

Volume XVII

Issue 54

pp. 9–24

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Implementation of Sustainable Development Goals by Polish universities

ABSTRACT

In recent years, the issue of Sustainable Development Goals (SDGs) has received increasing interest from various entities in the socio-economic environment. Universities are recognized as entities that play a special role in popularizing the SDGs, and they are also expected to practically implement the SDGs within their own domains. Therefore, universities undertake tasks aimed at achieving the SDGs. The aim of this article is to examine the approach of Polish universities to the implementation of the SDGs by analyzing the content of four Directories of Social Responsibility Practices of Universities in Poland. Specifically, it is examined which SDGs Polish universities focus on, whether this focus changes over time, and whether universities that regularly report their best practices in these directories undertake other actions to achieve the SDGs.

Keywords: Sustainable Development Goals, universities, good practices

JEL Classification: I23, Q56.

Introduction

The implementation of the Sustainable Development Goals (SDGs) is becoming a topic of interest for various entities, including higher education institutions [Ocaña-Zúñiga et al., 2023; Saphira et al., 2023]. It appears that universities have three distinct pathways for achieving the SDGs in accordance with their missions: conducting research, teaching, and engaging in broad social activities. Despite the evident growing interest in this subject among Polish universities, as evidenced by numerous events dedicated to this topic, there is a lack of nationwide studies that quantitatively verify the involvement of universities in the SDGs. This article aims to fill this gap by investigating the focus of universities on specific SDGs, particularly whether SDG 4, which is dedicated to educational institutions, constitutes the main point of interest for universities in Poland. The study also examines changes over time to determine whether the focus on specific goals is consistent or varies from year to year, and what actions universities are taking to achieve the SDGs.

The article adopts the following research questions:

RQ 1: Which SDGs do Polish universities focus on, and is SDG 4 the primary focus?

RQ 2: Does the focus on specific SDGs differ from year to year?

RQ 3: Do universities that regularly report their best practices to the Directories undertake other actions within the framework of the SDGs?

Theoretical background

Sustainable Development Goals from the perspective of universities

The Sustainable Development Goals (SDGs) were adopted on September 25, 2015. They replaced the previous eight Millennium Development Goals (MDGs), which were established in 2000 and were to be achieved by 2015. While the MDGs primarily focused on poverty and health, the 17 SDGs also address climate change, economic inequality, innovation, sustainable consumption, and justice [Leal Filho et al., 2019]. The 17 SDGs consist of 169 targets, each associated with specific indicators, totaling 232 indicators [Serafini et al., 2022; United Nations, 2022]. Researchers also emphasize the challenge of managing SDGs within organizations due to their multiplicity [Germann et al., 2023; Horvath et al., 2022]. It has been proposed that in order for universities to more effectively implement the SDGs, the following are needed: 1) development of guidelines for SDGs, 2) organizational culture change leading to concrete actions in line with the SDGs, 3) support for university managers in implementing the SDGs, and 4) creation of a tool for identifying actions and documents related to the SDGs [Serafini et al., 2022].

Universities play a significant role in the context of sustainable development by educating future leaders who are aware of the impact of their decisions [Acevedo-Duque et al., 2023; Greenland et al., 2023; Žalėnienė, Pereira, 2021]. The importance of universities in this regard is increasingly emphasized, as they also have the ability to influence their surroundings [Caiado et al., 2018; Fuchs et al., 2023; Ncube, 2023]. Universities are often referred to in the literature as "changing agents" and "catalysts" [Pakkan et al., 2022; Shields, 2019]. Undoubtedly, the greatest role of higher education is emphasized in relation to SDG 4 [Owens, 2017], also in the context of various identified inequalities in access to education [Islam, Alam, 2024]. Furthermore, the importance of well-being of academics, communication between academics and students, empathy, and self-awareness are emphasized as part of the successful implementation of SDG 4. Emotional quotient and spiritual quotient therefore play a significant role. Hence, it is particularly important for university decision-makers to take action to increase the potential of social capital [Saad et al., 2023]. Attempts are also made to determine the more detailed involvement of universities in their daily activities towards the SDGs: integrating SDGs into teaching [Adams et al., 2023], emphasis on research topics related to SDGs, prioritized funding for research and publications on SDG topics, and involving students in SDG-related tasks [Astuty et al., 2023; Omotosho et al., 2023]. Efforts are also made to capture the significance of SDG education in specific study programs [Alkaabi et al., 2023; Martínez-Hernández, Mínguez, 2023], within specific academic subjects [Deo et al., 2023; Kholiq et al., 2023], as well as to assess the extent to which teaching on SDGs enhances graduates' employability [Alimehmeti et al., 2024]. University projects are also subject to scrutiny to verify which SDGs they most commonly address [Podgórska, Zdonek, 2023]. There are also more pessimistic views suggesting that universities are not ready to implement SDGs and if this situation does not change, their role in achieving SDGs will be limited [Adhikari, Shah, 2021].

In the case of sustainable development goals, the importance of communication should be noted [Djordjevic, Cotton, 2011]. The annual compilation of best practices in Poland seems to be a very good form of popularization and inspiration for other universities [Ministry of Development Funds and Regional Policy, 2024].

Initiatives related to the implementation of SDGs dedicated to universities

Initiatives that bring universities together to address specific challenges often facilitate the exchange of experiences and provide principles or guidelines on how to approach certain issues. In the case of initiatives related to SDGs in which universities can participate, the following can be mentioned:

- Sustainable Development Goals Accord;
- United Nations Global Compact;
- United Nations Academic Impact;
- The Principles of Responsible Management Education.

The Sustainable Development Goals Accord is an agreement within the academic community aimed at achieving SDGs. The agreement serves two key purposes. Firstly, it promotes the role of education in achieving SDGs and their significance for businesses, governments, and entire communities. Secondly, it serves as a commitment for universities, which are required to engage in SDGs and report their actions annually as part of their participation in the initiative [SDG Accord, 2024].

The United Nations Global Compact supports the implementation of SDGs through its activities. It includes universities and other entities from the public sector, businesses, cities, and non-governmental organizations [UN Global Compact, 2024].

In 2010, the United Nations Academic Impact (UNAI) established a network of higher education institutions, scholars, and students. The work of its members is crucial for achieving SDGs. UNAI supports its members by promoting UN initiatives and presents opportunities for implementing these ideas within the university space. UNAI also provides a platform for exchanging ideas among academics and students, which helps in achieving SDGs [UNAI, 2024].

The Principles of Responsible Management Education (PRME) is the last initiative mentioned. Established in 2007 and supported by the UN, this initiative is primarily dedicated to business and management schools that educate future leaders. The initiative aims to educate young people to balance economic, environmental, and social goals and to pay attention to the implementation of Sustainable Development Goals [PRME, 2024].

Methods

Within the activities of the Working Group on the Social Responsibility of Universities operating under the Ministry of Development Funds and Regional Policy, good practices of social responsibility of Polish universities are collected annually. All universities in Poland listed in official directories receive invitations to submit their good practices every year. So far, four Catalogs of University Social Responsibility Practices in Poland have been published: for the years 2019, 2020, 2021, and 2022. Therefore, the effort to collect university good practices has been ongoing for 4 years. Each of the reported good practices is assigned, among other things, to specific SDGs that are implemented through the given practice. The study in this article was conducted by analyzing the content of these four reports. A quantitative analysis of the good practices contained therein was carried out in terms of the SDGs adopted for implementation.

Results and findings

In total, 109 universities participated in all four editions of the Catalogs of University Social Responsibility Practices in Poland. However, it should be noted that these universities

did not necessarily appear in all four reports. Table 1 summarizes the participation of universities in the reports.

Table 1. Participation of universities in the catalogues of good practices

Number of Catalogues Participated	Number of Universities		
1 report	56		
2 reports	24		
3 reports	21		
4 reports	8		

Source: own compilation based on Catalogs of University Social Responsibility Practices in Poland 2019, 2020, 2021, 2022.

Over half of the universities reported good practices in only one report. However, only 8 universities submitted their good practices to all 4 previous reports. These universities are: WSB University, Wrocław University of Science and Technology, SGH Warsaw School of Economics, University of Economics in Katowice, Poznań University of Economics and Business, University of Gdańsk, Adam Mickiewicz University, Medical University of Bialystok.

There are some differences between the catalogues in each year. Basic information about the reports is summarized in Table 2.

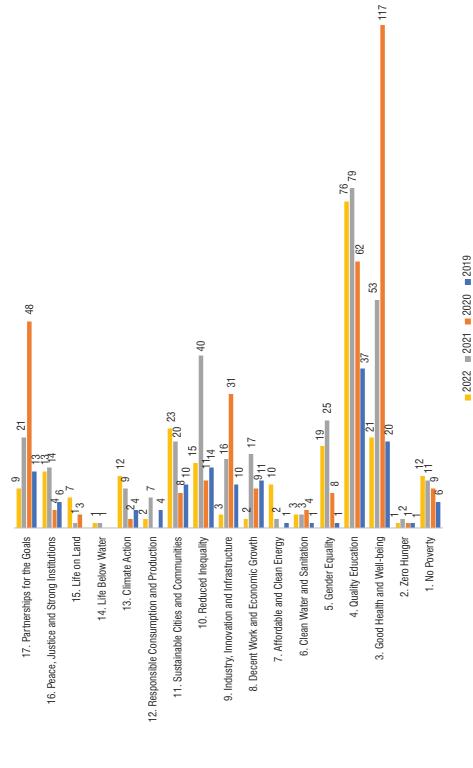
Table 2. Basic information about the catalogues

Criterion/Year	2019	2020	2021	2022
Number of universities that submitted good practices to the catalogue	40	57	44	53
Total number of good practices submitted to the catalogue	139	171	140	146 (133 new practices and 13 previously submitted practices now under evaluation)
SDGs implemented within the good practices	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17	1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17	all	all
SDGs not implemented	14, 15	7, 14	-	-
Average number of practices submitted per university	3,5	3	3,1	2,6

Source: own compilation based on Catalogs of University Social Responsibility Practices in Poland 2019, 2020, 2021, 2022.

Minor differences appeared in the number of universities that decided to submit their good practices in individual years. The fewest universities appeared in the first report (40), while the most appeared in the report for the year 2020(57). Differences also occurred in the number of good practices submitted. Similarly, the fewest practices appeared in the report for the year 2019(139), while the most appeared in the report for the year 2020(171). It should be noted that only in the 2019 report, only one SDG was assigned to each good practice. However, in subsequent years, good practices often had more than one SDG assigned to them. This is related to the overlap of individual SDGs [Kioupi, Voulvoulis, 2019].

Figure 1. The number of specific SDGs assigned to good practices broken down by years



Source: own compilation based on Catalogs of University Social Responsibility Practices in Poland 2019, 2020, 2021, 2022.

Additionally, in 2022, practices undergoing evaluation did not have assigned SDGs, and 4 new practices in the 2022 report also did not have assigned SDGs. In terms of implemented SDGs, in the last two reports, the good practices submitted by universities covered all SDGs. The situation was slightly different in the 2019 report where SDG 14 and SDG 15 were not listed by universities, and in the 2020 report, SDG 7, SDG12 and SDG 14 were not included. However, the average number of good practices across all reports is at a similar level. In the first report, one university submitted 3.5 practices on average, which was the highest average result, while the lowest average number of practices was 2.6 in the 2022 report.

To better understand the concentration of universities on individual SDGs, a comparison was prepared with the number of specific SDGs assigned to good practices in different years. This comparison is presented in Figure 1.

In all four reports, SDGs were mentioned 1006 times. The three most frequently indicated goals are: SDG 4 – Quality Education, SDG 3 – Good Health and Well-being, and SDG 17 – Partnerships for the Goals. The distribution of SDG mentions, broken down by individual years, is presented in Figure 2.

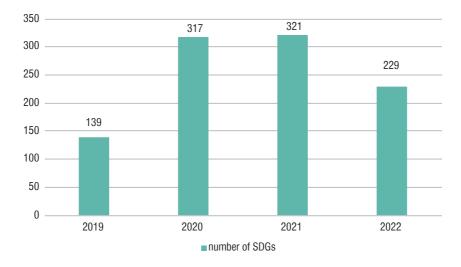


Figure 2. The number of mentions of SDGs in all good practices broken down by years

Source: own compilation based on Catalogs of University Social Responsibility Practices in Poland 2019, 2020, 2021, 2022.

Therefore, it seems that three goals: SDG 4, 3, and 17 are best aligned with the activities of universities. For a better overview of SDG implementation by universities, a percentage breakdown of the contribution of each SDG in all reports is provided and presented in Figure 3.

The compilation confirms the significant popularity of SDG 4 (25.25%) and SDG 3 (20.97%), as well as SDG 17 with a much smaller share (9.05%). It was also possible to capture SDGs whose share is below 1% – SDG 14 (0.20%) and SDG 2 (0.50%).

However, to verify whether the three most frequently mentioned SDGs (3, 4, and 17) are not the result of good practices of individual universities, it was verified how many universities

undertake their implementation in individual years. Table 3 presents the percentage share of goals in individual years.

30.00 25.30 25.00 21.02 20.00 15.00 9.06 10.00 7.97 6.08 5.88 5.28 3.69 3.78 3.78 5.00 2.69 1.10 1.29 1.29 1.10 0.50 0.20 0.00 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 Goals

Figure 3. The percentage share of all SDGs assigned to good practices in the 4 reports

Source: own compilation based on Catalog of University Social Responsibility Practices in Poland 2019, 2020, 2021, 2022.

Table 3. The share of individual SDGs in the catalogues in respective years

20	119	20	20	2021		2022	
Goals	%	Goals	%	Goals	%	Goals	%
4	26.6	3	36.9	4	24.6	4	33.2
3	14.4	4	19.6	3	16.5	11	10.0
10	10.1	17	15.1	10	12.5	3	9.2
17	9.4	9	9.8	5	7.8	5	8.3
8	7.9	10	3.5	17	6.5	10	6.6
9	7.2	1	2.8	11	6.2	16	5.7
11	7.2	8	2.8	8	5.3	1	5.2
1	4.3	5	2.5	9	5.0	13	5.2
16	4.3	11	2.5	16	4.4	7	4.4
12	2.9	6	1.3	1	3.4	17	3.9
13	2.9	16	1.3	13	2.8	15	3.1
2	0.7	15	0.9	12	2.2	6	1.3
5	0.7	13	0.6	6	0.9	9	1.3
6	0.7	2	0.3	2	0.6	8	0.9
7	0.7	7	0.0	7	0.6	12	0.9
14	0.0	12	0.0	14	0.3	2	0.4
15	0.0	14	0.0	15	0.3	14	0.4

Source: own compilation based on Catalogs of University Social Responsibility Practices in Poland 2019, 2020, 2021, 2022.

From the compilation, it can be observed that the top three positions vary slightly from year the year. However, it is noticeable that SDG 4 and SDG 3 consistently occupy the top three positions in all four catalogues. In 2019 and 2021, SDG 10 also appeared in the third position, while in 2022, SDG 11 appeared in the second position.

Focusing on the 5 most popular goals, the number of universities implementing them in each year is presented in Table 4. This action focuses on specific universities rather than just good practices. This allows for checking how many universities focused on the most popular SDGs in their good practices and what percentage of all universities participated in the report.

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Most Frequently Occurring CDCs	Number of Universities Implementing Good Practices (Total Universities)							
Most Frequently Occurring SDGs	2019		2020		2021		2022	
4. Quality Education	24 (40)	60%	38 (57)	67%	36 (44)	82%	43 (53)	81%
3. Good Health and Well-being	11 (40)	28%	49 (57)	86%	32 (44)	73%	15 (53)	28%
17. Partnerships for the Goals	11 (40)	28%	27 (57)	47%	13 (44)	30%	9 (53)	17%
10. Reduced Inequality	14 (40)	35%	11 (57)	19%	40 (44)	91%	15 (53)	28%
11. Sustainable Cities and Communities	10 (40)	25%	8 (57)	14%	20 (44)	45%	23 (53)	43%

Table 4. Implementation of the most frequently occurring SDGs

Source: own compilation based on Catalog of University Social Responsibility Practices in Poland 2019, 2020, 2021, 2022.

The data presented further highlights the differences in the concentration of universities on specific goals in different years. While SDG 4 constitutes a significant share every year, the concentration on other goals varies. In 2019, the highest percentage of universities among the 5 most popular goals was most strongly focused on SDG 4 (60%), similar to 2022 – SDG 4 (81%). In 2020, SDG 3 was the most popular (86%), and in 2021, SDG 10 (91%).

As indicated in the previous 4 reports, 8 universities submitted their good practices to each of them. These 8 universities were examined to see if, in addition to the actions reported in the reports, they undertake other initiatives related to the implementation of SDGs. The compilation of these actions is included in Table 5.

When delving deeper into the analysis of universities that annually submit their good practices to the nationwide catalog, it might seem that these universities are accompanied by a range of other activities. Especially the activities related to the Sustainable Development Goals (SDGs). First and foremost, the participation in initiatives supporting the implementation of SDGs was identified. The most popular initiative is the Principles of Responsible Management Education, which includes participants from 3 of the surveyed universities. In the case of other initiatives, the participation of Polish universities is minimal. Only SGH Warsaw School of Economics participates in the Sustainable Development Goals Accord and the United Nations Global Compact, while none of the surveyed universities participates in the United Nations Academic Impact initiative. However, when it comes to communication activities related to publishing the adopted SDGs on the university website or in a dedicated report, 5 universities have undertaken this action.

Table 5. Actions towards achieving SDGs by universities that submitted their good practices to the four editions of the catalogue

University	Participation in Sustainable Development Goals Accord	Participation in United Nations Global Compact	Participation in United Nations Academic Impact	Participation in The Principles of Responsible Management Education	Implemented SDGs in accordance with the information on the website or report
WSB University	No	No	No	Yes	4, 5, 8, 9, 11, 12, 17
Wrocław University of Science and Technology	No	No	No	No	1, 3, 4, 8, 9, 10, 11, 13, 16
SGH Warsaw School of Economics	Yes	Yes	No	Yes	4, 7, 8, 10, 12, 17
University of Economics in Katowice	No	No	No	No	No information
Poznań University of Economics and Business	No	No	No	Yes	3, 4, 5, 8, 9, 12
University of Gdańsk	No	No	No	No	No information
Adam Mickiewicz University	No	No	No	No	3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
Medical University of Bialystok	No	No	No	No	No information

Source: own compilation.

Summary

Research conducted at a public university in Brazil aimed at demonstrating the university's social engagement through the implementation of sustainable development goals found that the most popular SDGs were SDG 17, SDG 4, SDG 12, and SDG 8 [Borsatto et al., 2024]. However, research conducted in Chile indicated that universities mainly focused on SDG 4 and SDG 9 in their strategic documents, mission, and vision [Abello-Romero et al., 2023]. Other studies focusing on university strategies showed that approaches to SDGs at universities vary widely, and no single pattern has been identified yet [Fia et al., 2022]. Interest in this topic has led to more detailed research on the implementation of all SDGs by universities in a given country [Fiel'ardh et al., 2023; Lu et al., 2023; Stasiuk-Piekarska et al., 2024], or specific SDG 4 [Islam, Alam, 2024; Monteiro, 2023], as well as other individual SDGs [Merma-Molina et al., 2023; Raji, Demehin, 2023; Tran et al., 2023], and the actions of individual units to achieve SDGs [Al-Raeei, 2023; Heijmans, Ewag, 2023; Kalinowska, Batorczak, 2017; Korkosz-Gębska, 2022], as well as the publication engagement of universities in the field of SDGs [Pietrzak, 2022; Pietrzak, 2024].

Despite many global university initiatives to promote SDGs, there is still a need to strengthen these efforts [Chapungu, Nhamo, 2024]. Institutional solutions need to be developed, and all university community members need to be engaged [Engle et al., 2017].

The research results provide answers to the first research question. Polish universities focus not only on SDG 4, but also place great importance on SDG 3, SDG 17, as well as SDG 10 and SDG 11. In response to the second research question, it can be noted that there is also some variability over time in the focus on SDGs, which may be due to emerging challenges in the university environment. While SDG 4 is significant in every report, differences arise in the other most popular goals in each year. For example, in the 2020 report on practices, SDG 3, Good Health and Well-being, was mentioned the most, with 49 out of 57 universities reporting their good practices. This situation seems to be a response to the challenges posed by the COVID-19 pandemic. In addressing the third research question, it should be noted that universities that regularly report their practices to catalogues are only marginally involved in other SDG-related activities. Perhaps this indicates a certain initial stage of development of Polish universities in this area.

The research findings may provide some guidance for universities regarding future actions. It seems that the reports prepared are a very good source of inspiration and exchange of experiences between universities. Furthermore, the reflection on the most popular SDGs allows for the delineation of SDGs for implementation by individual universities. It also becomes possible to design strategic actions that align with the implementation of SDGs.

A limitation of the research conducted is the focus on good practices within four reports. Undoubtedly, some universities that do not report their good practices to this national compilation still take action to implement SDGs. Moreover, the perspective of the last four years shows a certain trend but does not present a long-term strategy of Polish universities. Additionally, it should be emphasized that the analyzed reports are based on universities' declarations. Therefore, there is a risk that universities try to present themselves in the best possible light, and within the research methodology adopted, there is no possibility to verify whether greenwashing occurs. In future research, it would be beneficial to verify the websites of individual Polish universities with regard to the implementation of SDGs. Nevertheless, the methodology adopted resulted in the examination of universities characterized by greater maturity and awareness in the implementation of SDGs. In future research, it would also be interesting to compare Polish universities with top foreign universities, for example, those ranked in the Times Higher Education World University Rankings.

Funding The article presents the result of the Project no. 037/GAZ/2023/POT financed from the subsidy granted to the Krakow University of Economics.

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