelândia e pacífico: sdsn, set. 2020.
- Sustainable development solutions network, sdsn. An action agenda for sustainable development: report for the un secretary-general, 2014. Disponível em: <https://www.unsdsn.org/>. Acesso em: 17 dez. 2021.
- Sustainable development solutions network, sdsn. Como começar os ods nas universidades: um guia para as universidades, os centros de educação superior e a academia. Austrália, nova zelândia e pacífico: sdsn, 2017.
- Universidade federal do amapá. Diretrizes para o trabalho de conclusão de curso em nível de graduação, no âmbito da unifap. Macapá, 2008a.

Universidade federal do amapá. Resolução nº 11/2008 – consu/unifap. Unifap, 2008b

Cortese, a. D. The critical role of higher education in creating a sustainable future. Planning for higher education, p. 15-22, 2003.

Universidade federal do amapá. Relatório de gestão 2020. Macapá, 2020c. Disponível em: [www2.unifap.br/deplan/relatorios-de-gestao/](http://www2.unifap.br/deplan/relatorios-de-gestao/). Acesso em: 16 out. 2022.

European university association, eua. Universities and sustainable development towards the global goals, 2018. Disponível em <https://eua.eu/resources/publications/798:universities-and-sustainable-development-towards-the-global-goals.html>. Acesso em: 01 dez. 2022.

Barbieri, j. C. Desenvolvimento sustentável: das origens à agenda 2030. Petrópolis: vozes, 2020.

Fleig, r.; nascimento, i. B.; michaliszyn, m. S. Desenvolvimento sustentável e as instituições de ensino superior: um desafio a cumprir. Arquivos analíticos de políticas educacionais, v. 29, n. 95, 12 jun. 2021.

Pinheiro, n. G.; ferreira, j. F. C.; freitas, j. F. Desafios da interiorização da educação superior no campus binacional oiapoque. Research, society and development, v. 11, n. 14, e334111436412, 2022.

Cabral, r.; gehre, t; melara; l. F. (org.). Guia agenda 2030: integrando ods, educação e sociedade [livro eletrônico]. São paulo: unesp, 2020.

Universidade federal do amapá. Plano de desenvolvimento institucional (pdi): 2010-2014. Macapá, 2010. Disponível em: [www2.unifap.br/pdi/files/2009/08/pdi-unifap-2010-e-2014.pdf](http://www2.unifap.br/pdi/files/2009/08/pdi-unifap-2010-e-2014.pdf). Acesso em: 20 jan. 2021.

Universidade federal do amapá. Relatório de gestão da unifap 2006 - 2014. Macapá, 2014.