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The Legal Meaning of Environmental Sustainability – Do the **Ecological SDGs Have Legal Status?**

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The study deals with the legal implications and core meaning of environmental sustainability. Ecological sustainability is one of the three pillars of sustainability (the others are economic and social sustainability). By giving an in-depth analysis of the entire legal background of environmental sustainability, the study reveals the relevant normative basis of this concept in international law. Furthermore, it focuses on the implementation of the 2015-2030 United Nations Sustainable Development Goals (UN SDGs or SDGs) as well. The SDGs are policy-based general commitments rather than binding and enforceable norms. However, their impacts are relevant to the findings of the United Nations member states' policies. Nevertheless, the goals and the indicators and targets attached to the goals are crucial to achieving sustainability. The study examines the legal status as well as the legal relevance of the goals (and targets and indicators) of the eco-friendly SDGs. Then, the environmental sustainability issues will be analysed in an in-depth way. Bearing in mind the generally poor (or poorer than expected) state implementation of the SDGs, the study reveals the monitoring and review process of the SDGs.

1. Introduction

The present paper enumerates the legal meaning and implementation status of the 2015 Sustainable Development Goals (SDGs) adopted by the United Nations (Crowther et al., 2018). The timeframe for the application of the SDGs is 2030. However, it is essential to carry out an analysis of these goals within the midst of the implementation period (8 y after the adoption and 7 y before the deadline). It is also the real novelty of this study since the halftime of the implementation period provides an exceptional chance to reexamine the legal nature of the Goals as well as to take into consideration whether their legal characters had changed in the given 8 y time period or remained on the level of their original legal status. Undoubtedly, several works are published within the subjects of the single SDGs (meaning, implementation), but the holistic legal assessment shall be taken into consideration in order to understand the content of the unique goals and the challenges due to their specific legal status. The study focuses on environmental sustainability, while the economic as well as social sustainability issues are tangentially mentioned. The paper also puts focus on the current ongoing efforts to improve the implementation and review mechanisms of the SDGs by globally accepted soft law works. The state-of-the-art approach of this study is to emphasise those identified negative tendencies after 8 y, which can definitely endanger the overall and comprehensive implementation in the remaining 7 y time frame.

2. Method

The method of this study is a normative analysis of the Sustainable Development Goals by especially highlighting their environmental focus via legal measures. The impact of SDGs on the state of the environment is also examined with regard to the frames of legal regulation. The core legal problems of the SDGs emerge from their legally non-binding status. Therefore, their implementation is very poor on the global level.

The 1987 report of the United Nations World Commission on Environment and Development (WCED) known as the report entitled 'Our Common Future', defined sustainable development as "development that meets the needs of present generations without compromising the ability of future generations to meet their own development needs" (Our Common Future, 1987). However, the Our Common Future report by the World Organisation had no direct legal meaning and no binding nature, though it introduced the term 'sustainable development' worldwide. Since then, the term 'sustainable development' has gained many layers and new levels of interpretation in world summits, policy papers and legal documents (Purvis et al., 2019). According to the report, global crises and problems caused by environmental degradation can be addressed through the concept of sustainable development. The Rio Declaration on Environment and Development, adopted at the Second World Conference on Environment in 1992 (UN, 1992) by the majority of the states, declared the principles and objectives of environmental protection, based on the principle of sustainable development, to be pursued in harmony with economic and social development.

In 2002, at the World Conference on Sustainable Development in Johannesburg, states declared that sustainable development is an important and common challenge for all cultures and civilisations, which must be addressed together. As a result of that commitment, many international organisations and the majority of states have afterwards included sustainable development as a goal and strategy in their legislations (many states at the constitutional level and the community of states into normative documents in multilateral, regional and subregional level too) (Schrijver, 2008). Today, there is hardly any international environmental treaty or national environmental legislation that does not mention sustainable development as a general objective or principle.

In the meantime, the concept of sustainable development (Schrijver, 2008) has certainly become a panacea but a generally accepted concept to achieve in the last few decades in addressing global challenges facing humankind. The core meaning of sustainable development (Redclift and Springett, 2015) has three pillars because sustainable development has already been obtained: i) a social, ii) an economic and iii) an environmental (ecological) layer within the inclusion of global policies.

Thus, sustainability is definitely interpreted and achieved simultaneously in social, economic and environmental ways (Aguilera et al., 2021). The interconnectedness and holistic approach of the three pillars are unquestionable, and hence, they simultaneously framed the entire development mechanism globally in the previous decades and – without a doubt – will frame it in the coming decades, too.

3. The Sustainable Development and SDGs

Thirteen years after the Our Common Future report, for celebrating and assigning the challenges of the new Millennium within the form of a Millennium commitment and manifesto by the United Nations member states for the year 2000, 189 nations adopted the non-binding Millennium Development Goals (MDGs) for a 15 y period as a general policy agenda.

In 2015, after being aware of the shortages, drawbacks and the lack of generally efficient national implementation of the MDGs, the United Nations Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) was completed and adopted by all United Nations member states (193 states) as a replacement of MDGs and further recommitment to the global goals. The UN member states set out the SDGs to be achieved by 2030 as globally applicable soft law in policy-based commitments in the form of a United Nations General Assembly resolution (Transforming Our World, 2015). As the 2030 Agenda (as the Transforming Our World commitment) of UN member states reads, "the 17 Sustainable Development Goals and 169 targets which we are announcing today demonstrate the scale and ambition of this new universal Agenda. They seek to build on the Millennium Development Goals and complete what they did not achieve" (Transforming Our World, 2015). The SDGs, with 17 main goals and a significant number of 169 targets and 232 related indicators, are abstract, holistic phenomena, and they are considered to be a set of general global commitments to be somehow reached in 15 y.

The structure and basis of the SDGs is a somewhat umbrella-like concept since each of the 17 holistic goals has its own targets (all in all 169 targets) in order to achieve the main goals, whereas 232 related indicators are also attached to somehow measure the implementation of the main goals. These goals can be labelled as soft law mechanisms, meaning the lack of exact meaning of the goals, as well as enforceable legal obligations and sanctions, are clearly missing from the text of the goals. Consequently, the SDGs are neither legal norms nor detailed content-oriented legal documents, but they seem to dominate the sustainability discourse and commitments of the global actors (including regional organisations, states, and private entities) since then. With these difficulties emerging, it is also clear that there are discrepancies on "three competing considerations" with regard to i) the relevant differentiation of the concept and legal meaning, ii) the actual practice by the states and iii) "inherent ethical dimension", as it was convincingly demonstrated by Viñuales (Viñuales, 2021). Therefore, it is crucial to assess their vague legal status in the global implementation.

Though the SDGs are not legally binding, their importance shall be measured and evaluated during the process. Since 2015, the national reports of the states have not been so convincing on the successful

inclusion of the commitments (and the world pandemic, along with numerous global crises, endangered their implementation). Without a doubt, each scientific field can find its interlinkages to the SDGs, such as green chemistry, while the SDGs adopted the idea of circular economy, which can be achieved by applying green chemistry principles (Guo et al., 2021). The growing need for urban planning also reflects SDGs, namely Goal 11 (Sustainable Cities and Communities), which includes all the relevant urban planning innovations fostering social, economic and environmental sustainability, such as reflecting on environment-friendly transportation by greenhouse gas emission reduction (Kim at al., 2022) or public transportation (Choi et al., 2022), and reaching the goals by applying waste management strategies (Adiansyah, 2022), by accepting climate change mitigation methods (Migo-Sumagang et al, 2022) or urban network analysis (Jeong et al., 2022) and by calculating and mitigating water footprint (Cruz and Tan, 2022). In 2023, it is hard to predict or currently determine the forward progress of the implementation of environmental sustainability since the seriousness of global challenges does not seem to be mitigated.

Therefore, the UN bodies indicated several safeguard measures for the control mechanisms for monitoring the implementation. First, the states adopted the Plan of Implementation of the World Summit on Sustainable Development in 2002 at the Johannesburg Summit, years before the adoption of the SDGs. The Plan of Implementation urged the states to enhance the inclusion of the three pillars of sustainability into common policies and integrated approaches (Aquilera et al., 2021), and it remained very vague and abstract by the meaning of methods of implementation. However, it gave special focus to the most vulnerable (economically, ecologically, and socially) regions, such as the small island developing states and Africa. It has specific, rather economical references to other regions, too (for instance, Asia, Latin America and the Caribbean, Europe). Second, the state delegations later adopted the Addis Ababa Action Agenda of the Third International Conference on Financing for Development in 2015, just in the year of the introduction of the SDGs. In the same year, the United Nations General Assembly, as the most representative global body, also endorsed the Action Agenda under its resolution 69/313 of 27 July 2015. The Action Agenda clearly embraced the main action areas on the implementation of the SDGs, namely the case of domestic public resources and domestic as well as international private business and finance, the international development cooperation and international trade, debt sustainability, and finally, the role of science, technology, innovation and capacitybuilding. However, these are just prioritised areas without clear content and without binding enforcement mechanisms. The implementation requirements are also out of the potential legal assessment of the SDGs.

The monitoring of the implementation process of the SDGs is based upon numerous steps and measures, such as the national reports, the country-led evaluations, and the review process. The voluntary nature of the country-led evaluations predominantly determines the entire monitoring process. The states' role within the procedure remains intact and determined. Although several United Nations General Assembly resolutions and proposals had been adopted for supporting the country-led evaluations (it is necessary for standardising to make the implementation of the SDGs globally comparable) based on the need for a review process of the national reports based on data "accessible, timely, reliable and of high quality" (Evaluation of the SDGs).

Bearing in mind that many countries have significant shortages in the implementation, the United Nations General Assembly adopted Resolution 77/283 on Strengthening Voluntary National Reviews through Country-Led Evaluation. The aim of the resolution was to encourage the UN member states "to conduct regular and inclusive reviews of progress at the national, subnational, regional and global levels, which are country-led and country-driven". Besides, they shall present regular voluntary national reviews with a country-led evaluation component with all relevant stakeholders. They shall recognise that the voluntary national review can help countries to track progress in implementing them, to use the consequent evidence from reviews to decision-making and to request United Nations agencies to provide support at the request of Member States on their efforts to undertake evaluations of the implementation of the SDGs (Resolution 77/283).

The most recent decision of the United Nations General Assembly was the adoption of the non-binding draft on "Impact of rapid technological change on the achievement of the Sustainable Development Goals and targets" (Draft Resolution 77/320) on 25 July 2023. The resolution (being a draft in late July 2023) only generally calls for technological changes to achieve the SDG targets without a narrower timeframe and clarified expectations.

4. Environmental Sustainability

The general commitment of states regarding environmental sustainability is based on the cornerstone principle of the (also non-binding) 1992 Rio Declaration on Environment and Development, which reads as follows: "States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place

on the global environment and of the technologies and financial resources they command" (Rio Declaration, Principle 7). Since the originally soft law Rio Declaration gained a somewhat customary nature in international law (by underlining the states' most important activities to achieve environmental protection and economic development, too), the relevance of this principle is relatively significant. As the principle has a general customary nature, it reflects the basic standard and activity requirements of the states towards each other in the international sphere by taking into account environmental and economic interests among the members of the international community.

As it was already mentioned, the term 'sustainability' has three levels of inclusive content, namely the ecological, economic, and social layers of sustainability (Schrijver, 2008). The study hereby puts focus on the first layer. Sustainability is, in fact, a broad, essentially non-legal concept that means more than the core and basic idea of preserving environmental values for future generations, as it was originally adopted in 1987. In its broadest sense, it is reinforced as a factor influencing all systems of society in all areas of decision-making, legislation and law enforcement, and thus has economic, social and environmental pillars. As Birnie et al. stated, "sustainable development' is intended to serve not simply the needs of the environment, but entails a reorientation of the world's economic system" (Birnie et al. 2009). In a narrower sense, however, only the environmental dimension is considered to be a primary factor, and it implies a strong consideration of environmental protection with regard to economic decisions.

The principle of sustainable development is a vague universal concept that is difficult to define in legal terms, and it has a multifaceted nature and layers of interpretation in the environmental sectors (e.g. biodiversity, climate issues, water). The concept of environmental sustainability is typically a phenomenon that is not (exclusively) implemented within the states' framework and international law (Boyle and Freestone, 1999), and it explicitly requires international cooperation to be meaningfully implemented based on the different vulnerability status of the states and regions and the difference of ecological challenges they have to face.

The elements of environmental sustainability may contain i) integration of environmental protection and economic development, ii) the right to development, iii) the sustainable utilisation and conservation of natural resources, iv) the inter-generational equity (relations between present and future generations), v) the intragenerational equity (relations between e.g. developed and developing world, or elderly and youth), and vi) the procedural elements of sustainable development (Birnie et al., 2009). Gupta and Vegelin (2016) convincingly identified five essential principles to achieve environmental sustainability: (i) the adoption of multiple sets of internally consistent ecocentric limits, (ii) the development of equitably shared rights, responsibilities and risks, (iii) the ensuring adequate legal protection and building the adaptive capacity of the most vulnerable to cope with climate change; (iv) the greening existing international instruments on trade, investment and development assistance; and (v) the aim to engage relevant stakeholders in defining and implementing the abovementioned instruments (Gupta and Vegelin, 2016). This study undoubtedly accepts such categorisation.

However, all SDGs (and their target indicators) are related to environmental sustainability. The present study emphasises four significant goals which are closely connected to the main ecological challenges of the ecosystem. Clean water and sanitation (Goal 6), Climate Action (Goal 13), Life below water (Goal 14), and Life on Land (Goal 15) refer to the existing climate, biodiversity loss (biological mass extinction) and hydrological threats humankind is facing now. While the ecological challenges are visible and unambiguous, as for the SDGs, the relevant international environmental commitments are also based upon soft law mechanisms, and they give a wide margin of appreciation for the states to fulfil the vague requirements. The basic commitments and goals related to environmental sustainability are full of verbs dominantly indicating the soft law status of the vague obligations. These verbs are the following, upon which the states shall act: implement, support, encourage, facilitate, commit, build, increase, enhance, promote, assist, improve, strengthen. All these verbs point to the wide discretion of states to choose their own method to achieve these general goals. Even the relevant international actors, such as the United Nations General Assembly and the United Nations Economic and Social Council, are only allowed to strengthen the institutional framework both on international and domestic levels as well.

The United Nations periodically publishes the Global Sustainable Development Report (GSDR) in an openaccess format. The GSDR is to inform the main decision-making bodies within the United Nations. Therefore, it assesses the information hub (based on policies and expert opinions, studies as well) on the SDGs of the United Nations member states and other relevant stakeholders as well as policymakers. The validated information they publish accordingly will facilitate the ambitions and objectives of the United Nations on the SDGs and other global challenges.

In July 2023, the upcoming Global Sustainable Development Report for 2023 is still publicly announced, however, in an advanced but unedited version. The upcoming GSDR will focus on the global environmental commons, which are labelled to be the most severe challenges of humankind with regard to environmental sustainability. Upon these global environmental commons, the GSDR aims to expand the protected areas worldwide, abandon the intensive agricultural practices in protected areas, facilitate an ambitious reforestation

of all degraded forest areas, reduce water consumption and ensure environmental flow requirements (Global Sustainable Development Report, upcoming, 2023).

The GSDR is also a relevant source for the United Nations High-Level Political Forum on Sustainable Development (HLPF). The latter platform has been established by The Future We Want document adopted in the 2012 Rio de Janeiro World Summit. The HLPF "shall follow up on the implementation of sustainable development and should avoid overlapping with existing structures, bodies and entities in a cost-effective manner" (The Future We Want, 2012) while providing a forum for the promotion of sustainable development policies, including environmental policies. But the HLPF – in theory – could "follow up and review progress in the implementation of sustainable development commitments contained in Agenda 21, the Johannesburg Plan of Implementation, the Barbados Programme of Action, the Mauritius Strategy and the outcome of the present Conference and, as appropriate, relevant outcomes of other United Nations summits and conferences" (The Future We Want, 2012), but in practice – similarly to the other bodies dealing with the implementation of SDGs – does not have the real competence to enforce binding laws, it provides only a political platform for further discussions, so it cannot efficiently monitor and facilitate the application of the SDGs.

Several authors concluded that the impact on ecological integrity at the planetary scale upon the environmental SDGs remained very poor by the level of implementation. In the words of Biermann and the coauthors of the relevant evaluation paper, "studies on international governance indicate a limited role of the SDGs in facilitating the clustering of international agreements by serving as a set of collective 'headlines'. At the regional level, the SDGs have fed into policies and programmes of regional governance bodies and steered the creation of new institutions, although even here, the political impact of the SDGs towards better environmental protection remains limited" (Biermann et al., 2022).

5. Conclusion

Since their adoption, the non-binding, at the utmost political commitments-based SDGs reached the status of being the crucial 'umbrella policy' for achieving the social, ecological and economic aspects of sustainability. These simultaneously existing layers and their core meaning differ from region to region and from state to state. The margin of appreciation of the states on their implementation remains high and essentially important when analysing the field of environmental sustainability.

The mission of this study, namely the halfway evaluation, is truly important since enough time has passed by to evaluate the previous implementation in order to raise attention to the problems humankind can see currently, but in the meantime, sufficient time left to achieve significant progress on SDGs on a worldwide level. Therefore, it was necessary to assess the legal, non-binding status of the SDGs and their implementations (follow-up and review mechanism). Until now, the SDGs did not necessarily strengthen the efficient state policies on environmental sustainability, so there are serious doubts about the achievement of the goals and targets until 2030. The problems are numerous: in the previous three years, humankind witnessed several world crises (world pandemic, ongoing wars, energy and food crises) upon which the states referred to a leeway in postponing or slowing down their implementation as planned. The SDGs, as non-binding soft law instruments, cannot be directly enforced via litigation (except for climate litigation under national laws, but those procedures are still pending in many states). Only the political discourse and the severe voluntary commitments can resolve the problem induced by the lack of implementation obligations upon law.

After all, some promising trends took place in the previous years and months, which offer hope at least. The last Global Sustainable Development Report has not been published, but it will definitely address the problems explicitly, and the country-led evaluation support document has just been adopted by the United Nations General Assembly in the summer of 2023. Its importance shall increase the willingness of the states for implementation. The majority of states recognised the right to a clean, healthy and sustainable environment as a human right, then the states adopted a long-awaited new ocean treaty (not in effect in July 2023), and there are numerous ongoing multilateral negotiations on environmental sustainability. The hypothesis of that paper is regarded as proven. Thus, the legal definition and character of SDGs would not qualify the SDGs themselves for labelling their legal commitments and enforceable measures. So, the international community can press the restart button in 2023 (at the latest, halfway) for the sake of achieving the SDGs in 2030.

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