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**RETHINKING THE SUSTAINABLE DEVELOPMENT GOALS?  
CRITICAL EXAMINATION OF THE 2030 GOALS.**

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## Declaration

I, Zuzana Hudcova, LL.M. hereby declare that the Master thesis submitted to the Faculty of Sciences as a thesis graduation requirement under the guidance and supervision of Professor Doc. Mgr. Miroslav Syrovatka, PhD, is my original work and any theoretical and empirical literature have been duly cited and the sources have been duly acknowledged.

In Olomouc, 11<sup>th</sup> December 2023.

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## Abstract

This Master Thesis provides a critical analysis of the Sustainable Development Goals (SDGs) through an examination of 113 scholarly articles from prominent databases. The data analysis reveals significant concerns, with internal clashes (28%) and lack of integration (13.33%) identified as key issues. Proposed solutions include introducing additional indicators to foster synergy and cross-sectorial partnerships. Challenges associated with the current global system (11%) underscore the need for a redefined distribution of responsibilities and collaborative efforts. Inefficient monitoring mechanisms (7.77%) point to the necessity of an independent body to enhance transparency. Addressing vagueness (6.66%) involves advocating for SMART targets, while the lack of accountability (4.44%) calls for an investigative body inspired by human rights models. A conceptual flaw (3.33%) emphasizes prioritizing environmental goals, and non-legally binding commitments (3.33%) suggest translating key SDGs into jus cogens norms for enforceability. These findings contribute to structural recommendations aimed at refining the SDG framework and advancing global sustainable development by 2030.

## Acknowledgements

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## CHAPTER 1: INTRODUCTION

In the late 1970s, it became increasingly apparent that "the exponential growth in production and consumption within the limited Earth ecosystem is not sustainable in the long term" (Novacek, 2001). Recognizing this reality, the international community established a commission to develop a global response to sustainable development efforts (Mensah, 2019). Headed by the Prime Minister of Norway, Gro Harlem Brundland, and supported by the UN-Secretary General, Javier Perez, years of research culminated in the release of the 1987 'Our Common Future Report,' a seminal document that first emphasized the critical notion of sustainable development (Purvis, 2018). Various scholars, including Brundland, provided their definitions of sustainable development. On that note, Brundland's definition, for instance, describes it as "development that meets the needs of the present while safeguarding Earth's life-support system, on which the welfare of current and future generations depends" (United Nations, 1987).

Building on this foundation, the United Nations currently defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 2023). Over the years, diverse approaches have been pursued to achieve systematic sustainable development, resulting in numerous international legal frameworks and policies of significance on local, national, regional, or international levels (Chassagne, 2020).

In 2000, world leaders reconvened at the Millennium Summit in New York for three days, bringing together approximately 150 global leaders. This summit yielded the Millennium Development Goals (MDGs), comprising eight objectives aimed at eradicating extreme poverty, achieving universal primary education, promoting gender equality, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria, and other diseases, ensuring environmental sustainability, and creating a global partnership for development. The ambitious timeline for achieving these goals was set for 2015 (Lomazzi et al., 2014, p. 3).

The MDGs, despite their ambitious nature, garnered widespread support and were considered the most comprehensive development goals established up to that point (Lomazzi et al., 2014). However, critics such as Jakob (2017) and Lomazzi et al. (2014) questioned their effectiveness,



citing ambiguity, excessive ambition, inefficient data collection, and a lack of appropriate leadership in enforcement. Issues arising from clashes among specific MDGs, particularly in education, health, and gender, were also noted, along with the oversight of environmental destruction linked to the fulfillment of other MDGs (Jakob, 2017, p. 2).

Nevertheless, the MDGs served as a catalyst for change, contributing, for instance, to the significant reduction of the population living in extreme poverty (Aseefa, 2017, p. 2). Recognizing the need for a successor, the Sustainable Development Goals (SDGs) were introduced, extending the agenda into other areas and incorporating an additional nine goals. These new goals predominantly focus on principles that embed environmentally sustainable practices in the realms of water, land, ecosystems, energy, climate change, sustainable cities, and the deepening of specific indicators and goals. The SDGs were formulated at the United Nations Conference on Sustainable Development in 2012 in Rio de Janeiro (Issever, Grochova and Litzman, 2021, p. 712). However, the SDGs faced criticism during negotiations, with scholars such as Griggs et al. (2014) expressing skepticism about the framework's efficiency and Constanza et al. (2016) highlighting the lack of required “end goals” as an approval aspect for states regarding their compliance amongst others. (Griggs et al., 2014, p. 306; Constanza et al., 2016, p. 354).

This Master Thesis explores a highly relevant topic as the world approaches the seven-year mark from the looming deadline for the fulfillment of the Sustainable Development Goals (SDGs). The significance of this inquiry lies in its potential implications for the subsequent generation of SDGs beyond 2030. Assessing the current framework becomes crucial, considering the probable continuation of a similar concept. The objective is to identify areas for improvement and refinement, shaping the foundation for the evolution of future global sustainability goals.

## 1.2 AIM OF THIS MASTER THESIS

This Master Thesis has a primary objective of conducting a thorough analysis to closely examine the inherent weaknesses in the Sustainable Development Goals (SDGs) framework. The study focuses on analyzing weaknesses related to the relationships among SDGs, their synergy, targets, indicators, monitoring, accountability mechanisms, and other pertinent aspects.

In addition to scrutinizing the inter-SDG relationships, this thesis aims to identify and address notable deficiencies within the SDGs framework. Drawing from relevant literature, the Master Thesis aims to provide recommendations that could effectively address the identified issues. The overarching goal is to contribute insights that can enhance the robustness and effectiveness of the SDGs as a comprehensive framework for sustainable development.

Therefore, learning on the results from the aforementioned data analysis, this Master Thesis aims to answer the following central question: **What are the main critical points and weaknesses of Sustainable Development Goals?**

In order to unravel the central question, this research dissects several sub-questions, including:

- 1. How do internal clashes among SDGs undermine the coherence and effectiveness of the overall SDG framework?*
- 2. In what ways does the perceived lack of integration within the SDG framework hinder its ability to address interconnected global challenges comprehensively?*
- 3. How do criticisms related to current global settings shed light on systemic challenges and geopolitical factors that impede the successful implementation of the SDGs?*
- 4. How do inefficiencies in the indicators associated with SDGs impact the accurate assessment and measurement of progress, and what are the implications for the overall success of the framework?*

5. *In what ways does the identified lack of a monitoring mechanism contribute to challenges in tracking and evaluating progress toward SDG goals, and what alternative mechanisms are proposed by critics?*
6. *How does the perceived lack of accountability within the SDG framework hinder the commitment of nations and stakeholders, and what accountability mechanisms are suggested for improvement?*
7. *In what aspects does the criticism regarding the wrong concept of sustainability challenge the foundational principles of the SDGs, and how might a redefined concept enhance the framework?*
8. *How does the criticism of vagueness and lack of specification in certain SDGs contribute to challenges in interpretation and operationalization, and what strategies are suggested for improving clarity and precision?*
9. *What are the consequences of the non-legally binding nature of the SDGs on the commitment and compliance of nations, and what arguments exist for or against making the SDGs legally binding?*

### **1.3 METHODOLOGY**

This Master Thesis predominantly employs qualitative research methods to conduct a comprehensive examination of academic sources, encompassing articles, journals, and official reports by the UN. The research is organized into six sections, each dedicated to addressing specific aspects derived from the central question.

The literature analysis commenced by searching for articles across scientific databases, including the Web of Science, Scopus, Science Direct, JStor, and Google Scholar. A review of the first 113 relevant articles formed a robust foundation for the subsequent analytical phase. Strict adherence to inclusion and exclusion criteria ensured that only articles from the specified databases, under key search terms such as “weaknesses of SDGs,” “criticism of SDGs,” “assessment of SDGs,” and others, were selected.

Following data collection, analysis focused on the most frequent criticisms, leading to the creation of sub-questions. Further literature review and data analysis ensued. The data analysis delved into key issues surrounding SDGs, while also examining patterns in academic literature and rhetoric towards the SDGs. This stage involved analyzing the release time of articles, the quartile of the institution, and its economic background in relation to specific criticisms, revealing patterns in how criticisms are shaped.

Upon identifying key issues through data analysis, an additional research phase explored relevant literature to inform the creation of recommendations. This iterative process ensures a comprehensive and well-informed exploration of SDGs' strengths and weaknesses, contributing valuable insights to the discourse on sustainable development.

The first subsection looked into the problematics of internal clashes. For this part, this Master Thesis leant on various scholars who have explored the internal conflicts within the Sustainable Development Goals (SDGs). Notably, Redclift (2005), Dasgupta (2013), Novovic (2021), Cumming (2018), and Kopnina (2016) have highlighted the challenges arising from conflicting goals and priorities within the SDG framework, contributing to a lack of synergy.

The second subsection analyzed the issue of the lack of synergy and integration among SDGs. Major authors for this part included Saez de Camara (2021), Moldavska and Welo (2019), Lim (2018), and Lalawmpuii and Rai (2023).

Moreover, the third subsection assessed global settings as another problematic aspect, drawing on the works of Carant (2016), Brisset (2017), Arora-Jonsen (2023), Cummings (2016), and Pogge and Sengupta (2016).

The fourth subsection investigated the inefficiency of SDG indicators, with key articles from Schmidt-Traub et al. (2017), Hak and Janouskova (2018), Guppy (2019), and others.

Furthermore, the subsection dedicated to examining the lack of a monitoring mechanism for SDGs drew on crucial literature, including works by Forbye, Constanza et al. (2016), Constanza et al. (2016), Merry (2011), Morse (2015), Smith (2020), Glass and Newig (2019), Fisher and Parr (2019).

The sixth subsection focused on the lack of an accountability mechanism pushing states to follow the SDG agenda. Major sources for this part included academic works by Friedman (2016), Donald et al. (2016), Hunt (2015), Lin (2020), or Merry (2011).

The seventh subsection explored issues linked to the application of the wrong model of sustainability and drew on academic work by Asadikia et al. (2021), Berrone (2023), Yang et al. (2020), Eisenmenger et al. (2020), Hickel (2020), Rockstrom and Sukhdev (2016), Sachs (2017), Wesley, Tittle, and Seida (2021), Mackey, Vain, and Kohler (2018), Nehan and Cox (2022), Hoffiani (2019), and Kunar (2018).

In addition, part number eight investigated the non-binding nature of SDGs. Influential academic writings by Friedman (2016), Biermann & Boas (2017), Spangenberg (2017), Brisset (2015), Pogge & Sengupta (2018), Berridge (2001), Klabbers (2017), or Shaw (2001).

Lastly, the last subsection looking into issues arising from the vagueness of SDGs was based mainly on the following authors: Burger and Parker (2022), Langford (2016), Engelbretsen (2017), Filho et al. (2023), and Mustajoki et al. (2020).

## CHAPTER 2: ANALYSIS OF LITERATURE ON CRITICISM OF SUSTAINABLE DEVELOPMENT GOALS

The data analysis conducted in this study delved into a comprehensive exploration of scholarly articles sourced from various academic databases. The investigation focused on five prominent platforms: Web of Science, Scopus, JSTOR, Science Direct, and Google Scholar. The dataset comprised a total of 113 articles, with each database contributing a distinct number of publications. Specifically, Web of Science yielded 20 articles, Scopus provided access to 54, JSTOR featured 4, Science Direct contributed 20, and Google Scholar encompassed 15 articles. This diverse selection of databases ensured a broad and multi-faceted representation of academic literature, laying the foundation for a thorough and insightful analysis of the chosen articles.

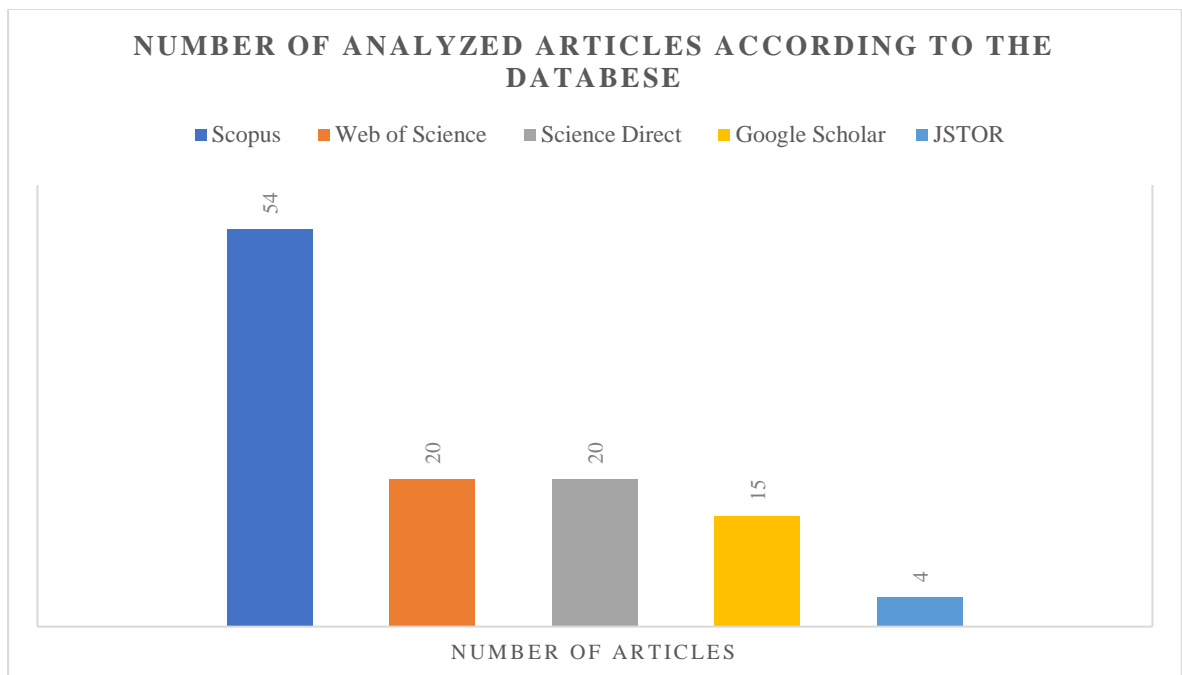


Table 1 This diagram illustrates the quantity of articles identified through the utilization of specific academic databases. The highest number of articles was found in Scopus.

### a) Central aspects criticized by the academic articles

The first, and arguably the most important, factor in this literature analysis involved examining which SDG each article focused on in its criticism. The findings revealed that 81% of the articles critically analyzed the SDGs as a framework, addressing their inconsistencies on a systematic level and assessing their coherence among other structural factors. Furthermore, while the second most frequent criticism was directed towards SDG 5 (gender equality), the third most recurring focus was on SDG 6, which pertains to access to safe and clean water.

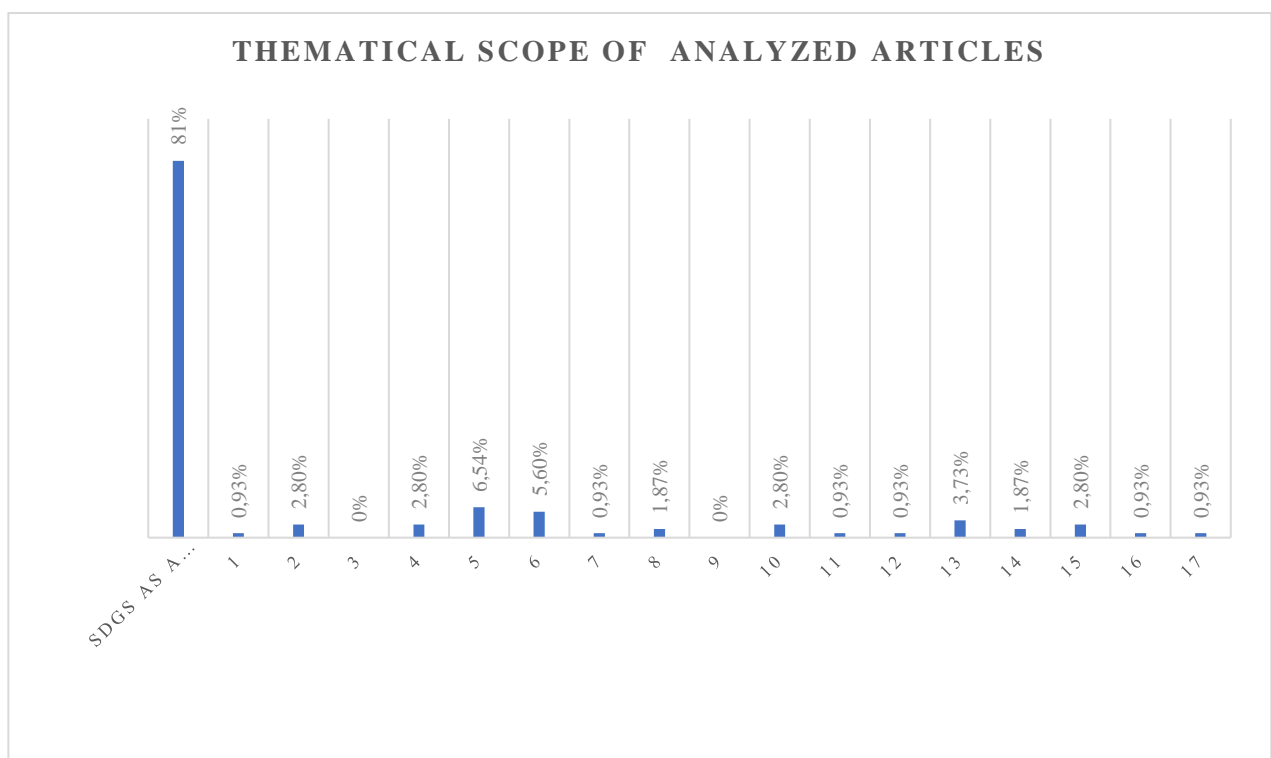


Table 2 This table summarizes the thematic scope of criticized SDGs which stem from the data analysis.

### b) Criticism linked to SDGs as framework

If one closely observes the criticisms related to issues regarding SDGs as a framework, the most frequently cited concern was internal clashes among SDGs. In fact, the most prevalent criticism (28%) analyzed one of the most profound clashes—the conflict between economic growth and environmental SDGs, and the trade-offs associated with it. Unfortunately, many states prioritize economic growth, significantly undermining the fulfillment of environmentally oriented goals.

Furthermore, the second most emphasized concern centered around the insufficient integration of goals, accounting for 13.33% of the criticisms. This issue highlights a noticeable 'separation' within the SDGs, actively contributing to their weakening. Additionally, a recurring theme involved critiques related to the inefficiency of indicators, ranking as the third prominent element in the analysis.

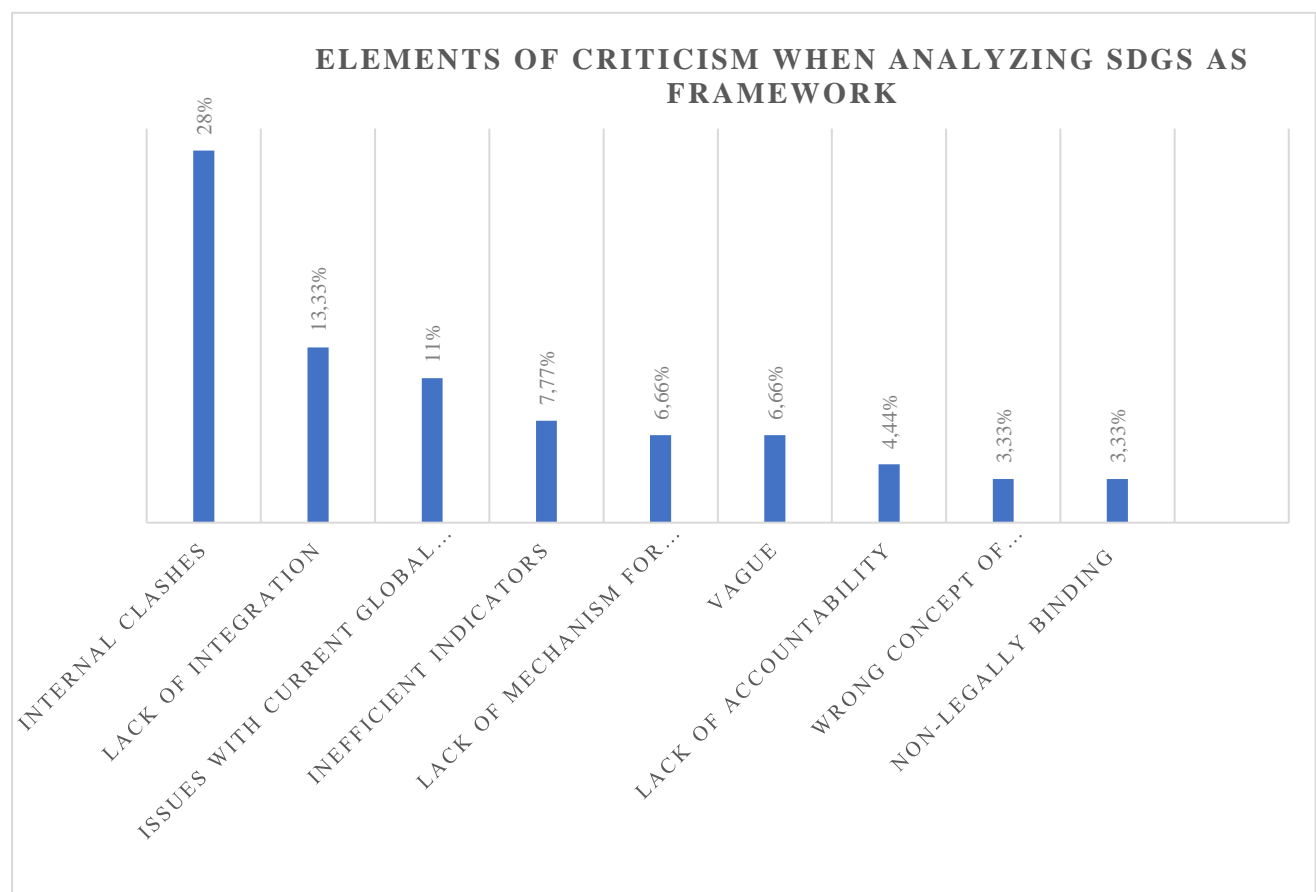


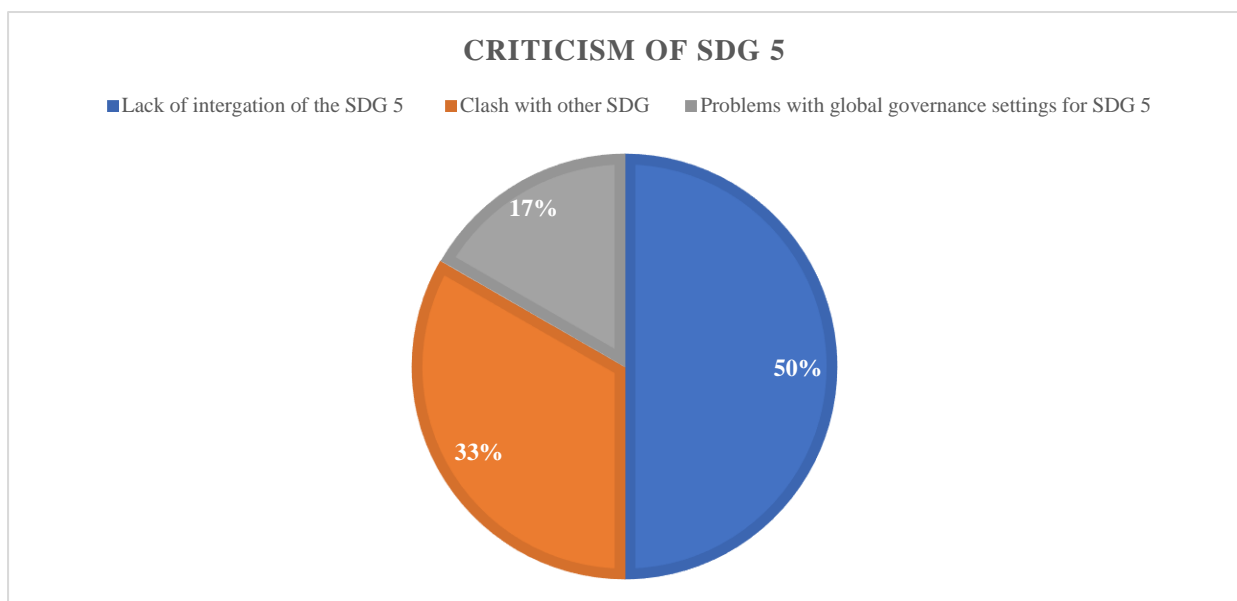
Table 3 This table indicates the most criticized aspects of SDGs as a framework.

### c) Criticism on the most recurring individual SDGs

Deviating from the examination of the SDGs as a framework, a close analysis of the primary areas of criticism surrounding the second and third most SDGs in this study—specifically, SDG 5 and SDG 6—reveals the following issues.



Regarding SDG 5, which pertains to ensuring gender equality, 6.54% of the articles in the literature review focused on this goal. Notably, almost half (49.99%) of the articles also delved into another critical aspect related to this SDG—the inadequate integration of the goal within its targets. A notable argument raised was the omission of LGBTQ issues from the specified targets (Celebi, 2022). Simultaneously, 33.33% of the articles explored how SDG 5 engendered internal conflicts with other SDGs, specifically SDG 8, which centers on economic growth. Another dimension of criticism centered on problems associated with global governance settings, wherein the author argued that women are systematically discriminated against (Sen, 2019). The ensuing diagram visually represents the analyzed data.



*Table 4 This table describes the main aspects of criticism of SDG 5 as outlined in the data analysis.*

In regard to SDG 6, the third most criticized SDG in this literature analysis, 5.60% of the articles condemned it. Half of the articles expressed critical views on the insufficient integration of SDG 6 within the framework of SDGs, particularly in terms of wastewater (Obaideen, 2022), and the lack of sanitation integration into the framework (German, 2023). The second most discussed aspect was the wrongful indicators, overlooking tremendously important realities such as 6.1 and 6.2, and the issues linked to their design and impossible monitoring (Guppy, 2019). Lastly, the last argument lies in the non-legally binding nature of this SDG and its insufficient translation into the accompanying international human rights

network (Winkler, 2018). The data are indicated in a visual manner in the diagram below.

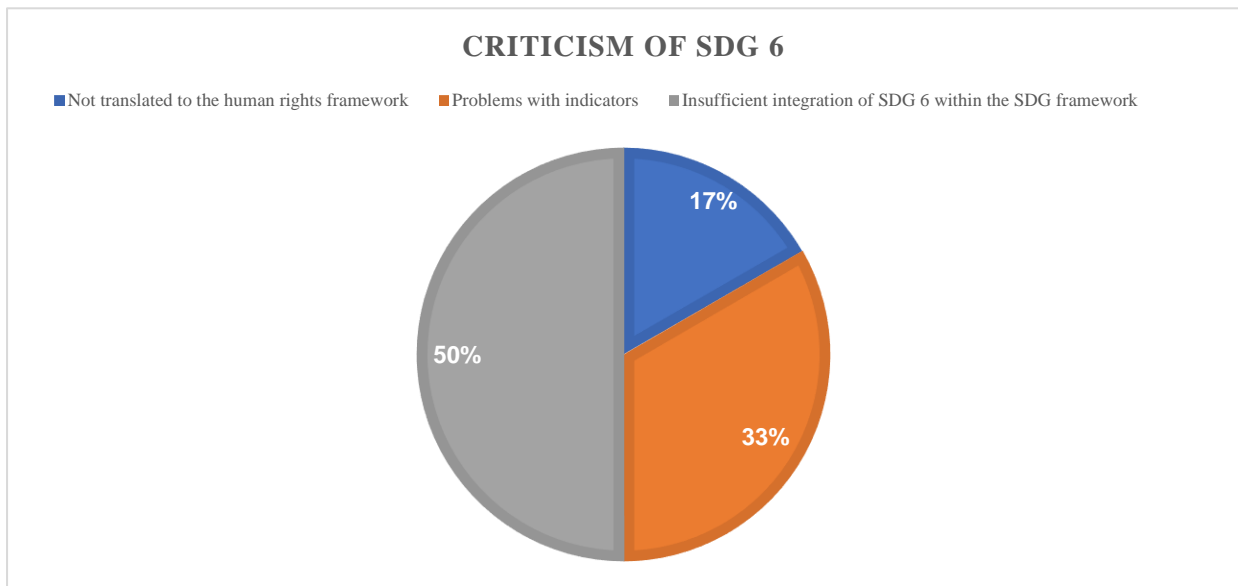


Table 5 This table showcases the main aspects of criticism of SGD6, the data come from the data analysis of academic articles.

#### d) Quartiles of articles analysed

By the same token, in the ranking of respective articles, the analysis delved into the specific quartile for each field, along with the year, as the quartiles—and thus, the ranking of each journal—might shift. While the quartile of Scopus was automatically given, the quartile of Web of Science was calculated using an internal website called Web of Science Info.

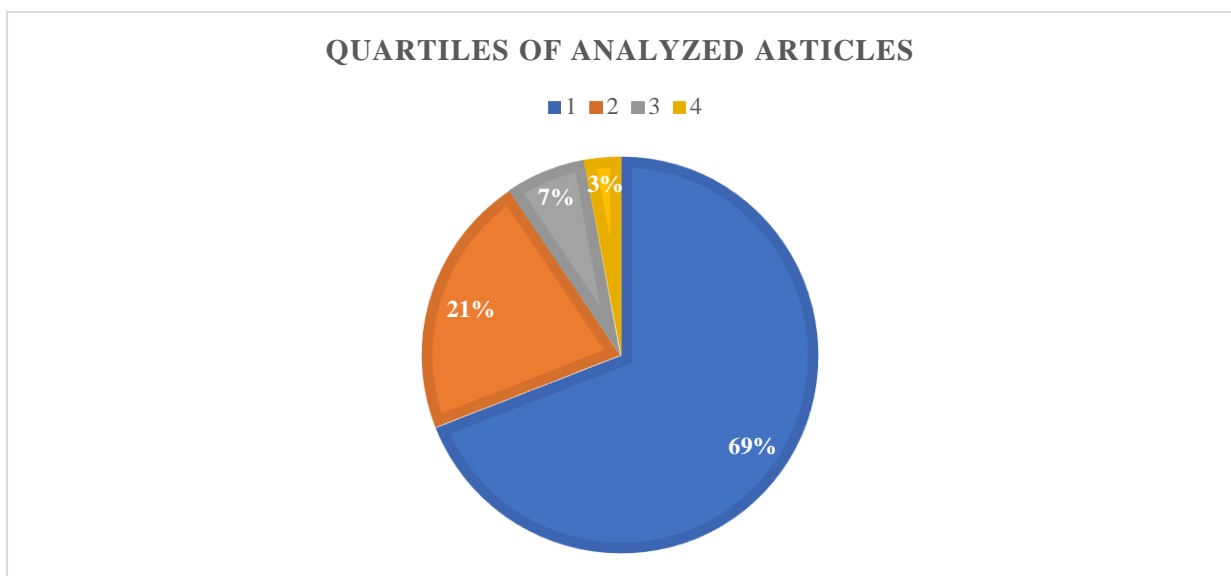


Table 6 This table summarizes the quartiles of analyzed articles

While 69.2% of articles were ranked in Quartile 1, 21% reached Quartile 2, Quartile 3 represented 7% of articles, and lastly, only 3% of the articles were ranked in Quartile 4. These findings reveal that the majority of articles were ranked with the best grade they could, thereby increasing the added value of this analysis.

The reason for choosing this factor was as follows: the collected data could create an opportunity to analyze the pattern between the quality of the journal and the scope of criticism in specific articles. Such analysis was undertaken after data collection, and the findings revealed the following.

#### **e) Relationship between quartiles and centre of SDG criticism**

For articles ranked in Quartile 1, the most frequently perceived issue with SDGs concerned internal clashes (28%), followed by another oftentimes recurring problem—the sparse integration of goals (25.90%). Moreover, the third most analyzed aspect was the challenges linked to not correctly defined indicators (15.58%). Additionally, 7.79% of articles highlighted the importance of issues with current global governance settings. The inefficient monitoring of the performance of states in different SDG areas was another discussed issue and was represented by 6.40% of articles. Furthermore, 2.59% of articles investigated the ambiguous nature of SDGs, and the same number, 2.59%, looked into the lack of mechanisms to hold states accountable. Lastly, 1.29% of articles deemed SDGs too ambitious.

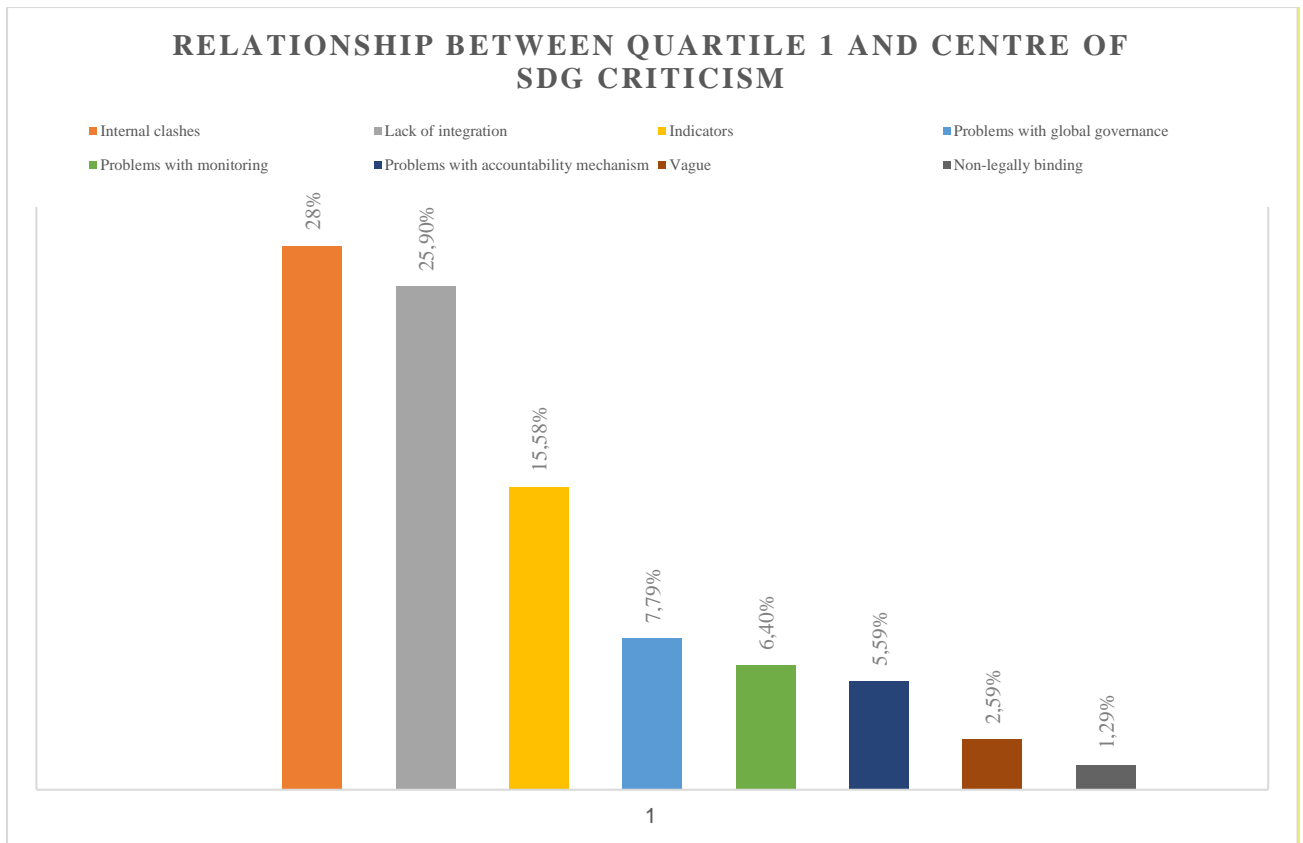


Table 7 This table analyzed the relationship of specific quartile and scope of criticism of SDGs as a framework.

Additionally, within Quartile 2, internal clashes were a prevalent concern, represented by 28% of articles. Lack of integration was another significant issue, accounting for 25.90% of articles. Critiques related to indicators were present in 15.58% of articles, highlighting challenges in accurately defining and measuring SDG targets. Problems with global governance were mentioned in 7.79% of articles, emphasizing the impact of neoliberal assumptions on SDG implementation. Monitoring issues were raised in 6.40% of articles, indicating concerns about tracking progress effectively. The need for a robust accountability mechanism was discussed in 5.59% of articles. Vagueness in certain aspects of the SDGs was analyzed in 2.59% of articles, and the non-legally binding nature of SDGs was criticized in 1.29% of articles. Furthermore, 26.66% of articles in Quartile 2 emphasized the lack of interaction between SDGs, while 19.9% criticized the non-legally binding nature of SDGs. Lastly, 6.66% of articles analyzed problems with SDG measurement, and another 6.66% investigated issues with SDG indicators. The chart below allows to visualise the data.

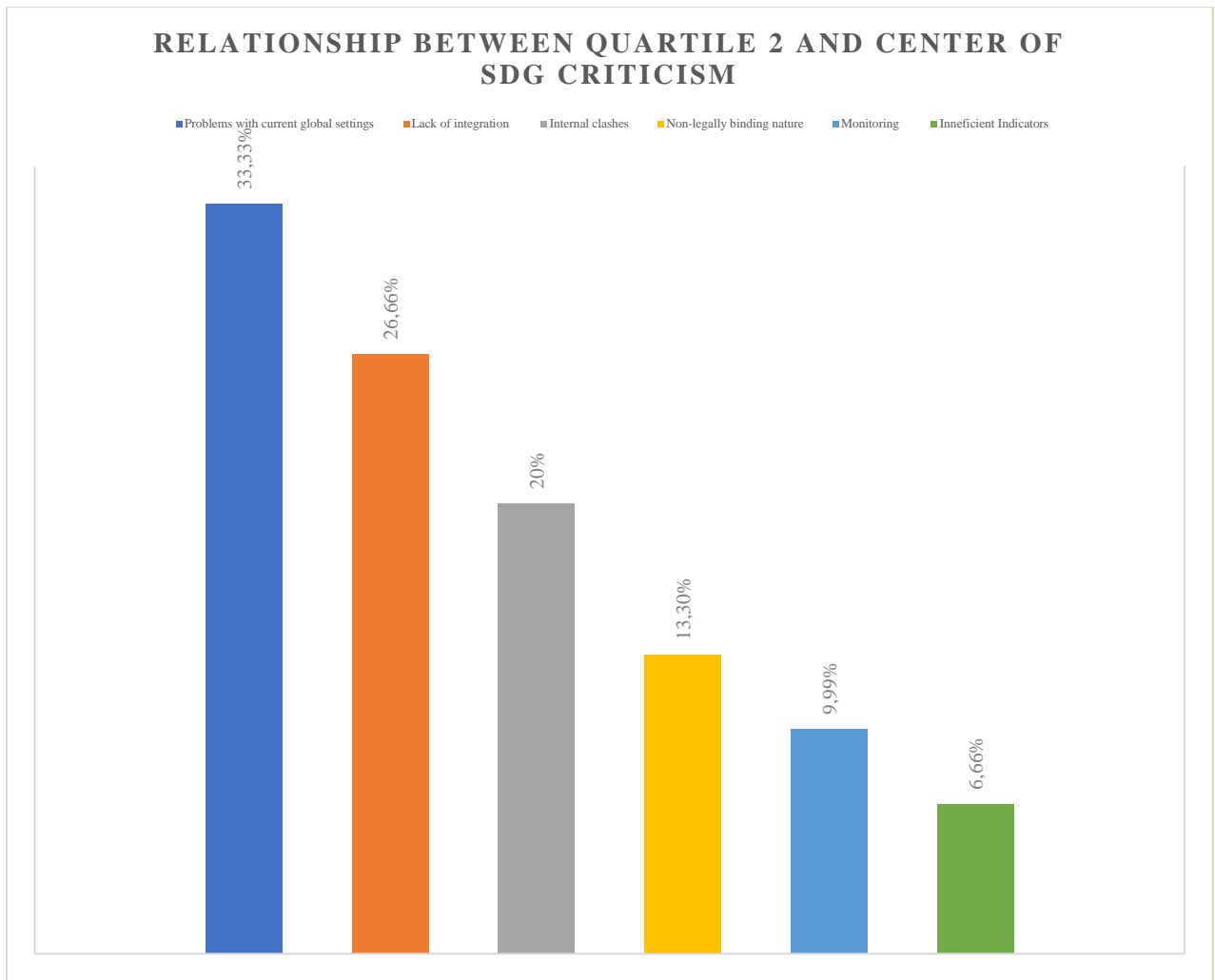
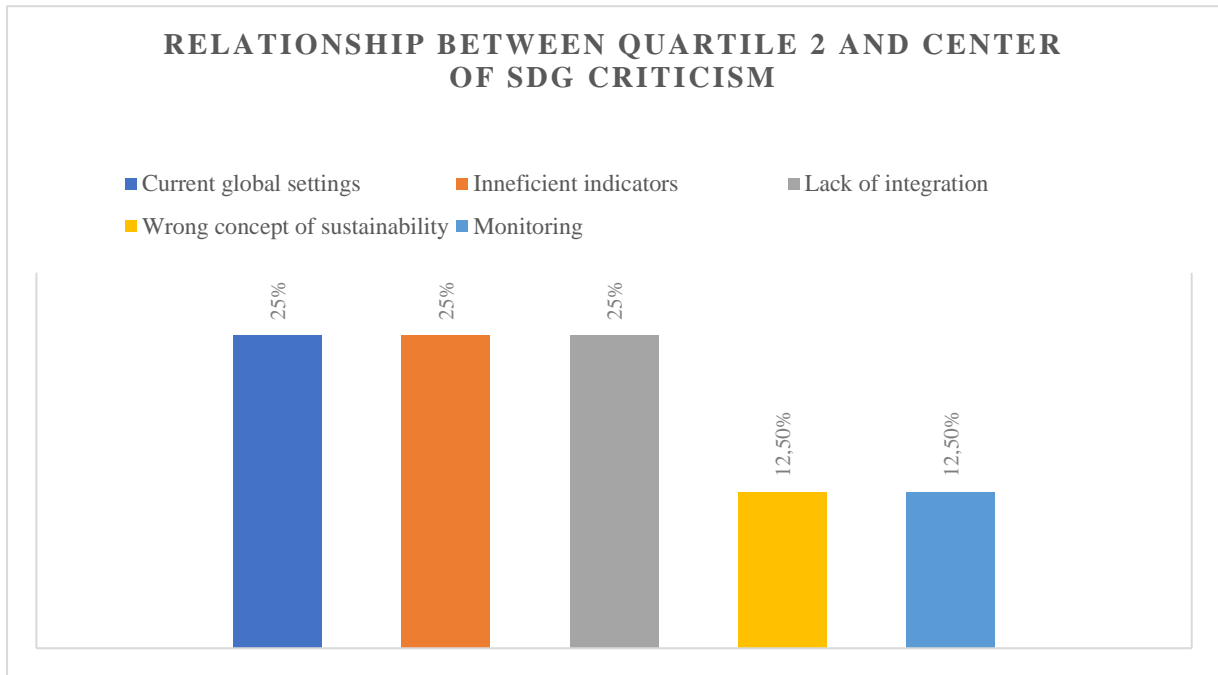


Table 8 This table summarizes relationship between quartile 2 and scope of criticism of SDGs as framework

Thirdly, concerning articles ranked in Quartile 3, there was not a single 'most-repeating' answer. The percentage was distributed equally among finding an issue with persisting concerns about the feasibility of SDGs in the current global settings (25%), inefficient indicators (25%), and insufficient integration of the goals (25%). Subsequently, two other elements were analyzed with the same percentage, as 12.5% of articles examined problems related to the problematic concept of sustainable development, and another 12.5% criticized faulty reporting as an issue.



*Table 9 This table investigates the relationship between articles ranked with quartile 3 and criticism of SDGs*

To summarize the aforementioned data, upon observing the first three Quartiles due to sufficient data, it becomes apparent that the most frequent points of criticism were internal contradictions, insufficient integration among the goals, and issues with indicators, along with challenges linked to the current global governance settings. Only minor issues were considered in the following features: monitoring, non-legally binding nature, ambiguity, accountability, and excessively ambitious goals, which the international community would not be able to fulfil by 2030. The following table puts all the quartiles together, enabling an easier extent of comparison of differences among the data.

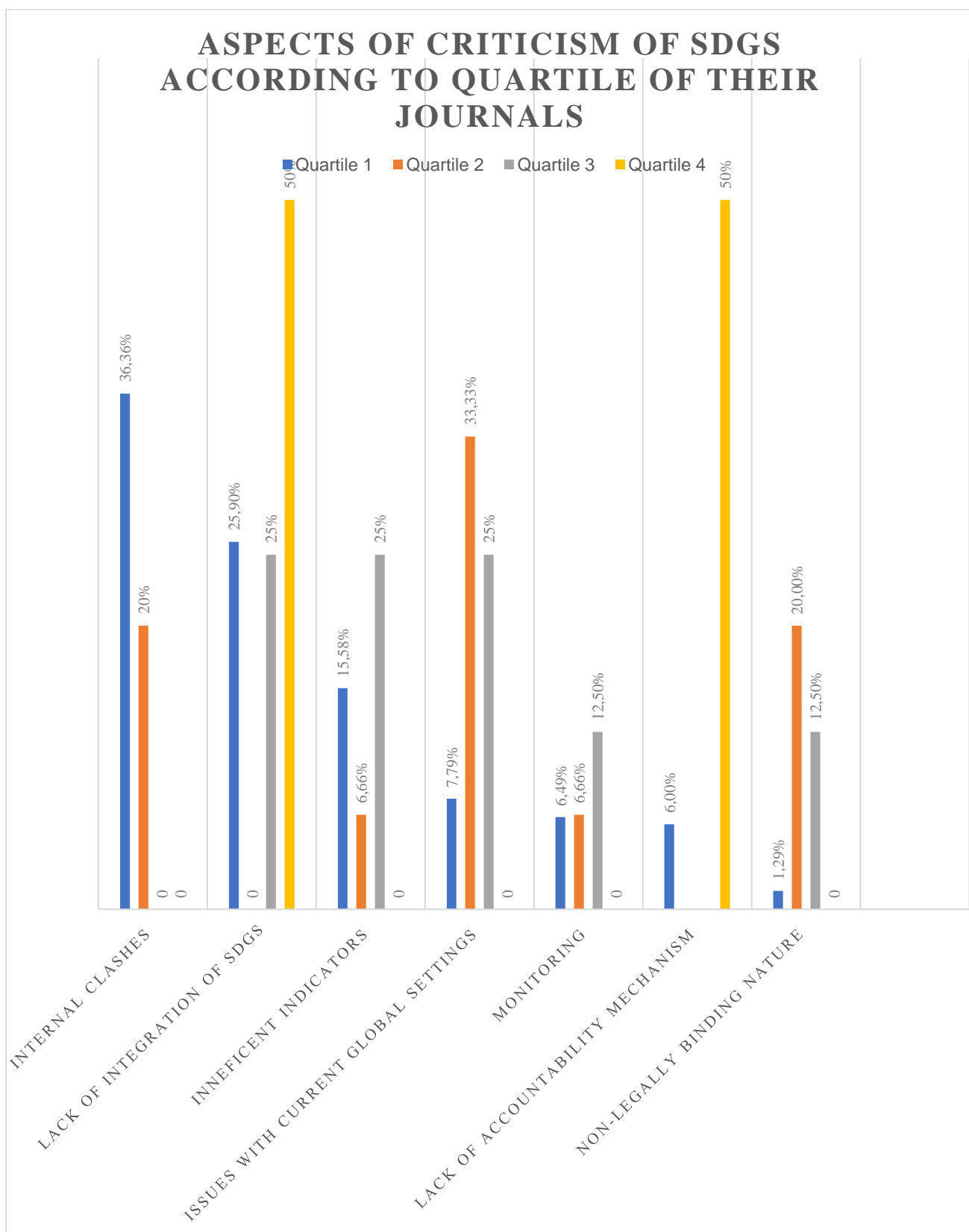


Table 10 This chart analyzes scope of criticism of SDG as a framework together with quartile of their journals

### f) Year of release of analysed articles

Another aspect of our analysis involved examining the time periods when specific articles were released. This data collection allows us to analyse the academic community's approach over time, enabling us to identify the evolution of certain critical points. The majority of the collected articles were released in 2022 (24.29%), followed by 2019 (15.88%) and 2020 (14.95%). One possible reason behind the prevalence of articles from these specific time periods could be attributed to the accessibility of data during these years. Notably, the Sustainable Development Goals (SDGs) were established in 2015, providing the academic community with ample time to recognize and thoroughly investigate the associated challenges.

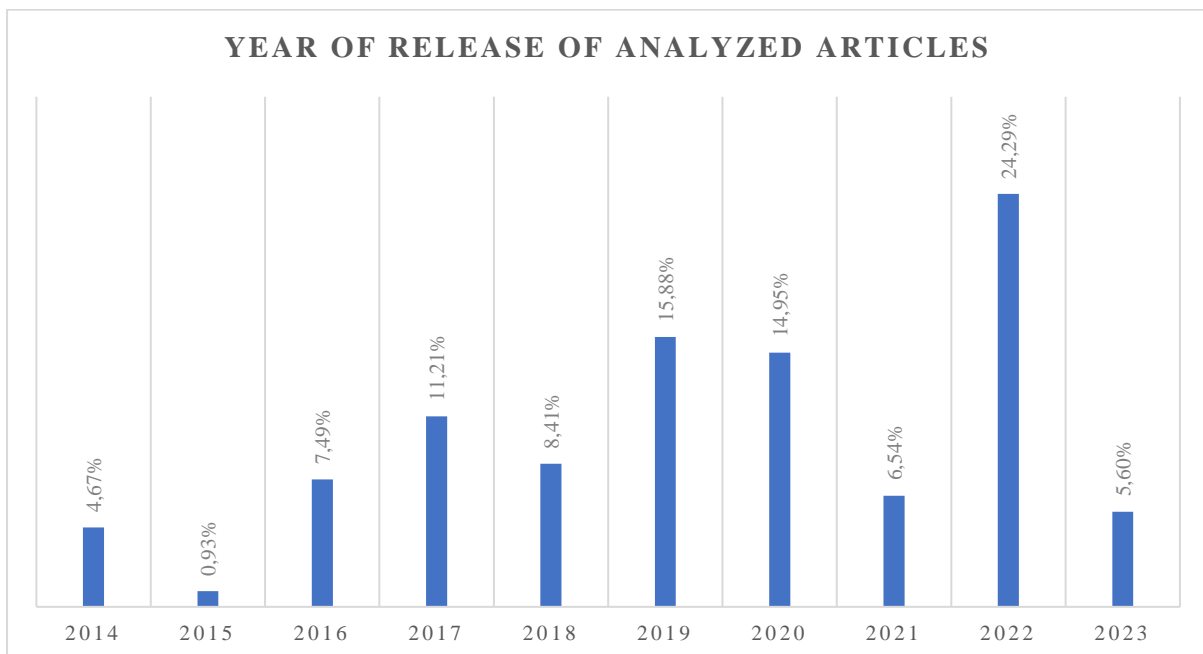


Table 11 This chart visualizes the period of when analyzed articles were released.

An interesting shift can be observed regarding calls for integration among the SDGs, aimed at preventing the fragmentation of SDGs and fostering an environment for the higher efficiency of SDG synergies. Upon close examination of the data from the period 2019-2023, it becomes evident that a higher number of articles over time intensify their calls for such reform. This trend can be explained by the growing recognition that interlinkages and the call for synergy among multiple policies, covering a greater number of goals, are increasingly desired and



considered an efficient approach. The chart below enables us to demonstrate this interlink visually.

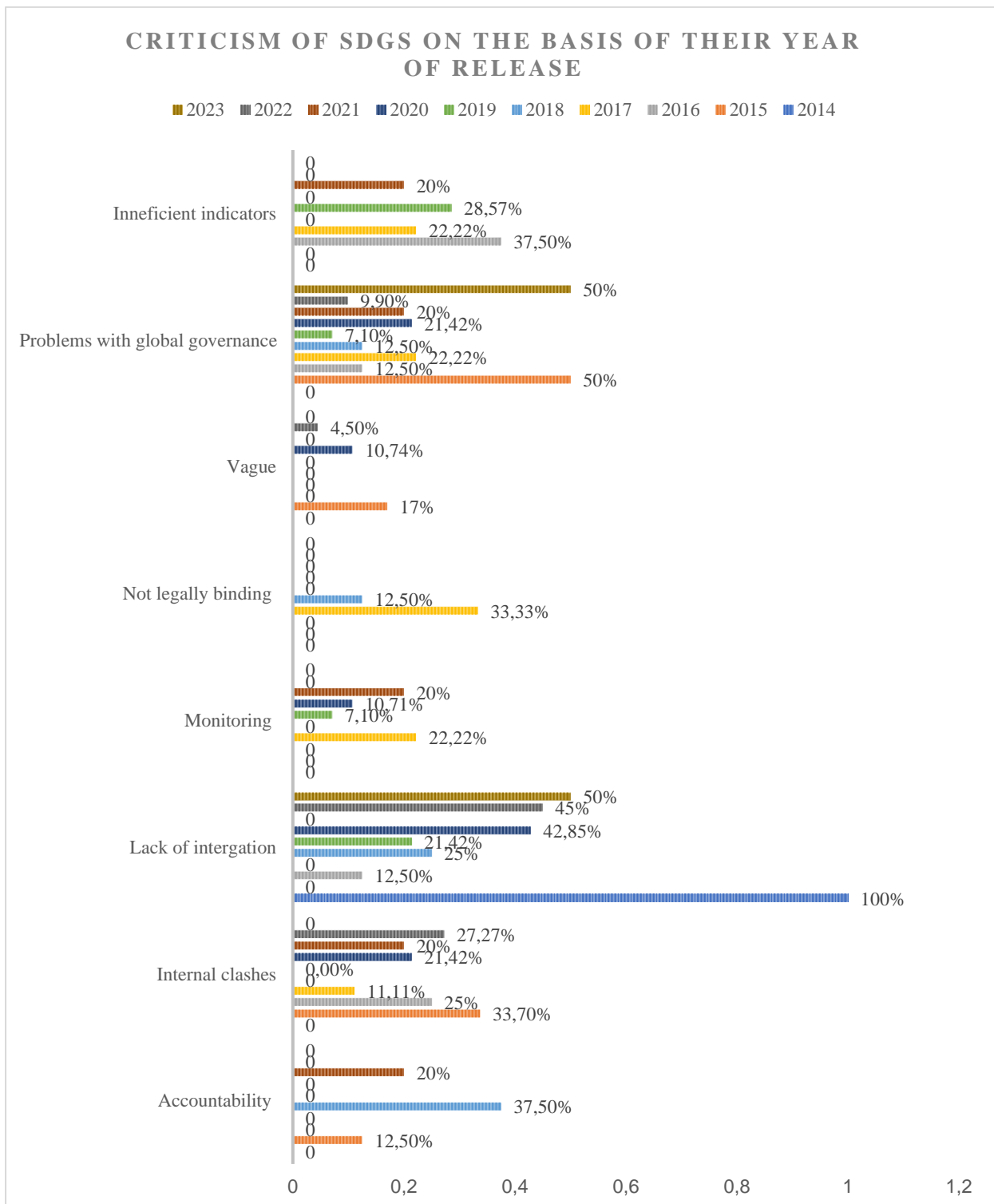


Table 12 This table looks into how did the criticism shape over the years.

**g) Country classification by World Bank of economic level of institutions releasing analysed article**

An intriguing correlation emerges when combining data on the economic classification of institutions, specifically distinguishing between high-income, middle-income, and low-income categories as defined by the World Bank, with the primary subject (SDG) of criticism. This combination allows for the exploration of potential parallels that could reveal distinctions in the perception of weaknesses in different SDGs by institutions and scholars from various economic backgrounds. It is plausible that low-income and middle-income countries might approach the identification of problems and challenges within SDGs differently.

However, this analysis encountered limitations in the data collection process, as the vast majority of sources were published by high-income countries (94%). Only a small percentage of data was collected from middle-income (4%) and low-income (2%) countries, which hinders the ability to draw meaningful parallels in this aspect. Despite this limitation, future research could delve into these aspects, along with cultural divisions as distinguished by Huntington (1996), to provide a more comprehensive understanding of how economic background and cultural factors influence the perception of SDG challenges. It is important to note that in instances involving multiple authors from different countries, the representation is determined based on the dominant institution and country. In such cases, the emphasis is placed on the institution and country that play a more prominent role in the collaborative work.

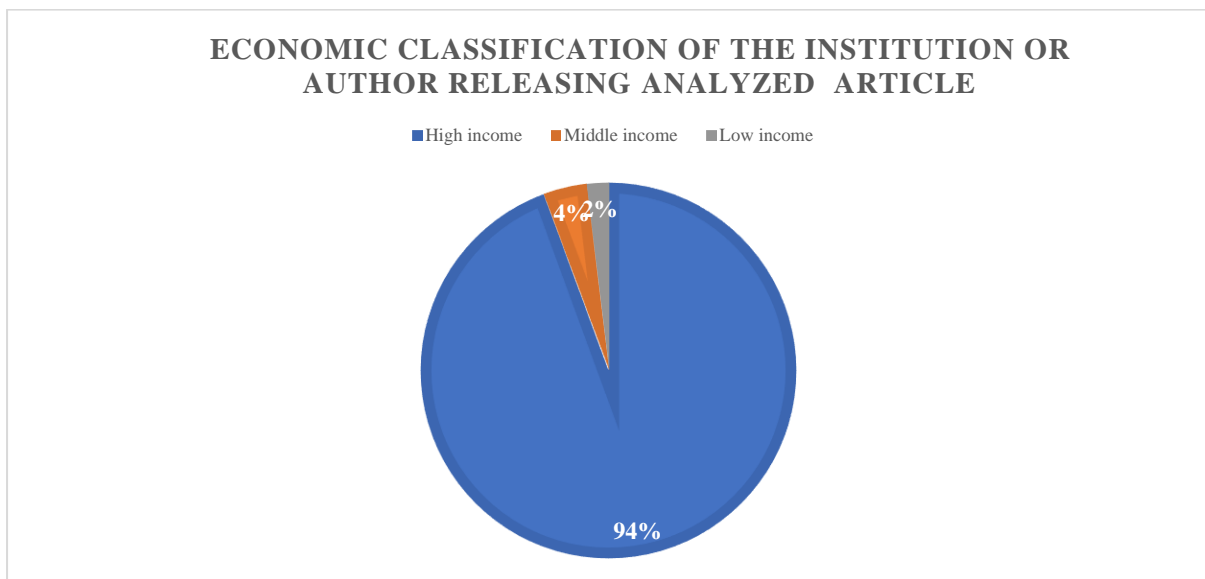


Table 13 This table diagram analyzes the economic classification of institutions publishing the articles in the data analysis

## **h) Criticism of separate SDGs**

The preceding section meticulously examined data related to the criticism of the SDGs as a framework. In contrast, this section briefly addresses specific deficiencies found in individual SDGs, acknowledging that this aspect is not the primary focus of the master thesis. A comprehensive overview is provided through the attached chart, offering insights derived from an exhaustive analysis of relevant articles. Noteworthy are the diverse and nuanced critiques associated with each Sustainable Development Goal (SDG), shedding light on multifaceted challenges and areas for improvement within each SDGS. Examples include criticisms ranging from the absence of a clear definition of poverty and inadequate acknowledgment of inequalities in SDG 1 to the limited focus on mental health and non-communicable diseases in SDG 3. Gender equality issues and the neglect of LGBTQ concerns emerge in SDG 5, while SDG 14 faces calls for a higher degree of ambition in its indicators and increased consideration of global governance for oceans.

Crucially, despite the thorough exploration of these individual criticisms, the subsequent sections of this Master Thesis will not extensively analyze specific SDGs. Instead, the primary focus remains on the overarching critique of the SDGs as a framework. This strategic decision ensures alignment with the core objective of scrutinizing the effectiveness and coherence of SDG framework itself, as revealed by the central theme in the major findings of the comprehensive data analysis.

<b>SDG</b>	<b>Goal</b>	<b>Criticism</b>
1	Eradicate poverty	Lack of definition of poverty, (Cuaresma, 2016), Insufficient acknowledgement of inequalities, (Oerther, 2020), lack of emphasis on social protection, (Oerther, 2020).
2	End hunger	Limited focus on small-scale farmers, (Gil, 2019), Insufficient attention to gender equality, Disregarding the downside of high-tech solutions, Limited attention to food waste, (Atukunda, 2021),
3	Good health and wellbeing	Limited focus on mental health (Votruba, 2016), underrepresentation of non-communicable diseases. (Kuefoglu, 2022)
4	Quality education	Narrow focus on access to education, (Saini, 2022), lack of focus on early childhood, (Brisset), education and non-formal education, (Boeren, 2019),
5	Gender Equality	Narrow focus on all genders, lack of LGBTQ, insufficient integration, (Ognuspactnum, 2020)
6	Safe drinking water	Limited focus on wastewater management, (Winkler, 2018) lack of climate change acknowledgement, (Guppy, 2019),
7	Affordable and clean energy	Limited attention to energy governance, (Burke, 2022), no attention given to social justice, (Tucho, 2020),
8	Decent work and economic growth	Economic growth in spotlight whilst overlooking social and environmental impact, Overlooking environmental sustainability, (Steindl, 2022),
9	Industry, innovation and infrastructure	Limited focus on rural areas, solely focusing on technology transfer, (Kufeoglu, 2020),
10	Reduced inequalities	Inadequate focus on intersectionality, Limited focus on wealth inequality, (Oerther, 2020),

11	Sustainable cities and communities	No higher focus on rural areas, Utterly overlooking social inequality, contradictions, (Songuepta, 2020)
12	Responsible consumption and production	Not applied on corporate responsibility adequately, Lack of recognition of Global North-South division, (Gasper, 2019)
13	Climate Change	Limited scope of climate change adaptation, Not integrated sufficiently into the SDG framework, oftentimes subject to trade-offs,
14	Life below water	Higher degree of ambition is needed to be codified in the indicators, Not considering the global governance in terms of the oceans, (Baker, 2023),
15	Life on land	Inappropriate attention to land-use change, (Katila, 2020), Lack of consideration of social and economic dimensions, (Kraus, 2022),
16	Just, peaceful and inclusive societies	Ambiguous indicators, Deflection from key issues, such as corruption, Limited accountability mechanisms, (Massey, 2022)
17	Partnerships for the goals	No concrete actions, Unbalanced power structure. (Filho, 2023)

*Table 14 This table provides summary of criticism of separate SDGs*

## **CHAPTER 3: DESCRIBING CRITICISM OF SDGS AS FRAMEWORK**

### **3.1 Internal clashes**

The primary and most frequently identified criticism emerging from the data analysis revolved around the tension and clashes between different SDGs. The literature predominantly underscores two pivotal types of clashes. The first and most prominent centers on the conflict between SDG 8, which emphasizes economic growth, and environmental goals. This clash is particularly pronounced, echoing concerns about prioritizing economic interests over environmental considerations. Secondly, there is a noteworthy tension between SDG 2 and SDG 6, which will be further explored in the subsequent discussion.

#### **a) Economic growth (SDG 8) versus the environment (SDG 6, 12, 13, 14, 15)**

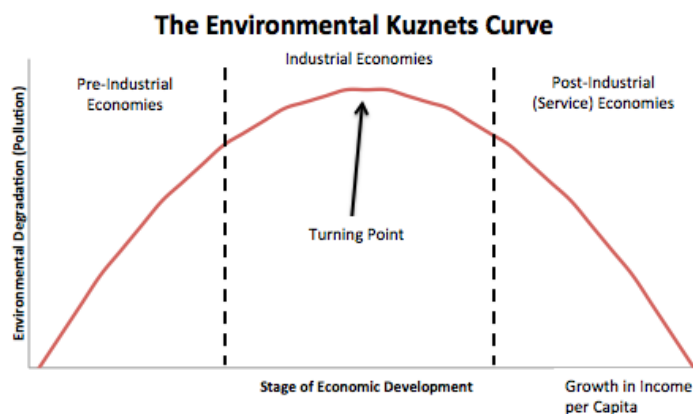
To dig deeper into the clash, it is crucial to examine SDG 8, which strives for sustained economic growth at a rate of “at least 7 percent of GDP per annum” (United Nations, 2015). The crux of the issue lies in the observation that economic growth often gives rise to unsustainable and environmentally damaging practices, accompanied by intensified industrialization. This raises concerns about the potential environmental repercussions. (Novovic, 2021)

The underlying assumption supporting SDG 8 is that economic growth acts as a pivotal tool, mobilizing financial resources for the realization of other SDGs, such as SDG 1, 2, and 3 (United Nations, 2015). However, Hickel (2019) challenges this notion, emphasizing that beyond a certain threshold, additional GDP becomes non-essential for achieving these goals, particularly in the case of high-income countries (Hickel, 2019, p. 880). This critical perspective adds a layer of complexity to the discussion, questioning the necessity of prioritizing continuous economic growth in achieving sustainable development goals, especially in more affluent nations. And also, what about the fulfillment of this goal by developing countries?

According to the statistics by the UNCTAD (2023) the economies of the 46 Least developed countries are based on agrarian revenues. (UNCTAD, 2023) It is also immensely important to

highlight that the actors in agriculture of these countries encounter colossal hardship caused by the natural hazards linked to climate change, such as drought, extreme temperatures or seasonal floods. In terms of increasing their GDPs, Rostow (1962) in his theory analyzed particular stages of the transformation from agrarian economies towards the industrial deflect, and emphasized that it takes five steps, more precisely “The Traditional Society”, “Pre-conditions to take off”, “The Takeoff, Drive to Maturity” which results in “Age of High-Mass Consumption” which with its nature and concept highly environmentally unsustainable. (Rostow, 1962) If this aspect would be applied on the least developed countries it could lead to environmentally detrimental practices.

Nonetheless, there is another paradigm called the Environmental Kuznets Curve, which indicates that with the increasing economic growth the environmental damage initially increases, however soon reaches the turning point which will gradually stabilize the environmental damage resulting in its fall even though the economic growth will persist. Its visual explanation can be found below.



*Table 15 This Environmental Kuznetz Curve describes the nexus between environmental degradation and economic growth.*

The only issue is that the Earth is in such an environmental crisis, it is questionable whether such actions would be in compliance with planetary boundaries. And, it is important to highlight that the relationship between rise of GDP and human development is not always immensely strong. (Reddy and Kvantgraden, 2015)

A potential solution to the challenges posed by the economic development models discussed earlier is found in degrowth theory. This theory advocates for a gradual and equitable reduction in economic activity to achieve both environmental sustainability and social justice. Proponents argue that the current economic system, driven by continuous growth and consumerism, is unsustainable and has contributed to environmental degradation, social inequality, and economic instability (Robra and Heikurrinen, 2021, p. 254).

Degrowth theory calls for a transition towards a more sustainable and equitable society, prioritizing well-being, social justice, and environmental protection. This involves reducing reliance on fossil fuels, transitioning to renewable energy sources, decreasing material consumption, and emphasizing local production and consumption. Additionally, proponents stress the need for wealth redistribution and a shift towards economic systems that prioritize social well-being and ecological sustainability over profit (Bolmonte-Urena, 2021).

Critics argue that degrowth is unrealistic, fearing potential economic stagnation, unemployment, and decreased innovation. However, proponents assert that such a shift is necessary to address pressing social and environmental challenges, particularly in staying within planetary boundaries.

A potential alternative involves applying a concept proposed by the initiative "L'Association Solidarite Echange et Developpement," in which a carbon intensity target is suggested for each Sustainable Development Goal (SDG). This serves as a tool for prioritizing goals that are more environmentally friendly. In the current context, some goals may inadvertently undermine environmentally oriented SDGs. This aligns with Norstrom et al.'s (2014) suggestion that integrating economic growth with environmental goals is crucial for implementing SDGs and achieving truly sustainable development.

Their model could be further developed into a more complex system linking SDGs to their environmental impact. For instance, SDG 8 (economic growth) could be assessed by offering alternative green policies with a reduced carbon footprint. In such a system, each SDG would be ranked with a carbon intensity target and its potential environmental effects. This ensures interlinkages, guiding states away from policies harmful to the environment.



## **b) Access to safe drinking water and no hunger**

Whilst the section above analysed the clash between environmental SDGs and economic growth, this section will investigate another conflict, the one between SDG 6 which is ensuring access to clean water and sanitation for all with the SDG of 2 aiming to eradicate hunger and promoting sustainable agriculture. If one targeted to entirely fulfil SDG 2 related to hunger, the responsible and sustainable agricultural production would be needed.

According to the Data by World Food and Agriculture Organisation (2017), for agricultural purposes, globally humankind uses 70 percent of freshwater withdrawals. (FAO, 2017) Accompanied by the data from the World Bank (2017), the highest rank of freshwater withdrawal occurs in South Asia and reaches 92 percent. The second highest rank takes place in the Middle East getting as far as 85 percent of total water withdrawal. (World Bank, 2017) In these regions, water scarcity can make it difficult for farmers to irrigate their crops, leading to lower crop yields and decreased food production. (Jagermeyir, 2020) In such cases, efforts to ensure access to clean water for domestic and industrial uses may compete with the needs of agriculture for irrigation water, creating a potential conflict between SDG 6 and SDG 2. In fact, the nexus between water as a tool for irrigation for farmers to grow their crops make these two SDGs either inherently interconnected or extremely conflictual. (Su, 2022)

To put the two goals together, it is important to walk through the aforementioned goals. Target 2.3 calls for “increasing agricultural productivity and income of small-scale food producers.” Although the goal could be highly efficient when fulfilled in effort to combat hunger, the achievement of this goal would require a significant increase in water usage for irrigation, which could put a strain on water resources and potentially conflict with the objectives of SDG 6, especially given the fact that water is becoming more and more valuable asset given its decreasing availability and soaring importance in humankind’s lives and dependency on it for agricultural purposes. The water situation is also being exacerbated by the negative effects of climate change and extreme temperatures leading to dry periods, oftentimes triggering climate migration.

In contrast to Target 2.3, the essential message of SDG 6 is to ensure universal access to safe and affordable drinking water for all. Achieving this goal requires sustainable water

management practices, including reducing water usage in agriculture and other sectors. (Kai, 2021) If SDG 2 targets are achieved without considering the sustainable use of water resources, it could potentially conflict with the objectives of SDG 6. One could argue that Target 2.4 hints towards the direction of environmental sustainability in the food production as it states the following:

“By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.” (United Nations, 2015)

Notwithstanding the aforementioned statement, its vague nature again, does not provide sufficient base for linking the problematic to the water sector, due to fact that it is not being explicitly mentioned and therefore, such omission leads towards likelihood of overlooking this important synergy. There is a room for improvement of these aspect, which lies in higher extent of integration of these two goals and their targets.

In effort to address this contradictory issue, it is important to adopt integrated approaches that take into account the interconnections between water resources, food production, and human well-being. This can involve promoting sustainable agricultural practices that minimize water use and reduce the impact of agriculture on water quality. It can also involve investing in technologies and infrastructure that help to conserve and manage water resources, such as improved irrigation systems and water treatment facilities. Kroll et al. (2019) distinguishes this practice as “transforming from trade-off to a synergy,” (Kroll, 2019) and such approach could become an efficient tool how to make potential trade-off more efficiently implemented.

Prospective solution for this problematic could be found in translating the conflicts into additional indicators which would create the link much more visible and therefore, would effectively guide the policy makers and states to focus their attention on the inherent, mutually reinforcing link, rather than perceiving these two elements as competing priorities.

### 3.2 Lack of integration amongst SDGs

The Sustainable Development Goals (SDGs) encapsulate the essence of the concept of three-pillared sustainable development, embodying 17 principles that address diverse spheres of drivers for change. These spheres, with their profound interconnected nature, collectively seek to confront challenges associated with various facets of development. Referred to as a “holistic approach” by numerous scholars and international institutions, including UNEP (2019), Saez de Camara (2021), and Moldavska and Welo (2019), this methodology is considered essential for effectively addressing the majority of the SDGs (Saez de Camara, 2021, Moldavska and Welo, 2019). Likewise, Lim (2018) emphasizes that the continuous failure to integrate within the SDGs jeopardizes the realization of the ultimate end-goal (Lim, 2018, p. 220).

Despite the advocacy for a holistic approach, a critical examination of the SDGs reveals a notable deficiency in the incorporation of this holistic perspective. This observation can be exemplified by SDG 6, which focuses on ensuring sustainable water management, access to water, and sanitation, often described as the “lonely wolf of the SDGs” (Lalawmpui and Rai, 2019). An analysis of the SDG structure reveals that the key objective is to “achieve universal and equitable access to safe and affordable drinking water for all by 2030” (United Nations, 2015). The table below summarises all the targets of this goal.

Target	Objective
6.1	“Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.” (United Nations, 2015)
6.2	“Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.” (United Nations, 2015)
6.3	“Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity.” (United Nations, 2015)

6.4	“Implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.” (United Nations, 2015)
6.5	“Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.” (United Nations, 2015)
6.a	“Expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.” (United Nations, 2015)
6.b	“Support and strengthen the participation of local communities in improving water and sanitation management.” (United Nations, 2015)

*Table 16 This table summarizes all the targets for SDG 6, enabling further analysis in the text below. (United Nations, 2015)*

Upon a thorough examination of the targets, it becomes evident that while the second indicator of Sustainable Development Goal 6 (SDG 6) incorporates a cross-cutting issue in the form of gender equality, specifically addressing menstrual hygiene management, the integration of other cross-cutting issues remains notably deficient (Lucks, 2016). Notably absent is the nexus between climate change, encapsulated in a separate target, despite its profound impact on water management and broader aspects of sustainability within the water sector.

It is arguable that certain climate effects can be underscored in existing indicators, such as water scarcity; however, other significant issues, particularly water-borne diseases resulting from elevated temperatures and extreme weather events, affecting the most vulnerable populations, remain overlooked. Consequently, there exists a compelling case for the inclusion of these elements within the framework through the establishment of new indicators. Such an augmentation would not only contribute to a more nuanced understanding but would also introduce a crucial layer of knowledge and action in areas where integration is imperative.

The absence of an indicator addressing water-borne diseases poses a tangible concern, given its far-reaching implications. Beyond impacting SDG 6, it jeopardizes the fulfilment of SDG 3

(Good Health and Well-being), SDG 1 (No Poverty), and SDG 10 (Reduced Inequality). Therefore, the incorporation of a pertinent indicator is essential to fortify the comprehensive approach to SDG 6 and mitigate potential impediments to the achievement of four interconnected SDGs.

Moreover, Obaideen et al. (2022) approach this issue from a distinct perspective, as evidenced in their research focused on wastewater, an integral component of SDGs. Their comprehensive analysis illuminates the multifaceted contributions of wastewater treatment towards 11 out of the 17 SDGs. These contributions encompass augmenting water availability, enhancing human health, generating new sources of income, converting waste to energy, and mitigating environmental impacts. The research posits a set of indicators designed to optimize the impact of wastewater treatment in advancing the UN's SDGs globally.

The study by Obaideen et al. (2022) underscores the profound influence of wastewater treatment on the attainment of SDGs and targets, with a particular emphasis on its significance for social SDGs, including SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), and SDG 5 (Gender Equality).

Moreover, Dilekli and Caszarro (2019) identify a challenge in the measurement of progress on SDG 6, which commonly relies on assessing access to basic services such as safe drinking water and sanitation facilities. While pivotal indicators, they fall short of capturing the broader complexities inherent in water and sanitation management, including water quality, scarcity, and the sustainable utilization of water resources (Dilekli and Caszarro, 2019, p. 374). This more complex perspective emphasizes the imperative of adopting a more encompassing approach to evaluating progress on SDG 6, considering its interconnectedness with various facets of sustainable development.

In conclusion, this section underscored the imperative for enhanced integration of certain Sustainable Development Goals (SDGs) within the broader framework. A focused examination of SDG 6 reveals the need for a more cohesive alignment with other SDGs. To better integrate SDG 6 into the comprehensive SDG framework, it is crucial to acknowledge and address the interdependencies of water and sanitation issues amongst others crosscutting issues with various sustainable development challenges and goals (Rimba & Hirabayashi, 2023, p. 613-615).

In the sphere of WASH, there are many issues such as water scarcity, pollution, and the profound impacts of climate change on water resources. These challenges are intricately linked to broader societal aspects including poverty, inequality, education, and health (Alcamo, 2019, p. 348). To foster a more professional and holistic integration of SDG 6, stakeholders should recognize the interconnected nature of water and sanitation challenges and their profound implications for achieving a comprehensive spectrum of sustainable development goals.

Whilst this sub section looked into SDG 6 as the case study, it is important to emphasize that its not only SDG 6 that need to be more integrated with other SDGs, on the contrary, the whole spectrum of SDGs should integrate relevant cross-cutting aspects and deepen the complexity of current “holistic” approach. Otherwise, the SDGs will keep confirming words from Bogers, Biermann, Kalfagianni and Kim (2022), “SDGs they fail to deliver on one of their key ambitions: to increase policy integration and “break down the silos” of global sustainable development.” (Bogers, Biermann, Kalfaginanni and Kim, 2022)

### **3.3 Issues with current global settings**

Another issue arising from the data analysis stands for issues with current global setting and more precisely, the Global South and North divide, coupled with a universalist divide, which presents a formidable obstacle to the successful fulfilment of SDGS. (Carant, 2016, p. 17) According to Brisset (2017), the conceptualization of progress inherent in the Sustainable Development Goals (SDGs) reflects a universalist Western perspective, perpetuating a vision that favors Western power dynamics. This perspective, as argued by Brisset (2017), influences the formulation of global economic and institutional structures, ultimately benefitting powerful stakeholders from the Western world. (Brisset, 2017)

In fact, the universalist divide encompasses differing perspectives on development and governance, often shaped by historical power dynamics and cultural contexts. This divide complicates the implementation of the SDGs, designed as a universal agenda applicable to all countries, as it reflects varying priorities, ideologies, and approaches to sustainable development. (Arora-Jonssen, 2023) In the realm of governance and policy, the universalist

divide manifests in diverse interpretations of concepts such as human rights, democracy, and social justice. This ideological diversity contributes to hindering consensus and cooperation on SDGs related to peace, justice, and strong institutions (SDG 16) as nations grapple with different visions of what constitutes a just and equitable society.

Moreover, the universalist divide intersects with the Global North-South economic disparities, further complicating efforts to address poverty (SDG 1) and inequality (SDG 10). The imposition of one-size-fits-all development models, often influenced by Northern perspectives, does not adequately consider the unique challenges, root causes and contexts of Southern nations. Linked to this, Cummings (2016) states that the international scope of the Sustainable Development Goals (SDGs) falls short, necessitating a focus on geopolitical spaces, collaboration, and the active involvement of civil-society organizations. The emergence of issues related to equality, justice, and dignity within official documents can be attributed primarily to the influence of civil society during the negotiation process. The interventions from these grassroots groups played a crucial role in shaping procedural rules that not only elevated the prominence of such thematic concerns but also paved the way for increased participation from grassroots organizations in subsequent negotiations. (Cummings, 2016, p.737)

On that note, Pogge and Sengupta (2016) argue that the lack of a clear division of labour among nations to ensure the success of these goals poses a significant problem. In the absence of a well-defined plan outlining each country's responsibilities, there is a risk of progress stalling without a mechanism to identify and rectify the issues. The ambitious aim of "ending poverty in all its forms everywhere" remains elusive without a concrete agreement on who bears the responsibility for specific actions.

Furthermore, the SDGs fall short in addressing the urgency required to combat global inequalities. Despite containing a goal dedicated to inequality reduction, a crucial shortcoming emerges – this reduction is not set to commence until 2029. This delay not only jeopardizes the lives and well-being of the impoverished, but it also allows the affluent to shape national and supranational agendas in their favor during this period. (Pogge and Sengupta, 2016)

Pogge and Sengupta (2016) point out that a more effective solution would involve refraining from diluting the SDGs by setting generic targets achievable with national resources. Instead,

they advocate for a more explicit delineation of responsibilities for wealthy countries and enterprises in driving sustainable development. They contend that the concepts of partnership (SDG 17) and universalism should carry more significant weight, avoiding the risk of becoming mere smokescreens that obscure extreme global inequalities. (Pogge and Sengupta, 2016)

Building upon the points raised, Brisset (2017) conducted an analysis of the power structure of the SDGs and proposed an amendment for institutions to establish a new global tax system. This proposed system would include a mechanism enabling developing countries, such as those in the Caribbean, to collect funds from transnational organizations that frequently employ strategies to evade national tax obligations. The recommendation is designed to address challenges associated with tax avoidance by large, multinational entities, a practice that can disproportionately affect developing nations. By advocating for a global tax system, the proposal seeks to create a more equitable and standardized framework for taxation that transcends national borders. Simultaneously, the suggested mechanism aims to empower developing countries to capture revenue from transnational organizations operating within their jurisdictions, potentially mitigating the negative impacts of tax avoidance on these economies. (Brisset, 2017)

### **3.4 Inefficient targets and indicators**

The monitoring procedure and measurement of the Sustainable Development Goals (SDGs) heavily rely on targets and indicators, each representing a specific sub-field of change within the framework of each SDG. One notable strength of the SDG indicators lies in their evidence-based and scientifically sound foundation (Schmidt-Traub et al., 2017, p. 9). These indicators underwent a complex development process characterized by rigorous methodologies and extensive consultations with diverse stakeholders, including governments, civil society, and the private sector (Hák and Janoušková, 2018). Such a collaborative approach aimed to ensure the relevance and reliability of the indicators, intending to capture key dimensions of sustainable development effectively.



Despite the positive aspects, such as providing states with indicators that shorten and simplify information while deflecting from complexities, criticism has been directed at the inefficiency of respective targets and indicators (Merry, 2011; Morse, 2015, p. 364; Guppy, 2019; Liberio, 2022). Some issues with the inefficiency of targets and indicators of SDG 6 were already described above, highlighting the need for further integration of cross-cutting and other relevant issues. However, the criticism extends to various targets and indicators. On that note, the International Council for Science and the International Social Science Council (2015) highlighted that "without clearer wording and better quantification for the targets, it will be difficult to monitor and evaluate progress" (International Council for Science and International Social Science Council, 2015). Similarly, Forbye, Constanza et al. (2016) pointed out that a change is required in the wording of SDGs, in effort to guide the states adequately, the narrative must be changed to use more specific narrative detailly describing room for policy improvements and societal changes that are integral for the SDGs fulfilment. (Costanza et al., 2016, p. 347)

In order to identify the issues with indicators, it is essential to demonstrate some specific examples. For example, Gulseven (2020) sheds light on the challenges faced by the United Arab Emirates in achieving SDG number 14, focusing on life underwater. The paper argues that certain indicators, particularly 14b1, pose inherent difficulties in measurement. This specific indicator relates to "the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries." According to Gulseven, the absence of clear starting points for measuring progress on this indicator renders it "unmeasurable." This case study highlights a broader issue—some sustainable development goals lack the SMART aspect, representing Specificness, Measurability, Achievability, Relevance, and Time-orientation (Gulseven, 2020, p. 53).

Furthermore, Vandemoortele (2016) pointed out that the current issue lies in the inadequacy of target 10.1, which addresses inequality, as it lacks precision and effectiveness. The deficiency becomes apparent when considering the use of the Palma ratio, which could substantially enhance the measurement and understanding of inequality within this target. Similarly, the author found deficiencies with target 2.2, focusing on malnutrition, which faces limitations by not encompassing the broader spectrum of nutritional concerns such as overweight and obesity. His idea of addressing this issue lies in incorporating the body mass index (BMI) as an additional metric would provide a more comprehensive and accurate evaluation of

malnutrition, aligning with contemporary health challenges. (Vondermontele, 2016) And therefore, his suggestion strengthens argument made in the previous section on goals integration (3.2), calling for more integrated approach and integration of relevant issues in the indicators.

The implication is that reforming indicators crucial for measuring states' performance on specific development goals becomes essential. Gulseven (2020) argues that incorporating more specific instructions, measurable units, relevance, and a well-defined time frame is pivotal for achieving more reliable data measurement. This strategic enhancement would not only ensure more systematic and efficient indicators but also provide states with clearer guidance in their pursuit of sustainable development goals (Gulseven, 2020, p. 58). The same argument was done by Hak and Janouskova (2018) who call for more measurable targets and indicators.

### **3.5 Lack of efficient mechanism for monitoring**

States are actively engaged in reporting on the progress of Sustainable Development Goals (SDGs), a commitment undertaken upon the acceptance of these global objectives. However, challenges have emerged in the effectiveness of this monitoring system. The World Bank (2021) highlights significant deficiencies in data collection, revealing that, on average, countries reported information on only 55% of SDG indicators. Despite advancements, data reporting remains a critical challenge within the SDG framework.

One notable issue arises from states' reluctance to report sensitive information that could potentially harm their reputations or diplomatic relations. This hesitancy introduces a challenge in achieving a comprehensive and accurate representation of SDG progress. Additionally, concerns have been raised about the susceptibility to “data manipulation” in national reports, as underscored by Glass and Newig (2019) and Fisher and Parr (2019). Such manipulation may be attributed to problems with data collection at the national level, where states may encounter difficulties in obtaining the necessary and issues with data variability in the methodologies employed by different countries for data collection and reporting, which oftentimes lead to inconsistencies. This makes it challenging to compare progress across nations and undermines the ability to derive meaningful global insights. (Gabay and Ilkan, 2017, p.469)

Diverse cultural interpretations significantly contribute to discrepancies throughout the entire data process, affecting how information is collected, analyzed, and presented. Cultural nuances play a substantial role in shaping data collection and understanding. The distinctive blend of cultural values, norms, and traditions greatly influences the methodology employed in data collection and impacts the willingness of individuals to participate. For instance, subjects considered sensitive or private in certain cultures may lead to underreporting or a hesitancy to share specific details, introducing inherent biases into the collected data.

Moreover, cultural differences extend to how data is presented, adding another layer of complexity to the interpretation process. The unique mix of cultural values influences the choice of language, terminology, and visual representation methods in data reports. (Friedman et al., 2016) This can lead to variations in emphasis, highlighting different aspects of the data based on cultural perspectives. Which is extremely problematic in measuring the data for SDGs fulfillment.

Drawing from the aforementioned arguments, a potential solution lies in the creation of an independent monitoring body present in every state. This body would operate with true independence, ensuring it is not affiliated with any UN agency nor state actor responsible for program implementation. Further details regarding this recommendation will be outlined in the recommendations chapter.

### **3.6 Lack of accountability mechanism**

Engelbretsen, Haggen, and Ottersen (2017) emphasize the general weakness of mechanisms holding states accountable for their responsibilities arising from international conventions (p. 365). Friedman (2016) suggests the need for improvement by introducing an efficient, independent accountability mechanism to encourage states to genuinely comply with the ambitious agenda (p. 134). According to Hunt (2015), while the current monitoring process is somewhat effective as a first step in ensuring SDG compliance, there is a need to shift focus from measuring "global" accountability to assessing accountability at the "national" and "sub-national" levels. Hunt stresses the importance of involving not only state actors but also local stakeholders, as they play a significant role in contributing to the 2030 SDG agenda.

Donald et al. (2016) argue that relying on a single accountability mechanism is insufficient and propose the use of a "web of accountability" as an efficient alternative (p. 203). This multifaceted approach ensures that states are actively monitored and held accountable for sustainability compliance, moving away from the current system that measures states' performance in a less "holistic" manner.

The current accountability mechanism relies on the monitoring toolkit and data collections conducted by states and various UN agencies. The SDG Annual Report, released by the United Nations Secretariat, provides regular updates on the progress of each goal. This process, however, has its shortcomings, including issues like data unavailability. Developing countries, in particular, often lack the capacity to monitor and report effectively on SDGs, and there is no unified method for reporting progress (Guo et al., 2022, p. 1793).

One potential solution could involve replicating the international human rights system. Specifically, creating an explicit and independent soft law framework for sustainable development goals with its investigative body could monitor and enforce these goals. This body would exert pressure on governments and local non-state actors through a regular review procedure. Drawing inspiration from the Universal Periodic Review (UPR), a distinctive process of the United Nations Human Rights Council that occurs biannually and analyzes the human rights situation in 48 states annually, this approach aims to enhance constitutional rights, civil liberties, and other universal human rights globally and nationally. The UPR process promotes dialogue, cooperation, and an enabling environment for the exchange of recommendations. While some countries remain reluctant to embrace the concept of human rights, and certain authoritarian states resist such governance, evidence shows a positive impact on progressing states' human rights situations and compliance. For instance, a study by the OHCHR (2023) revealed that after the first cycle of the UPR, approximately 85 percent of acquired recommendations led states to fully or partially implement them into their human rights framework. Additionally, another study by the World Future Council indicated that the UPR contributed to progress in various human rights areas, including the protection of children's rights, the abolition of the death penalty, and the promotion of gender equality (OHCHR, 2023).

Hence, there is potential in creating a platform for international dialogue, transparency, and recommendations for states through participatory approaches. If a similar concept of regular monitoring sessions, implemented by a dedicated UN agency focused on monitoring, collecting data, and enforcing SDGs, were established with a "voluntary" nature, it could serve as a starting point for major changes and a higher level of compliance and implementation. However, the establishment of such a concept could be challenging, requiring significant effort to adapt the UPR system to the terms of the SDGs. The process would begin with the submission of a national report by the "State under review," providing an overview of the national human rights situation and highlighting measures taken based on previous UPR recommendations. Various UN agencies, civil society organizations, and other stakeholders would contribute to forming the report and delivering additional data on human rights implementation. This step could be replicated in the SDG system, involving the collection of necessary data and the submission of national reports with contributions from non-state actors, such as UN agencies or non-profit organizations, to provide unbiased and up-to-date data.

Returning to the UPR process, review sessions take place at the Human Rights Council in Geneva, allowing states to ask questions and make comments on the human rights situation in the country under review. The state under review responds to each recommendation, indicating acceptance or rejection and outlining plans for implementation. This process has the potential to create a transparent and participatory way for states to interact, exchange good practices, and offer recommendations to enhance their future fulfillment. It would be desirable for a particular UN agency to host the review process or for a new UN body to be created with the sole role of measuring, reviewing, and facilitating the SDG review process. Following the UPR process, there is a post-review session where the state under review provides an interim report on the procedure and progress in implementing received UPR recommendations after four and a half years (Shan and Sivakunuran, 2021, p. 298). Applying this cyclical nature to the SDG review would be highly beneficial, promoting the goals and ensuring the pathway to their fulfillment. However, the UPR's repeating period of four and a half years might not align with the SDGs' limited timeframe for implementation, necessitating a shorter (halved) monitoring period for more efficient review. Thanks to its "friendly" and "collaborative" essence, the acquired recommendations could also provide policy suggestions, financial shifts, or

innovations for SDG contributions.



Table 17 Structure of UPR visually described.

### 3.6 Wrong concept of sustainability

The foundational concept of three-pillared sustainable development has been met with robust criticism from scholars who contend that it masks inherent conflicts between human and natural systems (Redclift, 2005). This perspective asserts that the economic, social, and environmental pillars are not inherently equal, posing challenges in balancing their priorities. In this vein, Dasgupta (2013) highlights a bias against nature within contemporary development thinking, emphasizing concerns about the unequal value assigned to environmental goals (Dasgupta, 2013, p. 2). Griggs and colleagues (2013) underscore sustainable development as “a development that meets the needs of the present while safeguarding Earth’s life support system, on which the welfare of current and future generations depend.” (Griggs et al., 2013, p. 305)

The perceived equality of the SDGs representing the three pillars comes into question when examining the numerical disparities between social and environmental goals, revealing an imbalance (Asadikia et al., 2021, p. 14). Critics like Berrone (2023) argue that SDG 8 is excessively prioritized, disrupting the envisioned balance in the three-pillar framework (Berrone, 2023, p. 320). Yang et al. (2020) draw attention to regional variations in SDG priorities, underscoring the need to recognize differing contextual priorities (Yang et al., 2020, p. 320). Eisenmenger et al. (2020) note that the equal value assigned to all SDGs does not reflect their interconnectedness, necessitating an acknowledgment of trade-offs and prioritization based on contextual realities (Eisenmenger et al., 2020, p. 1109).

Hence, it can be argued that the current concept of sustainability falls short in capturing and representing the interconnected social, economic, and environmental issues comprehensively and accurately. The inefficiency in the sustainability model of SDGs stems from the uneven value assigned to social goals compared to environmental and economic ones, as highlighted by Hickel (2020). With 70% of the SDGs in the social field, an environmental ranking challenge emerges, potentially creating a misleading impression that states excelling in social goals inherently achieve sustainability across all fields. For instance, Sweden, despite ranking high on the SDG index, is considered one of the least environmentally sustainable countries when considering its material footprint (Hickel, 2020).

In response to these criticisms, the Stockholm Resilience Centre introduced a paradigm shift by restructuring both the SDGs and the sustainability concept into the “wedding cake” model, a layered approach to sustainable development goals (Stockholm Resilience Centre, 2016). This model strategically places goals linked to the environment, particularly the biosphere, as the most fundamental ones on which other goals depend. Rockstrom and Sukhdev (2016), the authors of the model, explain that their assumption is to recreate the SDGs to respect planetary boundaries, creating a more conducive environment for achieving the other 16 SDGs. In essence, the "wedding cake" structure portrays the biosphere as the foundation for all 17 SDGs, fostering a comprehensive approach to sustainable development by integrating social, economic, and ecological considerations.

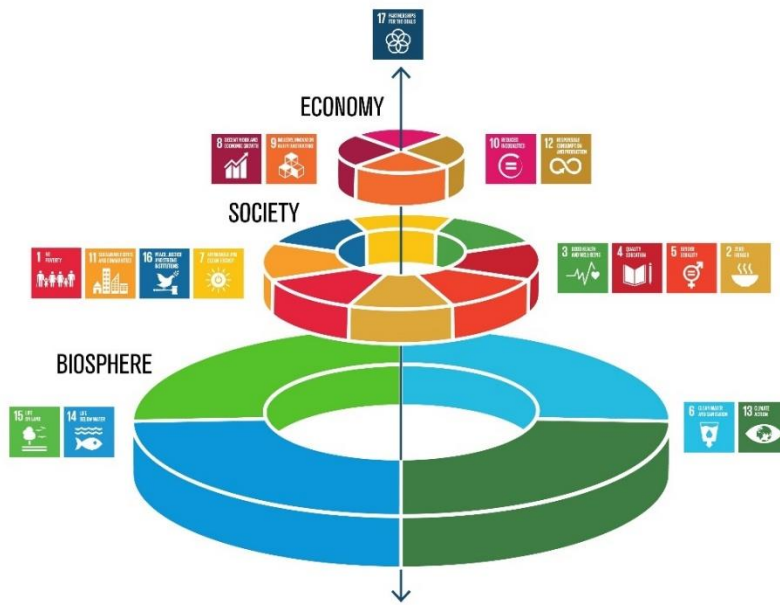


Table 18 The SDG wedding cake, this table visually represents a theory by Stockholm resilience center (2016), which highlights that the fulfillment of environmental SDGs is prerequisite for fulfillment of non-environmental SDGs.

This paradigm suggests that environmental SDGs play a crucial role in creating an enabling environment for the fulfillment of other SDGs. This viewpoint is reiterated in a report by UNICEF Jordan (2019), explicitly stating, “All the SDGs are of importance; however, it is imperative to remember that our societies and economies are based on what the biosphere can offer us in terms of water, biomass, a functioning climate, and healthy oceans. Without achieving the following SDGs: SDG 6 Clean Water and Sanitation; SDG 13 Climate Action; SDG 14 Life below Water; and SDG 15 Life on Land, we do not have a basis to build thriving societies with resilient functioning economies that can nurture, protect, and safeguard children” (UNICEF Jordan, 2019, p. 23).

Based on the evidence above and given the environmentally and socially detrimental effect of climate change, one could say that fulfilling SDG 13 and mitigating climate change, should be the top priority of states. These premises can be further illustrated through specific case studies which demonstrate the way negative climate change effects are undermining fulfillment of other SDGs.



### **Case study 1: Deepening gender inequality in North-eastern Ghana (SDG 5)**

A growing number of literature highlights the way climate change undermines gender equality. For instance, UN WOMEN (2022) highlights that women are usually more dependent, albeit do not have access to natural resources. (UN WOMEN, 2022) This statement also could be underlined by another factor, namely women being the most frequently responsible for water collection and household maintenance.

On that note, Eastin (2018) highlights the high extent to which women are prone to environmentally detrimental effects of climate change, and “the gender disparities in climate change vulnerability not only reflect pre-existing gender inequalities, but also reinforce them.” (Eastin, 2018, p. 293-298) This could be demonstrated further on the following case study. As Glazenbrook (2011) explains when climate change intensifies, women may have to take on additional unpaid care work, such as caring for sick family members, tending to crops and livestock, and collecting water and firewood. This can lead to increased time poverty, limiting women's opportunities to pursue education, work, and other activities outside the home. His analysis was based on data collection in Northeastern Ghana where women were not able to access basic services such as education and subsequent work and were left in an extreme poverty. (Glazenbrook, 2011, p. 775)

Another dimension to which climate change undermines SDG 5 is gender dimension of climate migration. Due to numerous natural hazards, climate change can lead to displacement and migration, which can have differential impacts on women and men. Women and girls may face additional risks and challenges during migration, such as increased risk of sexual violence, restricted mobility, and limited access to healthcare. This could thereby, undermine not only SDG 5, but multiple, such as SDG 4, SDG 3, SDG 2, SDG 1 and SDG 10. (Lama, 2019, p. 354)

### **Case study 2: Worsening the access to safe water due to climate change in Jordan (SDG 6)**

Another fitting example on which the higher salience of tackling environmental SDGs with soaring priority can be demonstrated on decreased access to safe water due to extreme

temperatures, a natural hazard that is driven by climate change. The access to safe and clean water can be found under SDG number 6, and apart from sustainable water management, one can find access to safe drinking water and sanitation for all. Yet, the extreme temperatures, minimal precipitation, and inability of groundwater basins to replenish tremendously undermine the efforts to make “clean water for all.” According to a recent report by the Economist Impact, “the impacts of climate change effect on water stress are among the key risks to long-term growth in Jordan, exacerbating already difficult economic situation the country faces.” (The Economist’s Impact, 2022, p. 95-97) On that note, apart from economic growth and hence, inability to end poverty, there are numerous studies analyzing the negative effects of water stress in further sectors in Jordan, such as the agriculture leading to food insecurity, higher percentage of infant mortality or for instance education attainment by girls. UNICEF Jordan conducted detailed research regarding water stress and its role in increase of gender inequality and the findings revealed that due to increasing water stress, women and girls are unable to either work or study, especially if menstruating or pregnant, because the lack of water does not provide an enabling environment for them to menstruate in educational premises or at their workplaces. Therefore, one can observe that the water stress induced by climate change hampers the fulfilment of SDGs further, especially those related to economic growth, gender equality, no hunger and health and well-being. (UNICEF, 2019, p. 61-64)

### **Case study 3: Climate Change and its effects on health and wellbeing (SDG 3)**

The climate change toll is being paid in the field of health and wellbeing as well. Climate change can lead to an increase in the frequency and intensity of extreme weather events, such as heatwaves, floods, and hurricanes. These events can cause physical injuries, illnesses, and death, all of which can impact the health and well-being of individuals, communities, and entire populations. (Rocque, 2021, p. 156) Moreover, climate change can also contribute to the spread of vector-borne diseases, such as malaria and dengue fever, as well as waterborne diseases, such as cholera. These diseases can have a significant impact on the health of individuals and communities, particularly in low- and middle-income countries that may lack the resources to effectively manage and treat them. And therefore, this would significantly undermine the SDG 3. Furthermore, air pollution, which is often exacerbated by climate change, can also have a significant impact on health. Exposure to high levels of air pollution can cause respiratory illnesses, such as asthma and chronic obstructive pulmonary disease (COPD), and can increase the risk of heart disease and stroke. (Rocklov and Dublow, 2020, p. 482) By the same token,

climate change can impact SDG 3 by exacerbating health inequalities and making it more difficult to achieve the goal of ensuring healthy lives and promoting well-being for all at all ages. To address these challenges, it is essential to take action to mitigate and adapt to the impacts of climate change, while also working to promote health and well-being through targeted interventions and policies. (Laumann, 2022)

While the aforementioned case studies shed light on the critical oversight of application of wrong concept of sustainability and neglecting the paramount value of efficiently combating climate change to fulfill the remaining SDGs, it is crucial to recognize that climate change has a detrimental impact, actively undermining the rest of the SDGs. For instance, global warming exacerbates and deepens poverty, significantly affects the viability of numerous plant and animal species, endangers ecosystems, disrupts underwater ecosystems, and contributes to socio-economic aspects that drive undemocratic systems and societies that oppress minorities.

In essence, addressing global warming and mitigating its effects on ecological capital form the bedrock of SDG fulfillment. Climate-resilient policies should thus serve as a guiding principle on the path toward sustainability. Without acknowledging the prominent significance of climate change and restructuring states' policies around this pivotal issue, the fulfillment of the remaining SDGs remains unattainable.

The preceding section delved into the paradox of sustainability and questioned the efficacy of a sustainable development model that may not be universally effective. It underscored the notion that certain Sustainable Development Goals (SDGs) might outweigh others in significance. Specifically, while SDG 13, addressing climate change, was identified as holding considerable importance, the data analysis also strongly advocated for assigning a higher value to SDG 16.

On that note, Sachs (2017) argues that SDG 16 is “the most important of all the SDGs” because it provides the foundation for effective governance, rule of law, and accountability, which are necessary for achieving progress on all of the other goals. (Sachs, 2017, p. 2574) Similarly, the Center for Strategic and International Studies (CSIS) (2021), a think tank focused on global security issues, has argued that SDG 16 is “critical for the success of the 2030 Agenda” because

it promotes stable and peaceful societies, which are necessary for achieving progress on all of the other goals. (Centre for Strategic and International Studies, 2021)

In other words, the reason why SDG 16 is considered a key goal is because it underpins the achievement of all the other SDGs. Without peaceful and inclusive societies, access to justice, and effective institutions, progress on other goals may be undermined or even reversed. For example, conflict and violence can lead to the displacement of populations, undermine economic development, and limit access to education, health care, and other basic services. Ineffective governance and corruption can undermine efforts to reduce poverty, promote economic growth, and last but not least to protect the environment.

In addition, SDG 16 is critical for ensuring that “no one is left behind” in the pursuit of sustainable development. It emphasizes the need to promote and protect the rights of all individuals and ensure that they have access to justice and effective institutions. This is particularly important for vulnerable and marginalized populations, such as women, children, refugees, and indigenous peoples, who may face discrimination, violence, and exclusion.

Wesley, Tittle and Seida (2021) call attention to SDG 16 being the most fundamental feature and condition for achievement of SDG 3 (Good health and wellbeing). In their paper they emphasise the institutional importance by using the case study on Syria where due to the destructive Syrian civil war, in the first five years of the conflict, the national life expectation rate decreased by 20 years, and therefore, the institutional unrest caused by the civil war took its toll on the development in many areas, including health and wellbeing. (Wesley, Tittle and Seida, 2021) The ensuing case studies illustrate the heightened significance of SDG 16 by revealing the repercussions - how the non-fulfilment of SDG 16 endangers various other SDGs.

#### **Case study 4: Corruption and its effect on SDG 16 amongst others**

One more aspect characteristic for undermining of SDG 16 is corruption. As Mackey, Vain and Kohler (2018) indicate that corruption is a major barrier to achieving sustainable development, and it undermines the progress made towards other SDGs. In their work they presume that corruption-free governance is needed for creation of enabling environment for fulfilment of SDG 3. (Mackey, Vain and Kohler, 2018, p. 639-641) The core issue about the corruption is that this phenomenon can lead to the misallocation of resources, weak governance, and reduced

trust in public institutions, which in turn can hamper economic growth, undermine social cohesion, and exacerbate poverty and inequality. Corruption can also lead to human rights violations, such as restrictions on freedom of speech, association, and assembly, and denial of access to justice. It is obvious that all the aforementioned aspects put numerous SDGs in jeopardy.

The failure to achieve SDG 16, and in particular, the indicator aiming to addressing corruption, can undermine progress towards other SDGs. For example, corruption can undermine progress on SDG 1, which aims to end poverty in all its forms everywhere, by diverting resources away from poverty alleviation programs and into the pockets of corrupt officials. Moreover, corruption can also undermine progress on SDG 5, which aims to achieve gender equality and empower all women and girls, by perpetuating gender-based discrimination and denying women access to education, healthcare, and economic opportunities. To demonstrate how does corruption hinder on women's rights in practice, Nehan and Cox (2022) described the women right nosedive that occurred in Afghanistan after takeover by Taliban. The practices of this unstable and increasingly corrupt country classified women as the second-class citizens who have no access to education, only worsening the gender inequality in the country. (Nehan and Cox, 2022, p. 59)

Moreover, corruption can undermine progress on SDG 8, which aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all, by creating an uneven playing field for businesses and deterring foreign investment. (Hoffiani, 2019) By the same token, corruption also undermines progress on SDG 10, which aims to reduce inequality within and among countries, by reinforcing existing inequalities and creating new ones.

### **Case study 5: Conflicts and instability and its effect on SDGs as a framework**

The failure to achieve SDG 16, characterized by injustice and weak institutions, can lead to the eruption of conflicts, thereby posing a significant threat to the accomplishment of other SDGs. In conflict-affected countries, striving for SDG attainment becomes a formidable challenge as resources are diverted to address conflict-related issues and expenses. Concurrently, physical insecurity undermines progress in crucial areas such as education, health, and economic growth (Kunar, 2018).

For instance, in Afghanistan, despite some progress in SDG achievement, decades of conflict have severely impeded advancements in SDG 3 (health) and SDG 4 (education), leaving the country grappling with high maternal mortality rates, low literacy levels, and restricted access to basic services. (Nehan and Cox, 2022)

Another poignant example is the ongoing conflict in Yemen, one of the most extensive humanitarian crises, which has transformed Yemen into a failed state, disrupting access to justice, weakening institutions, and threatening the rule of law. The Yemen war has resulted in thousands facing starvation, forced displacement, and the pervasive spread of physical and gender-based violence. Governance in Yemen has suffered as different factions, amidst chaos and violence, have asserted control over various parts of the country, imposing their own rules and regulations. This institutional uncertainty and the inability to restore order have led to the collapse of the justice system, leaving individuals without access to fair and impartial legal proceedings. It is evident that conflict and instability do not provide an enabling environment for SDG fulfilment; instead, they jeopardize the achievement of all SDGs.

In conclusion, a critical examination of sustainability, particularly the tripartite framework emphasizing economic, social, and environmental pillars, has drawn substantial critique from scholars and articles arising from data analyses. This critique extends to the realm of Sustainable Development Goals (SDGs), where a numerical disparity between social and environmental goals is observable, leading to instances where states prioritize the former over the latter in pursuit of economic and social advancement. An alternative perspective, introduced by the Stockholm Resilience Center through the Wedding Cake model, challenges this notion by positing environmental goals as a prerequisite for achieving social and economic progress, contingent on ensuring sufficient biocapacity. The synthesized evidence from these analyses suggests that SDG 13, focusing on climate action, ought to be accorded higher value than other goals due to its pivotal role and detrimental impact on the fulfillment of other SDGs.

Conversely, an alternate line of evidence elevates the importance of SDG 16, emphasizing peace as a precondition for achieving progress in other goals. As a result, this discourse posits that both SDG 13 and SDG 16 should be ascribed higher value and necessitate prioritization by states in their pursuit of sustainable development objectives.

### **3.7 Non-legally binding nature**

While the sustainable development agenda provides guidance on achieving a profound level of sustainability across various spheres, Friedman (2016) highlights a major deficiency of the Sustainable Development Goals (SDGs) in his article – the goals are not inherently legally binding. Biermann et al. (2017) characterize the nature of SDGs enforcement as "detached from the international legal system." In essence, states are not legally obligated to fulfill their commitments, and consequently, non-compliance with the goals does not incur penalties, providing no passive motivation for states to fulfill their agendas (Spangenberg, 2017).

Viewed through the lens of political realism, one might argue that the most unsustainable practices of states can be easily overlooked. While some scholars commend the participatory approaches made possible by the lack of legal codification, others criticize the non-mandatory nature. Stemming from liberalist notions of global governance, this criticism can be explained by applying realist assumptions regarding the balance of power, state ecocentrism, a drive for national interest over collective interests, and a high degree of selfishness among great powers and hegemonies. Consequently, the legal codification of SDGs could be seen as a potential platform for states to collectively implement their agenda (for those with a liberal perception of international relations) or as a limitation on states' national interest and selfishness (for political realists) (Berridge, 2001).

It is not entirely accurate to assert that SDGs are entirely excluded from the international legal system. Kim (2016) analyzed the "proxy" nexus between international law and the SDGs, noting that they did not emerge from a normative vacuum but are grounded in international law. The author highlighted existing international legal sources, such as the 1945 UN Charter, the 1948 Universal Declaration of Human Rights, the 2015 Paris Agreement, the 1997 Kyoto Protocol, or the 2002 ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development, among others. Kim (2016) also pointed out that the main tenets of sustainability were long established in International Court of Justice (ICJ) rulings, emphasizing the need to reconcile economic development with environmental protection. Additionally, Ebesson (2022) emphasized that certain SDGs are enshrined in existing agreements such as the Convention on Biological Diversity or the United Nations Convention to Combat Desertification. Notably, in 2023, a new treaty regarding SDG 14, the protection of oceans, was concluded, named the High Seas Treaty.

This statement could further serve as evidence that there is an undeniable link between the established norms of international law and the SDGs; nevertheless, the current system is more "sporadic in nature" and hence contains tremendous inconsistencies, as the system does not approach a degree of fully efficient and explicit codification of all the SDGs. Either a more comprehensive systematic framework could be established, comprising and legalizing every single SDG, or the principles of sustainable development could be enshrined in bloc legislation based on the type of sustainable development that the legislative framework would enforce, for instance, "the Convention on Sustainable Social Development," "the Convention on Sustainable Environmental Development," and "the Convention on Sustainable Economic Development." All these would translate the targets and indicators into legal norms, which would actively push states to implement the goals by 2030 as they would be legally bound to do so.

While the invention and emergence of new legal mechanisms might sound too good to be true, its birth might have a dark side. In fact, it is questionable whether, within the given timeframe, the international community would be able to implement and accept such legislation and also, if the international system in its current settings enables appropriate enforcement of the international legal norms and thus, would act as a driving force if the sustainable development agenda ever becomes legally codified. This problem stems from the nature of international law. Unlike national law, as its name implies, international law refers to legal norms concluded



predominantly among states that are deemed to possess their sovereignty, and therefore, in practice, there is no above authority over them, meaning that international law can be made solely if states give their consent. Hence, Klabbers (2017) proclaimed international law to be a “consensual system.” (Klabbers, 2017, p. 12-15) Numerous political neorealists have analyzed this problem further; for instance, Waltz (1974) highlighted the anarchic nature of the international system, where states are not supervised, and he emphasized that there is no superior authority enforcing the transboundary legal norms. (Waltz, 1974) In other words, unlike internal legal enforcement within a state, in the international arena, the executive authority, such as "police in the national system," is lacking. Surely, there have been various international active legal mechanisms that became a stage for states to settle their disputes, such as the International Court of Justice, the International Criminal Law, or the International Court of Human Rights; nonetheless, their efficiency lies in states' willingness to be a party in such a dispute or conflict resolution procedure (Shaw, 2001).

One could demonstrate this problem using the following case study: the enforcement of the Kyoto Protocol. In 1997, in the spirit of combating climate change, the international community agreed to reduce the number of greenhouse gases and CO<sub>2</sub> emissions into the atmosphere for industrialized countries, aiming specifically to lower the amount below the level of emissions in 1990. While the effort to establish such a legal base marked the first-ever incentive on an international level to decrease CO<sub>2</sub> contributions, it led to 191 countries ratifying and thus becoming parties to this legislation (Falkner, 2019). However, some countries never signed this legislation, especially those whose economies were highly reliant on industry and heavily polluted the atmosphere, such as the United States, a hegemony. Another convenient example would be Canada, which was a signatory party to the Protocol but never ratified it and even withdrew 15 years afterward (Peterson, 2009).

This problematic was a referent object of Morgenthau's (1949) work, called the *Politics Amongst Nations*, a realist classic that explains how the power is distributed in the international community and how hegemonies have power to sway the norms in the manner they desire because of the political and economic interdependency of less powerful states on hegemonies. Again, this could be very relevant point put in context with the SDGs. (Morgenthau, 1949) For example, if one observes closely the current hegemony, the United States, it becomes apparent that some of the theoretical paradigms could be applicable in practice. Whilst the rest of the international community relatively “globally” signed and ratified arguably the most recent

environmental contract, strongly arising from the SDGs, the *2015 Paris Agreement*, the United States infamously withdrawn from the treaty in 2017. Such action, committed by smaller and “less-prominent” power would be faced with economic sanctions, freeze of diplomatic relations and other forms of soft power which would lead to the state compliance and re-consideration. Nonetheless, since the US is indeed a hegemony, and the rest of the international community is heavily dependent on its economic, military and political power, which in practice means that the US can get away with actions like this. The same is applicable to another emerging hegemony, China, which happened to bypass the international law oftentimes, such as in the *Philippines v. China* (South China Sea Arbitration, ICJ, 2019), without any profound consequences. (De Castro, 2018) (Jones, 2016)

To summarise, it is not certain if translation of SDGs into framework in the sphere of public international law would be fully efficient due to states sovereignty and consensual nature of international law. Therefore, if implemented, it is essential to acknowledge the risks linked to its implementation.

Arguably, a potential solution to prevent low participation would be treating and accepting some SDGs as 'jus cogens' norms (Kleinklein, 2017, p. 309-317). Jus cogens is a so-called 'peremptory' norm, embodying a fundamental principle of international law accepted by the international community and which must not be derogated from under any circumstances. By the same token, jus cogens belongs to erga omnes norms owned by the whole international community (Klabbers, 2017, p. 58). The concept of jus cogens is important because it helps establish a hierarchy of norms in international law, with jus cogens norms at the top of the importance of international law (Shaw, 2001). This means that if a state violates a jus cogens norm, it can be held accountable by the international community, even if it has not ratified the relevant treaty or convention. Additionally, jus cogens norms provide a basis for the international community to intervene in the internal affairs of a state to protect fundamental human rights. Traditionally, jus cogens norms comprise the most heinous actions, such as genocide, piracy, or slavery. Nonetheless, recently, numerous scholars started to ponder whether climate change commitments would not be applicable via a jus cogens norm (Cervantes, 2022) (Kotze and Muzangaza, 2016).

Since climate change is a global issue that poses a threat to the environment, human rights, and sustainable development, it is widely recognized that the impacts of climate change have the

potential to affect the entire world population, including future generations. This is also the reason why the principles of jus cogens are being applied to climate change in the following ways.

Firstly, jus cogens norms include the right to a healthy environment, recognized as a basic human right. Climate change has the potential to cause significant harm to the environment, including the destruction of ecosystems, biodiversity loss, and changes in weather patterns. The right to a healthy environment may be invoked to protect against the impacts of climate change, and therefore, it has higher legal value.

Secondly, another basis of jus cogens is the duty to prevent harm. This principle requires states to take steps to prevent harm to the environment and human rights, including the impacts of climate change. States have a duty to take measures to mitigate the causes and effects of climate change, including reducing greenhouse gas emissions and promoting sustainable development.

Thirdly, jus cogens norms also include the principle of intergenerational equity, recognizing the need to protect the rights of future generations. Climate change poses a threat to future generations, who will be most affected by its impacts. The principle of intergenerational equity may be invoked to protect the rights of future generations and ensure that they are not unfairly burdened by the impacts of climate change (Cervantes, 2022).

Additionally, SDG 16, which focuses on peace, justice, and strong institutions, aligns with the principles of jus cogens by emphasizing the importance of accountable and inclusive governance. Recognizing the interdependence of peace and sustainability, SDG 16 contributes to the overall framework, promoting the rule of law and addressing social inequalities for a more just and equitable society

Hence, a plausible recommendation lies in the designation of the pivotal SDGs—13 and 16—as jus cogens norms. By elevating these goals to this status, they would not only embody fundamental principles accepted by the entire international community (*erga omnes*) but also enforceable with dire consequences for non-compliance. Both SDGs, addressing climate change and conflicts, exert profound impacts on the global community, justifying their consideration as jus cogens and *erga omnes* norms.

### 3.8 Vagueness

The characteristic of high ambiguity within the Sustainable Development Goals (SDGs) can be perceived both as a strength and a weakness. According to Burger and Parker (2022), this ambiguity provides states with 'interpretive' flexibility, enabling them to tailor the interpretation and implementation of the goals to their specific context, thereby avoiding a rigid 'one size fits all' approach (Burger and Parker, 2022, p. 17-23).

On the positive side, a high degree of flexibility opens up space for innovation, allowing states to explore novel approaches and solutions to achieve the goals. As pointed out by Langford (2016), this flexibility also supports an inclusive approach, permitting diverse stakeholders to contribute their expertise toward the goals. The unrestrictive nature of SDGs and their liberal interpretation can, in reality, be more efficient than adopting narrow and restrictive policy sets, especially considering the global application of SDGs across states with varying levels of sustainable development (Langford, 2016). However, this flexibility, when viewed through a critical lens, can be a double-edged sword, as observed in the data analysis.

Engelbretsen, Heggen and Ottersen (2017) contend that the issue with SDGs may be rooted in its ambiguous language, particularly in the distinction between the “we” promising a brighter and more sustainable future and the “we” responsible for finding solutions and taking action. This seemingly minor ambiguity, according to Engelbretsen, creates confusion, rendering the agenda “everyone's-but-nobody's business,” thereby undermining concerted action toward SDGs (Engelbretsen, 2017).

Building on this perspective, Filho et al. (2023) emphasize that vagueness poses a risk to 'data and technology,' crucial components for monitoring SDG progress. They underscore the importance of harmonizing all potential agendas into 'one common SDG language' to enhance the efficiency of global SDG compliance. In the current landscape, inconsistent monitoring and interpretation within the international community create a significant risk of not accurately reporting specific issues and developments. This lack of uniformity in interpretation and priorities may contribute to uneven progress across different countries and communities (Filho et al., 2023).

In close connection to the preceding argument, it is crucial to underscore that the vagueness inherent in the SDGs significantly undermines the accountability process. The profound flexibility provided by the SDGs contributes to challenges in harmonizing efforts among governments and organizations, subsequently hindering the establishment of an accountable process—a key mechanism essential for achieving the SDGs (Mustajoki et al., 2020).

## **CHAPTER 4: RECOMMENDATIONS**

### **4.1 How do internal clashes among SDGs undermine the coherence and effectiveness of the overall SDG framework?**

#### **A) Clash between environment and economic growth**

The academic community frequently highlights a clash between environmental objectives and economic growth, a concern accentuated by Goal 8 within the Sustainable Development Goals (SDGs). This section summarised how Goal 8, centered on economic growth, contradicts environmental sustainability, as illustrated by Rostow's economic growth curve and the evident environmental damage occurring within the confined planetary boundaries. To address this conflict, the section delves into the concept of de-growth, advocating for a reduced emphasis on economic growth to prioritize environmental conservation. However, the critics of the aforementioned theory contend that de-growth is impractical, predicting economic stagnation, unemployment, and diminished innovation.

In response to these challenges, the section explores the green growth theory, offering an alternative perspective that underscores investments in ecosystem restoration, sustainable land use practices, and the responsible management of natural resources. A practical solution and

recommendation proposed involves integrating carbon intensity targets into the SDGs, accompanied with the implementation of environmentally friendly alternatives to emphasize eco-friendly goals. This model could be further developed into a comprehensive system linking SDGs to their environmental impact, guiding states away from environmentally harmful policies.

## **B) Clash between access to clean water and sanitation and hunger eradication**

Furthermore, this chapter explored another conflict, the one between Sustainable Development Goal (SDG) 6, which focuses on ensuring access to clean water and sanitation, and SDG 2, which aims to eradicate hunger and promote sustainable agriculture. In fact, agriculture uses 70% of global freshwater withdrawals, with South Asia and the Middle East having the highest withdrawal rates. In areas where water scarcity is an issue, efforts to ensure access to clean water for domestic and industrial purposes can compete with the needs of agriculture for irrigation water, potentially creating a conflict between SDG 6 and SDG 2. Achieving SDG 2's goal of increasing agricultural productivity and income would require a significant increase in water usage for irrigation, potentially straining water resources and conflicting with the objectives of SDG 6.

To tackle the conflict between SDG 6 and SDG 2, it is necessary to implement integrated approaches that recognize the interconnections between water resources, food production, and human well-being. This involves promoting sustainable agricultural practices that reduce water usage and minimize agriculture's impact on water quality, as well as investing in technologies and infrastructure that aid in conserving and managing water resources. One solution to this issue is to create additional SDG indicators that make the link between the two SDGs more visible, allowing policymakers to focus on the mutually reinforcing link between them rather than seeing them as competing priorities. It is critical to ensure the sustainability of water resources while pursuing goals related to agriculture and food production, aligning with the objectives of SDG 6. Hence, this section gave birth to the following recommendation: Translate the conflicted relationship between SDG 2 and SDG 6 into translators ensuring their reinforcing and synergic relationship. Both aspects should be added to both goals, confirming the paramount interconnection leading to a higher likelihood of their fulfilment.

#### **4.2 In what ways does the perceived lack of integration within the SDG framework hinder its ability to address interconnected global challenges comprehensively?**

The findings of the data analysis in this master's thesis reveal a significant lack of synergies within the SDG framework. When analysed individually, goal by goal and indicator by indicator, it becomes apparent that the SDGs tend to exist in isolation from each other. Only a limited number of goals contain some cross-cutting issues, and even those are only to a certain extent. Furthermore, some goals might suffer from vagueness in their content, causing linkages to become obscured by ambiguity. In an ideal world, and under liberalist assumptions, such ambiguity might not be a major issue, as all states would understand the intricate interconnections of all SDGs within the framework.

Unfortunately, in the real world, achieving this understanding is challenging, given the current international system. States are driven by internal and foreign policy considerations that often overlook important contextual backgrounds and linkages, hindering the fulfilment of numerous SDGs. It is crucial to emphasize that incorporating direct linkages into the SDGs could present a significant opportunity for creating new cross-sectorial partnerships and attracting new investments. This, in turn, could maximize the fulfilment of numerous SDGs. Many scholars have highlighted the need to interlink the SDGs and have called for a higher degree of integration and synergy. This could certainly be achieved by integrating cross-cutting and major sectoral elements into the framework.

For instance, by incorporating a more gender-inclusive dimension to the goals, considering climate-resilient solutions, accounting for migration and its effects on SDGs, and including other salient factors crucial for each SDG, such as wastewater management for the achievement of SDG 6. In light of these considerations, the recommendation is as follows: Ensure that cross-cutting issues, including elements crucial for the fulfilment of specific sustainable development goals, are integrated into the indicators. This effort is aimed at establishing a solid foundation for implementing these interlinkages, including the creation of essential partnerships.

In effort to improve the whole SDG system, the recommendation would lie in establishment of a new indicators or for the sake of practical side, potentially supporting document informing about the interlinkages and how certain SDGs are intertwined. This could become beneficial for the governments as they might spot some multidimensional relationships and impose

broader policies contributing to achievement of more indicators. In case of invention of a sustainable framework in the post-2030 era, the policy drafters should make the indicators more interconnected in effort to cover broader scope of challenges.

The abovementioned lack of integration can be problematic because it fails to recognize the interrelated and interconnected nature of development challenges. For example, achieving SDG 2 on zero hunger requires addressing issues such as poverty (SDG 1), access to clean water and sanitation (SDG 6), and climate change (SDG 13). Similarly, achieving SDG 4 on quality education requires addressing issues such as gender equality (SDG 5), good health and well-being (SDG 3), and reduced inequalities (SDG 10). Hence, the lack of integration among the SDGs may lead to a fragmented approach to development, with different stakeholders working towards different goals and targets without sufficient coordination. This can result in duplication of efforts, inefficient use of resources, and missed opportunities for synergy and collaboration.

In effort to tackle this problem, there is a need to adopt a more integrated approach that states can pursue for SDG implementation. One of the solutions could lie in promoting more cross-cutting strategies, or in other words, efforts to identify and promote policies which can address multiple SDGs simultaneously, and thus, to kill two birds by one stone by policy coherence which would be mutually reinforcing. This will surely require greater attention to policy integration and coordination among different sectors and levels of governance as addressing the lack of integration among the SDGs is critical for achieving sustainable and inclusive development. (Guppy, 2019)

In summary, by adopting a more integrated and holistic approach to SDG implementation, the international community would be able to promote synergy and collaboration among stakeholders, and thus, maximize the impact of interventions, and advance progress towards a sustainable and equitable future. (Nunes et al., 2016) (Moldavska and Welo, 2019, p. 59) (Langford, 2016, p. 166)



### **4.3 How do criticisms related to current global settings shed light on systemic challenges and geopolitical factors that impede the successful implementation of the SDGs?**

Critics of the current global settings highlight various systemic challenges and geopolitical factors that impede the successful implementation of the Sustainable Development Goals (SDGs). One significant criticism revolves around the unequal distribution of resources and power among nations, often perpetuating disparities that hinder the achievement of SDGs. Various challenges such as economic inequality and resource asymmetry underscore the difficulty in achieving sustainable development. In fact, global economic structures and trade policies often favor powerful nations, leading to the concentration of wealth and resources in certain regions. This unequal distribution can limit the ability of less privileged countries to invest in sustainable practices, hindering progress towards SDGs, particularly in areas like poverty eradication, health, or education.

Furthermore, the passage discussed the challenges posed by the Global North-South and universalist divide in the context of Sustainable Development Goals (SDGs). It highlights how differing perspectives on development and governance complicate the implementation of SDGs, particularly in areas related to peace, justice, and strong institutions (SDG 16). Economic disparities between the Global North and South further complicate efforts to address poverty (SDG 1) and inequality (SDG 10). The role of civil society in shaping thematic concerns within official documents and the need for global collective responsibility are also emphasized.

Building upon the insights provided by Pogge and Sengupta (2016) and Fukuda-Parr and Hegstad (2018), it is recommended to reevaluate the approach to SDGs. Rather than diluting the goals based on national resources, there should be a more explicit emphasis on the responsibilities of wealthy countries and enterprises in ensuring sustainable development. This approach aligns with the concept of partnership (SDG 17) and universalism, emphasizing meaningful collaboration and shared responsibility. Additionally, there is a need for a global collective effort, with a focus on the accountability of international organizations and rule-making bodies. This more serious and collective approach is essential for addressing extreme global inequalities, fostering genuine partnerships, and achieving the overarching objectives of the SDGs.

#### **4.4 How do inefficiencies in the indicators associated with SDGs impact the accurate assessment and measurement of progress, and what are the implications for the overall success of the framework?**

Inefficiencies in Sustainable Development Goal (SDG) indicators pose significant challenges to accurately assess and measure progress, impacting the overall success of the framework. The issues include indicators mapping issues that are inherently challenging to measure, overlooking important aspects, and lacking clarity. This critique extends beyond specific goals, emphasizing the broader need for clearer wording and better quantification across the entire SDG framework to facilitate effective progress monitoring. The following exploration delves into the nuances of this critique, dissecting key arguments and proposing potential solutions for a more robust and streamlined SDG monitoring system.

The recommendation for this aspect will follow suggestion by Gulseven (2020) who called to reframe indicators through the SMART criteria—making all indicators Specific, Measurable, Achievable, Relevant, and Time-oriented, and by orientated- specific time period, for example by 2023 will X. Not by 2030- which is hardly to measure. This approach aims to enhance the precision, effectiveness, and systematic measurement of indicators, ultimately providing clearer guidance and fostering the success of SDGs.

#### **4.5 In what ways does the identified lack of a monitoring mechanism contribute to challenges in tracking and evaluating progress toward SDG goals, and what alternative mechanisms are proposed by critics?**

When it comes to the SDG monitoring and accountability, the research highlighted the lack of thereof and inefficient monitoring as a threat leading to hampering the SDGs fulfilment as whole. This arises from the reality that there is no accountability nor transparent monitoring procedure that would give states a chance to increase their extent of collaboration on one hand and participation in innovation exchange on another. The chapter suggested that creating a “soft law framework” for sustainable development goals with an independent investigative body could be a solution to monitor and enforce goals, similar to the Universal Periodic Review used for human rights. The process would involve regular reviews, participation from non-state actors, and the submission of national reports. The UPR process has been successful in promoting human rights, and a similar process could be implemented for SDGs. However,

establishing such a system would require significant effort and participation from various stakeholders.

Overall, the aforementioned section of this master thesis proposes a transparent and participatory manner for states to interact and exchange good practices to increase the fulfilment of SDGs. Hence, the research leads to the following recommendation: Create an independent investigative body and reviewing procedure of the SDG which would analyse the SDG's progress on every second year basis and which would create a platform for states to provide recommendations to each other leading to policy advice, innovation exchange and which would contribute towards global enabling environment for the SDGs, enabling states to use participatory and transparent approaches actively promoting collaboration and partnerships for sustainable development.



*Table 19 This chart visually represents the recommendation on accountability mechanism of SDGs. It is inspired by the current system of UPR.*

#### **4.6 How does the perceived lack of accountability within the SDG framework hinder the commitment of nations and stakeholders, and what accountability mechanisms are suggested for improvement?**

The perceived lack of accountability within the Sustainable Development Goals (SDG) framework poses a substantial obstacle to the commitment of nations and stakeholders. The absence of clear accountability mechanisms diminishes the effectiveness of SDGs, hindering the progress towards their attainment. As indicated in the critical analysis, one major issue is the non-enforcement of accountability on states. In light of this challenge, a recommended solution involves the establishment of an independent investigative body specifically dedicated to monitoring and ensuring accountability within the SDG framework. Drawing inspiration from existing models for human rights, this body would play a crucial role in holding states accountable through both soft and hard power mechanisms. By leveraging recommendations

and insights from different states, this body could serve as a platform for knowledge-sharing and idea exchange. The proposed independent investigative body would contribute to accountability by providing constructive recommendations to states, the influence of such recommendations could exert soft power on nations to comply with the SDG plans. As the section on international law above indicates, states failing to adhere to the recommended strategies and commitments could potentially face penalties, contingent on the severity of non-compliance. Importantly, the proposed body would need to strike a balance, fostering collaboration and shared responsibility while having mechanisms in place to address non-compliance.

#### **4.7 In what aspects does the criticism regarding the wrong concept of sustainability challenge the foundational principles of the SDGs, and how might a redefined concept enhance the framework?**

Another significant critique directed at the SDGs involves the utilization of an arguably flawed sustainability model. In this criticized approach, environmental SDGs are positioned in the background, potentially undermining Earth systems and the overall biocapacity. In pondering the potential for a reform of the current sustainability model and questioning the relative importance of various SDGs, this master thesis aligns with the paradigm that emphasizes two specific Sustainable Development Goals (SDGs). According to this paradigm, climate change, addressed in SDG 13, and governance and anti-corruption efforts, addressed in SDG 16, emerge as pivotal prerequisites for the successful implementation and fulfilment of the remaining SDGs. The Wedding Cake model demonstrates that without a stable environmental foundation and effective governance structures, the attainment of social and economic objectives becomes precarious.

In light of these findings, a recommendation emerges to re-evaluate the hierarchical structure of SDGs to challenge the current, inefficient system of sustainability. Proposing a shift in emphasis, SDG 13 and SDG 16 could be positioned as foundational goals with higher priority, given their essential role as prerequisites for the effective realization of all 17 SDGs. This restructuring could be achieved through direct modification or recreation, particularly in the context of post-2030 SDGs. Additionally, incorporating a protocol emphasizing the significance of SDG 13 and SDG 16 could serve as a means to underscore their critical value in providing the necessary foundation for the comprehensive fulfilment of the SDG framework. The alternative approach, based on a liberalist perspective, which merely adds an informational

protocol, is considered less likely to be efficacious, as it lacks the motivational impetus inherent in a direct restructuring.

#### **4.8 What are the consequences of the non-legally binding nature of the SDGs on the commitment and compliance of nations, and what arguments exist for or against making the SDGs legally binding?**

Furthermore, the ninth section of this critical analysis investigated the absence of legal codification of Sustainable Development Goals (SDGs) within the international legal system. Although SDGs find some representation in international law through various treaties or case law, they lack inherent legal binding. Given the structure of international law and the absence of a robust authority overseeing states, the effectiveness of their legal establishment is questionable. The consensual nature of international law, in contrast to the more "automatic" nature of national laws, raises uncertainty about states' willingness to participate in a legal framework. This hesitancy is exacerbated by the reluctance of current hegemonic powers and other major nations to assume obligations that may impact their economic growth. While acknowledging these challenges and assessing the associated risks, a specific solution emerges as particularly noteworthy and holds a crucial place in the international community—*jus cogens norms*. Jus cogens norms are peremptory norms accepted by the international community, prohibiting any derogation by states, irrespective of their consent or recognition. Consequently, translating each SDG into a jus cogens norm and securing acceptance by the international community would render states unable to evade accountability stemming from these non-derogable norms. This, in turn, would actively motivate states to genuinely adhere to the SDG agenda.

Given the considerations highlighted in the preceding section, the recommendation regarding the current non-binding nature of SDGs, it is proposed that SDG 13 (Climate Action) and SDG 16 (Peace, Justice, and Strong Institutions) be accorded elevated value than others, and therefore, it is recommended they are translated as jus cogens norms. This will confirm their pivotal role as prerequisites for the fulfillment of future SDGs. This prioritization can fulfill the urgent need for global commitment to addressing climate change and fostering peace as integral components of a sustainable and equitable development agenda. By the same token, their translation into jus cogens will confirm their "*erga omnes*" status in international law.

#### **4.9 How does the criticism related to the lack of specification impact the clarity and precision required for effective implementation, and what recommendations are proposed to enhance specificity?**

This section looked into the challenges associated with the absence of clarity and specification regarding SDGs' roles and responsibilities. The ambiguity surrounding the delineation of tasks and responsibilities creates potential obstacles in the effective execution of initiatives or plans. In order to address this challenge, a key recommendation is to institute a comprehensive approach involving an independent investigative body in collaboration with each country. This investigative body, engaged in ongoing dialogues with individual countries, would play a pivotal role in developing clear, detailed plans for each SDG. These plans should include well-defined milestones, with a specified time limit for implementation and measurable outputs. Notably, the proposed timeframe for monitoring progress is every three years, aligning with the original 15-year duration of the SDGs. This approach aims to overcome the limitations of existing milestones that often capture historical data and past achievements, lacking the forward-looking precision needed for effective implementation. The establishment of such a structured and proactive mechanism ensures that countries have a tangible plan for each SDG, fostering accountability and strategic focus. By incorporating important milestones and continuous monitoring, this approach enables timely adjustments, maximizes impact, and contributes to the overarching goal of sustainable development. Through this strategy, nations can go beyond the current SDGs, creating a robust framework for sustained progress and addressing the specific needs and challenges outlined in each goal.

## **CHAPTER 5: CONCLUSION**

The inception of the Sustainable Development Goals (SDGs) agenda in 2015 marked a significant shift, providing the international community with a comprehensive framework to strive for heightened sustainable development across economic, social, and environmental dimensions by 2030. Unlike its predecessor, the Millennium Development Goals, which were more narrowly focused on developing countries, the SDGs encompass a broader, global scope. Despite widespread acceptance and integration into policies at global, regional, and national levels, the SDGs have not been immune to criticism from scholarly and institutional spheres.

This Master Thesis, while recognizing the intrinsic value and conceptual importance of the SDGs, undertakes a critical examination of the notable criticisms that have arisen. In navigating through these critiques, the thesis aims to provide structural recommendations aimed at refining and strengthening the existing system.

This Master Thesis embarked on a thorough examination of scholarly articles retrieved from five prominent academic databases, namely Web of Science, Scopus, JSTOR, Science Direct, and Google Scholar. The diverse compilation of articles, totaling 113, drew from each database to ensure a broad representation of academic literature, the results were following.

Firstly, A predominant concern highlighted in the analyzed literature is the occurrence of internal clashes, constituting a significant portion of the identified issues at 28%. This suggests that within the framework of the SDGs, there are conflicting elements that may impede cohesive progress or realization of specific goals, such as the clash between environmental goals and economic growth or between ending hunger and access to safe and clean water. For the environmental clash and economic growth clashes, the recommended solution involves integrating carbon intensity targets into SDGs for comprehensive environmental impact assessment. As for the clash between zero hunger and access to water, the recommendation for this issue is to create additional indicators which will aim to make the interconnectedness between these goals more visible, fostering a synergic relationship rather than viewing them as

competing priorities. This proposed solution involves recognizing the mutual reinforcement between SDG 2 and SDG 6, ensuring sustainable water resources while pursuing goals related to agriculture and food production.

Secondly, the lack of integration emerged as another substantial issue, accounting for 13.33% of the findings. This underscores the importance of harmonizing different aspects of the SDGs to achieve a more unified and synergistic approach. The lack of integration within the SDG framework poses challenges, with goals existing in isolation. Incorporating direct linkages and cross-cutting elements is recommended to create new cross-sectorial partnerships and attract investments. This entails integrating gender-inclusive dimensions, climate-resilient solutions, and other salient factors crucial for specific SDGs into the framework.

Thirdly, issues with the current global settings were identified as a concern by 11% of the articles, indicating that the overarching global conditions may pose challenges to the effective implementation of the SDGs. The articles argued that systemic challenges and geopolitical factors, driven by unequal resource distribution and power dynamics, hinder Sustainable Development Goal (SDG) implementation. Economic inequality and resource concentration in powerful nations impede progress, particularly in poverty, health, and education. The Global North-South and universalist divide complicates SDG execution, impacting areas like peace, justice, and poverty reduction. To address this, a recommended shift involves emphasizing wealthy nations' responsibilities, promoting global collective efforts, and holding international bodies accountable. This approach aligns with SDG 17, fostering genuine partnerships and addressing extreme global inequalities.

Fourthly, inefficient indicators and the absence of a robust mechanism for monitoring were also recognized, with percentages of 7.77%. Inefficiencies in SDG indicators present challenges, impacting the comprehensive assessment and measurement of progress within the framework. These challenges encompass difficulties in measuring inherently complex issues, overlooking crucial aspects, and lacking clarity. The critique emphasizes the overarching need for improved clarity and quantification throughout the entire SDG framework to ensure effective progress monitoring. Gulseven's (2020) recommendation advocates reframing indicators using the SMART criteria—Specific, Measurable, Achievable, Relevant, and Time-oriented, with a specified time frame. This approach aims to enhance precision, effectiveness, and systematic measurement, providing clearer guidance and promoting the success of SDGs.



Fifthly, the data analysis revealed that 6.66% of analyzed articles criticized the lack of efficient monitoring mechanism for the evaluative aspects of the SDG framework. The absence of a robust monitoring mechanism hampers accurate progress assessment. To address this, a recommendation involves establishing an independent monitoring body. This body would enhance transparency, ensure objective evaluation, and foster credibility in tracking SDG implementation.

Sixthly, the analysis identified a significant concern (6.66%) about the perceived vagueness in certain aspects of the SDGs. To address this, the recommendation is to formulate SMART targets for effective implementation (Mustajoki, Borchardt, Buttner et al., 2022). Additionally, advocating clear communication, inclusivity in negotiations, and establishing an SDG Taskforce with diverse representation are crucial steps for successful SDG implementation at both national and regional levels.

Additionally, the lack of accountability was identified in 4.44% of the articles, signifying concerns about the responsibility and enforcement mechanisms within the SDGs. It was indeed recognized as a substantial obstacle. The recommendation involves establishing an independent investigative body dedicated to monitoring and ensuring accountability. Drawing inspiration from existing models for human rights, this body would play a pivotal role in holding states accountable through both soft and hard power mechanisms. The proposed body would contribute to accountability by providing constructive recommendations, exerting soft power on nations to comply with the SDG plans while maintaining a balance between fostering collaboration and shared responsibility and addressing non-compliance.

Further nuances in the analysis pointed to a 3.33% consensus on the notion of a wrong concept of sustainability within the SDGs, indicating a need for reconsideration or refinement in the conceptualization of sustainability. Criticism related to the wrong concept of sustainability focuses on the positioning of environmental SDGs in the background. The recommendation involves re-evaluating the hierarchical structure of SDGs. SDG 13 (Climate Action) and SDG 16 (Peace, Justice, and Strong Institutions) are proposed to be prioritized and translated into *jus cogens* norms, emphasizing their foundational role. This prioritization aligns with the urgent need for global commitment to addressing climate change and fostering peace as integral components of a sustainable development agenda.

Lastly, the aspect of non-legally binding commitments garnered an equal percentage of 3.33%, emphasizing concerns about the enforceability and commitment level associated with the SDGs. The non-legally binding nature of SDGs is identified as a challenge impacting commitment and compliance. The recommendation involves translating SDG 13 (Climate Action) and SDG 16 (Peace, Justice, and Strong Institutions) into jus cogens norms, rendering them non-derogable norms accepted by the international community. This approach actively motivates states to adhere to the SDG agenda and promotes accountability through the establishment of legal obligations.

In conclusion, the proposed solutions include refining the interconnectedness between conflicting goals, enhancing integration, addressing global inequalities, improving indicator precision, establishing an independent monitoring body, formulating SMART targets, ensuring accountability through an investigative body, re-evaluating the hierarchical structure, and translating key goals into jus cogens norms. By transforming criticism into actionable recommendations, there is an opportunity to fortify the SDG framework and its successor, making it more efficient, accountable, and responsive to the complex challenges of sustainable development beyond 2030.

## REFERENCES

- Ala-Uddin, M. (2019) "Sustainable' Discourse: A critical analysis of the 2030 agenda for sustainable development," *Asia Pacific Media Educator*, 29(2), pp. 214–224. Available at: <https://doi.org/10.1177/1326365x19881515>.
- Alcamo, J. (2019) "Water quality and its interlinkages with the Sustainable Development Goals," *Current Opinion in Environmental Sustainability*, 36, pp. 126–140. Available at: <https://doi.org/10.1016/j.cosust.2018.11.005>.
- Alvaredo, F. *et al.* (2018) "The elephant curve of global inequality and growth," *AEA Papers and Proceedings*, 108, pp. 103–108. Available at: <https://doi.org/10.1257/pandp.20181073>.
- Arora-Jonsson, S. (2023). "The sustainable development goals: A universalist promise for the future." *Futures*, 146, 103087. <https://doi.org/10.1016/j.futures.2022.103087>
- Asadikia, A., Rajabifard, A. and Kalantari, M. (2021) "Systematic prioritisation of sdgs: Machine learning approach," *World Development*, 140, p. 105269. Available at: <https://doi.org/10.1016/j.worlddev.2020.105269>.
- Assefa, S., & Demissie, D. (2019). Data and Information Literacy: Achieving Sustainable Development Goals in Africa. In SAIS 2019 Proceedings (p. 20). Retrieved from <https://aisel.aisnet.org/sais2019/20>
- Assefa, Y. *et al.* (2017) "Successes and challenges of the Millennium Development Goals in Ethiopia: Lessons for the sustainable development goals," *BMJ Global Health*, 2(2). Available at: <https://doi.org/10.1136/bmjgh-2017-000318>.
- Baker, S., Constant, N. and Nicol, P. (2023) "Oceans Justice: Trade-offs between sustainable development goals in the Seychelles," *Marine Policy*, 147, p. 105357. Available at: <https://doi.org/10.1016/j.marpol.2022.105357>.
- Bali Swain, R. and Yang-Wallentin, F. (2019) "Achieving Sustainable Development Goals: Predicaments and Strategies," *International Journal of Sustainable Development & World Ecology*, 27(2), pp. 96–106. Available at: <https://doi.org/10.1080/13504509.2019.1692316>.
- Baye, K. (2016) "The Sustainable Development Goals cannot be achieved without improving maternal and child nutrition," *Journal of Public Health Policy*, 38(1), pp. 137–145. Available at: <https://doi.org/10.1057/s41271-016-0043-y>.
- Belmonte-Ureña, L.J. *et al.* (2021) "Circular economy, degrowth and green growth as pathways for research on Sustainable Development Goals: A global analysis and future agenda," *Ecological Economics*, 185, p. 107050. Available at: <https://doi.org/10.1016/j.ecolecon.2021.107050>.

- Bendell, J. (2022) “Replacing sustainable development: Potential frameworks for international cooperation in an era of increasing crises and disasters,” *Sustainability*, 14(13), p. 8185. Available at: <https://doi.org/10.3390/su14138185>.
- Bennett, S. *et al.* (2020) “Understanding the implications of the Sustainable Development Goals for Health Policy and Systems Research: Results of a research priority setting exercise,” *Globalization and Health*, 16(1). Available at: <https://doi.org/10.1186/s12992-019-0534-2>.
- Berrone, P. *et al.* (2023) “How can research contribute to the implementation of sustainable development goals? an interpretive review of SDG literature in Management,” *International Journal of Management Reviews*, 25(2), pp. 318–339. Available at: <https://doi.org/10.1111/ijmr.12331>.
- Biermann, F., Kanie, N. and Kim, R.E. (2017) “Global governance by goal-setting: The novel approach of the UN Sustainable Development Goals,” *Current Opinion in Environmental Sustainability*, 26-27, pp. 26–31. Available at: <https://doi.org/10.1016/j.cosust.2017.01.010>.
- Biggeri, M. *et al.* (2019) “Tracking the sdgs in an ‘integrated’ manner: A proposal for a new index to capture Synergies and trade-offs between and within goals,” *World Development*, 122, pp. 628–647. Available at: <https://doi.org/10.1016/j.worlddev.2019.05.022>.
- Bonnedahl, K.J., Heikkurinen, P. and Paavola, J. (2022) “Strongly sustainable development goals: Overcoming distances constraining responsible action,” *Environmental Science & Policy*, 129, pp. 150–158. Available at: <https://doi.org/10.1016/j.envsci.2022.01.004>.
- Bonnedahl, K.J., Heikkurinen, P. and Paavola, J. (2022) “Strongly sustainable development goals: Overcoming distances constraining responsible action,” *Environmental Science & Policy*, 129, pp. 150–158. Available at: <https://doi.org/10.1016/j.envsci.2022.01.004>.
- Briant Carant, J. (2016) “Unheard voices: A critical discourse analysis of the millennium development goals’ evolution into the sustainable development goals,” *Third World Quarterly*, 38(1), pp. 16–41. Available at: <https://doi.org/10.1080/01436597.2016.1166944>.
- Brissett, N.O. (2017) “Sustainable development goals (sdgs) and the Caribbean: Unrealizable promises?,” *Progress in Development Studies*, 18(1), pp. 18–35. Available at: <https://doi.org/10.1177/1464993417734440>.
- Burger, K. and Parker, M. (2022) “Leveraging the sustainable development goals as a boundary object in the city of Bristol,” *Global Social Challenges Journal*, pp. 1–28. Available at: <https://doi.org/10.1332/bbzq5931>.
- Burger, K. and Parker, M. (2022) “Leveraging the sustainable development goals as a boundary object in the city of Bristol,” *Global Social Challenges Journal*, pp. 1–28. Available at: <https://doi.org/10.1332/bbzq5931>.

- Busco, C. (2018) “Make sustainable development goals happen through integrated thinking: An introduction,” *Sustainable Development Goals and Integrated Reporting*, pp. 1–19. Available at: <https://doi.org/10.4324/9780429027314-1>.
- Butcher, S. (2022) “Urban equality and the sdgs: Three provocations for a relational agenda,” *International Development Planning Review*, 44(1), pp. 13–32. Available at: <https://doi.org/10.3828/idpr.2021.6>.
- Chassagne, N. (2020) “A brief history of development and Sustainable Development,” *Buen Vivir as an Alternative to Sustainable Development*, pp. 13–26. Available at: <https://doi.org/10.4324/9781003023074-3>.
- Costanza, R. *et al.* (2016) “Modelling and measuring sustainable wellbeing in connection with the UN Sustainable Development Goals,” *Ecological Economics*, 130, pp. 350–355. Available at: <https://doi.org/10.1016/j.ecolecon.2016.07.009>.
- Costanza, R., Daly, L., Fioramonti, L., Giovannini, E., Kubiszewski, I., Mortensen, L. F., Pickett, K. E., Ragnarsdottir, K. V., De Vogli, R., & Wilkinson, R. (2016). Modelling and measuring sustainable wellbeing in connection with the UN Sustainable Development Goals. *Ecological Economics*, **130**, 350–355.
- Crespo Cuaresma, J. *et al.* (2018) “Will the sustainable development goals be fulfilled? assessing present and future global poverty,” *Palgrave Communications*, 4(1). Available at: <https://doi.org/10.1057/s41599-018-0083-y>.
- Cumming, G.S. and von Cramon-Taubadel, S. (2018) “Linking economic growth pathways and environmental sustainability by understanding development as alternate social–ecological regimes,” *Proceedings of the National Academy of Sciences*, 115(38), pp. 9533–9538. Available at: <https://doi.org/10.1073/pnas.1807026115>.
- Cummings, S., *et al.* (2016). "Critical discourse analysis on knowledge and knowledge society within the SDGs." *DPR*, 36, 727-742.
- Dawes, J.H.P. (2022) “SDG interlinkage networks: Analysis, robustness, sensitivities, and hierarchies,” *World Development*, 149, p. 105693. Available at: <https://doi.org/10.1016/j.worlddev.2021.105693>.
- de Mora Jimenez, R. (2019) “Public diplomacy and sdgs. sdgs as a goal and a means of public diplomacy,” *SDGs, Main Contributions and Challenges*, pp. 139–155. Available at: <https://doi.org/10.18356/c6934888-en>.
- Department of Social and Economic Affairs (2015) *The 17 goals | sustainable development, United Nations*. United Nations. Available at: <https://sdgs.un.org/goals> (Accessed: April 8, 2023).
- Dilekli, N. and Cazcarro, I. (2019) “Testing the SDG targets on water and sanitation using the World Trade model with a waste, wastewater, and recycling framework,” *Ecological Economics*, 165, p. 106376. Available at: <https://doi.org/10.1016/j.ecolecon.2019.106376>.

- Dilekli, N. and Cazcarro, I. (2019) “Testing the SDG targets on water and sanitation using the World Trade model with a waste, wastewater, and recycling framework,” *Ecological Economics*, 165, p. 106376. Available at: <https://doi.org/10.1016/j.ecolecon.2019.106376>.
- Donald, K. and Way, S.-A. (2016) “Accountability for the sustainable development goals: A lost opportunity?,” *Ethics & International Affairs*, 30(2), pp. 201–213. Available at: <https://doi.org/10.1017/s0892679416000083>.
- Easterly, W. (2015) “The trouble with the sustainable development goals,” *Current History*, 114(775), pp. 322–324. Available at: <https://doi.org/10.1525/curh.2015.114.775.322>.
- Eastin, J. (2018) “Climate change and gender equality in Developing States,” *World Development*, 107, pp. 289–305. Available at: <https://doi.org/10.1016/j.worlddev.2018.02.021>.
- Ebesson, J. (2022) “The Cambridge Handbook of the Sustainable Development Goals and International Law.” Available at: <https://doi.org/10.1017/9781108769631>.
- Eisenmenger, N. *et al.* (2020) “The Sustainable Development Goals Prioritize Economic Growth Over Sustainable Resource use: A critical reflection on the sdgs from a socio-ecological perspective,” *Sustainability Science*, 15(4), pp. 1101–1110. Available at: <https://doi.org/10.1007/s11625-020-00813-x>.
- Emma, G.-M. and Jennifer, M.-F. (2021) “Is SDG reporting substantial or symbolic? an examination of controversial and Environmentally Sensitive Industries,” *Journal of Cleaner Production*, 298, p. 126781. Available at: <https://doi.org/10.1016/j.jclepro.2021.126781>.
- Engebretsen, E., Heggen, K. and Ottersen, O.P. (2017) “The Sustainable Development Goals: Ambiguities of Accountability,” *The Lancet*, 389(10067), p. 365. Available at: [https://doi.org/10.1016/s0140-6736\(17\)30152-6](https://doi.org/10.1016/s0140-6736(17)30152-6).
- Ferrón Vilchez, V., Ortega Carrasco, P. and Serrano Bernardo, F.A. (2022) “SDGWASHING: A critical view of the pursuit of sdgs and its relationship with environmental performance,” *Journal of Environmental Planning and Management*, 65(6), pp. 1001–1023. Available at: <https://doi.org/10.1080/09640568.2022.2033960>.
- Filho, W., Trevisan, L. V., Rampasso, I. S., Anholon, R., Dinis, M. A. P., Brandli, L. L., Sierra, J., Salvia, A. L., Pretorius, R., Nicolau, M., Eustachio, J. H. P., & Mazutti, J. (2023). When the alarm bells ring: Why the UN sustainable development goals may not be achieved by 2030. *Journal of Cleaner Production*, 407, 137108. <https://doi.org/10.1016/j.jclepro.2023.137108>
- Friedmann, E. (2016) “An Independent Review and Accountability Mechanism for the Sustainable Development Goals,” *Health Human Rights*, 18(1).
- Fukuda-Parr, S. and McNeill, D. (2019) “Knowledge and politics in setting and measuring the sdg S: Introduction to special issue,” *Global Policy*, 10(S1), pp. 5–15. Available at: <https://doi.org/10.1111/1758-5899.12604>.

- Fukuda-Parr, S., & Hegstad, T. S. (2018). "Leaving no one behind." UN Committee for Development Policy. UNDESA, New York.
- Gabay, C. and Ilcan, S. (2017) 'The Affective Politics of the SDG', *Globalizations*, 14, pp. 468-485.
- Glass, L.-M. and Newig, J. (2019) "Governance for achieving the Sustainable Development Goals: How important are participation, policy coherence, reflexivity, adaptation and Democratic Institutions?," *Earth System Governance*, 2, p. 100031. Available at: <https://doi.org/10.1016/j.esg.2019.100031>.
- Glazebrook, T. (2011). Women and Climate Change: A Case-Study from Northeast Ghana. *Hypatia*, 26(4), 762–782. <http://www.jstor.org/stable/41328879>
- Griggs, D. *et al.* (2013) "Sustainable development goals for people and planet," *Nature*, 495(7441), pp. 305–307. Available at: <https://doi.org/10.1038/495305a>.
- Griggs, D. *et al.* (2014) "An integrated framework for sustainable development goals," *Ecology and Society*, 19(4). Available at: <https://doi.org/10.5751/es-07082-190449>.
- Gulseven, O. (2020) "Measuring achievements towards SDG 14, life below water, in the United Arab Emirates," *Marine Policy*, 117, p. 103972. Available at: <https://doi.org/10.1016/j.marpol.2020.103972>.
- Guo, H. *et al.* (2022) "Measuring and evaluating SDG indicators with Big Earth Data," *Science Bulletin*, 67(17), pp. 1792–1801. Available at: <https://doi.org/10.1016/j.scib.2022.07.015>.
- Guppy, L., Mehta, P. and Qadir, M. (2019) "Sustainable development goal 6: Two gaps in the race for indicators," *Sustainability Science*, 14(2), pp. 501–513. Available at: <https://doi.org/10.1007/s11625-018-0649-z>.
- Hák, T., Janoušková, S. and Moldan, B. (2016) "Sustainable development goals: A need for relevant indicators," *Ecological Indicators*, 60, pp. 565–573. Available at: <https://doi.org/10.1016/j.ecolind.2015.08.003>.
- Hangoma, P. and Surgey, G. (2019) "Contradictions within the sdfs: Are sin taxes for Health Improvement at odds with employment and economic growth in Zambia," *Globalization and Health*, 15(1). Available at: <https://doi.org/10.1186/s12992-019-0510-x>.
- Hickel, J. (2019) "The contradiction of the Sustainable Development Goals: Growth Versus Ecology on a finite planet," *Sustainable Development*, 27(5), pp. 873–884. Available at: <https://doi.org/10.1002/sd.1947>.
- Hickel, J. (2020) "The sustainable development index: Measuring the ecological efficiency of human development in the anthropocene," *Ecological Economics*, 167, p. 106331. Available at: <https://doi.org/10.1016/j.ecolecon.2019.05.011>.

- Hunt P. (2015) “SDGs and the importance of formal independent review: An opportunity for health to lead the way,” *Health and Human Rights*. 2; <http://www.hhrjournal.org/2015/09/02/sdg-series-sdgs-and-the-importance-of-formal-independent-review-an-opportunity-for-health-to-lead-the-way/> SDG Series blog. Available at.
- Iacobuță, G.I. *et al.* (2022) “Aligning climate and sustainable development finance through an SDG lens. the role of Development Assistance in implementing the Paris Agreement,” *Global Environmental Change*, 74, p. 102509. Available at: <https://doi.org/10.1016/j.gloenvcha.2022.102509>.
- Immler, N.L. and Sakkers, H. (2021) “The UN-Sustainable Development Goals Going Local: Learning from Localising Human Rights,” *The International Journal of Human Rights*, 26(2), pp. 262–284. Available at: <https://doi.org/10.1080/13642987.2021.1913411>.
- International Council for Science and International Social Science Council. (2015). Review of Targets for the Sustainable Development Goals: The Science Perspective. Paris: ICSU.
- Issever Grochová, L. and Litzman, M. (2021) “The efficiency in meeting Measurable Sustainable Development Goals,” *International Journal of Sustainable Development & World Ecology*, 28(8), pp. 709–719. Available at: <https://doi.org/10.1080/13504509.2021.1882606>.
- Jacob, A. (2017) “Mind the gap: Analyzing the impact of Data Gap in millennium development goals’ (mdgs) indicators on the progress toward mdgs,” *World Development*, 93, pp. 260–278. Available at: <https://doi.org/10.1016/j.worlddev.2016.12.016>.
- Jacob, A. (2017). Mind the Gap: Analyzing the Impact of Data Gap in Millennium Development Goals’ (MDGs) Indicators on the Progress toward MDGs. *World Development*, 93(C), 260-278.
- Janoušková, S., Hák, T. and Moldan, B. (2018) “Global sdgs assessments: Helping or confusing indicators?,” *Sustainability*, 10(5), p. 1540. Available at: <https://doi.org/10.3390/su10051540>.
- Jin, H. *et al.* (2020) “A global assessment of sustainable development based on modification of the human development index via the entropy method,” *Sustainability*, 12(8), p. 3251. Available at: <https://doi.org/10.3390/su12083251>.
- Katila, P. *et al.* (2020) “Forest tenure and the Sustainable Development Goals – A Critical View,” *Forest Policy and Economics*, 120, p. 102294. Available at: <https://doi.org/10.1016/j.forpol.2020.102294>.
- Kaygalak-Celebi, S., Ozeren, E. and Aydin, E. (2022) “The missing link of the sustainable development goals (sdgs) in tourism: A qualitative research on Amsterdam Pride,” *Tourism Management Perspectives*, 41, p. 100937. Available at: <https://doi.org/10.1016/j.tmp.2022.100937>.



- Kaymaz, Ç.K., Birinci, S. and Kızılkın, Y. (2021) “Sustainable development goals assessment of erzurum province with SWOT-AHP analysis,” *Environment, Development and Sustainability*, 24(3), pp. 2986–3012. Available at: <https://doi.org/10.1007/s10668-021-01584-w>.
- Kim, R.E. (2016) “The nexus between international law and the Sustainable Development Goals,” *Review of European, Comparative & International Environmental Law*, 25(1), pp. 15–26. Available at: <https://doi.org/10.1111/reel.12148>.
- Klabbers, J. (2013). *International Law*. Cambridge University Press. DOI: <https://doi.org/10.1017/CBO978113902256>
- Kopnina, H. (2016). The victims of unsustainability: A challenge to Sustainable Development Goals. *International Journal of Sustainable Development & World Ecology*, 23(2), [Page numbers]. <https://doi.org/10.1080/13504509.2015.1111269>
- Kotzé, L.J. and Muzangaza, W. (2018) “Constitutional International Environmental Law for the anthropocene?,” *Review of European, Comparative & International Environmental Law*, 27(3), pp. 278–292. Available at: <https://doi.org/10.1111/reel.12244>.
- Krauss, J.E. (2022) “Unpacking SDG 15, its targets and indicators: Tracing Ideas of Conservation,” *Globalizations*, 19(8), pp. 1179–1194. Available at: <https://doi.org/10.1080/14747731.2022.2035480>.
- Kroll, C., Warchold, A. & Pradhan, P. Sustainable Development Goals (SDGs): Are we successful in turning trade-offs into synergies?. *Palgrave Commun* 5, 140 (2019). <https://doi.org/10.1057/s41599-019-0335-5>
- Kubiszewski, I. *et al.* (2021) “Toward better measurement of sustainable development and wellbeing: A small number of SDG indicators reliably predict life satisfaction,” *Sustainable Development*, 30(1), pp. 139–148. Available at: <https://doi.org/10.1002/sd.2234>.
- Kuc-Czarnecka, M., Markowicz, I. and Sompolska-Rzechuła, A. (2023) “SDGs implementation, their synergies, and trade-offs in EU countries – sensitivity analysis-based approach,” *Ecological Indicators*, 146, p. 109888. Available at: <https://doi.org/10.1016/j.ecolind.2023.109888>.
- Kumar, R. and Roy, P. (2018) “War and peace: Is our world serious about achieving sustainable development goals by 2030?,” *Journal of Family Medicine and Primary Care*, 7(6), p. 1153. Available at: [https://doi.org/10.4103/jfmpe.jfmpe\\_231\\_18](https://doi.org/10.4103/jfmpe.jfmpe_231_18).
- Lalawmpuii, & Rai, P. K. (2023). Role of water-energy-food nexus in environmental management and climate action. *Energy Nexus*, 11, 100230. <https://doi.org/10.1016/j.nexus.2023.100230>
- Lama, P., Hamza, M. and Wester, M. (2020) “Gendered dimensions of migration in relation to climate change,” *Climate and Development*, 13(4), pp. 326–336. Available at: <https://doi.org/10.1080/17565529.2020.1772708>.

- Langford, M. (2016) “Lost in transformation? the politics of the sustainable development goals,” *Ethics & International Affairs*, 30(2), pp. 167–176. Available at: <https://doi.org/10.1017/s0892679416000058>.
- Libório, M.P. *et al.* (2022) “Consensus-based sub-indicator weighting approach: Constructing Composite Indicators compatible with expert opinion,” *Social Indicators Research*, 164(3), pp. 1073–1099. Available at: <https://doi.org/10.1007/s11205-022-02989-4>.
- Lim, M.M., Søgaard Jørgensen, P. and Wyborn, C.A. (2018) “Reframing the Sustainable Development Goals to achieve sustainable development in the Anthropocene—A Systems Approach,” *Ecology and Society*, 23(3). Available at: <https://doi.org/10.5751/es-10182-230322>.
- Lomazzi, M., Borisch, B. and Laaser, U. (2014) “The Millennium Development Goals: Experiences, achievements and what's next,” *Global Health Action*, 7(1), p. 23695. Available at: <https://doi.org/10.3402/gha.v7.23695>.
- Lyytimäki, J. *et al.* (2020) “Risks of producing and using indicators of Sustainable Development Goals,” *Sustainable Development*, 28(6), pp. 1528–1538. Available at: <https://doi.org/10.1002/sd.2102>.
- Mackey, T.K., Vian, T. and Kohler, J. (2018) “The Sustainable Development Goals as a framework to combat health-sector corruption,” *Bulletin of the World Health Organization*, 96(9), pp. 634–643. Available at: <https://doi.org/10.2471/blt.18.209502>.
- Marmolejo Cervantes, M.Á., Roeben, V. and Solís, L.R. (2022) “Global climate change action as a jus cogens norm: Some legal reflections on the emerging evidence,” *Environmental Policy and Law*, 52(5-6), pp. 359–373. Available at: <https://doi.org/10.3233/epl-219019>.
- Massey, A. (2022) “Sustainable development goals and their fit with good governance,” *Global Policy*, 13(S1), pp. 79–85. Available at: <https://doi.org/10.1111/1758-5899.13037>.
- McArthur, J.W. and Rasmussen, K. (2019) “Classifying sustainable development goal trajectories: A country-level methodology for identifying which issues and people are getting left behind,” *World Development*, 123, p. 608. Available at: <https://doi.org/10.1016/j.worlddev.2019.06.031>.
- Mdingi, K. and Ho, S.-Y. (2021) “Literature review on income inequality and economic growth,” *MethodsX*, 8, p. 101402. Available at: <https://doi.org/10.1016/j.mex.2021.101402>.
- Mensah, J. (2019) “Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review,” *Cogent Social Sciences*, 5(1), p. 1653531. Available at: <https://doi.org/10.1080/23311886.2019.1653531>.
- Menton, M. *et al.* (2020) “Environmental justice and the sdgs: From Synergies to gaps and contradictions,” *Sustainability Science*, 15(6), pp. 1621–1636. Available at: <https://doi.org/10.1007/s11625-020-00789-8>.

- Merry, S. E. (2011). Measuring the world: Indicators, human rights, and global governance: With CA comment by John M. Conley. *Current Anthropology*, **52**(S3), S83–S95. <https://doi.org/10.1086/657241>
- Moldavska, A. and Welo, T. (2019) “A holistic approach to corporate sustainability assessment: Incorporating Sustainable Development Goals Into Sustainable Manufacturing Performance Evaluation,” *Journal of Manufacturing Systems*, 50, pp. 53–68. Available at: <https://doi.org/10.1016/j.jmsy.2018.11.004>.
- Morgenthau, H. J. (2006). *Politics Among Nations: The Struggle for Power and Peace* (7th ed.). McGraw-Hill. ISBN-10: 0073137941, ISBN-13: 978-0073137948.
- Morse, S. (2016). Measuring the success of sustainable development indices in terms of reporting by the global press. *Social Indicators Research*, **125**, 359–375.
- Mustajoki, J., Borchardt, S., Büttner, L. *et al.* Ambitiousness of Sustainable Development Goal (SDG) targets: classification and implications for policy making. *Discov Sustain* **3**, 36 (2022). <https://doi.org/10.1007/s43621-022-00104-8>
- Nehan, N. and Cox, M. (2022) “The rise and fall of women rights in Afghanistan,” *LSE Public Policy Review*, 2(3). Available at: <https://doi.org/10.31389/lseppr.59>.
- Nobrega, J.H. *et al.* (2021) “Logistics 4.0 in Brazil: Critical analysis and relationships with SDG 9 targets,” *Sustainability*, 13(23), p. 13012. Available at: <https://doi.org/10.3390/su132313012>.
- Nováček, P. (2001) *Third transition: Towards sustainable development and global governance*. Olomouc: Univerzita Palackého.
- Nunes, A.R., Lee, K. and O’Riordan, T. (2016) “The importance of an integrating framework for achieving the Sustainable Development Goals: The example of Health and well-being,” *BMJ Global Health*, 1(3). Available at: <https://doi.org/10.1136/bmjgh-2016-000068>.
- Obaideen, K. *et al.* (2022) “The role of wastewater treatment in Achieving Sustainable Development Goals (sdgs) and sustainability guideline,” *Energy Nexus*, 7, p. 100112. Available at: <https://doi.org/10.1016/j.nexus.2022.100112>.
- OHCHR (2023) *Universal Periodic Review (2023)* Available at: <https://www.ohchr.org/en/hr-bodies/upr/upr-main> (Accessed: April 13, 2023).
- Papadopoulou, C.-A., Papadopoulou, M.P. and Laspidou, C. (2022) “Implementing water-energy-land-food-climate nexus approach to achieve the Sustainable Development Goals in Greece: Indicators and policy recommendations,” *Sustainability*, 14(7), p. 4100. Available at: <https://doi.org/10.3390/su14074100>.
- Pogge T, Sengupta M. Assessing the sustainable development goals from a human rights perspective. *Journal of International and Comparative Social Policy*. 2016;32(2):83-97. doi:10.1080/21699763.2016.1198268

- Purvis, B., Mao, Y. and Robinson, D. (2018) “Three pillars of sustainability: In Search of Conceptual Origins,” *Sustainability Science*, 14(3), pp. 681–695. Available at: <https://doi.org/10.1007/s11625-018-0627-5>.
- Redclift M. (2005) “Sustainable development (1987-2005): an oxymoron comes of age.” *Sustain Dev.* 13:212–227.
- Reinert, K.A. (2020) “From sustainable development goals to basic development goals,” *Ethics & International Affairs*, 34(2), pp. 125–137. Available at: <https://doi.org/10.1017/s0892679420000180>.
- Renaud, F. *et al.* (2020) “Synergies and trade-offs between sustainable development goals and targets: Innovative Approaches and new perspectives,” *Sustainability Science*, 15(4), pp. 1011–1011. Available at: <https://doi.org/10.1007/s11625-020-00815-9>.
- Rimba, A.B. and Hirabayashi, Y. (2023) “Interlinkages of water-related SDG indicators globally and in low-income countries,” *Water*, 15(4), p. 613. Available at: <https://doi.org/10.3390/w15040613>.
- Robra, B., Heikkurinen, P. (2021). Degrowth and the Sustainable Development Goals. In: Leal Filho, W., Azul, A.M., Brandli, L., Lange Salvia, A., Wall, T. (eds) Decent Work and Economic Growth. Encyclopedia of the UN Sustainable Development Goals. Springer, Cham. [https://doi.org/10.1007/978-3-319-95867-5\\_37](https://doi.org/10.1007/978-3-319-95867-5_37)
- Rocklöv, J., Dubrow, R. (2020) “Climate change: An enduring challenge for vector-borne disease prevention and control.” *Nat Immunol* **21**, 479–483  
<https://doi.org/10.1038/s41590-020-0648-y>
- Rocque, R.J. *et al.* (2021) “Health effects of climate change: An overview of Systematic Reviews,” *BMJ Open*, 11(6). Available at: <https://doi.org/10.1136/bmjopen-2020-046333>.
- Ronzon, T. and Sanjuán, A.I. (2020) “Friends or foes? A compatibility assessment of Bioeconomy-related Sustainable Development Goals for european policy coherence,” *Journal of Cleaner Production*, 254, p. 119832. Available at: <https://doi.org/10.1016/j.jclepro.2019.119832>.
- Sachs, W. (2017) “The Sustainable Development Goals and *laudato si*: Varieties of post-development?,” *Third World Quarterly*, 38(12), pp. 2573–2587. Available at: <https://doi.org/10.1080/01436597.2017.1350822>.
- Sachs, W. (2017) “The Sustainable Development Goals and *laudato si*: Varieties of post-development?,” *Third World Quarterly*, 38(12), pp. 2573–2587. Available at: <https://doi.org/10.1080/01436597.2017.1350822>.
- Sáez de Cámara, E., Fernández, I. and Castillo-Eguskita, N. (2021) “A holistic approach to integrate and evaluate sustainable development in higher education. The case study of the university of the basque country,” *Sustainability*, 13(1), p. 392. Available at: <https://doi.org/10.3390/su13010392>.

- Saxena, A. *et al.* (2021) “Striving for the United Nations (UN) sustainable development goals (sdgs): What will it take?,” *Discover Sustainability*, 2(1). Available at: <https://doi.org/10.1007/s43621-021-00029-8>.
- Schmidt-Traub, G., et al. (2017). National baselines for the SDGs assessed in the SDG Index and Dashboards. *Nature Geoscience*, 10.
- Sen, G. (2019) “Gender equality and women's empowerment: Feminist Mobilization for thesdgS,” *Global Policy*, 10(S1), pp. 28–38. Available at: <https://doi.org/10.1111/1758-5899.12593>.
- Shah, S. and Sivakumaran, S. (2021) “The use of international human rights law in the universal periodic review,” *Human Rights Law Review*, 21(2), pp. 264–301. Available at: <https://doi.org/10.1093/hrlr/ngaa056>.
- Shaw, M. N. (2019). *International Law* (9th ed.). Cambridge University Press. ISBN-10: 1108733050, ISBN-13: 978-1108733052.
- Shen, C. and Zhao, X. (2022) “How does income inequality affects economic growth at different income levels?,” *Economic Research-Ekonomiska Istraživanja*, 36(1), pp. 864–884. Available at: <https://doi.org/10.1080/1331677x.2022.2080742>.
- Spaiser, V. *et al.* (2016) “The Sustainable Development Oxymoron: Quantifying and modelling the incompatibility of sustainable development goals,” *International Journal of Sustainable Development & World Ecology*, 24(6), pp. 457–470. Available at: <https://doi.org/10.1080/13504509.2016.1235624>.
- Spangenberg, J.H. (2016) “Hot air or comprehensive progress? A critical assessment of the sdgs,” *Sustainable Development*, 25(4), pp. 311–321. Available at: <https://doi.org/10.1002/sd.1657>.
- Stockholm Resilience Centre (2016) *The SDGs wedding cake, The SDGs wedding cake - Stockholm Resilience Centre*. Stockholm Resilience Centre . Available at: <https://www.stockholmresilience.org/research/research-news/2016-06-14-the-sdgs-wedding-cake.html> (Accessed: April 11, 2023).
- Su, H., Krol, M.S. and Hogeboom, R.J. (2022) “The role of context in identifying linkages between SDG 2 (food) and SDG 6 (water),” *Sustainability Science*, 17(4), pp. 1605–1618. Available at: <https://doi.org/10.1007/s11625-022-01158-3>.
- Tichenor, M. *et al.* (2022) “Global public policy in a Quantified World: Sustainable Development Goals as epistemic infrastructures,” *Policy and Society*, 41(4), pp. 431–444. Available at: <https://doi.org/10.1093/polsoc/puac015>.
- Tura, H.A. (2019) “Achieving zero hunger: Implementing a human rights approach to food security in Ethiopia,” *Third World Quarterly*, 40(9), pp. 1613–1633. Available at: <https://doi.org/10.1080/01436597.2019.1617630>.
- UNICEF (2019) “Climate Landscape Analysis for Children in Jordan, UNICEF.

- United Nations (1987) *Report of the World Commission on Environment and Development: Our Common Future*. rep. United Nations . Available at: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> (Accessed: 2022).
- United Nations (2015) *The 17 goals | sustainable development, United Nations*. United Nations. Available at: <https://sdgs.un.org/goals> (Accessed: April 13, 2023).
- UNITED NATIONS (2015)/ *the 5Ps of the sdgs: People, planet, prosperity, peace and partnership* (no date) *United Nations*. United Nations. Available at: <https://unsdg.un.org/latest/videos/5ps-sdgs-people-planet-prosperity-peace-and-partnership> (Accessed: April 8, 2023).
- United Nations (2023) *Sustainable Development, United Nations*. United Nations. Available at: <https://www.un.org/en/academic-impact/sustainability> (Accessed: April 8, 2023).
- Vandemoortele, J. (2018). From simple-minded MDGs to muddle-headed SDGs. *Development Studies Research*, 5(1), 83-89. <https://doi.org/10.1080/21665095.2018.1479647>
- Vasseur, L. *et al.* (2017) “Complex problems and unchallenged solutions: Bringing ecosystem governance to the forefront of the UN Sustainable Development Goals,” *Ambio*, 46(7), pp. 731–742. Available at: <https://doi.org/10.1007/s13280-017-0918-6>.
- Walker, A. (2016) *Globalisation: Where on the elephant are you?*, *BBC News*. BBC. Available at: <https://www.bbc.com/news/business-37542494> (Accessed: April 13, 2023).
- Waltz, K. N. (1979). *Theory of International Politics*. Addison-Wesley. ISBN-10: 0201083493, ISBN-13: 978-0201083491.
- Weber, H. (2017) “Politics of ‘leaving no one behind’: Contesting the 2030 sustainable development goals agenda,” *Globalizations*, 14(3), pp. 399–414. Available at: <https://doi.org/10.1080/14747731.2016.1275404>.
- Weitz, N. *et al.* (2017) “Towards systemic and contextual priority setting for implementing the 2030 agenda,” *Sustainability Science*, 13(2), pp. 531–548. Available at: <https://doi.org/10.1007/s11625-017-0470-0>.
- Wesley, H., Tittle, V. and Seita, A. (2016) “No health without peace: Why SDG 16 is essential for health,” *The Lancet*, 388(10058), pp. 2352–2353. Available at: [https://doi.org/10.1016/s0140-6736\(16\)32133-x](https://doi.org/10.1016/s0140-6736(16)32133-x).
- Yang, S. *et al.* (2020) “Prioritizing Sustainable Development Goals and linking them to ecosystem services: A global expert’s knowledge evaluation,” *Geography and Sustainability*, 1(4), pp. 321–330. Available at: <https://doi.org/10.1016/j.geosus.2020.09.004>.

Zheng, X. *et al.* (2021) “Consideration of culture is vital if we are to achieve the Sustainable Development Goals,” *One Earth*, 4(2), pp. 307–319. Available at: <https://doi.org/10.1016/j.oneear.2021.01.012>.