

OPERATIONALIZATION OF SUSTAINABLE DEVELOPMENT IN THE INTERNATIONAL LEGAL INSTRUMENTS

LL.M in Natural Resources Law and International Environmental Law

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Abstract

The international legal framework on sustainable development is undergoing a paradigmatic transformation as a new binding agreement will be launched in September 2015. It is built upon the previous unachieved sustainable development goals, as progress has not been very satisfactory and the world is facing further challenges.

A review of the legislation and the different official reports that measure the outcomes puts forward that sustainable development is a concept in chaos, which compromises its importance and effectiveness. The concept has been mistreated by unclear references to sustainability that have concentrated in a discourse that misunderstands 'development' and conflates it with 'economic growth'. This has led to a renewed interest in sustainable development and features thereof.

Consequently, the purpose of this thesis is the analysis of the restrictions that the current legislation has represented for the accomplishment of the international legal objectives on sustainable development. Once analysed this, certain strategies will be considered with the aim to offer and academic perspective of some elements that could be enhanced for the implementation of the post-2015 development agenda.

Prologue

I find the disconnection between individuals and the environment quite worrying. I think it is odd that the environment is usually conceived as an abstraction, which downplays the fact that we can affect it with our daily choices. The general perception is that protecting the environment is an act of good will or kindness, but the truth is that it is closely connected to the life of each human being itself.

My latent interest for the environment has led me to be constantly enrolled in academic or social activities related to its protection. For that reason, this Master Programme in particular captured my attention. More than one year ago before arriving to Iceland, I could not have imagined that my perception about the planet would change in such a way that now I am even more conscious about the role of nature in my daily life.

By having the opportunity to acquire further skills through my studies, I could get a better picture of the challenges that humanity currently faces. I learned that the more influenced people's perception about development is, the more abstracted they are from the environment in practical terms. This contributes daily to the biggest problems that humanity is facing now, such as overpopulation, high rates of contamination, health problems, climate change, and with that, putting at risk the food security, health, biodiversity, and energy and water resources. All this in conjunction is what finally causes a claim for sustainable development.

Based on this deeper image I apprehended, I can say that this experience has enriched not only my academic background but also my life as an inhabitant of our planet. Since I found myself wondering about how effective legal developments have been for the achievement of the sustainable development goals, I decided to write my thesis on this topic.

I was very lucky to have Aðalheiður Jóhannsdóttir as my supervisor. She provided excellent guidance and helped me make my way back when I was getting lost within my own thoughts. She was always there to give me valuable advice and I am really grateful for her consistent predisposition. Likewise, I want to thank Davíð Örn Sveinbjörnsson for the final review. I would also like to show gratitude to my family for their patience and for understanding my *crazy* idea of moving abroad. Finally, I would like to express gratitude to the institutions that provided me not only financial resources for my studies but also moral support.

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Abbreviations

BATs Best Available Technologies

BETs Best Environmental Practices

BSTC Bilateral Scientific and Technical Committee

CBD Convention on Biodiversity

CCAMLR Conservation of the Antarctic Marine Living

Resources

EC European Community

ECtHR European Court of Human Rights
EIA Environmental Impact Assessment

GATT General Agreement on Tariffs and Trade

GDP Gross Domestic Product

GEO-5 Fifth Global Environmental Outlook

GHGs Green House Gases

ICJ International Court of Justice
ILA International Law Association

IPCC Intergobernmental Panel on Climate Change
ITLOS International Tribunal for the Law of the Sea

LOSC the Law of the Sea Convention

MEAs Multilateral Environmental Agreements

MDG Millennium Development Goals

NAPs National Action Programmes

NGOs Non-Governmental Organization

OECD Organisation for Economic Co-operation and

Development

OSPAR Convention for the Protection of the Marine

Environment of the North-East Atlantic

RSPB Royal Society for the Protection of Birds

SDGs Sustainable Development Goals

TEU Treaty on European Union

TFEU Treaty on the Functioning of the European Union

UN United Nations

UNCED United Nations Conference on Environment and

Development

UNCLOS United Nations Convention on the Law of the Sea

UNCSD United Nations Commission on Sustainable

Development

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environmental Programme

UNESCO United Nations Educational, Scientific and Cultural

Organization

UNFCCC Framework Convention on Climate Change

UNGA United Nations General Assembly

Environment of the North-East Atlantic

UNWCED United Nations World Commission on

Environment and Development

WSSD World Summit on Sustainable Development

WTO World Trade Organization

WWF Worldwide Fund for Nature

1. Introduction

During the last decades, the world has been facing great global challenges. There is increasing inequality within and between states, which entails vast disparity of opportunities, wealth and power. There are also some problems related to unemployment, spiralling conflict, violent extremism, humanitarian crises, natural resource depletion, adverse impacts of environmental degradation and climate change. All these are some of the obstacles that are putting at risk the survival of societies and the planet itself.¹

One of the most important tools to face all these problems in the international scene has been sustainable development. This concepts has been thoroughly included in multiple international legal instruments such as Our Common Future: Report of the World Commission on Environment and Development (Brundtland Report),² the Rio Declaration on Environment and Development (Rio Declaration),³ the Johannesburg Declaration on Sustainable Development: From Our Origins to the Future (Johannesburg Declaration),⁴ and The Future We Want (Rio+20 Declaration).⁵

Although the concept has been extensively accepted as an important objective by many institutions, governments and different actors of the international community, it suffers from conceptual ambiguity.⁶ Through the study of the how sustainable development has been addressed in the different legal instruments and academic approaches, it is possible to envisage its early conception, different phases and the great attention it has received by the international community. Even when all those characterizations offer a view of the world as an intertwined system, only mere references to the concept can be found instead of an agreed definition.

This absence of accuracy implies certain difficulties in terms of implementation as the concept's ground features cannot be fully applied or integrated in law and legal

¹ See: Open Working Group, Transforming our world: the 2030 agenda for global action. Final draft of the outcome document for the UN Summit to adopt the Post-2015 Development Agenda, will be opened for signature on 25-27 September 2015, expected to enter into force on 1st January 2016, 193 parties expected. Not registered yet. Paragraph 11.

² United Nations World Commission on Environment and Development (UNWCED), Our Common Future (Brundtland Report), Oxford: Oxford University Press, 1987.

³ United Nations Conference on Environment and Development, Rio de Janeiro (Rio Conference), (A/CONF.151/26, June 1992), Vol. I, Annex I.

 $^{^4}$ World Summit on Sustainable Development (Johannesburg Summit), (A/CONF.199/20, September 2002), Chapter 1, Resolution 1.

⁵ Final document of the Rio+20 Conference (Rio+20), (A/CONF.216.L.1, June 2012).

⁶ See for example: Intergobernmental Panel on Climate Change (IPCC), Fourth Assessment Report: climate change 2007, chapter 12.1.2.

practice.⁷ Nonetheless, some international actors and scholars are of the view that it is still possible to implement the concept within that scenario.⁸ This situation is only an example of the vast controversy that permeates the international forums of discussion.

Despite of that condition, it has been agreed that sustainable development is an area of interception between social, economic and environmental aspects, and what is really in discussion is the weight of each pillar. Departing from that point, and considering the fact that the objective of this thesis is the analysis of the concept's effective operationalization in the international legal system, its role at the global level will be studied.

Sustainable development has constantly and clearly involved a social and environmental mandate, but these dimensions have usually mingled *development* with *economic growth*. The prevalent failure of this perspective has led to an improved interest in the concept of sustainable development and its derivative features. A review of the different international legal instruments suggest, therefore, that it is a concept in chaos, which severely affects its importance, utility and effective implementation.¹⁰

As a consequence of the failures in implementation, the challenges for sustainable development have progressively increased, giving place to the need of a paradigmatic change. The international community is aware of this and some negotiations are being currently developed with the aim to address this defiance through an internationally binding agreement.

Pointing to this direction, a set of 17 sustainable development goals with 169 associated targets have been stated in the final draft of the outcome document to adopt the Post-2015 Development Agenda *transforming our world: the 2030 agenda for global action*.¹¹ They are intended to be adopted during the World Summit of September 2015 (Post-2015 Summit).¹² Although it has not taken place yet, an early

⁷ See further: Aðalheiður Jóhannsdóttir, 'Considerations on the development of Environmental Law in the light of the concept of sustainable development' (2005) 2 Ympäristöjuridikka 27, 27.

⁸ See for example: Maire-Claire Cordonier Segger 'Significant developments in sustainable development law and governance: A proposal' (2004) 28 Natural Resources Forum 61, 62–63.

⁹ See further: Klaus Bosselmann, *The Principle of Sustainability: Transforming law and governance* (Aldershot 2008); Gerd Winter. 'The concept of Sustainable Development 20 Years after the Brundtland Report' in Hans Christian Bugge and Christina Voigt (eds), *Sustainable Development in International and National Law: What did the Brundtland Report do to Legal Thinking and Legal Development, and Where can we go From Here?* (Europa Law Publishing 2008).

¹¹ Post-2015 Development Agenda (n 1).

¹² The UN Summit to adopt the post-2015 development agenda was mandated by the UN General Assembly on 25 September 2013 (Resolution 68/6). It will take place on 25-27 September 2015, and will

examination suggests that even when some means of implementation are included with these goals, the envisioned outcomes might not be as successful as expected because a structure similar to its precedent instruments is maintained. This gives place to the assertation that some changes are still going to be needed.

Therefore, this thesis goes through the concept, its principles, the core international legal instruments, case law and international reports on sustainable development to analyse its central drawbacks for implementation. With that purpose, sustainable development is examined as involving three stages: legal, judicial and material. It is suggested that the complexity inherent in balancing the three crucial dimensions of sustainable development – environment, economy and society – demands theoretical approaches for a further success in regards to its implementation.

Throughout this thesis a legal dogmatic method will be applied. This examination brings forth five research questions, all pointing to a conclusion on how effective the legal operationalization of sustainable development at the international level has been. The main research question concerns the need of international restructuring to achieve an equilibrium between the three crucial spheres of sustainable development. This question gives place to the other four: 1) the scope and role of the concept of sustainable development at the international level; 2) the relevant principles for sustainable development; 3) the effectiveness of the principles and instruments; 4) the obstacles that impede the effective operationalization of sustainable development at the international level.

Different steps will be followed to answer these research questions. A theoretical analysis of each pillar of sustainable development from philosophical, economical and sociological schools of thought will be presented in the second chapter, with the aim to study the role of sustainable development at the international level. This will constitute the basis for the later study of the concept as established in the main international legal documents proposed until now, including the final draft of the Post-2015 Development Agenda.¹³

It is important to keep in mind that within this work, *effectiveness* will be understood as the extent to which something is capable of generating the wanted

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be convened as a high-level plenary meeting of the General Assembly per Resolution 69/244 of December 2014.

¹³ Post-2015 Development Agenda (n 1).

outcome.¹⁴ Consequently, those sought results will be taken mainly in the formal sense, meaning that the effectiveness will be measured by the incorporation of the idea of sustainable development in the international legal instruments and case law where references and explanations can be found. Nonetheless, this formal analysis of effectiveness will be complemented with a short overview of the judicial and material spheres in chapter 4.

Chapter 3 goes through the principles for sustainable development. It takes as a point of departure its role as guidelines to interpret, shape and implement both domestic and international law, when integrating environmental, economic and social concerns. Here the Principles of International Law for Sustainable Development (ILA principles) that the Committee on Legal Aspects of Sustainable Development of the International Law Association (ILA)¹⁵ has elaborated are referenced. Despite of the lack of agreement on the principles that should be taken for the incorporation of environmental, economic and social elements into law, these are the principles found in most approaches.

Chapter 4 departs from the only clear feature of sustainable development: the recognition of a relationship between economy, society and environment. Since the subject of study of this chapter is the effectiveness of the principles tackled in the second, they are examined from the formal, procedural and material perspectives. Therefore, some international legal instruments of relevance for sustainable development discourse, certain cases of the International Court of Justice (ICJ)¹⁶ and the International Tribunal for the Law of the Sea (ITLOS)¹⁷ and finally some international reports that evaluate the results on sustainable development will be discussed to analyse the subject.

Building on that examination, chapter 5 goes through the main obstacles for the achievement of internationally agreed goals. These are considered as a chain of incongruities or gaps that obstruct the accomplishment of the objectives in each sphere tackled in the preceding chapter. Additionally, the most recent outlook on sustainable

¹⁵ New Delhi Declaration of Principles of International Law Relating to Sustainable Development, 70th Conference of the International Law Association (ILA), (Resolution 2002/3, 6 April 2002), Chairman: Kamal Hossain, Rapporteur: Nico Schrijver.

¹⁴ The Oxford English Dictionary (2008) 11th ed.

¹⁶ Principal judicial organ of the United Nations, established in June 1945 by the Charter of the United Nations and began work in April 1946.

¹⁷ Independent judiciary body established by the United Nations Convention on the Law of the Sea (UNCLOS) on 10th December 1982, to adjudicate disputes arising out of the interpretation and application of the Convention.

development is shortly overviewed, so as to offer an idea of the up-to-date state of affairs of the subject.

In sum, the purpose of this thesis is to comprehend the restrictions that the existing approaches represent for the accomplishment of the international legal objectives on sustainable development. Once this is thoroughly analysed, some strategies will be considered in chapter 6 with the aim to offer an academic perspective of elements that could be enhanced for the implementation of the post-2015 development agenda.

2. Sustainable development: what does it really mean and how is it achieved?

One of the most important concepts of environmental law is sustainable development, but what does it mean? An abundance of material can be found when looking for a definition, but a lack of precision in connection to the legal developments can be soon noticed. In the opinion of some scholars that have studied the notion, this absence of accuracy implies certain difficulties in terms of implementation as the concept's ground features cannot be fully applied or integrated in law and legal practice. ¹⁸ Nonetheless, other theorist are of the view that it is still possible to implement the concept within that scenario. ¹⁹ This situation is only an example of the vast controversy that permeates all the spheres in which the idea of sustainable development is discussed.

Despite that incongruence, an agreement that sustainable development implies the interception between social, economic and environmental elements to achieve development can be found, and what is really in discussion is the weight and role of each pillar.²⁰ Departing from that point and since the main focus of this study is the analysis of the concept's effective operationalization in the international legal system, the role of sustainable development at the international level will be covered.

Due to the absence of a clear definition and with the purpose to fully understand what the concept entails, each pillar will be analysed from schools of thought in philosophy, economics and sociology respectively. This will constitute the basis for the later study of the concept as established in the main international legal documents and later to examine its effectiveness in chapter 4.

At this point, it is important to clarify that *effectiveness* will be understood as the extent to which something is capable of generating the wanted outcome.²¹ Within this study, those sought results will be taken from the formal perspective, meaning that the effectiveness will be measured by the incorporation of the idea of sustainable development in the international legal instruments and case law if references and explanations are available. However, this formal analysis of effectiveness will be complemented with a short overview of the material spheres in chapter 4.

¹⁸ See further: *Jóhannsdóttir* (n 7) 27.

¹⁹ See for example: Cordonier Segger (n 8) 62–63.

²⁰ This will be exemplified later in this same chapter. See further legal literature on the topic: *Bosselmann, Winter* (n 9).

²¹ The Oxford English Dictionary (n 14).

2.1. Theoretical analysis of the concept of sustainable development

When researching sustainability, one must bear in mind that its essence presupposes some interconnectedness of the natural and socio-economic systems.²² In that sense, even when this study is presented from the legal perspective, the idea of interdisciplinariness implied by sustainable development leads one to take analytical tools from other disciplines.

Then, the need of addressing sustainable development from environmental, economic and social sciences is put forward by the three pillar model of sustainable development.²³ For that reason, before going through the definition contained in the main legal instruments, the main components of the notion will be examined individually from different philosophical, economic and environmental theories as follows. This will be done with the aim to show at the same time the influence that the academic field has on the creation of law on sustainable development.

2.1.1. Social sustainability from the environmental ethics approach

The idea of social sustainability can be found in theory as a threefold concept that includes: (a) *development sustainability*, which concentrates on issues such as basic needs, social capital and justice; (b) *bridge sustainability*, which is related to the fluctuations of the bio-physical environmental objectives and; (c) *maintenance sustainability*, which refers to the conservation of sociocultural features and how people face those changes.²⁴ Those dimensions are envisioned to discover how the inconsistencies and balances among them affect the promotion of sustainable development.²⁵

Nonetheless, since the current analysis takes in the legal point of view, the reasoning about law and sustainable development will be limited to environmental ethics and justice, putting special emphasis in the *development sustainability* dimension. Therefore, in line with the environmental ethics discourse, the moral basis of environmental responsibility will be examined beyond the traditional boundaries of ethics that only take into account humans, to include the non-human world too.

²² See further: Ethan D. Schoolman and others, 'How interdisciplinary is sustainability research? Analysing the structure of an emerging scientific field' (2010) 7-1 Sustainable Science 67, 67.

²³ ibid 68.

²⁴ See further: Suzanne Vallance and others, 'What is social sustainability? A clarification of concepts' (2011) 42 Geoforum 342, 342.
²⁵ ibid.

In that sense, sustainability will be perceived as the capability of a social system to function at a determined level of social wellbeing. It is aimed to optimize the quality of life for current and future generations, having due respect for the environmental boundaries.

Here the concept of *needs* found in the definitions of sustainable development in the international legal instruments and emphasized by different scholars plays an important role.²⁶ Of equal significance is the notion of *limits*, established by the developments of technology and social structures of each period of time, in relation to the capacity of the environment to fulfil the present and future demands.²⁷

In that point, the discussions about the role of the non-human world to satisfy the human needs and the limits set to protect it are given ground. This opens the debate for the classification of strong sustainability, which is related to the acceptance of certain environmental limits, versus weak sustainability which is constructed around the idea that the environment must be granted the same standing as the economic and social spheres have.²⁸

As will be further analysed in the second part of this chapter, it can be said that (from the legal perspective) weak sustainability is in correspondence with the definition of sustainable development set out in the Rio Declaration, while strong sustainability is in line with the definition consigned in the Brundtland Report. This is connected to the discussion about the weight that each pillar must be granted.

In that respect, it can be found that some theorist support the idea of balance between the three pillars of sustainable development and claim that it is possible to implement the concept within that scenario.²⁹ But other scholars are of the opinion that the idea of balance between the three fundamental pillars of sustainable development allows the mocking of compromises by leading to the underestimation of the true weight of nature.³⁰

However, while the substantial elements of the Rio Declaration's definition represents a regression due to its vagueness and lack of legal bindingness, the elements

²⁶ As it will be further analysed in the second part of this chapter, when addressing the definition of the Brundtland Report. See also: *Cordonier Segger* (n 8); Philippe Sands and others, *Principles of international environmental law* (3rd ed., Cambridge University Press 2012).

²⁷ Sands (n 26) 9.

²⁸ See further: *Bosselmann* (n 9) 88–89.

²⁹ See further: Cordonier Segger (n 8) 62–63.

³⁰ See further: Winter (n 9) 30.

of the Brundtland Report's definition can be more useful to balance the relationship between mankind and nature. ³¹

The previous asseveration would be more consequential with the environmental ethics perspective. It has its roots in the idea that it is necessary to redefine and narrow the scope of sustainable development in order to converge it on the exchange between humans and nature.³² Despite the significant level of general acceptance, the concept has also remained foggy for most people in industrialized nations. And those who seem to accept the idea eventually change their minds when they realize that it requires a modification in their current way of living. From that standpoint, this element is what represents a noteworthy gap between general approval and real application.³³

2.1.2. Economic sustainability from the ecological economics approach

In general terms, economic sustainability can be understood as the ability of an economy to indefinitely support a level of financial production.³⁴ Here, the necessary relationship of interdependence and coevolution of human economies and natural ecosystems over time and space is inferred, making possible to analyse it from the ecological economics perspective.

Therefore, the main objective of ecological economics from the normative perspective can be described as the envisioning of a legitimate framework that allows people to develop and human life to continue for an indefinite period without extinguishing ecological systems.³⁵ This represents a challenge to a considerable amount of perceptions on neoclassical economic theory that only focuses on the circular flow of value exchange without considering the biophysical world.³⁶

The on-going debate about weak and strong sustainability is also found in the ecological economics approach.³⁷ From this viewpoint, weak sustainability perceives the human use of the environment exclusively as an economic problem and identifies an economy as sustainable if the value of economic output does not present a recession

³¹ This has been asserted by some scholars. See for example: ibid 25.

³² See further: ibid.

³³ See further: *Bosselmann* (n 4) 82.

³⁴ John M. Gowdy and Marsha Walton, 'Sustainability concepts in Ecological Economics' in John M. Gowdy (ed), *Economics interactions with other disciplines* Vol. II (UNESCO 2009) 111.

³⁵ Christopher S. Sneddon, 'Sustainability in ecological economics, ecology and livelihoods: a review' (2000) 24, 4 Progress in Human Geography 521, 526.

³⁶ ibid.

³⁷ *Gowdy* and *Walton* (n 34) 113.

over time. This introduces the idea that natural capital can be substituted by humanmade capital.³⁸

In contrast, the strong theory conceives sustainability both as an economic problem and maintenance of vital environmental features.³⁹ This approach supports the idea of preserving critical levels of natural resources, no matter if they are substitutable or not, as there is uncertainty about their future availability. In that sense, it recognizes that the substitution of natural capital by human made capital might bring unpredicted consequences that could disturb the stability of an entire ecosystem.⁴⁰

Then, the main subjects under discussion between weak and strong sustainability from ecological economics are the substitutability between manufactured and natural capital, the relationship between economic and human well-being, and finally, the question about the indefinite sustenance of economic growth. 41 In synthesis, it can be said that the first presupposes the maintenance of economic value based on market prices; while the second acknowledges the link between ecological and economic notions to widen the economic sphere beyond the short-term market exchange field.⁴²

The effect of this in the legal sphere is that, in the last instance, the perception that prevails when enacting economic laws related to sustainable development are reflected in the weight granted to each of the three pillars. Therefore, the direction taken depends on whether the strong or weak sustainability considerations are given more importance when framing those laws, as the objectives will be determined by the school of thought that influences the aim of the legislation. This will also have consequences on the effectiveness of sustainable development.

Hence, if ecological economics approach could guide the law making process from the economic field, it would play an important role for the operationalization of sustainable development. This approach might promote a more realistic assessment of the significance of ecosystem structures and functions, by requiring the readdressing of economic and environmental policies to guarantee a no-depleting stock of natural capital.43

³⁸ ibid.

³⁹ ibid.

⁴⁰ ibid 111.

⁴¹ ibid.

⁴² ibid.

⁴³ See further: *Sneddon* (n 35) 527.

2.1.3. Environmental sustainability from the environmental sociology approach

Environmental sustainability is conceived in general terms as the preservation of the natural capital and the quality of the environment over the long-term. It entails the respect for some restrictions to keep the balance on the use of both the renewable and non-renewable resources, and the control of pollution and waste.⁴⁴

An environmental sociology approach can be of use to examine this pillar in line with the notion of sustainable development, for the reason that it provides convenient tools to understand the interactions between society and environment. Although its main focus is their relationship in general, a special emphasis is placed on the study of the social situations that lead to environmental problems, along with its social repercussions and the efforts to face them.⁴⁵ This can be illustrated in the legal field if one is reminded that international law on sustainable development represents those efforts to overcome the impacts caused by social situations that ended up as environmental problems.

Since environmental concerns are becoming increasingly more legal, social and political, the attention paid by environmental sociology to the social processes that define certain conditions as problems can be helpful to transpose sustainable development into law. These legal, social and political features are evident in the evolution that the concept of sustainable development in general and environmental sustainability in particular has had within the different legal instruments on sustainable development, as will be furthered explored later in this chapter. This statement is reaffirmed at the same time by the fact that scholars from diverse academic fields that examine the concept refer to the legal instruments when illustrating the evolution of the concept, because at last it mirrors the social concerns of each period of time.⁴⁶

It has to be recalled that at the beginning sustainable development was related to social and economic development that had to be environmentally sustainable.⁴⁷ But later, it transformed into a three pillar concept that recognizes the individual value and specific meaning of social and economic sustainability as part of human, social political

⁴⁴ ibid.

⁴⁵ ibid 523.

⁴⁶ See for example: ibid; Tarah S,A, Wright, 'Definitions and frameworks for environmental sustainability in higher education' (2002) International Journal of Sustainability in Higher Education Vol. 3 n 3 203 – 220; Robert Goodland, 'The Concept of Environmental Sustainability' (1995) 26 Annual Review of Ecology and Systematics, Vol. 26 1–24.

⁴⁷ Brundtland Report (n 2).

and economic development.⁴⁸ From that point of departure, environmental sustainability became the tool to protect natural resources from economic growth within the ecological framework, and started to be gradually established in the different international legal documents. Some scholars asseverate that since the concept has been weakened after the Brundtland report, its scope has to be redefined and narrowed to converge it on the exchange between humans and nature, and transform it to fill the literal meaning of sustainability: humanity supportable for the biosphere.⁴⁹

From this perspective, the concept introduced by the Brundtland Commission suggests sustainable development as a platform where social and economic development are sustained by the planet. In other words, it conceives the environment as the fundamental basis on which society and economy take place but in a weaker and dependent way.⁵⁰ According to this view, this is the reason why humans must respect the resources exploited and its limitations.

As such, a panorama where the environment constitutes the platform for economy and society – topped by future generations, whose needs will consequently benefit from this model – is from the environmental sustainability perspective more accurate than the three pillar concept of sustainable development.⁵¹ Therefore, it can be said that the legal operationalization of environmental sustainability does not directly depend on law or the concept of sustainable development itself, but on its role as the platform from which governance, facilitation and coordination must take place to ensure coherence.⁵² Then, environmental sociology would constitute an interesting approach the face the defiance of this pillar.

2.2. Legal approximation to the concept of Sustainable Development

When researching the concept of sustainable development, it is found that some scholars, governments and legal operators identify the Rio Declaration and its principles as a starting point, while others rely on the moral features of major intertwined issues

⁵⁰ WCED (n 2). See further: ibid; Bosselmann (n 9) 81–96.

⁴⁸ Evidenced in the Rio Declaration (n 3). See further about environmental sustainability: Bedrich Moldan and others, 'How to understand and measure environmental sustainability: Indicators and targets' (2012) Ecological Indicators 17 4, 6. 6.

⁴⁹ See for example: *Winter* (n 9) 43.

⁵¹ This is further analysed by some scholars. See for example: Winter (n 9) 27.

⁵² See further about sustainable development governance: *Cordonier Segger* (n 8) 66.

that are part of sustainable development according to which the future policies and laws must be developed.⁵³

However, there are other scholars that claim the acquired status of sustainable development as an international custom, even when setting the precise content represents a difficult task.⁵⁴ Regardless the standpoint, some references to the definitions of sustainable development set out in the Brundtland Report, the Rio Declaration, the Johannesburg Declaration and Rio+20 Declaration are always found. Consequently, in the following sub-chapter a short overview of the notion in those main outcomes on sustainable development will be addressed.

2.2.1. The Brundtland Report: Our Common Future

Published in 1987 by the World Commission on Environment and Development (WCED),⁵⁵ the Brundtland Report constituted an innovation in the field by introducing the concept of sustainable development. The notion drafted in this document became not only one of the most important approaches outlined, but also the most commonly quoted definition. This constitutes the guide for the international agenda and the international community's insight for economic, social and environmental development.⁵⁶

The most common characteristic of the report is the view it offers of sustainable development as an issue that has to be seen in conjunction with social, economic and environmental aspects and not as opposing or contradictory.⁵⁷ But also, the linkage of two fundamental challenges that became a matter of awareness around the period when it was developed: the high percentages of poverty and the serious risk of life on the earth implied by the environmental global crises.⁵⁸

The Report introduces some important concerns like the respect for fundamental human rights, the conservation and sustainable use of natural resources, the fulfilment of environmental standards and monitoring processes, the accomplishment of a prior environmental assessment, prior notification, access and due process, plus sustainable

⁵³ See further: *Jóhannsdóttir* (n 7) 28.

⁵⁴ ibid

⁵⁵ Commission established in 1983 by the United Nations to find the way to save the human environment, natural resources and promote development.

⁵⁶ Brundtland Report (n 2)43.

⁵⁷ ibid 48.

⁵⁸ ibid 8.

development and assistance. These subjects are identified as the legal set of principles for environmental protection and sustainable development ⁵⁹

Moreover, by pointing out that sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future, 60 the principles of intra-generational equity, inter-generational equity and the differentiated duties of states can be recognised, the last of which can be of special importance when analysing the operationalization of the notion. 61 Therefore, the reason why the description set out in the Brundtland Report is of weight for the current thesis is that it establishes certain margins to the concept. It bases its idea upon the indication that environmental conservation represents one of the core elements within which society and economy take place. 62 This feature in particular leads to the following question: is environmental conservation given prevalence over economic and social interests? 63

In order to find an answer, the limits set out by the Brundtland Report must be taken into account; explicitly, that sustainable development should not put the ecosystems in risk and the intrinsic limitations of nature have to renew themselves as well as bend to fluctuations in the environment.⁶⁴ In the last instance, the direction taken in this matter will rest on how the limits set out by the Brundtland Report are taken, which in the opinion of some scholars would be more useful for balancing out the relationship between mankind and nature than the three pillar concept.⁶⁵

However, it must be kept in mind that still there is no agreement on whether to stick to the limits established in this report for sustainable development – respect the ecosystems and the limits of nature –, or to the idea of balance between economic, social and environmental interests to accomplish the objectives of sustainable development. ⁶⁶

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⁵⁹ Brundtland Report (n 2) Summary of Proposed Legal Principles for Environmental Protection and Sustainable Development, Annex I.

⁶⁰ ibid chapter 2: towards sustainable development, paragraph 1.

⁶¹ See further: *Jóhannsdóttir* (n 7) 34.

⁶² See further: *Bosselmann* (n 9) 81–96.

⁶³ As mentioned for example by *Bosselmann* (n 9) 84; *Jóhannsdóttir* (n 7) 35; Nico Schrijver, *The evolution of Sustainable Development in International Law: inception, meaning and status* (Offprint from the Recueil des cours (2007) 29, Marinus Nijhoff Publishers 2008) 248.

⁶⁴ Brundtland Report (n 2) chapter 2: towards Sustainable Development, paragraphs 10–15.

⁶⁵ See further: *Jóhannsdóttir* (n 7) 28-30, 47.

⁶⁶ ibid 35.

2.2.2. The Rio Declaration on Environment and Development

Despite being a mere soft law instrument, the influence of the Rio Declaration⁶⁷ and its principles for the development of environmental law at the international level has been evident throughout the last two decades. This document was an outcome of the second United Nations Conference on Environment and Development held in Rio de Janeiro in June 1992 (Rio Conference), along with Agenda 21,⁶⁸ the Convention on Biodiversity (CBD)⁶⁹ and the Framework Convention on Climate Change (UNFCCC).⁷⁰ This instrument represents the conclusion of the debates on sustainability included in the international itinerary by the Brundtland Report, which ensured that the documents agreed at Rio were built upon sustainable development principles. They have been implemented by nations around the world in their domestic legislation and it can be said that this meant the institutionalization of sustainability, at least from a legal positivistic point of view.⁷¹

Of special attention for the concept of sustainable development in Rio Declaration is Principle 27, which says that states and individuals shall contribute together on behalf of the Declaration's objectives and help to improve international law on sustainable development. Nonetheless, when taking into account this statement it must also be considered the difference that each of the twenty-seven principles of the Rio declaration imply in the light of international law, having in mind that they are in essence general objectives or manifestations of good will rather than portrayers of genuine normative significance.⁷²

2.2.3. The Johannesburg Declaration on Sustainable Development: From our Origins to our Future

As a result of the World Summit on Sustainable Development (WSSD),⁷³ the Johannesburg Declaration⁷⁴ sought to cover not only the concerns of development and environment, but also poverty reduction through social and economic development.

⁶⁷ Rio Declaration (n 3).

⁶⁸ UNCED, Agenda 21: Programme of Action for Sustainable Development, Brazil - Rio de Janeiro, UN Doc A/Conf.151/26 (1992).

⁶⁹ Opened for signature on 5 June 1992, entered into force on December 1993, 194 parties, no registration number found.

 $^{^{70}}$ Opened for signature from 4 to 14 June 1992, entered into force on 21 March 1994, 196 parties.

⁷¹ See further: R. Harding, 'Ecologically Sustainable Development: origins, implementation and challenges' (2006) 187 Desalination 232.

⁷² See further: *Jóhannsdóttir* (n 7) 37.

⁷³ United Nations, Johannesburg - South Africa, 26 August to 4 September 2002.

⁷⁴ Johannesburg Declaration (n 4).

This time it was guided by both the pursuit of a new philosophical or political manifestation of good will and a plan of action, emphasizing the importance of partnership and education.⁷⁵ Encouraged by the failures on implementing sustainable development and the underachievement of the goals of Rio Declaration – as evidenced in the reasons that gave place to the conference⁷⁶ – the Johannesburg Declaration along with its plan of implementation became an instrument with large challenges to face. However, it did not reach the Rio Declaration's levels of success when attracting the attention of the governments and society in general.⁷⁷

Even when it was developed based on the aforesaid declaration, the features of sustainable development set out in this document are worth mentioning. Despite not having much normative value itself or including many objectives, it restated the persisting aim to strengthen the relationship between development and the economic, social and environmental fields, while calling for a balance among them.

This was materialized through the commitment of the leaders of the world to focus on the three pillars of sustainable development, within a new plan of implementation that was envisioned to move to reality by establishing aims and timetables. Unfortunately, as revealed in some posterior reports on the field, most of the objectives remained vague and even practically un-measurable.⁷⁸ This will be further examined in chapters 4 and 5.

2.2.4. The future we want

In 2012, twenty years after the UNCED, world leaders and participants from other groups (NGOs, private sector and representatives of civil society) gathered once more with the aim to lessen poverty, improve social equity and guarantee environmental protection in an even more populated world.⁷⁹

Commonly known as Rio+20, this conference was projected as a review to measure the progress reached since 1992. For that reason, its objectives – at least from

⁷⁵ *Johannesburg Declaration* (n 4).

⁷⁶ ibid Paragraph 13.

⁷⁷ See a further analysis of this situation: *Harding* (n 70) 233.

⁷⁸ See for example: United Nations Environmental Programme (UNEP), Fifth Global Environmental Outlook (GEO-5). This report, published in 2012 to coincide with Rio+20 is of special usefulness because it analyzes the state and trends on the global environment in connection to the key internationally agreed objectives.

⁷⁹ Brochure of the Rio+20 United Nations Conference on Sustainable Development, Rio de Janeiro, Brazil, 20 – 22 June 2012.

the formal point of view— were more limited than those of the previous declarations.⁸⁰ It concentrated on strategies to build a green economy, eradicate poverty and expand international coordination for sustainable development.⁸¹ Once more, the focus was on the ever increasing population, the precarious conditions of an important portion of that population,⁸² the rising of greenhouse gas emissions and the risk for biological diversity due to climate change.⁸³

The final document did not contain new binding targets, did not have many concrete initiatives, and lacked financial and institutional support. Still, a platform for all those willing to act on behalf of sustainable development was created under this new agreement, in order to allow them to *think globally and act locally*. With this, national governments, NGOs, civil society and the industrial sector got enrolled into practical and interdisciplinary alliances. 85

By establishing the challenge of coordinating economic, environmental and social objectives and instituting sustainability as the precondition to consider development as effective, it settled a hallmark and invigorated the integrated policy-making to a higher level. Besides, it highlighted the inherent relationship between environmental protection and economic development, giving equal emphasis to the social dimension of sustainable development. In that sense, its outcome echoes a progressive thinking that brought the consensus of member states in a similar way to the Brundtland Report.⁸⁶

2.2.5. Transforming our world

A new set of negotiations under the auspice of the UN are currently taking place at the international level. Their main purpose is the adoption of a legally binding agreement for a post-2015 development agenda.⁸⁷ It is being elaborated by two co-facilitators that lead the informal consultation of the UN General Assembly, which is lead at the same

⁸⁰ Helen Clark, 'What does Rio+20 mean for sustainable development?' Lecture at Lincoln University, New Zealand, 20 August 2012.

⁸¹ ibid.

 $^{^{82}}$ Measured by situations such as deficient access to electricity and sanitary services, low income and hunger, ibid.

⁸³ ibid.

⁸⁴ ibid.

⁸⁵ ibid.

⁸⁶ ibid.

⁸⁷ Discussion Document for Declaration. Post-Intergovernmental negotiation 17-20, February 2015.

time by Member States, with wide participation of important groups and civil societal stakeholders.⁸⁸

The need to fully integrate economic, social and environmental spheres in a *holistic, comprehensive and balanced manner* has been emphasized once more during these negotiations. ⁸⁹ The final draft of the outcome document for the UN summit named *transforming our world: the 2030 agenda for global action,* was published in July 8 2015. It was sculpted from the feedback received from Member States and stakeholders during the negotiation session of June 2015, but further changes might be required in the days previous to the summit in September 2015. ⁹⁰

The document displays 17 integrated and indivisible sustainable development goals and 169 targets accompanied by their respective means of implementation that will come into effect on 1 January 2016. It includes some considerations about other features of great importance such as global partnership, finance, technology, capacity building, trade, systemic issues and follow up and review.⁹¹

In the diagnosis of our world today, it recognizes the vast challenges to sustainable development faced by the current generations. ⁹² In that regard, the document reaffirms all the principles of the Rio Declaration on Environment and Development, the Millennium Development Goals among the other international instruments for sustainable development, but departs from the lack of success in their objectives to manifest its intention to go far beyond. ⁹³

The new goals on sustainable development are comprehensive, action guided and intended to set a new path towards sustainable development through the implementation of a new agenda for the benefit of all, for today's and future generations. ⁹⁴

2.3. Short Discussion

The central idea of individually analysing each pillar of sustainable development was to offer a clearer understanding of the objectives sought by each area. The reason for choosing the specific schools of thought correspond to the opinion that those views

⁸⁸ UN post-2015 summit (n 12).

⁸⁹ First United Nations Environment Assembly, 23 - 27 June 2014, Nairobi, Kenya. Over 1065 participants, 163 Member States, 113 Ministers and 40 Events.

⁹⁰ Post-2015 Development Agenda (n 1).

⁹¹ ibid.

⁹² ibid, paragraph 11 to 16.

⁹³ ibid, paragraphs 10 and 13. See also: Annex 3: Introduction of the Open Working Group Proposal for Sustainable Development Goals and Targets. Paragraphs 6 to 7.

⁹⁴ ibid, paragraph 17.

integrate the main features of the pillars separately, taking into consideration the other two spheres in a lesser extent.

On the other hand, through the study of the how sustainable development has been addressed in the different international instruments, it was possible to envisage its legal conception, different phases at the international level and the great attention it has received after the publication of the Brundtland Report. This analysis reflects at the same time how the legal field has been highly influenced by the developments in other disciplines in its attempts to delineate the concept of sustainable development. But even when all those characterizations offer a view of the world as an intertwined system, it is clear that only mere references to the concept can be found instead of an agreed definition.

How does this ambiguity exactly affect operationalization? As it has been pointed out by some scholars, the problem of this from the legal stand point lies in the fact that without an explicit demarcation, it is not possible to shape and consequently reach the objectives intended by the concept. This is the basis for the creation of substantive rules and the operationalization of sustainable development, as they define the rights, duties and scope that the concept entails. However, some authors say that this gap is filled by the institutionalized principles through international legislation and policies, since they serve as guidelines regardless of whether or not the meaning of sustainable development is accepted. But has the application of those principles made it effective? This is what will be further examined in the following chapter.

3. The Principles of Sustainable development

The importance of the principles for sustainable development can be attributed to the fact that they are seen as guidelines to interpret, shape and implement both domestic and international law to outline future directions for societies. ⁹⁵ When tackling this topic, an important amount of references to a wide variety of principles can be found spread over all writings on sustainable development, as well as some considerations about the status of sustainable development as a principle itself. ⁹⁶ In any case, it is generally accepted that the principles play an important role when integrating environmental, social and economic law to operationalize sustainable development. For that reason, this standpoint will be considered to study the effectiveness of sustainable development from the legal angle.

The task of examining the principles or the standing of sustainable development as such implies at least a quick reference to terminological matters from the perspective of legal philosophy; this is, to the definition of *principle*. For practical purposes, the idea of principle will be seized as a wide proposition behind more concrete rules that support the interpretation of the rules themselves and the filling of lacunae.⁹⁷

Despite of the lack of agreement on the principles that should be taken for the incorporation of environmental, economic and social elements into law, a reference to the Principles of International Law for Sustainable Development (ILA principles) that the Committee on Legal Aspects of Sustainable Development of the International Law Association (ILA)⁹⁸ has elaborated are found in most approaches. As they are seen as vital elements for the evolution of international law on sustainable development, they will be subject of revision in this chapter.

3.1. Principles of International Law for Sustainable Development

Some considerable difficulties for the coordination and monitoring of sustainable development implementation have emerged from the concept's inherent nature.⁹⁹ In order to soothe this, the International Law Association developed a set of seven principles of international law relating to sustainable development at its meeting in New

⁹⁵ About this topic, see: Cordonier (n 8) 62; Schrijver (n 63) 39.

⁹⁶ For further illustration, see: Alan Boyle, 'Between Process and Substance: Sustainable Development in the Jurisprudence of International Courts and Tribunals' in *Bugge and Voigt* (n 9); *Winter* (n 9).

⁹⁷ Winter (n 9) 39.

⁹⁸ New Delhi Principles (n 15).

⁹⁹ See for example: GEO-5 (n 78). This will be further analyzed in chapters 5 and 6.

Delhi in 2002, with the aim to guide the formulation of policy and the legal activities in general. They will be reviewed as follows.

3.1.1. Sustainable use of natural resources

The ILA Declaration voiced the responsibility for States to avoid unnecessary harm to the environment when making use of the sovereign rights over their own natural resources. In other words, the duty to benefit from their environmental assets in a sustainable way. ¹⁰⁰ This principle contains not only the right for each state to freely dispose of its natural resources, but also the duty to prevent extraterritorial effects and take into consideration the common concerns of neighbouring States. ¹⁰¹ In that sense, it can be said that the first principle of the ILA Declaration is a double purposed source that contains both rights and duties.

It also echoes the right of every State to choose the socio-economic system that fits in a better way their development prospect, as well as the right to regulate the access for foreign investors. Additionally, it cannot be forgotten that through this principle the ILA Declaration imposed the duty for the industry and society in general to abstain of wasting natural resources and reduce polluting practices. 103

Besides of being articulated in the Stockholm Declaration,¹⁰⁴ the Brundtland Report, Rio Declaration and Johannesburg Declaration, its implementation can be found in a great variety of instruments covering areas such as conservation of nature, biological diversity, climate change, genetic resources, energy, marine resources, human rights, economic law and even in policies of some European oil-producing countries.¹⁰⁵

Some scholars argue that the focus of attention of treaties with objectives influenced by this principle is on the establishment of parameters to control the margin of exploitation rather than on the protection of the resources for future generations. ¹⁰⁶ It has been pointed out as well that its importance – no matter if term used is a *prudent*,

¹⁰² ibid.

¹⁰⁰ New Delhi Principle 1 (n 15).

¹⁰¹ ibid.

¹⁰³ ibid.

Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), 5 June 1972, U.N. Doc. A/Conf.48/14/Rev. 1(1973). Principle 21

¹⁰⁵ Some examples of this are the 1968 African Convention on the Conservation of Nature and Natural Resources and its 2002 revisions; the 1992 Convention on Biological Diversity; the 1992 Framework Convention on Climate Change; the 2010 Nagoya Protocols, the Energy Charter; the 1982 UNCLOS; the two1966 Human Rights Covenant and the preamble of the Agreement establishing the World Trade Organization.

¹⁰⁶ See for example: Philippe Sands and others, *Principles of international environmental law* (3rd edn, Cambridge University Press 2012), 207–210.

sound, rational, wise or *appropriate* – is tied to the recognition of the limits fixed on the use or the way of exploitation. This has to be interpreted and implemented by States collaboratively with international organizations or international judicial bodies in cases of conflict.¹⁰⁷

The importance of this principle for the implementation of sustainable development lies in the fact that the evident non-sustainable management of a great variety of species and natural resources represents one of the main practical difficulties. But at the same time, it has to be recognized that more obligations are being framed at the national level, taking into account this principle to protect the interests of future generations and indigenous people. It is in these characteristics where the relevance of this principle as a parameter to analyse the effective operationalization lies, especially in relation to social and environmental sustainability.

3.1.2. Principle of equity: Inter-generational and Intra-generational

The weight of this principle for the sustainable development discourse can be regarded to its double role: in one hand, the *intergenerational* aspect, meaning by this equity amid the present and the future generations; on the other hand, the *intra-generational* characteristic, that brings the equitable and impartial relationship within the current generation. The first implies the obligation of contemporary societies to avoid depleting or causing irreversible damages to the natural resources in such a way that would hinder future generation's right to be beneficiated from it. The second, a fair distribution of the resources among the population in the present, including development opportunities and income at the national and international level to bridge the breach between the North and South States.

This principle was previously envisaged in the Brundtland Report, the Rio Declaration and Agenda 21, but some references to its intergenerational element can be found in the principle of common heritage of humankind, international law of the sea, outer space law, international law on nature conservation and international

¹⁰⁷ ibid 213.

¹⁰⁸ See for example the conclusions of different reports, such as GEO-5 (n 78).

¹⁰⁹ ibid.

¹¹⁰ New Delhi Principle 2 (n 15).

¹¹¹ ibid.

¹¹² ibid.

environmental law.¹¹³ Nonetheless, a new feature brought by the ILA Declaration was the addition of poverty eradication as a response to the open demand of the African and Indian members. This gave to the principle the shape of an objective rather than a principle of international law.¹¹⁴

Additionally, the extent to which it has gotten can also be seen in the in the global judiciary bodies case law, as it will be examined in chapter 4. Nonetheless, its application to human rights, international economic law or international legal instruments is hard to find due to the wide polemic that this principle entails and its *soft-law* status.¹¹⁵

Of importance for this topic is the environmental ethics approach about social sustainability. From this perspective, the definition of sustainable development must take into account the morality of the distribution of goods among the present and future generations. This would divide the opinion in those who consider that needs of the upto-date poor must prevail despite of the burdens that it might entail for future generations, and those who support the rights of future generations, even if that imposes restrictions to the current generation. ¹¹⁶

As both standpoints are based on ethical choices, sustainable development would be an extension of justice, which envisages the three concerns in jurisprudential terms. That is, the concern for the poor or intra-generational justice as part of economic sustainability, the concern for future generations or intergenerational as a familiar feature of social sustainability, and the concern for the natural world belonging to environmental sustainability. 118

3.1.3. Common but differentiated responsibilities

The principle of common but differentiated responsibilities implies the recognition of each State's obligations for sustainable development, in correspondence with their

With regards to the intra-generational aspect, the maritime delimitation on the 1982 Law of the Sea Convention is of importance as it calls for equitable solution. See further: *Schrijver* (n 83) 342–343.

¹¹⁴ See further: ibid 344.

¹¹⁵ See further: ibid.

¹¹⁶ See further: *Bosselmann* (n 9) 94.

¹¹⁷ See further: ibid 92.

¹¹⁸ See further: ibid 95–96.

particular historical background and current status at the international level. This entails a different treatment of developing countries in comparison to developed ones.

This provision, considered by many scholars as one of the cornerstones of sustainable development, ¹²⁰ can be explicitly found in the seventh Principle of Rio Declaration and the third Principle of the ILA Declaration. Further examples of its operationalization can be mapped out in treaties on the protection of the ozone layer ¹²¹ and the climate change system ¹²² such as the United Nations Framework Convention on Climate Change (UNFCCC), ¹²³ the Kyoto Protocol to the UNFCCC, ¹²⁴ and the Montreal Protocol on Substances that Deplete the Ozone Layer. ¹²⁵

Some scholars have highlighted Kyoto Protocol as a good example of application when it comes to certain global environmental problems, due to the fact that it shows how some specific international objectives and principles of sustainable development can reach effectiveness in the achievement of environmental objectives when they have been identified and agreed on.¹²⁶

In that vein, the relationship of this principle with the intra and inter-generational equity is highlighted since it implies some equality of living standards and possibilities within each generation, which involves transfer of technology, data and capital from the more developed countries to the developing ones, and also the consideration of future generations when exploiting natural resources.¹²⁷ Accordingly, this principle is especially in line with the social and economic sustainability postulates.

In the same spirit, the applicability of this principle would have a place in the sharing of experiences, innovations and techniques amongst countries facing similar challenges for the implementation of the current flood of international treaties on

¹¹⁹ Its origin can be linked to equity considerations in international law and the older principle of positive discrimination or preferential treatment of developing countries as applied in human rights law, international economic law and law of the sea. See further: *Schrijver* (n 63) 344.

¹²⁰ See for example: *Jóhannsdóttir* (n 7), *Cordonier* (n 2) and *Schrijver* (n 63).

¹²¹ This serve as a guideline for many provisions of the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer to the 1985 Vienna Convention for the Protection of the Ozone Layer. *Cordonier* (n 8) 63.

¹²² Schrijver talks about the responsibilities of each States in the reduction of Greenhouse emissions, and how the industrialized countries have some targets and the developing doesn't. See further: *Schrijver* (n 63) 345.

¹²³ UNFCCC (n 69)

¹²⁴ Opened for signature from 16 March 1998 to 15 March 1999, entered into force on 16 February 2005, 192 parties, registration number 30822.

¹²⁵ Agreed on 16 September 1987, entered into force on 1 January 1989, 197 parties, registration number 26369

¹²⁶ See for example: *Jóhannsdóttir* (n 7) 31.

¹²⁷ ibid 34.

environmental, economic and social issues. 128 But also, in the effective financial support needed to improve research in regards to the mechanisms of implementation, procedural aspects, participation and access to justice, in order to reach the goals of sustainable development.129

3.1.4. The Precautionary Approach

The fourth principle of the ILA Declaration compels States to handle the environment and natural resources in their territory in a cautions way even in circumstances of scientific uncertainty. It was early envisaged and has received the most attention, as it is evidenced by its inclusion in a wide variety of legislation like Article XX of the General Agreement on Tariffs and Trade (GATT), ¹³⁰ the Law of the Sea Convention (LOSC), ¹³¹ and the Vienna Convention for the protection of the Ozone Layer. 132

However, it was not until the 1990 Bergen Declaration on Sustainable Development¹³³ that it reached its high profile.¹³⁴ Posteriorly, principle 15 of Rio Declaration included it in more practical and neutral terms by using the wording approach instead of principle. 135 After this, it has been counted in a wide variety of environmental treaties including the UNFCCC, the CBD, the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)¹³⁶ and the Fish Stocks Agreement. 137

There are two key elements for the operationalization of this principle: first, the scientific uncertainty and second, the anticipation of conceivable environmental damage. In operational terms, this implies the application of measures such as Best

¹²⁸ See further: *Cordonier* (n 2) 72.

¹²⁹ ibid 73.

¹³⁰ The General Agreement on Tariffs and Trade (GATT) was an international agreement that promoted international trade and the reduction of trade barriers among member states from 1947-1994.

Opened for signature on 10 December 1982, entered into force on 16 November 1994, 167 parties (157 signatures), registration number No. 31363.

¹³² Opened for signature 22 March 1985, entered into force 22 September 1988, 196 parties, registration number not found.

¹³³ This conference was attended by the Environment Ministers of 34 countries and the Commissioner for the Environment of the European Community (EC). It was hosted by Norway and co-sponsored by the UN Economic Commission for Europe (ECE). The Conference was one of a series of regional meetings held before the UNCED in June 1992.

¹³⁴ See further the early inclusion of the principle in legistration: Schrijver (n 54) 350.

¹³⁵ Rio Declaration Principle 15.

¹³⁶ Opened for signature 22 September 1992, entered into forcé 25 March 1998, 16 parties.

¹³⁷ United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Opened for signature 4 August 1995, opened for signature 11 December 2001, 77 parties, registration number A/CONF.164/37.

Available Technologies (BATs), Best Environmental Practices (BETs) and at last the Environmental Impact Assessment (EIA), which has become a required procedure in many States and the practice of many international organization. It can be said that EIA plays a relevant role for operationalization, since its main objective is to find if a proposed policy will cause extensive economic, environmental or social repercussions.

Notwithstanding the wide use of the precautionary approach, there is no official pronouncement about its legal status. A divided theoretical opinion about its evolvement into a norm of customary international law is found and the only clear fact is that it has become part of the body of environmental treaty law. Therefore it can be said it is in correspondence almost in an exclusive way to the environmental sphere of sustainable development, that is, to environmental sustainability. Anyhow, the ILA Declaration sought to broaden this principle by making it applicable to human health and the ecological systems, in relation to the activities of States, international organizations, business sector and scientific community. Ite

Some scholars assure that this principle is the most important for the operationalization of sustainable development for the reason that it guarantees the modification or cancellation of projects with possible negative consequences for the environment, even if those harmful effects are not fully proved. As this principle is supposed to influence the will of decisions makers, it represent a strong shield for the environment.

3.1.5. Public participation and access to information and justice

The acknowledgment of public participation as a principle did not take place until the Rio Conference, although its importance had already been recognized in the development debates of the 1960s. 144 This was caused by the persistent claiming of many social organizations for more information and participation at both national and international levels. The result was the possibility for all concerned citizens to have

¹⁴⁰ See further: Jóhannsdóttir (n 7) 37; Schrijver (n 63) 357–358.

¹³⁸ See further about its application: GEO-5 (n 78).

¹³⁹ ILA Declaration Principle 4.

¹⁴¹ See further: *Schrijver* (n 63) ibid 357.

¹⁴² ILA Declaration Principle 4, paragraph 4.

¹⁴³ See further: Jonas Ebbesson, *Compatibility of International and National Environmental Law* (Iustus Förlag 1996) 246-254; *Jóhannsdóttir* (n 1) 45.

¹⁴⁴ United Nations Declaration on Social Progress, (UNGA Resolution 2542). See further: *Schrijver* (n 63) 358.

access to environmental-related information and participate in the decision making processes, including the right to appeal if their concerns are not addressed.¹⁴⁵ It was consolidated through the tenth Principle of the Rio Declaration first and later in the ILA Declaration, the last of which requires the engagement not only of governments, but also of civil society organizations, industrial sector and trade unions, and connects it to the human right to free expression of opinion and information.¹⁴⁶

This principle was taken further by the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention). Besides stipulating the procedure to facilitate public participation in environmental decision-making, this convention clarifies what kind of data must be made available. Some additional examples of international instruments built on this principle are the United Nations Convention to Combat Desertification (Anti-Desertification Convention), the Lomé/Cotonou conventions, the Nordic Environmental Protection Convention and the Recommendation of the Council for the Implementation of a Regime of Equal Right of Access and Non-Discrimination in Relation to Trans-frontier Pollution.

The analysis of case law is of special relevance for this principle. For example, Gabčíkovo-Nagymaros is often referenced as a case of singular importance for the reason that the process of decision-making is taken as a key legal element. ¹⁵³ In this case, the encouragement of public participation and the consideration of other principles such as integration, equity and precautionary approach to facilitate sustainable development is required. ¹⁵⁴ Similarly, the Taskin case is referenced when examining the

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¹⁴⁵ ILA Declaration Principle 5.

¹⁴⁶ ibid.

¹⁴⁷ Opened for signature on 25 June 1998, entered into force on 30 October 2001, 47 parties, registration number 37770.

¹⁴⁸ ibid Articles 2(3) and 4.

¹⁴⁹ Opened for signature, from October 1994 to October 1995, entered into force on 26 December 1996, 195 parties. Specifically in article 3.

¹⁵⁰ Trade and aid agreement between the European Community (EC) and 71 African, Caribbean, and Pacific (ACP) countries. Article 2.

¹⁵¹ Convention on the Protection of the Environment between Denmark, Finland, Norway and Sweden. The Convention was signed on 19 February 1974 and it entered into force on 5 October 1976.

¹⁵² Organisation for Economic Co-operation and Development (OECD), 17 May 1977, C (77)28/FINAL.

¹⁵³ Gabčíkovo-Nagymaros Dam (Hungary v Slovakia), Judgment of 25 September 1997, ICJ Reports 1997, (Gabčíkovo-Nagymaros Case).

¹⁵⁴ This is further analyzed in Chapter 5.

application of this principle, as it envisioned an informed process that mirrors the postulates of the Aarhus Convention.¹⁵⁵

Some scholars assure that one of the reasons why sustainable development does not represent tangible benefits for people is linked to the fact that it was born from the political discourse instead of social movements. Therefore, as this principle embodies that needed connection between people and institutions, it can grant some legitimacy to the discourse of sustainable development. This is of importance for its effective operationalization, particularly in regards to the social sustainability component.

3.1.6. Good Governance

The principle of good governance entails the obligation of States, international organizations and other non-state actors to undergo to internal democratic governance, effective liability and respect of the Rio principles. Additionally, it defines the social responsibility of corporations and investors as preconditions for the fair distribution of wealth in the global market. It is envisioned to contribute to the objective of achieving development and codifying international law on sustainable development. By setting these obligations for states, institutions and corporations, it sets at the same time the right of societies to a wise management.

This principle, as set out by the ILA Declaration has four requirements that can be seen as procedural elements: a) the adoption of democratic and transparent procedures for the making of decisions and financial accountability; b) the establishment of effective measures against corruption; c) the respect for due process, rule of law and human rights; and d) the implementation of a public procurement approach in line with the WTO Code. 160

The importance of the principle of good governance within the sustainable development debates lies in the fact that it constitutes the main focus of attention when evaluating effectiveness. Therefore, the imperative need of more democratic and responsible governments, a higher emphasis on human rights and the obligations of

¹⁵⁵ Granting of permits to operate a gold mine (Taskin and others v. Turkey), Judgement of 10 November 2004, ECtHR (Taskin Case).

¹⁵⁶ See further: *Bosselmann*. (n 9) 82.

¹⁵⁷ ILA Declaration Principle 6.

¹⁵⁸ ibid.

¹⁵⁹ ibid.

¹⁶⁰ ibid.

governments towards its citizens proceed from it. 161 As such, it has become an important element of international economic, environmental and developmental cooperation policy, which is reflected by its inclusion in substantive multilateral, regional and international treaties and policies. 162

An additional crucial element is its relationship with democracy, legitimacy of decision making and the principle of public participation, which makes this principle of good governance a crucial element for the implementation of sustainable development. 163

3.1.7. Integration

Considered as one of the most important elements for sustainable development, the principle of integration represents the acknowledgement of the interrelationship between the economic, social and environmental areas for the eradication of poverty, the protection of the environment and the respect for human rights. 164

Before being consolidated in the ILA Declaration, it was envisaged in the thirteenth Principle of the Stockholm Declaration and the fourth Principle of the Rio Declaration. It has been include not only in these instruments, but also in a wide variety of treaties such as the UNFCCC, the preamble of the LOSC, the CBD, the Anti-Desertification Convention, the Fish Stocks Agreement and different provisions of the European Union where it plays an important role. 165

Its application has been made evident as well in cases like the Iron Rhine case, where the Arbitral Tribunal highlighted the need to integrate for the schematization and implementation of economic development activities, at both the international and the European Community level. 166 Additionally, in the acknowledgement that the WTO Appellate Body made of the need of a comprehensive approximation to environmental problems in its 2007 report on Measures Affecting Imports of Retreaded Tyres. 167

¹⁶¹ See further: *Schrijver* (n 63) 360.

¹⁶² See further: Cordonier (n 8) 362.

¹⁶³ See further: ibid.

¹⁶⁴ ILA Declaration Principle 7.

¹⁶⁵ See for example Article 21 (3) amended TEU; Article 11 TFEU (former Article 6 TEC); Article 208 TFEU (replacing Articles 177.178 TEC); the Cotonou Agreement. ibid 363–364.

¹⁶⁶ Iron Rhine railway line (Belgium v Netherlands), Award of the arbitral tribunal of 24 May 2005, (Iron Rhine Arbitration).

¹⁶⁷ Measures Affecting Imports of Retreaded Tyres (European Community v Brazil), Report of 3 December 2007, WTO Appelate Body, (Brazil Retreaded Tyres).

The integrative character of sustainable development embodies the great political importance given to it, which constitutes the reason why its elements are reflected in all definitions of the concept (as it will be further analysed in chapter 6). Therefore the integration of social, economic and environmental concerns are usually taken as sufficient common ground to move on and implement. This is the reason why this principle is the most important and legalistic.

The role of this principle for implementation can be deducted from the fact that without integration there is not sufficient interaction and interrelation between the three pillars of sustainable development. Hence, without the hypotheses of this principle, coordinated and coherent implementation activities cannot be carried out and the purposes of sustainable development cannot be met.¹⁶⁸ Then, the meaningful effects that this principle brings in practical terms is that environmental concerns are progressively featured in international economic policy and law, accomplishing the purposes sought by economic, social and environmental sustainability as presented in chapter 2.

3.2. Short discussion

Disregarding the general acceptance and institutionalization of the principles for sustainable development as a tool for implementation in the international field, there are still some obstacles of great weight. The biggest barrier seems to be the ambiguity of the concept that cannot be overcome even with the existence of a set of principles to provide guidance. Then, it can be noticed how sustainability remains a debated and obscure subject and how that discussion is extended to its principles.

Finding an agreed definition and set of principles to guide sustainable development in practice is apparently a difficult and long task. Thus far, the only certain fact is the assenting in that unsustainability must be stopped and the current development techniques must be shifted urgently. So now the interrogation is: are the current theories, principles and elements of sustainable development enough to achieve an effective operationalization if taken together? Some scholars are of this opinion, but other seems to dissent by saying that a new morality must be recognized to translate sustainable development into a more effective legal framework to overcome the current unsustainability. From that point, the attention is directed to the weight or role of each pillar when implementing sustainable development. Therefore, its application in the

¹⁶⁸ See further: *Cordonier* (n 8) 67.

international legal instruments, case law and practice will be analysed in the next chapter.

4. Legal operationalization of Sustainable Development

At this point, it is clear that the lack of agreement on the content of sustainable development and its legal relevance leads to an absence of clarity about when it is necessary to take restrictions seriously and subsequently about its role in shaping the content of policy, plans and legislation. In other words, this lack of clarity affects the legal operationalization of sustainable development and influences the substance of law and its effectiveness.¹⁶⁹

Nonetheless, it is also clear that one of the features that has been agreed on is that sustainable development comprises the relationship between the economic, social and environmental areas and that a set of principles has been defined to provide guidance for its operationalization (see further Chapter 3). In line with that, it is possible to find some indicators to measure progress towards sustainable development in the three key sectors.

Since the subject of study in this section is the effectiveness of the principles tackled in the third chapter, they will be examined from the formal, procedural and material perspectives. Therefore, some international legal instruments of relevance for sustainable development discourse, certain cases of the ICJ and the ITLOS and finally some international reports that evaluate the results on sustainable development will be taken for this purpose.

4.1. Formal Effectiveness of Sustainable Development

What is meant with formal effectiveness is the incorporation of the idea of sustainable development and its principles in the different intergovernmental legal instruments that seek to elude or manage human impacts on natural resources. This will be understood not only as an explicit reference but as the inclusion of their general notion or content.

Departing from that, a large quantity of instruments can be linked to sustainable development in the areas of economic and social law; and especially in environmental law, as the number of international environmental institutions, goals and agreements have raised hugely after the United Nations Conference on the Human Environment in 1972.¹⁷⁰

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¹⁶⁹ See further: *Jóhannsdóttir* (n 1) 36.

¹⁷⁰ This can be seen for example through The Database Project on International Environmental Agreements (IEA) managed by the University of Oregon, which offers a perfect picture of the proliferation of legal documents on the topic. See: Ronald B. Mitchell. 2002-2015. *International Environmental Agreements Database Project (Version 2014.3)*. Available at: http://iea.uoregon.edu/. Date

Nonetheless, the foundation of the global sustainable development legal framework is constituted by a narrower sum of ratified treaties among which some can be highlighted due to its relevance for the subject. A considerable amount of international agreements with explicit sustainable development objectives are found in the international scene as a result of the 1992 UNCED. A few examples of this are The United Nations Convention to Combat Desertification (Anti-Desertification Convention), 171 the 1992 CBD and its 2001 Cartagena Protocol on Biosafety, 172 the 1992 UNFCCC 173 with its 1997 Kyoto Protocol, 174 the Lomé/Cotonou Conventions, 175 among others. These instruments incorporate the idea of sustainable development and make explicit reference to some of its principles.

With the purpose to analyse this situation, the three Conventions adopted at the Rio Summit of 1992 will be taken in this chapter. That is, the UNFCCC, the CBD and the Anti-Desertification Convention. This study is not intended to offer a rigorous evaluation but to provide some examples of implementation of the principles of sustainable development in the international context. Even when this selection might offer a limited view of the evolution and integration of sustainable development into legal instruments, they were chosen due to the great importance they have had in the international context. If it is true that they do not offer a broad view as they were developed in the same period of time, they hold interesting elements to illustrate the application of the principles on sustainable development.

4.1.1. The United Nations Framework Convention on Climate Change (UNFCCC)

Although it does not contain binding targets on the part of states, the UNFCCC lays down general commitments to soothe atmospheric concentration of GHGs by restricting emissions, improving sinks and protecting reservoirs.¹⁷⁶ Even if it can be said that the achievement of its objectives is guided by several of the principles for sustainable

accessed: 31 March 2015. For a fuller description, see: Ronald B. Mitchell. 2003. "International Environmental Agreements: A Survey of Their Features, Formation, and Effects." Annual Review of Environment and Resources 28, 429-461.

¹⁷¹ Anti-desertification Convention (n 149).

¹⁷² CBD (n 69).

¹⁷³ UNFCCC (n 70).

¹⁷⁴ Kyoto Protocol (n 124).

¹⁷⁵ Cotonou Agreement (n 150).

¹⁷⁶ UNFCCC (n 70).Article 3.1.

development,¹⁷⁷ the UNFCCC specifically constitutes an effort to operationalize the principle of common but differentiated responsibilities in its core, which is clearly enunciated in article 3.1 and linked to the principle of equity.¹⁷⁸ In article 4.1, it also states the common but differentiated responsibilities of the parties when setting their commitments.

Despite the fact that this principle is not subject to clear definition, the distribution of the parties to the UNFCCC into diverse groups when assigning responsibilities gives place to the principle of common but differentiated responsibilities within the climate change regime. This enables the recognition of the great challenge that the anthropogenic climate change implies as countries' contributions to global greenhouse gas emissions as well as the different capacities of countries and development levels are taken into consideration. Additionally, the principle of equity is referenced in the preamble as it is stated that the agreements reached through the Convention are, among other purposes, determined to safeguard the climate system for the present and future generations.

The precautionary principle is also found in the convention – precisely in article 3.3 – as it requires that the parties take precautionary actions to avert and diminish the causes of climate change and its hostile consequences, even when there lacks full scientific certainty. The enclosure of this principle is definitely a wise strategy for topics such as climate change, where the addressing of potential hazards and effects implies many uncertainties by the intricacy of the problem, which may or may not be unknotted in time by scientific research. Therefore, this article embodies the precautionary principle as a tool advantageous for the global determination to face climate change.

The three spheres of sustainable development also have space within the convention. The right to sustainable development, understood as the right of every State to reduce poverty and provide its population with sustainable living standards, is found in Article 3.4. While the preamble talks about sustainable social and economic development, Article 2 specifically refers to *economic development*; and Article 3.5 and 4(2) (a) *sustainable economic growth*.

Although this Convention eased the foundation of an international legal system to mitigate climate change, especially through the operationalization of the principle of

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¹⁷⁷ See chapter 3 of this thesis.

¹⁷⁸ When it says that the parties should guard the climate system for the benefit of present and future generations on the basis of equity and common but differentiated responsibilities.

common but differentiated responsibilities, its implementation remains difficult and contentious.180

4.1.2. The Convention on Biological Diversity (CBD)

The operationalization of the principles covered in chapter 3 of this thesis can be perfectly depicted in the CBD. Whether explicitly or implicitly, independently or jointly, all the ILA principles can be found in its text.

For instance, by associating the need of equality of living standards and possibilities within each generation, this convention emphasizes the relationship between the principle of common but differentiated responsibilities and the principle of intra and inter-generational equity. This is evident in articles 16, 17, 18, 20 paragraph 4 and 21, where it states that the application of commitments for developing countries depends on the effective implementation on issues related to financial resources and the transfer of technology from the developed ones. This takes into consideration the prevalence that economic and social development for eradication of poverty implies for the first. The task involves the transfer of technology, data and capital from the more developed countries to the developing ones, and the consideration of future generations when exploiting natural resources. What is especially referred to is the sharing of benefits from the commercial utilisation and other uses of genetic resources. ¹⁸¹

An important element for sustainable development made operational through this international legal instruments is the principle of integration. It is shown when the convention compels the parties to integrate the preservation and sustainable use of biological diversity into pertinent sectorial or cross-sectorial plans, programmes and policies as far as conceivable and suitable. 182 Additionally, the principle of sustainable use and the principle of equity can also be found in article 2, when the term sustainable use of biodiversity is defined as taking into account the needs and aspirations of present and future generations.

¹⁸² CBD (n 69) Article 6 (b). This idea is further developed by: Schrijver (n 80) 363–364; Winter (n) 42.

¹⁸⁰ Proof of this is the subsequent international efforts to face climate change and the change of the perspective, which went from prevention to mitigation and even more important, to adaptation. This is evidenced for example in the negotiations about the new global agreement that is expected to be reached in December 2015 in Paris. See for example: Paris 2015: getting a global agreement on climate change A report by Christian Aid, Green Alliance, Greenpeace, RSPB, and WWF. Lead author: Rebecca Willis. Green Alliance, 2014.

¹⁸¹ CBD (n 69). See for example Article 15.7 on *Benefit Sharing*.

In addition to the definition set out in article 2, the convention makes reference to the principle of sustainable use in articles 1, 8, 11, 12, 16, 17 and 18; and to the principle of equity when it includes the fair and equitable distribution of profits from the use of genetic resources in its article 1 and 15(7).

Moreover, a version of the precautionary principle is contained in the preamble as it provides some guidance for the interpretation – from the biodiversity perspective – on how severe or irreparable harm is as mentioned in the Rio Declaration. It states that a lack of full scientific certainty cannot be the reason for delaying actions to elude or diminish a threat that could imply a significant reduction or loss of biological diversity. ¹⁸³

Article 14 also develops the precautionary principle paired with public participation, as it constrains the parties to ask for environmental impact assessments for the proposed projects that could have critical consequences on biological diversity. Therefore, it allows public participation in those procedures. This last principle is further set out along with the principle of sustainable use in the preamble, when the starring role of participation of women is acknowledged as a key element for the conservation and sustainable use of biological resources.

Finally, it is worth of mentioning that article 8(e) explicitly refers to sustainable development when it states that each party to the Convention is in charge of promoting sustainable development and providing further safekeeping of the areas that surround protected zones. By affirming in its preamble that biological diversity is a common concern of humanity, the convention develops the principle of common but differentiated responsibilities, which is further emphasized through Article 20(4).¹⁸⁴

4.1.3. The Convention to Combat Desertification (Anti-Desertification Convention)

This convention recognizes the urgency of combating desertification and it is aware of the fact that an enabling environment is required to achieve the results sought by the idea of sustainable development. An important feature is the connection it creates between economy and environment in a balanced way. It transforms the principle of integration in a central element when setting out the objectives and obligations for the

¹⁸³ Anti-desertification Convention (n 149) preamble, paragraph 9.

¹⁸⁴ About implementation of commitments of developing countries dependant effective implementation by developed ones.

State parties. For instance, Articles 2(1), 2(2) and 4(2) (a) provide that it is through an integrated approach that the physical, biological and socio-economic facets can combat desertification and achieve sustainable development.

Some explicit references to sustainable development are also found in certain parts of the Anti-desertification Convention. It is stated in its objectives that the improvement of land productivity and preservation follows the postulates of sustainable development. For example, its preamble reminds that desertification and drought have impacts for sustainable development due to their relation with important social problems such as poverty, health and nutrition. Similarly, when establishing what the term *combat desertification* implies in article 1(b), it makes reference to the areas for sustainable development.

Even each of its annexes about regional implementation contain a section about a strategic planning framework for sustainable development, which is connected at the same time with other principles.¹⁸⁷ For example, article 2(c) of annex III regulates the implementation of the convention for Latin America and the Caribbean, and refers to the need of adopting an integrated approach by the promotion of sustainable development models that take into account the environmental, economic and social conditions of each country.¹⁸⁸

Some references to the principle of public participation can also be identified. For example, article 17(f) alludes to the principles of public participation and sustainable development jointly. It sets the obligation to stimulate cooperative research programmes between research organizations at different levels for the development of better and reasonably priced technologies for sustainable development, through

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¹⁸⁵ Anti-desertification Convention (n 149) preamble, paragraph 9.

¹⁸⁶ ibid. There are more of this kind of provisions throughout the entire convention. For example, article 2 sets its objectives with a view to advance towards sustainable development in the affected areas; article 4(b) establishes the general responsibilities of the parties taking into account the facilitation of an international economic environment to promote sustainable development; Article 5(b) says that the parties have the obligation to set plans within the framework of sustainable development policies; and articles 9 and 10 asseverate that national action programmes should be linked with other national policies for sustainable development.

¹⁸⁷ ibid. Annexes I to IV about implementation for Africa, Asia, Latin America and the Caribbean, and Northern Mediterranean respectively.

¹⁸⁸ ibid. In the same vein, Article 4(2) (c) compels Parties to integrate tactics for poverty eradication into efforts to combat desertification and Article 3(d) of Annex I which refers to the Regional Implementation Annex for Africa, establishes that Parties shall takes into account the widespread poverty prevalent in most affected countries in their National Action Programmes (NAPs) and include actions to improve the economic environment to eradicate poverty. Additionally, Article 3(b) calls for Parties to pay especial attention to financial, human, organizational and technical resources where they are needed; and Sections 2 and 3 of Part III deal with assistance of poorer countries in achieving their objectives under the Convention through technology transfer and the use of developed-country resources.

effective participation of local populations and communities. The principle of common but differentiated responsibilities is also found in Article 18, as it talks about transfer, acquisition, adaptation and development of technology with the purpose to contribute to the attainment of sustainable development in the locations affected by drought and desertification.

As the Convention refers to poverty in many of its provisions, it takes into consideration the principle of equity as well. The prologue denotes the determination of State Parties to take suitable efforts to combat desertification and mitigate the effects of drought for the benefit of present and future generations. It manifests that States parties are aware of the fact that desertification increases some social problems, like poverty and lack of food security, and admits that sustainable economic growth, social development and the eradication of poverty should be prioritized by developing countries.¹⁸⁹

This convention is a good example of operationalization of the subject studied, as it bases its premises on many of the principles for sustainable development. It departs from the idea that certain changes need to be introduced both at the international and the local level in order to achieve sustainable development objectives.

4.2. Judicial Effectiveness of Sustainable Development

The aim of this subchapter is to offer an outline of the body of jurisprudence that has incorporated the principles of sustainable development covered in chapter 3. Here, the application and interpretation made by the International Court of Justice (ICJ)¹⁹⁰ and International Tribunal for the Law of the Sea (ITLOS)¹⁹¹ is presented, in order to chart the evolution and application of the principles for sustainable development by these global international judiciary bodies. The practical, political and economic challenges to further judicial consideration and acceptance of the principles will not be taken into account due to the complexity of the topic.

¹⁸⁹ ibid. Similarly, Article 2(2) is mindful that achieving the objective of the convention will benefit the living conditions of people, especially at the community level.

¹⁹⁰ ICJ (n 16).

¹⁹¹ ITLOS (n 17).

4.2.1. International Court of Justice (ICJ)

More than a norm, the ICJ has usually perceived sustainable development as an objective. 192 This court has examined some important environmental issues that have contributed to the development of international law related to sustainable development. The three main cases where the ICJ has considered the principles of sustainable development will be analysed in the following sections.

4.2.1.1.Advisory Opinion of the ICJ Legality of the Threat or Use of Nuclear **Weapons (1996)**

This case emerged from the conflict that arose between Australia, New Zealand and France for the atmospheric nuclear tests performed by France from 1966 to 1972 on the Island of Mururoa. It could be said that the considerations about sustainable development in this judgement were not very wide, but some premises to decide were pondered in line with certain sustainable development principles.

The most remarkable international judicial treatment of the concept of intergenerational equity is found in this opinion. Here the ICJ established that in order to apply the charter law on the use of force, it was vital for the Court to take into account the countries' possibility to cause damage to future generations. 193 Therefore, the risk under which the environment is daily put forward and the magnitude of the consequences that the use of nuclear weapons could add was acknowledged through the principle of equity. 194

Additionally, the Court referred to the principle of equity, sustainable use and integration as it defined the environment as the representation of living space upon which the health and quality of life of present and future generations depend. 195 The importance of sources of international law, world summits' documents and the obligation of States to safeguard the resources under their jurisdiction as part of the corpus of international environmental law was also pointed out. 196

¹⁹² About the concept of sustainable development, see chapter 2 of this thesis. See also: Patricia Birnie, Alan Boyle and Catherine Redgwell, International Law and the Environment, Oxford University Press (2009), 53, 115.

¹⁹³ Legality of the Use by a State of Nuclear Weapons in Armed Conflicts (Australia and New Zealand v France), Advisory Opinion of 8 July 1996, ICJ, 36 (Use of Nuclear Weapons Case). ¹⁹⁴ ibid 29.

¹⁹⁵ ibid.

¹⁹⁶ ibid 23 and 29.

Not only the Court but also the States involved made allusions to provisions related to the principles of sustainable development, and three different stances can be identified. Some of them referred to a number of international treaties and instruments that prohibits the employment of techniques or means of warfare intended to cause extensive, long-term and harsh damage to the natural environment. Those provisions were said to be applied in war and peace, and it was argued that the use of nuclear weapons would violate these precepts by causing widespread and transboundary effects. 198

On the other hand, other States, based on the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, called the binding legal effects of those environmental provisions into question or denied that they were related to the use of nuclear weapons. Others argued that those environmental instruments were intended to be applied in time of peace, as they do not mention nuclear weapons. Others

The Court did not take into consideration the possible intention of the treaties that limit the right of States to use self-defence by their obligation to protect the environment. Despite this, this judiciary body said that States are compelled to pay due regard to environmental aspects when measuring the necessary and balanced conditions in the pursuit of legitimate military targets.²⁰¹ According to that, the protection of the environment becomes one of the parameters when evaluating if the proposed strategies are in line with the principles of necessity and proportionality; which is paired by the Court with principle 24 of the Rio Declaration.²⁰²

In consequence, the Court recognized the repercussions that nuclear explosion could bring for health, agriculture, natural resources, demography and the serious danger it represents for future generations, environment in general and food an marine ecosystems.²⁰³ But it concluded that even when there is no existing international law on the protection of the environment that unfolds the prohibition to use nuclear weapons,

¹⁹⁷ ibid 27.

¹⁹⁸ ibid.

¹⁹⁹ ibid 28.

²⁰⁰ ibid.

²⁰¹ ibid 30.

²⁰² "Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary." ibid.

²⁰³ ibid 35.

there are some important environmental elements that must be taken into account for the implementation of the principles and rules of law applicable to armed conflict.²⁰⁴

4.2.1.2.Gabcíkovo-Nagymaros Project (Hungary/Slovakia) (1997)

The *Gabčíkovo-Nagymaros case* was concerned with a project that started in 1977 between Hungary and former Czechoslovakia to dam the Danube all the way from Bratislava to Budapest, which would provide an abundant quantity of clean hydroelectric energy.²⁰⁵ In 1989, Hungary suspended labour on its part of the project based on unstipulated ecological concerns and in 1993 the International Court of Justice was called in to settle the disagreement.²⁰⁶

Here, the ICJ expressly outlined the basic idea of sustainable development for the first time by asseverating that economic development must be tailored with the protection of the environment.²⁰⁷ This constituted at the same time a reference to the principle of integration. It presented sustainable development as a principle with normative value and an essential role for the case.²⁰⁸ By referring this way to the concept of sustainable development, the court suggested that it was ready to acknowledge this new principle even in absence of an explicit treaty norm.

Additionally, it referred to several principles linked to the concept of sustainable development and the importance of the decision making process as a vital legal element. The ICJ uttered that states should carry out EIAs, promote public participation, integrate development and environment, and take into consideration intra and intergenerational equity when implementing the main elements towards sustainable development. The precautionary principle and the principle of equity were also referenced, as the importance of giving proper weight to the new scientific standards, legal developments and the growing awareness of the threats for present and future generations were acknowledged. The several principles linked to the concept of sustainable developments.

²⁰⁴ ibid 33.

²⁰⁵ Gabčíkovo-Nagymaros case (n 153), Summary of the Judgment.

²⁰⁶ ibid

²⁰⁷ ibid 140. See also: Gabčíkovo-Nagymaros case, Separate opinion of Justice Weeramantry, ICJ, Year of Decision 1997, p 90.

²⁰⁸ Gabčíkovo-Nagymaros case (n 153), 140.

²⁰⁹ ibid.

²¹⁰ "Owing to new scientific insights and to a growing awareness of the risks for mankind - for present and future generations - of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past." Gabčíkovo-Nagymaros case (n 153), 140.

There are a few elements in this case that are worth highlighting from the viewpoint of sustainable development law. First, the need to perform the EIA prior to and during the functioning of the project, and according to the standards valid in the period when it is performed.²¹¹ Second, the acknowledgement of the limits that the dispute settlement mechanisms have due to the irreversibility of the damages caused to the environment.²¹² In relation to the previous point, some considerations about the effectiveness of the traditional mechanisms would have place with regards to the international responsibility. Third, the importance that Rio Declaration of 1992 even for the judicial sphere is represented in this case.²¹³

While the decision did not reflect enough attention on the above factors and the ICJ rested upon international treaty law to solve the case, 214 the separate opinion of Judge Weeramantry has been a major step for the discussion at the international level. He perceived sustainable development as a principle covering not only the right to development but also the environmental conservation as an element of equal weight, taking into account people's wellbeing, economic development and the environmental matters for the present and future generations.²¹⁵ From his point of view, if the risk of environmental damage is the only valid consideration in this case, Hungary's arguments would have been conclusive. 216 But other issues had to be taken into account and economic development was one of the most important.

Judge Weeramantry considered that sustainable development was more than a legal concept that had transformed into a principle with normative value and a crucial role to decide the case. 217 In his opinion, this case represented a perfect example to put the principle into practice, as it was originated in the application of a treaty whose objective is development with facts based on environmental considerations. ²¹⁸

²¹¹ ibid.

²¹² ibid. ²¹³ ibid 125.

²¹⁴ The court said that the final result of the negotiations brought by the case, were to be led by the Parties: It is for the Parties themselves to find an agreed solution that takes account of the objectives of the Treaty, which must be pursued in a joint and integrated way, as well as the norms of international environmental law and the principles of the law of international watercourses. ibid 141. See further: Caroline Katona. 'Case Concerning the Gabčíkovo-Nagymaros case Hungary versus Slovakia (1997)'

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²¹⁵ Gabčíkovo-Nagymaros case, Separate Opinion of Vice-President Weeramantry (n 207).

²¹⁶ Ibid.

²¹⁷ Ibid.

²¹⁸ Gabčíkovo-Nagymaros case, Separate Opinion of Vice-President Weeramantry (n 207) 90.

His main idea was that the right to development and the right to environmental protection are both important principles of modern international law.²¹⁹ This does not necessarily mean that all and every member of the United Nations has explicitly accepted the principle, but that the harmonization of economic development and the environmental protection has permeated the different cultures of the international community. To corroborate this, Judge Weeramantry offered an exhaustive examination of its utilization by the different cultures and legal systems through a perspective authentically multicultural.

In line with Judge Weeramantry's opinion, the problem itself of pairing the economic interests and the environmental protection relies on both law of development and law of the environment. Therefore, the most important element of the court to balance them was the principle of sustainable development in his opinion.²²⁰

4.2.1.3. The Pulp Mills on the River Uruguay

This case emerged from the authorization granted to a company for the construction of a Pulp Mill on the banks of the River Uruguay, which was shared between the two sovereign States of Argentina and Uruguay. The dispute was concluded with the judgement of the ICJ, which not only settled the problem between the parties but also emphasized some of the principles for sustainable development.

On this occasion, the Court expressly affirmed that Article 27 of the Vienna Convention on the Law of Treaties embodies the principle of sustainable use of natural resources and the essence of sustainable development.²²¹ In that regard, it highlighted the importance of ensuring environmental conservation of shared natural resources while advancing towards sustainable economic development, giving place at the same time to the principle of integration.²²² This portrays evidence at the judicial level of how the principle of integration is an intrinsic feature or even a synonym of sustainable development.

By pointing out those elements, the case became a perfect example of the struggle between economic development, environmental protection and human rights in the

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²¹⁹ Due to the unavoidable coherent necessity and its extensive and general reception by the global community. Gabčíkovo-Nagymaros case, Separate Opinion of Vice-President Weeramantry (n 207) 95.

²²⁰ Gabčíkovo-Nagymaros case, Separate Opinion of Vice-President Weeramantry (n 207) 88 and 90.

²²¹ Consequently, it is the opinion of the Court that Article 27 embodies this interconnectedness between equitable and reasonable utilization of a shared resource and the balance between economic development and environmental protection that is the essence of sustainable development. Pulp Mills on the River Uruguay (Argentina v Uruguay), Judgement of 20 April 2010, ICJ Reports 2010, 177 (Pulps Mills Case).

²²² ibid 80.

international case law. 223 The case also recognized the character of the environment as a representation of the living space and an inherent condition for the health of present and future generations'. The Court also referred to the precautionary approach and the principle of common but differentiated responsibilities, as it discussed the obligation to notify the neighbouring countries about planned projects with the purpose to enable them to study foreseeable damages.²²⁴ Some allusions to the precautionary principle can also be found in Argentina's request for provisional measures, although in the Court's opinion the imminent threat of irreparable damage to the aquatic environment was not properly demonstrated.²²⁵

In the opinion of the Court, States must carry out EIAs in order to protect and preserve the aquatic environment from transboundary harm.²²⁶ It referred to the case of legality of the threat or use of nuclear weapons in order to state that the principle of prevention is a customary rule that makes part of the corpus of international law relating to environment. ²²⁷ Consequently, the important role that the precautionary principle plays in sustainable development law was confirmed, as the ICJ acknowledged some behaviours that can be required in the future from any State intending to implement projects with possible transboundary environmental impacts. 228

As both parties acknowledged the connection of inter-generational equity with the principle of sustainable development, it constituted an expression of their concern for the welfare of present and future generations, which gave place to the principle of intergenerational equity. ²²⁹ On that subject, Judge Cançado Trindade assured that the prevalence of conservation over the mere exploitation of natural resources is a cultural reflection of the incorporation of the human being within its natural surroundings. ²³⁰ In that sense, the idea of intergenerational equity is subordinated to the condition that the practical legal consequences of undertakings in favour of future generations, must

²²³ See a deeper analysis about human rights and the environment in Courts decisions: Boyle (n 96) 204. 224 Pulp Mills Case (n 221) 113.

²²⁵ Pulp Mills Case (n 221) 164. additionally, the ICJ implicitly acknowledges the importance of common but differentiated responsibilities to manage the environmental risks. In the case, it is specifically related to the substantive and procedural obligations laid down by the 1975 Statute. As the substantive obligations are broader than the procedural ones, this is deemed to facilitate the process of implementation (paragraph 77). For that reason, the Court described the regime as a "comprehensive and progressive régime". Pulp Mills Case Provisional Measures, Order of 13 July 2006, I.C.J. Reports 2006, 81.

²²⁶ Pulp Mills Case (n 221) 204.

²²⁷ Pulp Mills Case (n 221) 101.

²²⁸ ibid 101 and 113. Separated opinion.

²²⁹ Case Concerning Pulp Mills on The River Uruguay, Separate Opinion of Judge Cançado Trindade, ICJ Reports 2010, 124 (Separate Opinion of Judge Cançado Trindade). ²³⁰ ibid 114.

enrich the legal standing of current generations in cases depending on substantive rules of environmental instruments.

Nonetheless, as the Court did not specifically link the continuing obligations of monitoring²³¹ to inter-generational equity, it took away its own reasoning of the longterm temporal aspect, which is markedly present in the field of environmental protection.²³² Jugde Cançado Trindade referred to the perception of sustainable development as the connection between the right to a healthy environment and the right to development, and the fact that human beings must remain at the centre of concerns for sustainable development.²³³

In the opinion of Judge Cançado Trindade, the ICJ considerations were short in its contribution as it did not identify a clear way prevention, precaution or sustainable development as general principles.²³⁴ Nonetheless, far from being insignificant, this decision is very important for the evolution of sustainable development law. The reason for its significance is that it is one of the few court's judgements that refer with details to the basic legal principles of sustainable development. By tackling the complicated task of defining sustainable development and some of its principles, this judgement represents an important landmark within jurisprudence about sustainable development. As such, it is probably the most important case after the *Gabikovo-Nagymaros*.

4.2.2. International Tribunal for the Law of the Sea (ITLOS)

There is a considerable amount of judgement of the ITLOS where the principles of sustainable development are shortly referenced. Even when those considerations are not extensive in most of cases, they are worth mentioning and analysing as they are of great importance to rule on the cases. As they are disperse in various judgments, this analysis, different from the one of the ICJ, will not be made by cases but by principle. Nonetheless, the fact that in many occasions those principles are not taken in isolation but combined with others will be contemplated.

²³¹ Pulp Mills Case (n 221) 266.

²³² Separate Opinion of Judge Cançado Trindade (n 230) 124.

²³⁴ Pulp Mills Case (n 221) 75, 177. See also ibid 6, 114, 124, 132, 159.

4.2.2.1. Sustainable use of natural resources

The ITLOS has repeatedly talked about this principle in a considerable amount of documents. It has been invoked in several cases either by the parties or the Tribunal, explicitly or implicitly. A primary reference can be found in the *Saiga Case*, where this judiciary body classified the legal instruments on bunkering of fishing vessels into those that regulate the management, profit and preservation of living resources in the exclusive zone of the coastal States.²³⁵

The principle of sustainable use is commonly linked to the principle of equity in the jurisprudence of this tribunal, as the events when it has been brought are about the protection of future resources and conservation of the marine ecosystems. In the Southern Bluefin Tuna Cases for example, the tribunal considered the preservation of the living resources of the sea as an element of the conservation and safeguard of the marine environment. Likewise, the reference to the principle of sustainable use in *Monte Camuoco case* made by the respondent is worth of mentioning. Here it was alleged that illegal fishing constitutes a menace for both the future resources and the methods adopted by the institution in charge of conservation. 237

The *Hoshinmaru case* is also noteworthy in this regard. Here the Tribunal uttered that the offence fouled by the Master of the Hoshinmaru ship could not be considered as a slight or merely technical offence, as the accurate reporting of catches is a fundamental element for the management of marine resources.²³⁸ Through this asseveration, the Court acknowledged the importance of controlling the margin of exploitation to protect the resources for future. A similar situation is found in the *Tomimaru case*, as the ITLOS briefly noted the situation found in the legislation of many States with regards to the confiscation of fishing vessels, based on premises of management and conservation of marine resources.²³⁹

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²³⁵ The M/V Saiga Case (Saint Vincent and The Grenadines V. Guinea), Decision of 4 December 1997, ICJ Reports 1997, 63 (Saiga Case).

²³⁶ Southern Bluefin Tuna Case (New Zealand v. Japan; Australia v Japan), provisional measures, Order of 27 August 1999 ITLOS Reports 2000, (Southern Bluefin Tuna).

²³⁷ In this case, the institution in charge of conservation is the Commission for the Conservation of the Antarctic Marine Living Resources (CCAMLR). Monte Confurco Case (Seychelles v France), Prompt Release of 18th December 2000, ITLOS Reports 2000, 79 (Monte Confurco case).

²³⁸ The "Hoshinmaru" Case (*Japan v. Russian Federation*), Order of 06 August 2007, ITLOS Reports 2007, 99 (Hoshinmaru Case).

²³⁹ The Tomimaru Case (*Japan v. Russian Federation*), Judgement of 6 August 2007, ITLS Reports 2007, 72 (Tomimaru Case).

Another interesting situation is offered in the *case concerning the conservation* and sustainable exploitation of swordfish stocks in the South-Eastern Pacific Ocean.²⁴⁰ All the basic elements of the principle of sustainable use can be found in the joint communication sent by the agents of the parties.²⁴¹ In this document, the Agent of the European Union and the Agent of Chile informed the Court about their intention to sign, ratify or approve and implement an agreement that comprised, among other elements, a framework of fisheries to combine forces for the long-term preservation and administration of the swordfish stocks in the South Eastern Pacific.²⁴² A reflection of the principle of sustainable use combined with the precautionary approach can be found in this proposal of the parties. They committed to catch levels that would warrant the sustainability of resources and safeguard the marine ecosystem, by the establishment of a Bilateral Scientific and Technical Committee (BSTC) for that purpose.²⁴³

The advisory opinion about responsibilities and obligations of States sponsoring persons and entities with respect to activities in the area also provides an interesting contribution of the principle of sustainable use paired with the precautionary approach.²⁴⁴ The description that the Seabed Disputes Chamber of the ITLOS made of the obligations of *due diligence* (or precaution) as a variable concept, can be paired with the content of the principle of sustainable use, as it assures that the risks of the activity in the seabed area can fluctuate depending on the moment and new scientific or technological knowledge.²⁴⁵

In this advisory opinion, the chamber highlighted among the most important direct duties of the sponsoring States, the obligation to guarantee the availability of resource for compensation in respect of damage caused by pollution, along with the application of the precautionary approach and EIA.²⁴⁶

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²⁴⁰ Case concerning the Conservation and Sustainable Exploitation of Swordfish Stocks in the South-Eastern Pacific Ocean (Chile v European Union), Order of 16 December 2009, ITLOS Reports 2009 (Swordfish Stocks case).

²⁴¹ 15 December 2009, sent by the Agents of the Parties to answer the request made by the Special Chamber on 30 November 2009. ibid.

²⁴² ibid 12.

²⁴³ ibid.

²⁴⁴ Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the area, Advisory opinion of 1 February 2011, ITLOS Reports 2011 (Request for Advisory Opinion Submitted to the Seabed Chamber).

²⁴⁵ ibid 117.

²⁴⁶ ibid 117, 124-150.

4.2.2.2.Principle of Integration

The Request for Advisory Opinion submitted to the Seabed Chamber²⁴⁷ offers an explicit outlook of the principle of integration.²⁴⁸ In accordance to the view of the Seabed Dispute Chamber, the principle of integration would serve to control what in the text can be identified as a drawback of the principle of common but differentiated responsibilities and the principle of equity. That downside refers to the setting up of companies in States with less stringent regulations expecting to be subjected to a weaker control system.²⁴⁹

The purpose of this principle from that perspective would be the standardization of the highest measures to defend the marine environment, to ensure the safe development of activities in the area and to protect the common heritage of mankind.²⁵⁰ By confirming that developmental interests must be tailored with the protection of the environment, the chamber highlighted the importance of applying the principle of integration and presented it as a tool to control the side effects of the principles of equity and common but differentiated responsibilities.²⁵¹

In the same advisory opinion, the sponsoring States are compelled to act in a reasonable, relevant, non-arbitrary, conductive and objective manner when helping the authorities.²⁵² This requirement compels them to operate guided by the principle of integration, as they are asked to act for the benefit of human wellbeing as a whole, taking into account the social, economic and environmental spheres.

4.2.2.3.Good Governance

The principle of good governance is also implicitly found in the *opinion of the Seabed Disputes Chamber*, with regards to the institutional framework for sustainable development. In the advisory opinion referenced previously, the importance of the functions of the chamber itself for the good governance of the seabed area were highlighted.²⁵³

²⁴⁷ The Seabed Disputes Chamber of International Tribunal for the Law of the Sea has jurisdiction in disputes related to activities in the International Seabed Area. It was established in Part XI, section 5 of the LOSC and article 14 of the ITLOS Statute.

²⁴⁸ ibid 159.

²⁴⁹ ibid.

²⁵⁰ ibid.

²⁵¹ ibid.

²⁵² ibid 230.

²⁵³ This functions are set out in Part XI of the LOSC. See further: ibid 29.

This was further emphasized in the contractual approach examined in the case. It was said that the association of developing States with corporations of the global private sector to explore the area, would lack transparency and consequently affect the proper application of the principle of good governance.²⁵⁴ The argument for this was that a sponsorship agreement might not be publicly accessible or mandatory at all. Therefore, that lack of publicly available measures would imply some difficulties when checking if the sponsoring State had met its responsibilities.²⁵⁵

4.2.2.4.Common but Differentiated Responsibilities

Once again in the *request for advisory opinion submitted to the Seabed Chamber*, this judiciary body limited the scope of the precautionary principle through the precepts of the common but differentiated responsibilities.²⁵⁶ It assured that the precautionary approach must be applied in accordance with the capabilities of each State as introduced by the first sentence of principle 15 of the Rio Declaration.²⁵⁷ This is further emphasized when it refers to the application of the precautionary approach set out in the Nodules Regulations and the Sulphides Regulations, with the objective to guarantee the effective protection of the marine environment.²⁵⁸ The Chamber pointed out that this is linked as well to Principle 15 of the Rio Declaration and highlighted that its application should correspond to each States capabilities.²⁵⁹

The preceding asseveration gives place to different degrees of application of the precautionary approach, which would be as applying the logic of the common but differentiated responsibilities to the precautionary principle.²⁶⁰ This viewpoint is interesting for the sustainable development discourse, as it suggests to fill the voids of each principle by applying their logic among them. What is more important, this would

²⁵⁴ Ibid 225.

²⁵⁵ "Annex III of the Convention, and the Nodules Regulations and the Sulphides Regulations contain no requirement that a sponsorship agreement, if any, between the sponsoring States and the contractor should be submitted to the Authority or made publicly available. The only requirement is the submission of a certificate of sponsorship issued by the sponsoring State (regulation 11, paragraph 3(f), of the Nodules Regulations and of the Sulphides Regulations), in which the sponsoring State declares that it 'assumes responsibility in accordance with article 139, article 153, paragraph 4, and Annex III, article 4, paragraph 4, of the Convention'." ibid.

²⁵⁶ Request for Advisory Opinion Submitted to the Seabed Chamber (n 244) 129.

²⁵⁷ ibid.

²⁵⁸ ibid.125, 161.

²⁵⁹ ibid.161.

²⁶⁰ ibid.129, 151 – 163.

help to direct the attention to the fact that a level of *integration* is required among the principles themselves.²⁶¹

The chamber also pointed out the threat resulting from difference of treatment between developed and developing states for protection of the marine environment.²⁶² On that point, the chamber took into consideration that the needs of the developing States differ from those of the developed ones, and remarked the assistance that the developing countries require to benefit from seabed activities ²⁶³ In that vein, the chamber provided an interpretation of some provisions of the UNCLOS as containing the guidelines of the principle of common but differentiated responsibilities.²⁶⁴ Although this principle is not explicitly mentioned in those norms, its content can be clearly identified as suggested by the interpretation of the judiciary body.

4.2.2.5.Precautionary Principle

The precautionary principle is probably the most analysed by ITLOS and it is through this principle that the Tribunal has made the greatest contributions to sustainable development. One of the most relevant cases is the *Southern Bluefin Tuna*, a dispute between New Zealand and Australia in one hand, and Japan in the other hand. ²⁶⁵ Here the ITLOS recalled the importance of prudence and caution to avoid serious harm to the southern Bluefin tuna stocks. ²⁶⁶ Even when no conclusive scientific evidence was submitted by the parties, Japan was required to abstain from directing an experimental fishing programme. The Tribunal did not make any statements about the legal nature of the precautionary approach, but this constituted its first direct application in international law by an international tribunal. ²⁶⁷

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²⁶¹ This will be further discussed in the following chapters.

 $^{^{262}}$ Which would favor the leaking of corporations in the expectation of being subjected to less stringent regulations and controls. Nonetheless, it clarified that this does not interfere with the difference of treatment imposed by the rules that set out direct obligations for the sponsoring States. See Principle of integration described earlier in this chapter. See further: Request for Advisory Opinion Submitted to the Seabed Chamber (n 244) 129, 151 – 163.

²⁶³ See further: fifth preambular paragraph, article 148 and Annex III, article 9, paragraph 4 of the UNCLOS. ibid 157, 163.

²⁶⁴ ibid.

²⁶⁵ Southern Bluefin Tuna case (n 236).

²⁶⁶ ibid 77.

²⁶⁷ Judge Treves explains for example why the Tribunal did not make some statements about the precautionary approach as a binding principle of customary international law. In his opinion, the precautionary approach can be perceived as a logical outcome of the provisional measures themselves. This would leave out the need to declare that the precautionary approach is dictated by a rule of customary international law. See further: Southern Bluefin Tuna Cases (*New Zealand v. Japan / Australia v. Japan*), Separate Opinion of Judge Treves, ITLOS Reports 1999, 8 (Separate Opinion Judge Treves).

This case has a couple of separate opinions that make a deeper analysis of the precautionary principle. Judge Laing and Judge Shearer brought to attention the requirement for the States to act with prudence and caution. They highlight that instead of adopting the term *principle*, the ITLOS used the word *approach* probably with the objective to grant certain degree of flexibility.²⁶⁸ Both judges mentioned that due to the lack of scientific certainty on the stocks, the tribunal had to assess the urgency of prescribing measures based on precepts of *prudence and caution*.²⁶⁹ They indicated that although the Tribunal did not discuss the precautionary principle/approach, the measures ordered were precisely based upon such considerations.²⁷⁰

Another case of importance is the *Mox Plant Case* concerning a dispute about marine pollution between Ireland and the United Kingdom. The precautionary principle was brought once more by the second with the aim to stop the operation of the Mixed Oxide Fuel plant (MOX).²⁷¹ By clarifying the extent of the precautionary approach, the Tribunal evaded its overuse and required prudence and caution from the disputant parties for the proper exchange of information about the hazards of operating the plant.²⁷² It also clarified that when invoking the precautionary approach, the harm to be prevented has to be identifiable and clear, and the threat must imply serious or irreversible damage to the environment.²⁷³

Although Judge Wolfrum concurred fully with the decision and the reasoning of the order in general, he stressed on the ambiguity of the precautionary principle or approach as part of customary international law, as the Tribunal did not consider it in its Order.²⁷⁴ According to his view, the burden of proof was on the State undertaking the activity, which shows the need to make environmental-related decisions that face scientific uncertainty.²⁷⁵ He also pointed out that the precautionary principle should not

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²⁶⁸ Southern Bluefin Tuna Cases (*New Zealand v. Japan / Australia v. Japan*), Separate Opinion of Judge Laing, ITLOS Reports 1999, 13, 14, 16, 17, 19 (Southern Bluefin Tuna Case Separate Opinion Judge Laing). See also: Southern Bluefin Tuna Cases (*New Zealand v. Japan / Australia v. Japan*), Separate Opinion of Judge Shearer ad hoc, ITLOS Reports 1999, 5 (Separate Opinion of Judge ad hoc Shearer)

²⁶⁹ Separate Opinion of Judge Treves (n 266) 8.

²⁷⁰ Separate Opinion of Judge ad hoc Shearer (n 267) 6.

²⁷¹ The MOX Plant Case (Ireland v. United Kingdom) Order of 3 December 2001, ITLOS Reports 2001 (MOX Plant case).

²⁷² ibid.

²⁷³ ibid.

²⁷⁴ The MOX Plant Case (Ireland v. United Kingdom) Separate Opinion of Judge Wolfrum, ITLOS Reports 2001, 3 (MOX Plant case).

²⁷⁵As contended by Ireland, see further: MOX Plant Case (n 270); ibid.

overrule the exceptional nature of the provisional measures, and at the same time, provisional measures should not be used to anticipate a judgement on the merits.²⁷⁶

In the *Land Reclamation case* between Singapore and Malaysia, the Tribunal required prudence and caution from the states by the establishment of mechanism for the exchanging of information and the pursuance of EIAs.²⁷⁷ It resulted in the provisional measure against Singapore prohibiting the conduction of its land reclamation in ways that would cause serious harm to the marine environment or irreparable prejudice to the rights of Malaysia.²⁷⁸

The application of the precautionary principle – along with the principle of sustainable use – can be identified as well in the *case concerning the Conservation and Sustainable exploitation of Swordfish Stocks in the South-Eastern Pacific Ocean.* Specifically, in the commitments acquired by the European Union and Chile in the Understanding agreed on 16 October 2008. Through this agreement both parties arranged a more structured framework based on cooperation for long-term conservation and management of the swordfish stocks in the South Eastern Pacific, ensuring sustainability and safeguarding the marine environment.²⁷⁹

Likewise, in the *advisory opinion of the Seabed Chamber*, this judiciary body extended the scope of the principle as it recalled the obligation of the sponsoring States and the authority to apply the precautionary approach as part of the obligation of due diligence, even outside the scope of the regulations.²⁸⁰ Additionally, the chamber assured that a trend towards making the approach part of customary international law was initiated by its inclusion in several international instruments.²⁸¹

4.3. Material Effectiveness of Sustainable Development

By material effectiveness what will be identified is the influence that the idea of sustainable development introduced through the different legal instruments and jurisprudence has had in the real world. In other words, the measurement of results. If it is true that the main international institutions in charge of following up and review of sustainable development's implementation are the United Nations Commission on

²⁷⁶ Separate Opinion of Judge Wolfrum (n 273) 3.

²⁷⁷ Case concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v. Singapore), Provisional Measures of 8 October 2003, ITLOS Reports 2003 (Land Reclamation case) 95, 96, 99.

²⁷⁸ ibid 106.2.

²⁷⁹ Swordfish Stocks case (n 240) 12.

²⁸⁰ Request for Advisory Opinion submitted to the Seabed Chamber (n 244) 122, 131.

²⁸¹ ibid 135.

Sustainable Development (CSD) and the High-level Political Forum on sustainable development²⁸² as its substitute, since their reports are presented in a more formal sense they are not suitable for the current analysis.

Therefore and in line with the purposes of this subchapter, the fifth Global Environmental Outlook (GEO-5)²⁸³ issued by the United Nations Environmental Programme (UNEP) will constitute the point of departure.²⁸⁴ This report, published in 2012 to coincide with Rio+20 is of special usefulness because it analyses the state and trends on the global environment in connection to the key internationally agreed objectives.²⁸⁵ The source of those objectives are the different legally binding international treaties, conventions and protocols, along with some non-binding instruments such as the declarations of the different summits and world conferences.

The areas for the examination of the objectives in GEO-5 were divided by atmosphere, land, water, biodiversity, chemicals and waste. ²⁸⁶ The progress towards goals were measured through different international instruments by areas. For example, some of the instruments taken as point of departure to evaluate the progress were the UNFCCC for the atmosphere related areas, ²⁸⁷ Johannesburg (WSSD) for land-related goals, ²⁸⁸ Johannesburg Plan of Implementation 2002 for water related objectives, ²⁸⁹ the CBD in relation to biodiversity, ²⁹⁰ and the Montreal Protocol on Ozone-Depleting Substances regarding chemicals and waste. ²⁹¹

The analysis offers a scene of inconsistent success rather than constant improvement. Despite the fact that some progress was identified relevant to certain goals within each area, there has also been very little or no progress for most of the legal targets and even deterioration or insufficient data for goals related to land, water and biodiversity.²⁹² In general terms, it could be said that the obstacles for the achievement

²⁸² Contemplated at Rio+20 to replace the Commission on Sustainable Development.

²⁸³ Five GEO reports have been published to date: GEO-1 in 1997; GEO-2 in 1999; GEO-3 in 2002; GEO-4 in 2007; GEO-5 in 2012. The sixth report is expected to be launched in 2017.

²⁸⁴ This reports have been issued by the United Nations Environmental Programme (UNEP) so as to track the state and trends on the global environment. It involves the reports of scientific and policy experts, focusing on the identification and analysis of the diverse environmental problems from an integrated assessment approach that gives place to a broad and multidisciplinary outline of the diverse environmental concerns at the global and regional levels.

²⁸⁵ GEO-5 (n 283) part I. See also: Jason Jabbour and others (n 78) 5.

²⁸⁶ GEO-5 (n 283).

²⁸⁷ See further: ibid 35.

²⁸⁸ See further: ibid 67.

See further: Ibid 67.

²⁸⁹ See further: ibid 101.

²⁹⁰ See further: ibid 135-138.

²⁹¹ See further: ibid 172.

²⁹² See further: ibid 58-61, 89-91, 126-129, 158-160, 185-189.

of the legally set goals are related to problems such as the predominance of the economic growth at the international, national and local development agendas; the mismatch between the sustainability challenges and the responses received; the insufficient authority of the environmental institutions; the failures in communication between science and policy; the disintegration of the governance and the proposed solutions; and the unfeasibility for measuring the outcomes.²⁹³ This will be further analysed in the following chapter.

Nonetheless, it can also be inferred from the report that the most promising outcomes have been reached where it was possible to identify problems with fairly straightforward origins and quantifiable targets were established²⁹⁴. The clear problems related to the poor data, weak frameworks for compliance, lack of confirmable indicators, calculable targets and inconsistencies of information, make the examination of the progress on international sustainable development objectives a difficult task. It can be noticed that a number of serious incongruities are still obstructing the accomplishment of sustainable development aims and even the last attempt to deliver a systemic change in the architecture of sustainable development governance – Rio+20 – has not been as successful as expected.²⁹⁵

4.4. Short Discussion

The previous analysis shows that many international legal instruments have recognized the need to integrate the three pillars of sustainable development. The great amount of conventions and protocols that have proliferated after the Brundtland Report can be seen as an advancement in the field. Therefore, it can be said that the legal operationalization of sustainable development from the formal point of view has been effective, since this situation could be perceived as an indicator of the importance it has reached and therefore as a success.

On the other hand, the application of sustainable development as a principle or concept by two of the most important international judiciary bodies has illustrated the relevance of the notion and the influence of the different legal declarations. A general critique found is that international courts case law has concentrated on questions of

²⁹⁴ ibid.

²⁹³ ibid.

²⁹⁵ ibid.

balance, necessity and the degree of interference rather than on the legal status of the principles on sustainable development.

Nonetheless, it should not be forgotten that the function of these judiciary bodies is the settlement of disputes through its jurisprudence and the contribution to the development of international law as an auxiliary function. Therefore, they cannot decide on issues that the parties do not allege or that are outside the application of the norms invoked in each case. Based on this, it can be said that the operationalization of sustainable development from the judicial perspective has been effective as well, as the different principles have been considered in different cases that involve environmental, social and economic issues.

A different conclusion is suggested concerning the results in the real world, as the wanted outcomes have not been reached and the information drawn by the reports emphasizes the clear need for new policy responses. The current international scene shows that there has been a positive reaction to this, but even when new negotiations are taking place to overcome the identified problems through the creation of new binding agreements, they are embracing the same focus than the previous declarations. By this, what could be predicted so far is not that progress will not be reached, but that it will continue as slow as it has been until now. Therefore, the need to shift the perspective is remarked once more, taking into account that the urgency of action will be inversely increased by our slowness in getting effective results; so the slower we are, the more the need to act.

Then, from the conclusions that can be delineated from this information, what would be analysed next are the problems or obstacles identified in each perspective – formal, judicial and material – in order to understand the limitations of the current frameworks for the accomplishment of the international legal objectives on sustainable development.

5. Obstacles for the achievement of Sustainable Development

Building on the analysis presented above, this section will identify the main obstacles for the achievement of internationally agreed goals on sustainable development. These can be considered as a chain of incongruities or gaps that hinder the adoption of the objectives in each sphere tackled in the previous chapter. In addition to that, the current outlook on sustainable development will be shortly overviewed, so as to offer an idea of the up-to-date state of affairs on the subject. The purpose of this analysis is to comprehend the restrictions that the existing approaches represent for the accomplishment of the international legal objectives on sustainable development.

5.1. Obstacles in the formal context

One of the main problems that can be identified when analysing the body of legal principles, treaties and other instruments in conjunction with the scientific reports – GEO-5 in this case – is the failure in communication between science and law. Despite all the important scientific contributions for the improvement of environmental knowledge, only a small part of it is reflected by law and policy. Besides, in the cases where both areas interact, the communication between the scientific community and policy makers can be deemed unsatisfactory.²⁹⁶

The role of science in the decision making processes has not given as much importance as it deserves yet. For that reason, the need to address sustainable development problems by transcending the disciplinary borders has been considered only in small proportions. This causes some inaccuracy during the law-making processes and can be exemplified through the international agreed goals on land use and conservation, where some vulnerabilities and challenges of the Polar Regions in relation to other goals are identified, despite all the scientific advices on this respect.²⁹⁷

This situation can also be found in the international regulation for waste management. While the developing countries usually ratify Multilateral Environmental Agreements (MEAs) on chemical and wastes – like the Basel Convention²⁹⁸– they usually fail to transpose the obligations into comprehensive national legislation due to the complexity of the topic. As a consequence, the implementation of some of the

²⁹⁶ See further: GEO-5 (n 283) 58-61, 89-91, 126-129, 158-160, 185-189.

²⁹⁷ See further: ibid 88.

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²⁹⁸ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention), opened for signature 22 March 1989, entered into force 5 May 1992, 183 parties, registration number 28911.

obligations found in these instruments are assigned randomly to several authorities or ministries. This is done without taking into account certain factors such as policy creativity to stabilize development and sustainability, or the need to include societal responsibility and public-private cooperation to connect technological advance and allocation of funds for capacity building.²⁹⁹

The disconnection between science and law also causes the creation of a multiple agreements rather than some specific comprehensive instruments to tackle many problems at the same time. It can be problematic in that the implementation of such a multiplicity of obligations becomes too confusing for governments. This situation is an evident example of the weak coordination between the different fields when the negotiations of the agreements take place.³⁰⁰

Another consequence of that lack of communication is the inconsistency of law within the different contexts and the disregard for the diverse geographical and cultural features of the world's regions.³⁰¹ One example of this can be found in the Convention on Biological Diversity, which requires all member states to develop a national strategy and action plan for the implementation of its strategic program.³⁰² Even when 172 of the state parties had adopted the equivalent instruments of the CBD when the GEO-5 was elaborated, it was discovered that the national strategies had not been totally effective in tackling the central drivers of biodiversity loss. Besides, only some States had used the plans to standardize biodiversity and ecosystem services.³⁰³

This condition illustrates how the goals are usually considered in isolation and sometimes progress towards one objective and not seen in line with other objectives. ³⁰⁴ For instance, the Millennium Development Goal 1 on reducing hunger could be taken together with Millennium Development Goal 7 on environmental sustainability. This with the aim to further reduce the tensions and synergies to protect the forests, wetlands and other ecosystems that comes from increasing food production through agricultural widening. This would also apply for positive results, as efforts on Millennium Development Goals 2 to 6 on educational and health issues can contribute on the

²⁹⁹ GEO-5 (n 283) 185 – 189.

 $^{^{300}}$ ibid 215 – 230.

³⁰¹ See for example Part 2 of GEO-5 about Policy Options, which is divided by regions. ibid 231-415.

 $^{^{302}}$ In decision X/2, the tenth meeting of the Conference of the Parties, held from 18 to 29 October 2010, in Nagoya, Japan, an updated Strategic Plan for Biodiversity was adopted, including the Aichi Biodiversity Targets for the 2011-2020 period. See further: COP 10 Decision X/2.

³⁰³ See further: GEO-5 (n 283) 157.

³⁰⁴ ibid 67, 80, 90.

achievement of Millennium Development Goal 1.³⁰⁵ Unfortunately, none of these circumstances are thought due to the failures in communication.

The consequences of taking goals separately can be noticed as well in the biodiversity area. The most common strategy for the achievement of biodiversity objectives has been the legal establishment of protected areas. Nonetheless, this tool in isolation has not been very satisfactory for the reduction of biodiversity loss, since the need of an integrated approach for ocean governance, local participation and community support has not been explicitly taken into account.³⁰⁶

This situation probably has its root in the great weight that is usually given to economic interests over the environmental ones, which has prevailed not only at the international level but at the national and local development agendas as well. Consequentially, countries usually refrain from signing and ratifying international instruments based on their deficient capacity and resources.³⁰⁷ This condition permeates the political will and hinders implementation, leading some researchers to asseverate that it is the main cause of the serious risk that planet's resilience and its capacity to sustenance human development is currently facing.³⁰⁸

The disadvantages that come from all those problems calls for the adoption of a cross-sectorial perspective on the procedure of transposing sustainable development goals into legislation. That with the purpose to ideally acknowledge the interactions between different components of the social-ecological systems at different scales.³⁰⁹

5.2. Obstacles in the judicial context

The task of the global judiciary bodies is of relevance for the implementation of sustainable development due to the increasing promulgation of documents in the international legal context, as exemplified in chapter 4. As they play a key role by applying and providing an interpretation of law on sustainable development in the resolution of disputes, they become an essential component of the general governance structure. At the same time, their decisions materialize the idea of justice, which is in line with the idea of social sustainability from the environmental ethics approach as analysed in chapter 2.

³⁰⁶ ibid 158 – 160.

³⁰⁵ ibid 67, 80, 90.

³⁰⁷ See further: *Jabbour and others* (n 78) 17 - 18.

³⁰⁸ See for example: Johan Rockström and others, 'Planetary boundaries: exploring the safe operating space for humanity' (September 2009) 461 Nature 472 – 475.

³⁰⁹ See further: GEO-5 (n 283) ibid 90.

Despite of the important contributions that jurisprudence has made to the topic, some limitations in the judiciary bodies' approach can be identified. One of them is that, same as in the legal instruments, they focus on economic priorities rather than environmental ones; this turns the reconciliation of the interest in both areas and other conflicting goals into the main difficulty.³¹⁰

That situation can be seen for example in the approach of the ICJ in the *Gabčíkovo-Nagymaros case*. In the judgement, the court eluded the environmental concerns and managed to accommodate environmental protection and economic development by focusing on problems such as the fair distribution of water flow or the applicability of international environmental standards in the operation of the hydroelectric system.³¹¹

It can also be noticed how the lack of agreement on specific international action and the social and economic value that judgments involve lead to the possibility for States to keep a certain degree of discretion on determining and applying what will be considered as sustainable. The consequence for this in practice is that it is still hard to see an international court reviewing national action and getting to the conclusion that it falls short of standards on sustainable development.³¹²

Nevertheless, as most cases reflect the mismatch between the sustainability challenges and the responses received, they display the failures in coordination over spatial, temporal and jurisdictional scales. This problem can be blamed either to the complexity of the problems which are not adequately addressed at the formal level, or the lack of consideration of cross-scale interactions between the problems and solutions.³¹³

The approach of the ICJ to sustainable development has been deemed to be mainly focused in the balancing of concerns. But it has to be taken into account though that the functions of the court, in accordance with article 38.1 of its Statute, is the settlement of disputes through its jurisprudence and the contribution to the development of international law as an auxiliary function.³¹⁴ Consequently, the court could not decide

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 $^{^{310}}$ See a deeper analysis about this topic in: Boyle (n 96) 214 - 215.

³¹¹ Gabcikovo-Nagymaros Case (n 153). See also: ibid 207.

³¹² ibid.

³¹³ See also: *Jabbour* and others (n 76) 16.

³¹⁴ United Nations, Statute of the International Court of Justice, 18 April 1946, Art. 38.1.

about facts that the parties of the dispute did not allege even when it can acknowledge the existence of new environmental laws concerning the application of a treaty.³¹⁵

The ITLOS on the other hand seems to be less reluctant to take into account sustainable development issues, but this could be due to the fact that the LOSC has many provisions containing the principles of sustainable development. For example, as Judge Laing pointed out in his separate opinion to the provisional measures in the Southern Bluefin Tuna Cases, it is undeniable that the UNCLOS adopts the precautionary approach in the paragraph 4 of the preamble and articles 63-66, 61, 64, 116, 117, 118, 119 and 290. This situation can be identified with respect to many of the other sustainable development principles.

It has to be kept in mind as well that these judiciary bodies have voluntary jurisdiction, meaning that the fulfilment of their decisions and the resolution of international disputes rely on the States that comprise the international community. ³¹⁷ For that reason, those bodies might be interested in avoiding overly progressive considerations as much as possible. Therefore, it would be fair to say that the problem from the judicial perspective is not the approach of the judiciary bodies themselves, as they are limited to rule within the facts and laws brought for each case. The problems are rather related to the legal tools of which the judiciary bodies dispose.

5.3. Obstacles in the material context

As pointed out in the previous chapter, it can be concluded that one of the core problems for the achievement of sustainable development goals is the limited information, which reinforces the need for more research. This issue can be noticed in many areas, particularly in the goals for land conservation, where global data on degradation has not been updated for a long time in spite of the new technology available. This brings about as well the fact that research cannot be taken in isolation and must be interpreted within appropriate contexts to overcome the lack of coordination among different areas. That is what happens for instance with the large

³¹⁵ See for example: The Gabčíkovo-Nagymaros Case (n 153) 112, 140.

³¹⁶ Separate Opinion Judge Laing (n 267) 13, 14, 16, 17, 19.

³¹⁷ Even when paragraphs 2-5 of Article 36 of the Statute of the International Court of Justice establishes the compulsory jurisdiction of the ICJ, it is not really compulsory because is based on the consent of the parties. States can accept or reject the Court's jurisdiction under terms and conditions they determine themselves. Meanwhile, ITLOS has voluntary jurisdiction to deal with disputes by agreement of the parties and compulsory jurisdiction for some specific kind of conflicts. See further: ITLOS, articles 20 - 23.

³¹⁸ See further: GEO-5 (n 283) 88.

amount of information that can be found regarding chemicals, which has not been sufficiently used to bridge the gaps on legislation about its effects on health and environment.³¹⁹

The problem of insufficient research becomes relevant from the legal perspective because without clear information, it is almost impossible to set measurable objectives. Land and water related areas offer a perfect picture of the situation, as they are especially challenging for the reason that they are inadequately represented in international objectives and many of their goals lack quantifiable targets.³²⁰ This is increased – or even caused – by the lack of long-term monitoring programmes, which are essential for a comprehensive understanding of trends in global environment and therefore for the evaluation of the effectiveness of internationally agreed goals.

Since only some instruments have compliance and evaluation mechanisms, the measuring of outcomes becomes unfeasible, which constitutes a problem when avoiding environmental damage. It can be noticed that environmental trends are monitored in a deficient way, causing major gaps and limiting the ability to avert unwanted outcomes. This lack of improved national and global monitoring systems gives place to the need to create standard indicators for governments to monitor the environmental impacts of different patterns.³²¹

Where compliance, monitoring and enforcement of regulations is fragile, financial and technical capacity to implement improved management practices becomes narrow. This can be seen in the waste-related goals, where mismanagement is usually caused by the increasing transboundary movement of hazardous wastes from developed to developing countries with weak economic and scientific capacity. This problem is also found in the water-related objectives, where monitoring of water quality, quantity and ecosystem's health have been reduced in many regions. As a result, the problems concerning the assessment and management of the water environment have increased due to data gaps and the rapidly changing nature of water issues, including those related to climate change. 323

This characteristic turns the existing models of international governance into ineffective tools for the achievement of sustainable development goals. It can be noticed

³¹⁹ ibid 185.

³²⁰ See further: OECD, 'Taxation and Economic Growth' (2008) 620 Economics Department Working Papers; see also: ibid 127.

³²¹GEO-5 (n 283) ibid 88.

³²² ibid 170.

³²³ ibid 127.

in the climate change related goals, where the current emissions pledges have been proved to be insufficient for the avoidance of serious impacts.³²⁴ And also in the biodiversity field, as the lack of documentation for both the current and the required level of financing to safeguard biodiversity has caused a breach in the monitoring processes. Therefore, it has obstructed the improvement of a range of issues that go from hunting and pollution, to enforcement of environmental impact assessments and mitigation measures for infrastructure development.³²⁵

Another hindrance that even transcends the institutional field is the insufficient authority of the environmental institutions – global and national – as their level of power, resources and capacity are usually out of proportion with the vast responsibility they bear for implementation of sustainable development. Some discussions and debates about this particular problem in the context of global governance for sustainable development context have arisen, based on the unsatisfactory results of the different programmes.

All these problems are linked somehow to the predominance of economic considerations when translating international agreed goals into practice, as access to technology and funding is very restricted.³²⁸ Despite all the contributions and advances reached in practice for the achievement of sustainable development goals in the different areas, environmental concerns are still subordinated to economic growth in the development agendas, policies and strategies. Furthermore, it becomes obvious that implementation is still highly conditioned by the political will, the prevailing economic trend and the weak governance structure for sustainable development.

5.4. Current Legal Outlook on Sustainable Development

The obvious problems related to poor data, weak frameworks for compliance, lack of confirmable indicators, calculable targets and inconsistencies of information in areas like biodiversity, wastes, and aspects related to land use and conservation of terrestrial

³²⁴ ibid 59-60.

 $^{^{325}}$ ibid 156 - 160.

³²⁶ ibid 17.

³²⁷ ibid.

³²⁸ One of the main barricades for the achievement of water related goals for instance, has been the inadequate capacity along with the limited access to technology, funding and information. Likewise, many national reports submitted to the Convention on Biological Diversity have noted the lack of financial, human and technical resources as the prevalent impediment for the implementation of national strategies and the aforementioned convention in general. It also applies in the case of sound chemicals and waste, where in addition to scientific knowledge and education gaps, management is also hampered by a shortage of resources, capacity and compliance monitoring. Ibid 127 and 156.

ecosystems, make the examination of the progress on international sustainable development objectives a difficult task.³²⁹ It can be noticed that a number of serious incongruities are still obstructing the accomplishment of sustainability aims and even the last attempt to deliver a systemic change in the architecture of sustainable development governance through Rio+20 was not as successful as expected.

A new set of negotiations are taking place in the international context with the purpose to define a post-2015 development agenda in September 2015.³³⁰ The need to fully integrate economic, social and environmental spheres in a *holistic*, *comprehensive* and balanced manner has been emphasized once more during the first United Nations Environment Assembly in June 2014.³³¹

For this objective, a group of sustainable development goals have been contemplated among its various inputs, those being: the eradication poverty and inequality in all its dimensions; the adoption of more sustainable lifestyles to address climate change; the transformation of economies into more strong, inclusive and resilient ones; the promotion of peaceful societies and strong institutions; a renewed global partnership and suitable means of implementation; and the review of progress on sustainable development commitments.³³²

In principle, not many innovations seem to be introduced in this new negotiation, but the main advantage is the acknowledgment of the problems for implementation and the consideration of different disciplines, sciences and groups in the process. Also, the 17 goals and 169 targets that have been proposed by the Open Working Group of the General Assembly on Sustainable Development Goals, represent a solid message that the environment should be prioritized over economic growth. The most remarkable advance that can be identified is that all 17 objectives accentuate sustainability and almost half of the goals directly pair the efforts of UNEP and the

³²⁹ See further: GEO-5 (n 283); See also: *Jabbour and others* (n 78) 9.

³³⁰ Post-2015 Development Agenda (n 1). See also: UN Discussion Document for the 2015-post Development Agenda. Post-Intergovernmental negotiation, February 2015, 17-20.

First United Nations Environment Assembly, 23 - 27 June 2014, Nairobi, Kenya. Over 1065 participants, 163 Member States, 113 Ministers and 40 Events.

³³² Post-2015 Development Agenda (n 1). See also: Targets in the Proposed SDGs framework.

United Nations General Assembly, 'The road to dignity by 2030: ending poverty, transforming all lives and protecting the planet Synthesis report of the Secretary-General on the post-2015 sustainable development agenda', 4 December 2014, Registration number A/69/700.

environmental agenda. This is a represents a noteworthy advancement of integrated sustainable development.³³⁴

Even though the ongoing negotiations are intended to overcome the problems by the creation of new binding objectives, they still remain in the abstractedness as they are taking the same focus as the previous declarations. This can be noticed for example when it is said that integration can occur either within a sector (between climate change and biodiversity for example), or among any of the three dimensions of sustainability. Such a wide integrated approach seems too complex and daunting to implement.

As this critique has been foreseen, UNEP's conceptual integrated framework has proposed three key principles that States need to address in the road to sustainable development: a life dignity for all; the assurance of a minimum standard of living for all; and finally, development within the capacity of the Earth's life support system. ³³⁵ It is argued that with data revolution there is no excuse not to call for more integration and application of these principles. ³³⁶ But the impossibilities for this raise once more from the abstractedness of the purposes, which gives place to the carelessness about shrinking the resource base and the lack of willingness to invest now for sustainable development for today's and future generations.

Still, this evidences an open-endedness that will not contribute to the achievement of quick results. The need for an integrated approach is of course out of discussion, but it should not been forgotten that it requires political and multistakeholder commitment to reform the existing institutions, generate the incentives for interlinked solutions, and take a longer-term view towards economic, social and environmental progress.

All the failures and slow progress in sustainable development international goals put forward that integration as it has been conceived until now is a really difficult task; even though, it still keeps on being the main focus of attention. By this, what could be anticipated is not that progress will not occur, but that it will continue as slow as it has been until now. This gives way to questions about the possible ineffectiveness of the proposed framework, as the basis for the new agreements is still the same; that is, the principle of integration.

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³³⁴ See further: Oyun Sanjaasuren, 'Opportunity for Change: UNEP should provide leadership in integrating the environmental, economic and social agendas integrating the environmental, economic and social agendas' found at: http://89.31.102.21/ourplanet/Opportunity-for-Change

³³⁵ Post-2015 Development Agenda (n 1).

³³⁶ ibid.

It should be taken into account that the considerations of the goals within an interconnected system composed by all the objectives in conjunction call for a consistent monitoring and evaluation system, a proposal to efficiently manage financial resources and tactics to supplement existing national and regional efforts. Without a precise measurement system of progress the risk of undermining sustainable development goals increases and this issues cannot remain in the abstractedness if real results are sought.³³⁷

Additionally, it can be said that the disconnection between the legal language and the scientific data is still prevailing during the new negotiations as the objectives are being drafted in legal language in isolation. But it should be reminded that without identifiable targets, the progress cannot be measured in realistic terms, and this will lead once again to measure the results at convenience without genuine significance in the physical world. This is what has happened for example with regards to the acclaimed carbon tax system and the Kyoto targets. It can be found in the press that countries have exceeded their original ambitions, but scientific reports show the opposite, since climate change is one of the planetary boundaries that humanity has transgressed and is approaching the earth system thresholds.³³⁸

Outcomes cannot be measured merely in the formal sense and be expected to bring positive results in the real world. If real results are intended to be reached, the new agreements need to bring a long term paradigm change that mirrors today's scientific reality. Therefore, even when it can be supposed that most of the problems referred above are being considered during the new negotiations, they are still very open and left to randomness, creating more difficulties when measuring the outcomes.³³⁹

These negotiations are decisive and they are being faultily understood as the current chosen prototypes, analytical fields of study and ethical choices are not proper to face the challenges of sustainable development. Proposed solutions must accept and match real challenges. So even when the integration principle is of indisputable importance, it should not continue being the main focus of attention, but should be seen

³³⁷ See further: *Jabbour* and others (n 78) 9.

 $^{^{338}}$ See further: GEO-5 (n 283) 58 - 61.

³³⁹ By asseverations such as "Paris will not solve climate change at a pen stroke. But similarly it must trigger a world-wide over-achievement and a clear sense of direction that can restore the natural balance of emissions on planet Earth" found in the media.

See for example: http://www.un.org/climatechange/blog/2015/02/kyoto-protocol-turns-10-un-says-first-critical-step-must-trigger-new-2015-emissions-curbing-deal/

instead as one of the different tools to reach the substantial objectives of sustainable development.

5.5. Short Discussion

After reviewing the situation of the legal instruments on sustainable development, it can be said that the obstacles for the achievement of internationally agreed goals cannot be regarded to a lack of regulation as there is an abundance of international instruments that cover the subject. The real problems are rather attributed to the failures in communication between science and law, the disintegration of governance and the proposed solutions, the inconsistencies of norms and lastly, the weight of the economic interest when translating the agreed goals into law. Therefore, it is concluded that the normative problems cannot be blamed on non-regulation but on the content and coordination of the existing frameworks.

With regards to the locus assumed by the international judiciary bodies, the letdowns on giving full effect to sustainable development adages are connected to the fact that the main focus of attention during the resolution of disputes is usually the economic growth over the environmental protection. Nonetheless, it has to be kept in mind that the problem from the judicial perspective is not the approach of the judiciary bodies themselves, as they are limited to rule within the facts and laws brought for each case. The problems are rather related to the legal tools of which the judiciary bodies dispose.

As a result of the aforementioned problems, several obstacles can be identified when measuring the effects of sustainable development in the real world. First of all, there is a big obstacle for measuring the outcomes due to the complexity of legal agreements and the deficient structure of the monitoring systems established by law. Summed to that, the implementation policies are not sufficient, the current institutional frame for international governance can be deemed to be weak in structure and authority; and the goals or targets as consigned in the legal instruments are not precise or measurable.

This increases the need for more research and coordination in the different areas. Just as in the formal and judicial context, the predominance of economic considerations over the environmental or social ones is reflected in this sphere, allowing to say that, as such, the mismatch between economic and environmental concerns is the strongest obstacle for sustainable development at all scales.

The information drawn by the different reports emphasizes the clear need for new policy responses. The current international scene shows that there has been a positive reaction to this, but even when the new negotiations that are taking place are intended to overcome the identified problems by the creation of a new binding agreement, they are taking the same focus as the previous declarations. By this, what could be predicted so far is not that progress will not be reached, but that it will continue as slowly as it has been until now. Therefore, the need to shift the perspective is remarked once more, taking into account that the urgency for action will be inversely increased by our slowness in getting effective results; so the slower we are, the more the need to act.

This suggests that despite the difficulties brought by perceiving integration as it has been until now, it keeps being the main focus of attention and reinforces the need to adopt a different approach if quicker and more effective results are sought. Therefore, some considerations or reflections that might contribute to change the perception of sustainable development for the implementation of future legal developments will be addressed in the next chapter.

6. Strategies for sustainable development law

To this extent, it is clear that the achievement of sustainable development's main target – the integration of economic, social and environmental priorities – has been hindered by the constant pursuit of economic growth, which seems to prevail over the two other spheres at the international, national and local development plans. This has its basis in the application of the objective to maintain economic growth and the business orientation of governments that usually downplay environmental priorities. In the view of some scholars, as that situation is challenging the resilience of earth natural systems and the ability to preserve human development, the search of new models to reach the goals sought by sustainable development has been prompted.³⁴⁰

Due to this situation, some important alternatives have been proposed for the improvement of sustainable development strategies. An example of this is the emanation of sub-disciplines seeking to complement and clarify sustainable development matters from different perspectives, like is the case of environmental ethics, ecological economics and environmental sociology, referred to in chapter 2. Furthermore, the different UNEP initiatives and reports, such as GEO-5, the most recent Global Sustainable Development Report 2015 or the Green Economy Initiative, have promoted the debate on the development of environmental and social parameters and indices that are now starting to be applied.³⁴¹

Although positive contributions for the balancing of social, economic and environmental priorities has been presented, environmental concerns usually remain subordinated to economic growth in national and local development plans, policies, and strategies. This constitutes the main reason for the slow pace on the pursuit of global environmental change. Implementation of the different international legal instruments is thus seemingly constrained by limited political will, the prevalence of free trade ideology, economic and financial emergencies and the rise of new governance approaches to foster sustainable development processes.³⁴²

When the crucial dimensions of sustainable development are analysed individually, what is found is not very promising either. The unsatisfactory status of

³⁴⁰ See further: *Rockström and others* (n 307) 472 - 475.

³⁴¹ See further: Global Sustainable Development Report, advanced unedited version, 2015 Edition; United Nations Commission for Sustainable Development, 'A Guidebook to the Green Economy' (June 2013) 4; GEO-5 (n 283).

³⁴² See further: GEO-5 (n 283), it is remarked throughout the whole report.

each of the three components of sustainable development is highlighted for example in the final draft transforming our world: the 2030 agenda for global action, presented by all the permanent representatives and permanent observers to the United Nations on 8 July 2015.343

It is true that according to research, hundreds of millions of people have emerged from extreme poverty over the last decades.³⁴⁴ Nonetheless, economics have not necessarily improved globally as its objective has been narrowed to growth and the importance of demand management, nature and scientific evidence has been downplayed until now. As such, the economic sphere of sustainable development has failed to be aware of the fact that all economies depend on living within the earth's biogeochemical borders. It has forgotten that the extent to which humanity has transformed the environment requires a shift from the neoclassical economics of the 18th century as its tools are being applied in a framework that has been vastly transformed.³⁴⁵ Societies needs have not necessarily been met either; efforts to reduce poverty, hunger and health-related problems have not always been very successful and human wellbeing has deteriorated in many parts of the world, including wealthy countries.³⁴⁶

Moreover, the deterioration of the environment is still taking place. This has been repeatedly pointed out in recent reports and scientific documents that have been focusing on the explanation of the risks that human activities could inadvertently entail, the limits that have already been crossed and the repercussion that it brings for conditions upon which our societies depend.³⁴⁷ By showing that several of the identified planetary boundaries have been crossed as a consequence of human activity, the academic community has tried to warn decision-makers on the indispensability of defining a safe operating space for humanity.

All this underpins that the legal frameworks developed until now have not been adequate to face the modern social, economic and environmental challenges. The International community is aware of this situation and new initiatives are being created to respond, but the ongoing negotiations and proposed mechanisms do not seem to bring a very promising picture as the same structure is kept. What is being changed is mostly

³⁴³ Post-2015 Development Agenda (n 1) specially paragraphs 11 to 16.

³⁴⁵ See further: Nicolas Kosoy and others, 'Pillars for a flourishing Earth: planetary boundaries, economic growth delusion and green economy' (2012) 4 Current Opinion in Environmental Sustainability 74, 74. ³⁴⁶ Post-2015 Development Agenda (n 1) 11; ibid.

³⁴⁷ ibid (n 1) 11. See further: Will Steffen and others, 'Planetary boundaries: Guiding human development on a changing planet' (2015) Vol. 347 no. 6223 Science.

the way it is being presented, without making due regards to the deeper and substantial problems that hinders effectiveness.

There is a need to shift the structures, because what is being done now is merely creating more instruments, which is superficial, like the top of an iceberg. What needs to be changed is the basis of the structure. This asseveration is based on the proposal for the new sustainable development goals, which are presented – same as the preceding international agreements on sustainable development – as an aspirational or optimistic manifestation of good will rather than realistic objectives.

If goal 1 *end poverty in all its forms everywhere* is analysed for example and compared with the current state of affairs, the early conclusion that can be reached is that this objective will not be met by 2030 for the reason that is very ambitious and vague. Or goal 2, *Conserve and sustainably use the oceans, seas and marine resources for sustainable development* for instance. If this objective is compared with the outcomes of the Global Sustainable Development Report 2015, it is found that even when 3 billion people depend on marine resources for their livings, they are progressively more endangered, degraded or destroyed by human activities.³⁴⁸ And something similar can be found with regards to most of the 17 goals.

Departing from this point, and based on the entire analysis presented through this thesis, the following considerations are introduced with the purpose to offer an academic perspective of some elements that could be of use for the implementation of the new international sustainable development agenda.

6.1. Elucidation of the principle of integration

There are two key hitches that can be linked to the main role granted to integration for the achievement of sustainable development. The first is the terminological problem related to the content of sustainable development and the integration principle, as the most agreed definition of the first is exactly the content of the second. At the same time, the terms *balance* and *coherence* are frequently used as synonyms to refer to integration.³⁴⁹ This lack of precision leads to mingle integration with sustainable development and consider integration as an objective, principle and tool at the same

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³⁴⁸ Global Sustainable Development Report 2015 (n 340) chapter 3: the oceans, seas, marine resources and human well-being nexus.

³⁴⁹ Post-2015 Development Agenda (n 1) see for example paragraph 5: the goals and targets we have decided on are integrated and indivisible and balance the three crucial dimensions of sustainable development.

time, ending up in more ambiguities and misperceptions and leading to more problems when taking its postulates to practice.

If the meaning of these terms is examined, it will be noticed that each one brings different implications. On one hand, integration does not necessarily imply balance. It has been seen that the three pillars have been included in the different instruments, which allows one to say that they have been integrated. However, it can be concluded that the inclusion has not been balanced as the importance given to each area is not equal in the correct proportions. In the other hand, in correspondence with the dictionary form of *coherence* and in order to know if it has been reached, it is necessary to determine what is considered as *logic* and *consistent*, so it becomes even more difficult to measure its attainment based on those parameters.

Consequently it can be assumed that since integration itself implies combination to form a whole, its purpose has been achieved; but if it is measured departing from what the concept of *balance* or *coherence* entails, it can be deemed unsuccessful. Nonetheless, a deeper analysis of the concept of integration suggests that what is pursued by integration is the organization of diverse elements of the economic, environmental and social aspects of sustainable development so as to enable them to work together effectively. Therefore it can be said that the concept of *coordination* is the one that suits it better.

The drive of inquiring in this specific subject is to demonstrate that since law must be as precise as possible, special attention with regards to terminological uses is required. Even when all those terms are closely related and are involved in the process of integrating, they have their own meanings and implications and should not be indiscriminately used.

The second problem has to do with the substantial matters of adopting an integrated approach. This asseveration is based on the fact that even when it is always kept in mind that integration is key for sustainable development, the purposes of each spheres individually have not been met (as studied in the previous chapters, especially 3 and 4. As a consequence, it is common to find that the sustainable development objectives are mixed for the sake of integration, creating mess and confusion and ending up on giving more importance to one of the three pillars, which is usually the economic.

This is happening once again in the ongoing negotiations for sustainable development. For example, as is stated in paragraph 50 of the final draft, sustainable development goals and targets are integrated and indivisible, global in nature and

universally applicable. But it has been proved by the failures of the previous international instruments – whose unachieved goals are actually intended to be completed through this framework – that it is really difficult to take them in an integrated and indivisible way in practice.³⁵⁰

Thus, this is contradictory with the acknowledgement in the same paragraph of the different national realities, capacities and levels of development in practice. This passage continues with the description of the targets as aspirational and global, which is reflected indeed in the undetailed means of implementation and the global partnership stated from paragraph 53 to 72.³⁵¹ All this, in my opinion, goes against the aim to provide a strong legal basis.

To surpass this situation, the specialty, individuality and differences of each sphere should be recognized and be given specific targets as such as well as particular guiding parameters. They should be balanced and interconnected by being given equal importance, spaces and resources, but they should be separated in regards to the targets, be assigned different guiding ideologies and implementation-related considerations. This would not affect the constant communication between the three areas and actually can be easier to make progress on each by its own, which at last would indirectly favour integration.

In consequence, if the integration principle is understood as the search for coordination of the internationally agreed core of sustainable development, it becomes an indispensable tool to measure progress and to analyse operationalization.³⁵² Due to the terms in which the concept of integration is presented, it would be more convenient to perceive it as the core of sustainable development itself than a principle, objective and tool.

It is true that there is a strong need of forums where implementing actors and institutions can gather to give place to coordination of agendas on environmental, economic and social sectors to favour cross-fertilization. Nevertheless, this should not be done at the operationalization level but at the phase prior to the legal making process instead; that is, at the stage of transforming the scientific outcomes into law and

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³⁵⁰ ibid. See paragraphs 10 to 15 on the scope, where the failures on the previous instruments for sustainable development are mentioned as the basis for the new one.

³⁵¹ ibid. Which according to paragraph 14, reflect the integrated approach and the crucial means of implementation.

³⁵² ibid 86.

policy.³⁵³ With this, what is intended is not to rest importance to the integration principle, but to point out that it is too abstract when it comes to operationalization and should not continue being the main focus of discussion.

The integration principle can still be present in any legal reasoning from the perspective of lawmakers, legal operators, judges, lawyers and the scientific and academic community, but the decisions reached should not continue concentrating all their efforts on it. If in the search for coordination each sector follow the postulates of certain principles to guide their decisions and be in charge of some assigned tasks, the purposes sought by this principle would be indirectly reached at the end. This view might contribute to overcome some of the problems identified in chapter 5.

6.2. Incorporation of relevant sciences and disciplines for sustainable development law-making

The importance of the scientific understanding to guide policy decision for sustainable development and the need to sharpen it, is undeniable. It has been even acknowledged in the Global Sustainable Development Report 2015 presented to UN Member States at the High Level Political Forum³⁵⁴ and the post-215 development agenda.³⁵⁵ In these documents published in June and July 2015 respectively, the need for further research using scientific techniques to identify emerging issues and guide policymakers has been highly remarked.

There is no doubt that the scientific community should be granted a main role as an interpreter of the real world. But they should be accompanied by experts of academic disciplines relevant for sustainable development, such as law, economics, sociology, philosophy and political science among others, who would be in charge of making it understandable for policymakers. This should be at the first level of the structure and permeate the pre-legislative and legislative processes.

The proposal of a follow up and review framework integrated by governments, economic, social, environmental organizations and other actors in charge of research, analysis, debate and track of the legal developments in an equilibrated way for more effective and coherent governance, is of use for this point.³⁵⁶ It is true that stronger mechanisms and networks for the following up with specific tasks and multidisciplinary

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³⁵³ See further: *Cordonier Segger* (n 7) 70.

³⁵⁴Global Sustainable Development Report 2015 (n 340).

³⁵⁵ Post-2015 Development Agenda (n 1) 35.

³⁵⁶ See further: ibid 56 - 72.

approaches are needed. Nonetheless, it should not only be taken at the operational level to measure the outcomes but also to the first stage as it is important to have clear from the beginning what is being advanced towards.

In the three-folded concept of sustainable development, the scientific community should be conceived as the representative of the environment, and lawyers should be in charge of translating and contextualizing their recommendations into the legal language. They might serve as a channel of communication between the knowledge network and the legislators at the moment of proposing solutions to operationalize them. Where overlaps or conflicts between social, economic and environmental fields of law become ostensible, legal investigation and analysis could help to outline balanced solutions. Additionally and based on the premise that our actions have repercussion on the whole earth no matter where we are, the international legal solidarity would be of great importance for this point, for the reason that this task requires great amount of research, which at the same time depends vastly on financial resources and human capital, as pointed out in the post-2015 sustainable development agenda.

In regards to the economic concerns at the law-making level, it is worth of mentioning that the tools of neoclassical economics are not in correspondence with the current challenges of sustainable development. Consequently, a new perspective in which the human-made universe of economics and politics is linked to the natural world, taking into account the technological developments of the new century is needed. Until very recently, economics took nature for granted and focused on market-based finance, saving and business investment instead, forgetting that economies have always relied upon natural capital.³⁵⁹

To change this situation, economics should be teamed up with other disciplines such as the engineering knowledge, departing from the affirmation that economy is a constructed system that requires smart thinking, planning and targeted technologies.³⁶⁰ This should be accompanied by an ethical framework consistent with the cultural diversity of the world, as the normative core of sustainable development suggests the

¹³ Science plays a role in informing legislation, at the national and international levels. In addition, the judicial system is increasingly faced with litigation cases that present complex issues of science and technology, and increasingly requires access to sound science. One role of science is therefore to provide evidence on issues that are challenged or whose validity is questioned. Global Sustainable Development Report 2015 (n 340) 27.

³⁵⁸ ibid 32, 33.

³⁵⁹ See further: Jeffrey D. Sachs, *The Age of Sustainable Development* (Columbia University Press 2015) XIII – XIV/Preface.

³⁶⁰ ibid.

combination of the economic growth, social justice and the protection of the physical world.³⁶¹ Since the threat to the physical world is in an advanced stage and paired with a portentous economic inequality, economics must be shifted from chasing indicators such as Gross Domestic Product (GDP) to prosperity, inclusion and sustainability.³⁶² This would correspondingly match the three spheres of sustainable development from the viewpoint of economics as analysed in chapter 2.

As pointed out by the biologist Edward Osborne Wilson, humanity cannot continue with stone-age emotions, medieval institutions and near godlike technologies within the 21st century; some level of coherence must be achieved.³⁶³ The current state of the world created through technology should be matched with the sustainable development discourse, to give humanity new guides and measuring posts for prosperity, justice, and environmental safety in the fluctuating and unsteady world.³⁶⁴ There is a strong need of a new perspective centred in the relationship between the world of economics, politics and the natural world within the 21st century panorama.

Likewise, environmental education should be given place as one of the most important points to strengthen within future negotiations. I would dare to say that this is indispensable to achieve the goals related to the principle of public participation, which has no effect if it is not complemented with education. In my view, the right of access to environmental information and participation has no meaning if the addresses are not properly educated or aware of it.

It would also contribute to the finality of the principle of good governance, due to the fact that the more educated the people are, the more they can participate and contribute to the sustainable development objectives. Nonetheless, this is a task that would bring results only in the long-term. By now the need for action in the present has to be faced with more expedite methods, as humanity is running out of the scenery to undertake and make possible every purpose. Still, it has to be given major importance and some efforts must be made starting now.

The incorporation of the relevant sciences and might be of help to overcome many of the problems that hinders the effectiveness of sustainable development goals identified in chapter 5, such as: the failure in communication between science and

³⁶² ibid.

³⁶⁴ Sachs (n 358).

³⁶¹ ibid.

³⁶³ Quoted in Harvard Magazine from a public discussion between Wilson and James Watson moderated by NPR correspondent Robert Krulwich, September 9, 2009.

policy, the disintegration between governance and the proposed solutions, the inconsistencies of norms within the diverse political and normative contexts, the consideration of goals in isolation, the focus on economic priorities, the mismatch between sustainability challenges and responses and the deficiencies on the specification of targets. The decision-making processes could be guided as well by the precautionary principle and the principle of sustainable use, which could be useful to guide actors in this sphere when performing research and suggesting solutions.

6.3. Perception of law as the main tool

As it has been repeatedly pointed out, the exact relationship between the three main areas of sustainable development in the international legal context is uncertain and the idea has been replicated differently under the diverse instruments that cover the topic. For example while Rio Declaration and Agenda 21 call for balance between the three sectors, Brundtland Declaration and other documents drafted by Non-Governmental Organizations emphasize the environment. These differences can be regarded to the political tensions and conflicting world views during the negotiations of the different instruments, triggering to spend excessive time and energy trying to define the concept, but being unsuccessful on agreeing on a definition as shown in chapter 2.

Nonetheless, while it may not be possible to clear up the doubts about the concept of sustainable development, it is necessary to understand the objectives sought by it for the reason that the clearer they are, the more accurate sustainable development prospects become to take a leading role in the public debate. Therefore, one of the main challenges for law is to be as precise as possible. This can be achieved if the scientific community is given a starring role within the new international framework for sustainable development, as the decision making processes would rely on precise data.³⁶⁵

In that sense, law must be seen as the instrument to operationalize the solutions suggested by the knowledge network so as to bridge the gaps in communication between science, economy and society. Within that scheme, the main task of lawmakers would be the formalization of the solutions offered by science into law, contextualizing and matching them with the economic and social needs. The role of judges, legal operators and lawyers would be to interpret and serve as a channel within the different

³⁶⁵ Global Sustainable Development Report 2015 (n 340) 27.

contexts. In line with that, the guiding principles for lawmakers shall be the principles of equity and common but differentiated responsibilities; for judges the principle of public participation and access to justice; and for legal operators the principle of good governance.

Until now, legal developments have tried to define, analyse and implement sustainable development in the search for new ways to promote coherence and resolve conflicts. But this has not been very satisfactory because they are usually proposed in an idealistic way, which makes it difficult to take it to practical terms. This needs to be changed as law cannot continue disclaiming reality. It needs to get out of the established formal schemes to face corporeality, offer tangible solutions and stop ignoring what is happening in the physical world. It does not exist in a parallel realm and cannot change facts if real challenges are not acknowledged. Consequently, the defiance is discovering mechanisms to go from abstract values to concrete enforceable law.

For example, if the current state of affairs of climate change is taken, it can be seen that there are some gaps between law and reality. While the Intergovernmental Panel on Climate Change has ratified certain levels of sea rise in its most recent assessment of climate science with the aim to guide policymakers, ³⁶⁶ the scientific evidence shows that sea level rise is taking place at a faster pace than those ratified by the UN. ³⁶⁷ This shows that the simple answer to the modern challenges cannot be the disclaiming of reality through legislation and policies, for the reason that the environment will not adapt to the reality we claim on paper and it has to be the other way around.

Legal mechanisms should not continue focusing on trying to define sustainable development since that debate has captured all the attention and impeded to advance towards practical results. Instead, it should be in charge on bringing to practice the solutions suggested by the knowledge networks. Law should not be tasked with the balancing of the social, economic and environmental aspects of sustainable development and this should be defined before taking it to the law-making process. It has been proved – in the cases of ITLOS and the ICJ analysed in chapter 4 for example – that if left for this stage, mix-ups will capture the attention and at the end one area will be prioritized above the others.

³⁶⁷ See for example: James Hansen 'Atmospheric Chemistry and Physics' in *An interactive open-access journal of the European Geosciences Union* Vol. 15, Nr. 15, 2015.

³⁶⁶ Climate change 2013: the physical science basis. Intergovernmental Panel on Climate Change (IPCCC).

The perception of law as the main tool would be of use to overcome the problems identified in chapter 5 for the legal sphere. But also some of the obstacles in the practical context such as the lack of coordination between disciplines and areas, such as the impossibility to measure objectives, the lack of specific targets, the insufficient interpretation within appropriate contexts, the poor coordination between different disciplines and areas and the ineffectiveness of the current model of international governance.

6.4. Proposal of a theoretical approach and leading principles for each pillar:

Due to the important implications of sustainable development for societies, some precision is still needed in regards to what is to be sustained. As this has been impossible to define or agree on, the attention has centred in the integration of the three main key areas, but instead of offering guidance it has led to more confusion and difficulties in practical terms. Taking as a point of departure the adversities of relying on that kind of abstract and polemic premises, the need of taking a different viewpoint becomes indisputable. This might give place to allege that the perception of integration as the closest approach to sustainable development core should be shifted. Based on that, the following proposal is presented.

To start, it should be recognized that it might be more beneficial that not every single actor at each level is in charge of ensuring integration, not only because of the problems this entails, but also because of its abstractedness. To overcome this, some of the sub-disciplines that have appeared in the last years with the aim to complement and clarify sustainable development matters from different perspectives – like is the case of environmental ethics, ecological economics and environmental sociology as presented in chapter 2 – should be taken instead for each of the main pillars of sustainable development.

In line with this, the different actors involved in sustainable development processes should be assigned certain main functions, duties and responsibilities with defined means of competence. Sight should not be lost on the fact that absolute separation of tasks is not possible – neither in theory nor in practice – as some overlapping is unavoidable. On the contrary, that would be an advantage as it adds the integration component to the whole structure either for guaranteeing economic, social or environmental sustainability at any level.

In line with what was presented in the second chapter for the analysis of each sphere of sustainable development, it could be said that by adopting a separate view for every level, the concerns of the three pillars would be taken into consideration individually from the legal perspective. As a collateral effect, what is sought by integration, especially in correspondence with the meaning of *coordination* as pointed out previously within this chapter, would be reached. This might be of use to solve many of the problems identified in chapter 5 with respect to the legal, judicial and material level. Actually, it could be of use for the implementation of the new sustainable development agenda; especially in relation to goal 17, which consists in the strengthening of the means of implementation and revitalization of the global partnership for sustainable development.³⁶⁸

6.4.1. Law-making stage

A new set of value-based parameters is required to evaluate and prompt the implementation of the principles, to shift the world onto a sustainable path and achieve the new sustainable development goals. ³⁶⁹ For this purpose, the actors at the law-making level should be constituted by a knowledge network and lawmakers as proposed in the first point of this chapter, who would ideally agree on the adoption of an academic view to offer guidance in the development of their tasks.

The postulates of a theoretical approach such as those of the environmental ethics for example, could be of use for this purpose.³⁷⁰ It would impregnate the law making process with a perspective based on the extension of the traditional boundaries of ethics that includes humans and the non-human world. In that sense, every legal act would be directed towards the assurance of a determined level of social wellbeing, having in mind the optimization of quality of life for those living and descendants and the respect for the environmental boundaries. This enforces the need to start imagining an economy that is not obsessed with economic growth, with the purpose not to maximize profits but to provide high quality, satisfying jobs, producing goods and services that people do need.

In line with that, the principles of equity, sustainable use, common but differentiated responsibilities and the precautionary principle would be of special

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³⁶⁸ Post-2015 Development Agenda (n 1) paragraph 52, goal 17.

³⁶⁹ ibid (n 1).

³⁷⁰ Examined in Chapter 2.

importance for the application of the environmental ethics hypothesis. The main actors within this level would be the scientific community as the representatives of the environment and experts of social disciplines as the representatives of social concerns; all guided by the postulates of the agreed theoretical approach.

This would be of use for the application of the new agenda for global action, which provides means of implementation for each of its 17 general goals on sustainable development.³⁷¹ In the final draft of this new agenda, it is remarked that each country will be in charge of implementation, taking into consideration the different national realities, capacities and levels of development.³⁷² This is certainly a good strategy, but it can grant wide discretion to States and even lead to confusion. Therefore, the agreement on a theoretical approach to lead the path towards the achievement of the new goals would be of use for the legal operationalization of these objectives, considering that law will be the bridge between the enforcement of those aspirations and reality.

Within this structure, economics and especially law – as suggested in the second point of this chapter – would be seen as mere instruments. Even the environment could be conceived as such if it is comprehended that the core target of sustainability is human wellbeing and survival within the earth's limits, in line with the preamble of transforming our world.³⁷³ This would also give place to the acknowledgement that human life completely depend on environment and that the problems caused to water, air, food and the exposure to toxic substances are bringing disastrous consequences to human beings.³⁷⁴

If there is to be any chance of averting further social and environmental breakdown, the economics playing field should be levelled through law. In that sense, the legal instruments should take into account the postulates of environmental ethics or other theoretical approach that allows to shape the economy in regards to what will be regulated, what will be taxed and what will be subsidized. In that vein, the main sources for the decision making and legal operationalization would be the data acquired through research in the different areas. This would be in consonance with the purpose to build dynamic, sustainable and people-centred economies stated in goal 8 of transforming our world.³⁷⁵

³⁷¹ Post-2015 Development Agenda (n 1).

³⁷² ibid 20.

³⁷³ ibid 'preamble.

³⁷⁴ ibid.

³⁷⁵ ibid 25, 36, 52.

Science, along with the different academic and disciplinary developments would be no longer used mainly to feed the economic system, but to comprehend better our nature and essence, which would stop the headway towards extinction. The environmental ethics approach would be advantageous to shift the current paradoxical view in which economy has become the instrument but also the objective of every single choice made by both individuals and institutions for the sake of wellbeing.

The task of evaluating the progress achieved on globally agreed sustainable development goals would be measured taking as a starting point the series of biophysical trends established at the level of creation of law. Evaluation of results in line with the new follow-up and review framework should be at this level, since it is necessary to learn from past failures or successes and adapt that knowledge to the always changing environmental, political and economic circumstances, in order to overcome the obstacles encountered in practice.³⁷⁶

6.4.2. Application stage

By application stage what is meant is the execution of law on sustainable development, which concerns actors at the international stage such as the different organizations involved in the implementation of law on sustainable development, as well as governments and domestic legal operators at the national and regional levels.³⁷⁷

This sphere represents the connection between law and the real world at the practical scale. For that reason, the premises of a theoretical view such as those of environmental sociology to offer guidance when applying law and materializing its precepts can be of use as it focuses in the societal-environmental interactions. As environmental concerns are becoming increasingly social and political, the attention paid by environmental sociology to the conditions of the natural world conceived as problems and the way law is used to solve them is helpful to assess progress and effectiveness of international law on sustainable development.

It is true that many international instruments on sustainable development are achieving some important goals, but it has been identified as well that the main problem for not achieving its full potential has not been law itself but governance.³⁷⁸ As it is

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³⁷⁶ ibid 56 to 72.

³⁷⁷ ibid paragraph 20: All of us will work to implement the Agenda within our own countries and at the regional and global levels.

³⁷⁸ This is acknowledged in paragraphs 7 and 30 of transforming our world. See further: *Cordonier Segger* (n 2) 71.

materialized at this level of the structure, the principle of good governance gains special importance. Its postulates can complement those of the theoretical approach chosen to guide the different actors in the operationalization of sustainable development law, and could be accompanied as well by the principle of public participation and access to justice along with the precautionary approach.

Monitoring and compliance would also be important for this level and must be differentiated from evaluation in that the last should be at the legislative level and would be performed to see if the results expected were reached. While the objective of the former is the following up of the execution of laws to ensure that the conditions set are being met. In other words, the first is focused on the measurement of results and the second seeks to assure that the procedure conceived to achieve the proposed goals is being followed.

The adoption of a theoretical view would be of help to overcome the mismatch between problems and strategies. One of the causes is the drive of governments and private sector actors towards short-term electoral and financial circumstances that makes them leave aside problems in the long period. But also, for the difficulties related to jurisdiction at the international, national and local levels, as not many attempts have been made to match efforts on information about impacts and compliance. It would also be advantageous to ease up the decentralization of authority in the different parts of the world, which has taken place without the establishment of clear connections between the diverse levels of governments and international bodies, and without shifting the existing patterns of influence by centralized authors.³⁷⁹

If an agreement is reached with respect to a theoretical view at the application stage of sustainable development, some clearance to shift the ineffective existing model of international governance would be offered as the problem might not be the institutional framework itself but the lack of guidance for the legal operators when performing their labour. Additionally, this would contribute to solve the problems related to the insufficient authority of international institutions, as the burden of achieving sustainable development will not greatly depend on them but would be built upon the task performed at the formal level. That is, the problems would be managed from the root by preventing the situations at the legislative level through the constant communication with the knowledge network in order to bring substantive solutions.

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³⁷⁹ See further: GEO-5 (n 283).

This would also benefit the outmatching of some other problems covered in chapter 5, such as the fragmentation and inconsistencies of norms within the diverse political and normative contexts, insufficient interpretation within appropriate contexts, and the lack of compliance and evaluation mechanisms.

6.4.3. Judicial stage

As judiciary bodies play an important role by applying and providing an interpretation of law on sustainable development in the resolution of disputes, they constitute a vital piece of the general governance structure. As it was seen through the cases analysed chapter 4, most of the problems found in practice have their origin in pairing economic with environmental concerns and hence most cases focus on economic issues.³⁸⁰ For this reason, the premises of a theoretical view from the economic theory such as those of the ecological economics would be of use to offer guidance to the actors at this level of the structure.

This approach would be advantageous to reconcile the interest of the economic and environmental areas along with other conflicting goals at the interpretational level. This within the necessary relationship of interdependence and coevolution of human economies and natural ecosystems over time and space, which would be of help for the achievement of the new goals, especially goals 8 and 16.³⁸¹ If for example ecological economics theory is taken as the leading approach, the decisions of judges would be made under a frame in which people can develop and respect the natural limits contemplated by legal instruments.³⁸²

In line with this, the precautionary approach and the principle of public participation and access to justice would accompany the ecological economics postulates to complement the guidance offered to the judiciary bodies in the performance of their labour. It must be kept in mind though that in order to reach the potential aid this could achieve through the purposes of public participation, environmental education must be strengthened.

This perspective could represent a challenge to a considerable number of precepts of neoclassical economic theory, which has been the leading influence and has

³⁸⁰ See further: chapter 4.

³⁸¹ Goal 8: promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. See also paragraphs 8 and 30. *Post-2015 Development Agenda* (n 1).

³⁸² See further: *Sneddon* (n 35) 526.

only focused in the circular flow of exchange value without considering the biophysical world.³⁸³ The labour performed by the judiciary bodies at this level can have relevance to solve one of the problems pointed out in chapter 5 when analysing cases and the respective problems identified. That is, to detect and display the failures or voids left by legislation in coordination over spatial, temporal and jurisdictional scales. But also, to soothe the insufficient interpretation of law within appropriate contexts.

6.5. Short Discussion

It can be concluded that the main problem of the legal frameworks until now, has been that the balance is exceedingly inclined in favour of the economic considerations, hindering the application of all the postulates of sustainable development. Current societies are influenced by economy in every single choice made both by individuals and institutions. For example the choices that people make as consumers (what they choose to eat, wear, and buy or the jobs they perform) are based mainly on economic considerations, forgetting to question about the source, the composition and the repercussions of their decisions both for the environment and their own wellbeing.

The same applies for institutions; as laws and policies are based on economic concerns as well, governments and organizations do not emphasize in matters such as the protection of the environment or environmental education for society for the reason that it might bring negative impacts for the economy. The failures of adopting an integrated approach can be noticed in this. In line with that, some sectors of the international community and academy propose that inclining the balance to the environmental factor would bring better results. While other – as it is the case of the post-2015 development agenda – asseverate that an integrated approach is still indispensable.

As the current governance structures for sustainable development has proved to be ineffective, new proposal are being drafted by date in order to offer solutions. Nonetheless, the outcome documents and proposed mechanisms do not seem to bring a very promising picture, as the same structure is kept and what seems to be different is the way it is being presented. Therefore, what is being shifted are the superficial features, but the core problems and essence will remain the same.

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³⁸³ ibid.

Based on these facts, some strategies and a proposal centred on selected schools of thought for the law-making, judicial and application stages were presented in this chapter. The ILA principles developed in the third chapter are included in the proposal to complement and fill the voids left by the theoretical approach chosen for each level. The objective of this proposal was to offer an academic perspective of some elements that could be enhanced for the implementation of the new international sustainable development law.

At the end, in accordance to the scheme drafted, each of the stages would in principle assure safeguards on specific areas; that is: the law-making stage would look after the environmental concerns, the judicial stage would escort the economic interests and the application stage would attend the social affairs. Nonetheless, as absolute separation of tasks is not possible or not even desired – neither in theory nor in practice –that would be an advantage as it enhances the integration component of the whole structure. This would offer assistance to all economic, social and environmental sustainability at any level.

7. CONCLUSIONS

The main purpose of the individual analysis of each of the sustainable development pillars was to offer a clearer understanding of the objectives sought by each area. The reason for choosing the specific schools of thought correspond to the opinion that those views contain the main ideas of the pillars separately, taking into consideration the other two fields in a lesser extent.

On the other hand, through the study of the how sustainable development has been addressed in the different international instruments, it was possible to envisage its legal conception, different phases at the international level and the great attention it has received after the publication of the Brundtland Report. But even when all those characterizations offer a view of the world as an intertwined system, it is clear that only mere references to the concept can be found instead of an agreed definition. Therefore, it becomes obvious that sustainable development is still a concept difficult to define.

The New Delhi Declaration of Principles of International Law relating to Sustainable Development marked an important contribution to overcome this vagueness. They have been included in treaties and soft-law instruments such as the Brundtland Report of 1987. Since then, their recognition across different fields of law has been extensive by dispute settlement bodies with diverse jurisdictions over contentious issues between states, human rights, investment amongst others. Nonetheless, when the inclusion of those principles in the international instruments (formal), case law (judicial) and the real world (material) is analysed, the shortcomings of the law of agreement become evident.

This ambiguity obstructs its operationalization for the reason that without an explicit delineation it is harder to reach the objectives sought by the concept. Without a formal delimitation of the concept, it is really difficult to establish parameters that allow the measurement of results from the procedural and material perspectives.

From the review of the legal instruments related to sustainable development, it is concluded that the lack of success cannot be deemed to be a lack of regulation, because there is a great amount of legal instruments that include the idea of sustainable development. The problem is rather related to other circumstances not taken into account when shaping law that hinders its implementation, such as the failures in communication between science and law and the weight given to economic interest when translating the agreed goals into law, among others. Therefore, it is concluded that

the normative problems are not related to a matter of non-regulation but of content and coordination of the existing frameworks.

Likewise, the let-downs on giving full effect to sustainable development maxims before the international judiciary bodies are connected to the fact that the main focus of attention during the resolution of disputes is usually the economic growth over the environmental protection. That characteristic exemplifies the failures in coordination over spatial, temporal, jurisdictional and cultural levels.

As a result of those problems, several obstacles can be identified when measuring the results of sustainable development in the real world. One of the most important is difficulties in measuring the outcomes due to the complexity of legal agreements and the deficient structure of the monitoring systems established by law. Summed up as such, the implementation policies are not sufficient, the current institutional frame for international governance can be deemed to be weak in structure and force; and the goals or targets as consigned in the legal instruments are not precise or measurable. This raises the need of more research and coordination in the different areas. Same as in the formal and judicial context, the predominance of economic considerations over the environmental or social ones is reflected in the material context, allowing to say that, as such, the mismatch between economic and environmental concerns is the strongest obstacle for sustainable development at all scales.

The information drawn by the different reports emphasizes the clear need for new legal responses. The current international scene shows that there has been a positive reaction to this, but even when the new negotiations that are taking place are intended to overcome the identified problems by the creation of a new binding agreement, they are taking a very similar focus as the previous declarations. By this, what could be predicted is that progress will continue to go as slowly as it has been until now.

Despite the complications brought by giving to integration the main focus of attention, the same perspective has been kept. This reinforces the need of adopting a different approach if quicker and more effective results are sought, giving place to some considerations or reflections that might contribute to shifting the perception of sustainable development. The idea is to offer a different approach that might be of use for the implementation of the upcoming goals on sustainable development.

The thesis suggests that the problems for the operationalization of sustainable development can be appropriately conducted within a legal framework in line with

theoretical approaches. Although many shortcomings can be identified in both the current and future international instruments – such as their aspirational shape and difficulties in terms of application—they can be useful to match the general concern in the long term with the political and private interests in the short term.

The main conclusion is that the failures for implementation of the international legal instruments for sustainable development adopted until now, can be overcome by improving efforts in each of the three pillars individually. This with the help of the legal principles and specific theoretical approaches, rather than concentrating on integration. It can be of special importance for the implementation of the upcoming post-2015 development agenda *transforming our world: the 2030 agenda for global action*.

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