International law and the sustainable governance of shared natural resources: A principled approach

Sánchez Castillo, N.N.A.

Conclusion: Principles for the sustainable governance of shared natural resources

This concluding chapter highlights the findings, answers to the research questions and conclusions in each of the five preceding chapters. These are addressed in sections 1 to 5 respectively. Each section's first paragraph summarizes the main conclusion in the corresponding chapter. Subsequently, each section repeats the research questions formulated in the introduction to the dissertation for ease of reference. Afterwards, each section highlights the chapter's findings, answers the research questions and sums up the conclusions.

Accordingly, Section 1 addresses the principle of permanent sovereignty over natural resources (PSNR) and the question of whether PSNR and the sovereignty exercised over resources that are shared by two or more states are distinct from each other, in the context of shared aquifer governance. Section 2 discusses the principle of community of interests and the question of its legal nature and role in the exercise of sovereignty over shared water resources. Section 3 addresses the principle of common concern of humankind and the question of its conceptualization and legal consequences in the context of atmospheric governance. Section 4 discusses the principle of public participation and the question of whether the human right to participate in public affairs could complement climate law and possibly contribute to enhancing observer participation in international climate change decision-making. Section 5 addresses the principle of sustainable development and the question of whether the Sustainable Development Goals (SDGs) could influence institutions governing high seas fisheries and deep seabed minerals and thus promote the sustainable governance of these resources.

Sections 6 and 7 provide more general conclusions. Section 6 focuses on the general research questions posed in the Introduction, i.e. what principles of international law promote the reconcilement of the exercise of PSNR and the common interests of states sharing resources? And, what principles of international law promote the inclusion of non-state actors in the governance of shared natural resources? Section 6 answers these questions based on the findings, answers and conclusions in each of the five preceding chapters presented in sections 1 to 5. Finally, section 7 offers concluding remarks and places the conclusions of this dissertation in the context of two international instruments adopted during the course of this study that are of crucial importance to the sustainable governance of shared natural resources, namely the Paris Agreement and the 2030 Agenda for Sustainable Development.

1 SOVEREIGNTY

Sovereignty over exclusive resources and sovereignty over shared resources are conceptually different and constitute distinct legal regimes.

> *Research questions: Is the sovereignty exercised over natural resources under the exclusive jurisdiction of a state different from the sovereignty exercised over resources that are shared by two or more states? If that is the case, what distinguishes one from the other? What is the usefulness of differentiating between them from the perspective of transboundary cooperation and environmental protection?*

The International Law Commission's Draft Articles on the Law of Transboundary Aquifers (Draft Articles) recognise permanent sovereignty over natural resources (PSNR) over aquifers that are shared by two or more states. They do so by referring to UNGA Resolution 1803 (XVII) in the Preamble and by providing in Draft Article 3 that 'Each aquifer State has sovereignty over the portion of a transboundary aquifer or aquifer system located within its territory'. This recognition creates an overlap in which PSNR seems to encompass shared natural resources. Arguably, recognising PSNR over transboundary aquifers could help dissipate certain political concerns. For instance, it could protect aquifer states as a group from foreign intervention by third states or international organizations,[1] including environmental interventions,[2] and from the intention to make shared aquifers part of the common heritage of humankind.[3] Furthermore, PSNR could contribute to allocating responsibility to the aquifer states for complying with the duties inherent to the exercise of sovereignty over the shared resource.[4]

However, as discussed in Chapter 1, scholars point out that applying PSNR to shared aquifers might discourage transboundary cooperation and be in-

1 F. Sindico, 'The Guarani Aquifer System and the International Law of Transboundary Aquifers', 13:3 *International Community Law Review* (2011), 255, at 261 – 262.

2 F.X. Perrez, *Cooperative Sovereignty: From Independence to Interdependence in the Structure of International Environmental Law* (Kluwer Law International, 2000), at 95.

3 L. del Castillo Laborde, 'The Guaraní Aquifer Framework Agreement (2010)', in: L. Boisson de Chazournes, C. Leb and M. Tignino (eds.), *International Law and Freshwater: The Multiple Challenges* (Edward Elgar, 2013) 196, at 207.

4 The Argentinian member of the ILC stated that permanent sovereignty places 'the primary responsibility for the use and management of each transboundary aquifer on the State where the aquifer was located'. Report of the International Law Commission on the Work of its Fifty-eighth Session (2006), Topical Summary of the Discussion held in the Sixth Committee of the General Assembly During its Sixty-first Session, Prepared by the Secretariat (UN Doc. A/CN4/577, 19 January 2007), at paragraph 10. The same member had pointed out earlier that recognizing permanent sovereignty 'was consistent with … the crucial role assigned to aquifer States in the draft articles'. ILC, Summary Record of the 2834th Meeting (UN Doc. A/CN.4/SR.2834, 19 May 2005), at 15 – 16.

sufficient to effectively protect the environment. States would perceive any possible violation of their right to an equitable share as an infringement of their sovereignty and invoke PSNR in order to avoid it, bringing to the fore ideas of exclusive entitlement and protection of territorial interests that tend to deter joint action. In addition, scholars highlight that environmental protection under PSNR – based on the no-harm rule- does not address the environment as such but to the extent that significant harm is caused to the territory of another state. Furthermore, as shown by the *travaux préparatoires* of the Draft Articles and other international instruments examined in Chapter 1, applying PSNR over shared natural resources gives rise to controversy based on political concerns, making debates on this issue within UN organs more complex and negotiations less smooth. Essentially, scholarly writings reject PSNR over shared aquifers because it might discourage cooperation and offer insufficient environmental protection; while states invoke sovereignty in UN discussions to protect their national interests in the shared resource.

Chapter 1 explored the possibility of approaching the issue of sovereignty over transboundary aquifers from a different angle. Thus, instead of addressing the question of whether or not PSNR should apply – which is the question both academic writings and UN discussions try to answer, Chapter 1 asked whether PSNR is any different from the sovereignty exercised over resources that are shared by two or more states (referred to in this thesis as 'sovereignty over shared natural resources', SSNR), particularly in the context of transboundary aquifers. Chapter 1 set out to identify what distinguishes PSNR from SSNR and assess the usefulness of a differentiation from the perspective of transboundary cooperation and environmental protection.

Chapter 1 identified three main differences between PSNR and SSNR. First, PSNR is exercised exclusively by one state over the natural resources located entirely within its national boundaries and in areas under its exclusive economic jurisdiction (exclusive economic zone and continental shelf), while SSNR is exercised jointly by two or more states over resources distributed over their respective territories and where utilization by one state affects utilization by the other(s). Second, the original purpose of PSNR was to ensure political and economic self-determination of peoples and economic independence of newly independent states, while that of SSNR was to regulate the benefit sharing from, and the environmental protection of, shared resources. Third, the essential and characteristic right under PSNR to freely dispose of natural resources does not apply to resources that are shared, while the essential and characteristic duty under SSNR to cooperate does not apply to resources under exclusive jurisdiction.

Chapter 1 also found that the nature of the resource (exclusive or shared) determines the applicable legal regime (PSNR or SSNR), which confers distinguishing rights and duties. PSNR confers to a state the distinguishing right to freely dispose of natural resources under its exclusive jurisdiction. This right is not conferred over shared resources because, based on their very nature,

unilateral acts of disposition may affect the entitlements of the other state(s) sharing the resource and infringe the principle of equitable and reasonable utilisation. SSNR, in turn, requires states to comply with the distinguishing duty to cooperate in managing shared resources. The duty to cooperate does not apply to exclusive resources because they are managed to the exclusion of other states and cooperation only takes place if activities related to their utilization have transboundary impact.

Based on its findings – showing that PSNR and SSNR are different concepts and constitute distinct legal regimes- Chapter 1 suggests that understanding PSNR and SSNR as distinct sets of rules could promote that shared resource governance continues to be increasingly focused on cooperation and environmental protection, and less and less oriented towards protecting states' territorial interests. In addition, awareness of the differences between PSNR and SSNR could make debates about the issue of sovereignty over transboundary aquifers more straightforward and negotiations easier, particularly in the light of the ongoing discussions on the law of transboundary aquifers at the UNGA.[5]

2 Community of interests

The principle of community of interests stems from the legal recognition of the unity of the drainage basin and promotes riparian solidarity and cooperation as well as the formation of a community of law. Emerging trends show that the principle also advances the ecosystems approach and the rights of the riparian populations.

> *Research questions: What is the legal nature of the principle of community of interests? How does community of interests relate to the exercise of sovereignty over shared water resources? Does international water law show any trends indicating that the emerging principle of community of interests is evolving in a certain direction?*

International water law recognizes the existence of a community of interests between riparian states. However, the legal nature of such a community of interests and its role in the exercise of sovereignty over shared water resources remain unclear. For this reason, Chapter 2 examined eleven water treaties selected because they expressly recognize a community of interests or common

5 At its seventy-fourth session (2019), the UNGA decided to include in the agenda of its seventy-seventh session (2022) the topic of the law of transboundary aquifers. UNGA 'The law of transboundary aquifers' UN Doc A/RES/74/193 (30 December 2019), para. 3.

interests between riparian states[6] in order to identify the basic legal features of community of interests and thus establish its legal nature. Chapter 2 also sought to establish the relationship between community of interests and the exercise of sovereignty over shared water resources based on the selected treaties. In addition, bearing in mind that community of interests is considered an emerging principle for transboundary water governance, Chapter 2 tried to identify trends indicating the general direction in which the principle of community of interests is evolving.

Chapter 2 found that the initial conceptualization of the principle of community of interests in the *River Oder* case (1929) provided the following foundational features: (1) riparians' community of interests is the basis of a common right (of navigation); and (2) the essential features of said right are the perfect equality of all riparian states in the use of the whole (navigable) course of the river and the exclusion of any preferential privilege of any one riparian in relation to the others.[7] The principle subsequently evolved from encompassing only riparian states' common interests in navigation to include their common interests in non-navigational uses as well (e.g., consumption, irrigation and hydropower generation). Chapter 2 found that, throughout its evolution, the principle of community of interests has added to its initial conceptualization features such as the notion of drainage basin, riparian solidarity, community of law, the ecosystems approach and the inclusion of riparian populations in shared water resource governance.

Based on an exhaustive analysis of water treaties explicitly referring to 'community of interests' or 'common interests' between riparian states, Chapter 2 found, first, that said common interests stem from the legal recognition of the unity of the shared drainage basin. Nine of the eleven treaties examined clearly adopt the drainage basin as the basic unit for water governance.[8] The

---

6 These are: the 1950 Treaty between Canada and the United States concerning the Diversion of the Niagara River, the 1960 Indus Waters Treaty, the 1992 Agreement between Namibia and South Africa on the Establishment of a Permanent Water Commission, the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, the 1995 Protocol on Shared Watercourse Systems in the Southern African Development Community (SADC) Region and the 2000 Revised SADC Protocol, the 2000 Agreement between Botswana, Lesotho, Namibia and South Africa on the Establishment of the Orange-Senqu River Commission (ORASECOM), the 2002 Water Charter of the Senegal River, the 2003 Protocol for Sustainable Development of Lake Victoria Basin, the 2008 Water Charter of the River Niger and the 2012 Water Charter of the Lake Chad Basin.

7 Case Relating to the Territorial Jurisdiction of the International Commission of the River Oder (UK, Czech Republic, Denmark, France Germany and Sweden v. Poland), PCIJ, Judgment of 10 September 1929, PCIJ Series A. No. 23, p. 27. See Chapter 2, Section 2.1.

8 The 1960 Indus Waters Treaty, the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, the 1995 Protocol on Shared Watercourse Systems in the Southern African Development Community (SADC) Region and the 2000 Revised SADC Protocol, the 2000 Agreement between Botswana, Lesotho, Namibia and South Africa on the Establishment of the Orange-Senqu River Commission (ORASECOM), the 2002 Water Charter of the Senegal River, the 2003 Protocol for Sustainable Development of Lake Victoria

remaining two treaties, although not expressly referring to the drainage basin, nevertheless imply that the parties intended to regulate and protect not only the shared waters but also the related land as a whole.[9] Chapter 2 thus identified the unity of the drainage basin as the foundational legal element of the principle of community of interests. Second, the community of interests thus originated is the basis of riparian states' common rights and duties. Chapter 2 found that said rights and duties include the right to an equitable and reasonable share, the duty to cooperate and the duty of environmental protection. The treaties examined include riparian solidarity as a factor in the community of interests related to the duty to cooperate. Third, the common rights and duties are part of a community of law among riparian states. Chapter 2 found that such a community of law is established mainly through the harmonization of riparians' national laws and policies on water governance. Requiring unanimous approval of projects of a certain size, like in the legal regime of the River Senegal, has also contributed to the formation of a community of law.

Concerning the relationship between the principle of community of interests and the exercise of sovereignty over shared water resources, Chapter 2 found that the principle in question is an element of the exercise of sovereignty over shared waters only when included in treaty law or when the treaty is silent on the issue but has nevertheless been subsequently interpreted as establishing a community of interests.[10] This is because community of interests is not yet part of customary international water law. Until now, all judicial decisions that have contributed to the evolution of the principle are based on the interpretation of one particular treaty or another and not on a rule of customary law. Legal academic scholarship supports this interpretation.[11] Consequently, when a water treaty sets forth -or is interpreted as setting forth- a community of interests between riparians, the principle influences and qualifies the way sovereignty is exercised. It does so mainly through emphasizing the unity of the shared drainage basin and the resulting duty to cooperate, riparian solidarity and community of law.

Basin, the 2008 Water Charter of the River Niger and the 2012 Water Charter of the Lake Chad Basin.

9 In the 1950 Treaty concerning the Diversion of the Niagara River, Canada and the United States recognize 'their primary obligation to preserve and enhance the scenic beauty of the Niagara Falls and River'; while the 1992 Agreement between Namibia and South Africa on the Establishment of a Permanent Water Commission provides that the Commission shall advise the parties on the prevention and control of soil erosion affecting the common water resources. The references to 'scenic beauty' and 'soil erosion' suggest an intention to regulate more than just the shared waters.

10 E.g., such is the case of the 1975 Statute of the River Uruguay as interpreted by the ICJ in the Pulp Mills case.

11 See, e.g., Owen McIntyre, *Environmental Protection of International Watercourses* (Ashgate 2007) p. 33-4; Christina Leb, *Cooperation in the Law of Transboundary Water Resources* (Cambridge University Press 2013) p. 55.

Based on these findings, Chapter 2 articulates the legal nature of the principle of community of interest as follows:

> Community of interests is a principle that, when provided for in a treaty or subsequently interpreted as such, governs riparian states' relations concerning the shared water resources. Its basic legal features are (1) the unity of the shared drainage basin; (2) riparian solidarity and cooperation; and (3) the harmonization of riparians' national laws and policies on water governance.

Additionally, Chapter 2 identified two emerging trends shedding light on the general direction in which the principle of community of interests is evolving. First, the treaties examined show a shift from the traditional approach to environmental protection based on the no-harm rule to the protection of the environment *per se*, i.e., irrespective of whether harm is caused to other riparian states, shown by the adoption of the ecosystems approach. In comparison, water law of global application shows a rather timid adherence to the ecosystems approach. The UNWC, for instance, provides for the protection and preservation of the ecosystems of international watercourses;[12] however, the governing approach to environmental protection continues to be the no-harm rule.[13] Water treaties acknowledging a community of interests or common interests between states adhere more decisively to the ecosystems approach thus furthering its application. Second, the treaties examined suggest an emerging trend to include the basin populations as subjects of rights and duties including the right to water and sanitation and the right to public participation in decision-making processes concerning shared drainage basins. Through providing for public access to information and participation in decision-making, the treaties involve populations not only in the use but also in the protection of the shared resource. In this way, community of interests influences a change in the way sovereignty is exercised towards implementing the ecosystems approach and recognizing the rights and duties of the riparian populations.

Two of the treaties examined also indicate a nascent trend: the consideration of the interests of non-riparian states in the shared resource. The Charter of Lake Chad considers different kinds of non-member states (associated states, observer states, and partial participation states[14]), which have different degrees of participation as authorized by the Commission.[15] It also provides for the protection of the legitimate interests of aquifer states that are not members of the Commission.[16] In addition, the agreement between Namibia and South

12 Convention on the Law of the Non-navigational Uses of International Watercourses (New York, 21 May 1997; in force 17 August 2014) Art. 20.
13 Ibid. Arts. 7, 21, and 22.
14 Art. 2.
15 Art. 92.
16 Art. 20.

Africa provides that the Commission shall have regard 'for the interests any other State may have in any water resource of common interest to the Parties and that State'.[17] This trend is just coming into existence; whether other communities of interests in shared drainage basins will adopt such an approach remains to be seen.

Based on its findings – showing that the principle of community of interests is based on the legal recognition of the unity of the drainage basin and promotes riparian solidarity and cooperation as well as the formation of a community of law- Chapter 2 submits that when provided for in a treaty or subsequently interpreted as such, community of interests is an element of the exercise of sovereignty over shares water resources and consequently governs riparian states' relations concerning the shared resource. Chapter 2 also submits that community of interests promotes a shift from protecting primarily state interests to protecting the environment irrespective of whether harm is caused to other riparian states (i.e. a shift from the no-harm rule to the ecosystems approach) and to protecting the rights of the riparian populations (including the rights to water and to public participation). In this way, community of interests advances the harmonization of the pivotal dimensions of state sovereignty, environmental protection and human rights.

3 Common concern of humankind

The principle of common concern of humankind applies to issues that affect human wellbeing and the environment and that require global cooperation to be effectively addressed. Therefore, the principle should also apply to the degradation of the atmosphere.

> *Research questions: What does the principle of common concern of humankind entail according to international law? What are the legal consequences of the principle? Is atmospheric degradation a common concern of humankind?*

In 2015, the International Law Commission (ILC) removed from its Draft Guidelines on the Protection of the Atmosphere (Draft Guidelines) the concept that the degradation of atmospheric conditions is a 'common concern of humankind'. This decision was the result of objections raised by ILC members concerning the insufficient clarity of the concept of common concern of humankind and its legal consequences.[18] For this reason, Chapter 3 aimed at establishing what the principle of common concern entails according to international law. To this end, the chapter examined ten international instruments containing

17 Art. 3(5).

18 Int'l Law Comm'n, Rep. on the Work of Its Sixty-Seventh Session, U.N. Doc. A/70/10 (2015), at 26-27.

the principle; five of these are the treaties that currently recognize issues of common concern, while the remaining five are non-binding -or soft law- international instruments.[19] Based on this analysis, the chapter identified the distinctive features shared by the issues currently considered as common concerns of humankind. It subsequently examined whether the issue of atmospheric degradation shares those distinctive features. Additionally, considering the scientific finding that short-lived climate pollutants (SLCPs) such as black carbon both degrade the atmosphere and cause climate change, and that climate change is a legally recognized issue of common concern, Chapter 3 examined the Air Convention[20] and the 2012 amendment to its Gothenburg Protocol[21] with the purpose of establishing the international legal recognition of the linkage between SLCPs and climate change.

Chapter 3 found that the concept of common concern of humankind currently appears in five international treaties, namely the UN Framework Convention on Climate Change (UNFCCC),[22] the Paris Agreement,[23] the Convention on Biological Diversity (CBD),[24] the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA),[25] and the Convention for the Safeguarding of the Intangible Cultural Heritage (CICH).[26] These treaties recognize as common concerns of humankind the following issues: climate change and its adverse effects,[27] the conservation of biological diversity,[28]

19 Treaties: UN Framework Convention on Climate Change (UNFCCC) and its Paris Agreement; the Convention on Biological Diversity (CBD); the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); Convention for the Safeguarding of the Intangible Cultural Heritage (CICH).
Other instruments: the Earth Charter; the Langkawi Declaration on the Environment; the Hague Recommendations on International Environmental Law; the International Law Association (ILA)'s New Delhi Declaration of Principles of International Law Relating to Sustainable Development; and the International Union for Conservation of Nature (IUCN)'s Draft Covenant on Environment and Development.

20 1979 Convention on Long-Range Transboundary Air Pollution, Nov. 13, 1979, 1302 U.N.T.S. 217.

21 1999 Protocol to the 1979 Convention on Long-range Transboundary Air Pollution to Abate Acidification, Eutrophication and Ground-level Ozone, opened for signature November 30, 1999, 2319 U.N.T.S. 80 (Gothenburg Protocol); Amendment of the text of and annexes II to IX to the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone and the addition of new annexes X and XI, adopted May 4, 2012, C.N.155.2013.TREATIES-XXVII.1.h (Depositary Notification).

22 1992 UN Framework Convention on Climate Change, *adopted* May 9, 1992, 1771 UNTS 107.

23 Paris Agreement, *adopted*, December 12, 2015, FCCC/CP/2015/10/Add.1, C.N.92.2016. TREATIES-XXVII.7.d (Depositary Notification).

24 1992 Convention on Biological Diversity, *adopted* June 5, 1992, 1760 U.N.T.S. 79.

25 International Treaty on Plant Genetic Resources for Food and Agriculture, *adopted* Nov. 3, 2001, 2400 U.N.T.S. 303.

26 Convention for the Safeguarding of the Intangible Cultural Heritage, Oct. 17, 2003, 2368 U.N.T.S. 35.

27 UNFCCC, n. 22 above, Preamble, para. 1.

28 CBD, n. 24 above, Preamble, para. 3.

plant genetic resources for food and agriculture[29] and the safeguarding of intangible cultural heritage.[30] Chapter 3 found that these issues are legally recognized as being of common concern essentially because they affect life on earth (human health, environmental integrity) or because they are otherwise considered essential to human wellbeing (plant genetic resources, intangible cultural heritage).[31]

Concerning the legal consequences of recognizing an issue as being of common concern, Chapter 3 found that all the treaties examined call on the parties to establish broad forms of international cooperation. The use of terms such as 'the widest possible cooperation by all countries',[32] 'global response' or 'global effort',[33] 'global cooperation',[34] 'global plan of action'[35] and cooperation at the 'bilateral, subregional, regional and international levels'[36] indicates that parties' efforts to address the issue of common concern are to be worldwide. In order to facilitate and concretize a form of international cooperation of global reach, parties have established global governance mechanisms, notably in the climate change and biodiversity regimes.[37] In addition, such a global cooperation is guided by certain principles. According to the treaties, these are the principles of intergenerational equity, common but differentiated responsibilities, the precautionary principle, sustainable development, and cooperation. Four of the five treaties explicitly provide for these principles.[38] The CICH expressly refers to sustainable development and co-

29 ITPGRFA, n. 25 above, Preamble, para. 3.

30 CICH, n. 26 above, Preamble, para. 6.

31 As stated in the treaties, the reasons that make these issues common concerns are: (1) climate change: the adverse effects of global warming on ecosystems and humankind; (2) the conservation of biological diversity: biological diversity's intrinsic value; its ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values; and its importance for evolution and for maintaining life sustaining systems; (3) plant genetic resources for food and agriculture: that all countries depend greatly on plant genetic resources originated elsewhere; (4) the safeguarding of intangible cultural heritage: its invaluable role in bringing human beings closer together and ensuring exchange and understanding among them as well as its vulnerability to deterioration, disappearance and destruction.

32 UNFCCC, n. 22, Preamble para. 6.

33 Paris Agreement, n. 23, Arts. 2, 3, 7, 9 and 10.

34 CBD, n. 24, Preamble para. 14.

35 ITPGRFA, n. 25, Art. 14.

36 CICH, n. 26, Article 19(2).

37 See, e.g, P.H. Pattberg and F. Zelli (eds.), *Encyclopedia of Global Environmental Governance and Politics* (Edward Elgar 2015); F. Biermann and P. Pattberg (eds.), *Global Environmental Governance Reconsidered* (MIT 2012); K. Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar 2015); O.C. Ruppel, C. Roschmann and K. Ruppel-Schlichting (eds.), *Climate Change: International Law and Global Governance* (Nomos 2013); J. Gupta, *The History of Global Climate Governance* (Cambridge 2014).

38 UNFCCC, n. 22, Art. 3; Paris Agreement, n. 23, Preamble, para. 3; CBD, n. 24, Preamble, Arts. 1, 5, 6; ITPGRFA, n. 25, Preamble, Arts. 5-8.

operation[39] while the principle of common but differentiated responsibilities is arguably implied. As stated in the CICH, international cooperation includes the establishment of a mechanism of assistance to parties in their efforts to safeguard the intangible cultural heritage.[40] The beneficiary state party shall 'within the limits of its resources, share the cost of the safeguarding measures for which international assistance is provided'.[41] The phrase 'within the limits of its resources' suggests that the different capabilities of states in addressing the issue of common concern – and thus the principle of common but differentiated responsibilities – were considered.

Chapter 3 also found that human rights obligations are relevant to the discussion on the legal consequences in respect of two issues of common concern, climate change and the safeguarding of intangible cultural heritage. According to the Paris Agreement, '*Acknowledging* that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights'.[42] As discussed in Chapter 4 of this dissertation, parties to the Paris Agreement acknowledge that they should comply with their existing human rights obligations when taking climate action, evidencing acceptance by the parties that climate change jeopardizes the full enjoyment of human rights. Such an acknowledgement reinforces human rights obligations and highlights the potential they have to inform and complement the implementation of climate laws and policies. In addition, the CICH seeks to harmonize the safeguarding of the intangible cultural heritage with human rights law. It refers to existing human rights instruments in the Preamble and provides that, for the purposes of the Convention, 'consideration will be given solely to such intangible cultural heritage as is compatible with existing international human rights instruments'.[43] Compliance with existing human rights obligations is thus an element to be considered in the discussion concerning the legal consequences of acknowledging an issue as being of common concern, at least with regard to climate change and the safeguarding of intangible cultural heritage.

In order to determine what the principle of common concern of humankind entails, Chapter 3 also examined five non-binding or soft law instruments, namely the Earth Charter,[44] the Langkawi Declaration on the Environment,[45]

39 CICH, n. 26, Preamble, Arts. 2(1), and 19.
40 Ibid. Art. 19(1).
41 Ibid. Art. 24(2).
42 Paris Agreement, n. 23, Preamble, para. 11.
43 CICH, n. 26, Art. 2 (1).
44 The Earth Charter Initiative, *The Earth Charter*, (2000), http://www.earthcharterinaction.org/invent/images/uploads/echarter_english.pdf.
45 The Commonwealth, *Langkawi Declaration on the Environment*, (1989), http://www.thecommonwealth.org/sites/default/files/news-items/documents/Langkawi-declaration.pdf.

the Hague Recommendations on International Environmental Law,[46] the International Law Association (ILA)'s New Delhi Declaration of Principles of International Law Relating to Sustainable Development,[47] and the International Union for Conservation of Nature (IUCN)'s Draft Covenant on Environment and Development.[48] Chapter 3 found that these instruments recognize the following as issues of common concern of humankind: 1) the global environment (Earth Charter, IUCN Draft Covenant);[49] 2) environmental deterioration (Langkawi Declaration);[50] and 3) environmental preservation (New Delhi Declaration, Hague Recommendations).[51] Chapter 3 also found that while the treaties recognize as common concerns specific issues, soft law instruments recognize as such the deterioration and preservation of the global environment in general, stressing in this way the unity of the biosphere and the interdependence of humanity and the environment. In essence, the reason why the deterioration and preservation of the global environment are considered common concerns of humankind is, according to the non-binding instruments examined, because the life and wellbeing of present and future generations depend on maintaining a healthy biosphere.[52]

Chapter 3 found that, like the treaties examined, the soft law instruments call for global cooperation in addressing issues of common concern. As stated in the Earth Charter, the Langkawi Declaration and the IUCN Draft Covenant, a global partnership needs to be formed 'to care for Earth and one another';[53] environmental problems that transcend national boundaries and interests require a 'co-ordinated global effort';[54] and 'the interdependence of the world's ecosystems and the severity of current environmental problems call for global solutions to most environmental problems'.[55] According to the Hague Recommendations, states should apply, inter alia, the duty to cooperate in good faith in developing environmental policies at the international level[56] and, as stated in the New Delhi Declaration, consideration should be given

46 International Conference on Environmental Law, *The Hague Recommendations*, (1991), *as reprinted in* 21 *Environmental Policy and Law* 242, 276.

47 70th Conference of the International Law Association, *ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development* (2002), as *reprinted in* 2 *International Environmental Agreements: Politics, Law and Economics* 211-216 (2002). *See also* N. Schrijver, *The Evolution of Sustainable Development in International Law: Inception, Meaning and Status* (Martinus Nijhoff Publishers 2008) 162-207.

48 Int'l Union for Conservation of Nature (IUCN), *Draft International?Covenant on Environment and Development. Fifth Edition: Updated Text*, (2015).

49 Preamble and Art. 3, respectively.

50 Para. 2.

51 Principle 1.3 and para. I.3f, respectively.

52 Earth Charter, n. 44, Preamble; Langkawi, n. 45, Preamble; Hague Recommendations, n. 46, at II; IUCN Draft Covenant, n. 48, commentary to Art. 3, at 44.

53 Earth Charter, n. 44, Preamble.

54 Langkawi, n. 45, para. 4.

55 IUCN Draft Covenant, n. 48, at 45.

56 Hague Recommendations, n. 46, at 3d.

to the interaction of states and non-state actors as participants in 'multilateral development co-operation'.[57] Acknowledging an issue as being of common concern thus calls for 'global partnership', 'global effort', 'global solutions', and for international and multilateral cooperation. The non-binding instruments also refer to principles that govern states' relations concerning the issue of common concern. These are the same principles found in the treaties, namely cooperation, intergenerational equity, common but differentiated responsibilities, sustainable development, and the precautionary principle.[58]

Based on the ten international instruments examined, Chapter 3 found two common features that capture the essence of the principle of common concern of humankind: the interest to protect humanity and the global environment from harm, and the need for international cooperation at a global scale to address the issue successfully. It also found that the issue of atmospheric degradation shares those two common features because, as scientific research discussed in Chapter 3 shows, the atmosphere performs essential functions for sustaining life on Earth and degraded atmospheric conditions endanger human health and environmental integrity. Preventing atmospheric degradation is thus as essential to protecting humanity and the global environment as many issues already acknowledged as common concern of humankind. The second common feature is also shared by atmospheric degradation, i.e. global cooperation is necessary because the atmosphere is an indivisible unit that is in constant movement disregardful of states' territorial boundaries. According to scientific research discussed in Chapter 3, air pollution moves around in the atmosphere and across borders and certain components of air pollution both degrade the atmosphere and cause climate change. Atmospheric degradation thus requires global cooperation in order to be successfully addressed.[59]

Chapter 3 found an additional reason why the principle of common concern of humankind should apply to atmospheric degradation. Short-lived climate pollutants (SLCPs) are components of air pollution responsible for almost half of global warming. The linkage between SLCPs and climate change is scientifically proven and is beginning to gain legal recognition. The parties to the Air Convention amended the Gothenburg Protocol to include, for the first time in treaty law, emission reduction commitments for one of the most harmful air pollutants: fine particulate matter ($PM_{2.5}$). The amendments to the Gothen-

57 New Delhi Declaration, n. 47, Preamble.

58 Earth Charter, n. 44, Preamble and principles 4, 5, 6, 8, 11, 14, 16; Langkawi, n. 45, paras. 1, 4, 5, 6; Hague Recommendations, n. 46, at I.3.d.; New Delhi Declaration, n. 47, Preamble and throughout its 7 Principles; IUCN Draft Covenant, n. 48, throughout the Covenant, see in particular Arts. 5, 7, 11 and 13.

59 The unity of the atmosphere makes global cooperation necessary, which is coherent with the finding in Chapter 2 that the unity of the drainage basin prompts riparian cooperation and solidarity.

burg Protocol, which entered into force on 7 October 2019,[60] legally acknowledge the soundness of scientific knowledge on this matter. Consequently, because climate change is a common concern of humankind (UNFCCC), and because SLCPs both pollute the atmosphere and cause climate change (Gothenburg Protocol), atmospheric degradation – the deterioration of atmospheric conditions harmful to life on Earth- is a common concern of humankind.

Based on its findings – showing that common concern of humankind applies to issues that affect human wellbeing and the environment and that require global cooperation to be effectively addressed- Chapter 3 submits that the principle of common concern of humankind should apply to the degradation of the atmosphere and suggests returning 'common concern of humankind' to the International Law Commission's Draft Guidelines on the Protection of the Atmosphere. Bearing in mind that the principle continues to be regarded as lacking in clarity, the ILC could contribute to a better understanding of its meaning and scope. The Draft Guidelines thus present a unique opportunity for the ILC, as an authoritative body, to discuss the principle of common concern of humankind and, in that process, advance its conceptual development.

4 PUBLIC PARTICIPATION

The human right to participate in public affairs could complement climate law in such a way as to contribute to enhancing observer participation in international climate change decision-making processes.

> *Research questions: What characterizes observer participation in international climate change decision-making processes? What does the acknowledgement in the Paris Agreement that parties should comply with human rights obligations mean? What does the human right to participate in public affairs entail? Does it encompass decision-making processes at the international level? How could the right to participate in public affairs complement climate law and possibly contribute to enhancing observer participation in international climate change decision-making?*

Parties to the United Nations Framework Convention on Climate Change (UNFCCC) acknowledged the need to further enhance the effective engagement of observer organizations as the UNFCCC process moves towards implementation of the Paris Agreement. However, climate law does not stipulate *how*

60 Amendment to the 1999 Gothenburg Protocol, n. 21. At the time Chapter 3 was published, the amendments were not yet in force. See, e.g., https://www.unece.org/info/media/presscurrent-press-h/environment/2019/entry-into-force-of-amended-gothenburg-protocol-is-landmark-for-clean-air-and-climate-action/doc.html

parties are to ensure effective observer participation. For this reason, Chapter 4 of this dissertation explored whether and how the human right to participate in public affairs, and the obligations derived therefrom, could complement climate law in such a way as to contribute to enhancing observer participation in international UNFCCC decision-making processes. Chapter 4 examined observer participation in 'international UNFCCC decision-making processes'. This term refers to intergovernmental negotiations during sessions of the COP, subsidiary bodies and open-ended contact groups (intergovernmental negotiations) and to processes reviewing the implementation of parties' commitments, namely those of the measurement, reporting and verification framework (MRV system), which will eventually be superseded by the enhanced transparency framework (ETF) established by the Paris Agreement.

Chapter 4 described observer participation in international UNFCCC decision-making processes. As of November 2017, 2,259 observer organizations had been admitted to the UNFCCC process.[61] Although a large number of observers have significant resource implications for the UNFCCC secretariat,[62] parties nevertheless agree on the importance of further enhancing observer engagement.[63] Notwithstanding, Chapter 4 found that UNFCCC parties close intergovernmental meetings to observers, for instance, towards the end of each negotiation period. This practice has been criticized as undermining the role of civil society.[64] In addition, certain UNFCCC negotiations are open to observers while others are closed because of what is known as functional efficiency;[65] however, they are also closed because of standard operating practices, habits, and routines and not necessarily due to high political stakes.[66] A large number of closed meetings could lead to unequal participation opportunities for non-state actors, depending on their available resources,

61 UNFCCC Secretariat 'Engagement of observer organizations and non-Party stakeholders in the intergovernmental process' (period 2016-2017) included in SBI 'Arrangements for Intergovernmental Meetings' UN Doc FCCC/SBI/2018/7 (22 March 2018) para 39.

62 Ibid.

63 SBI 'Report of the Subsidiary Body for Implementation on its forty-fourth session, held in Bonn from 16 to 26 May 2016' UN Doc FCCC/SBI/2016/8 (26 August 2016) para. 162.

64 S Kravchenko, 'Procedural Rights as a Crucial Tool to Combat Climate Change' (2010) Georgia Journal of International and Comparative Law 613, 643-4, referring to restricted access to observers and civil society during the last two-days of COP 15 in Copenhagen; M Doelle, 'The Paris Agreement: Historic Breakthrough or High Stakes Experiment?' (2016) 6 Climate Law 1, 7.

65 According to the functional efficiency hypothesis, states hold meetings open to observers when it is convenient for their interests, particularly during the agenda setting stage, and close meetings during the more sensitive decision-making stages. See JW Kuyper, B Linnér and H Schroeder 'Non-state actors in hybrid global climate governance: justice, legitimacy, and effectiveness in a post-Paris era' (2018) 9 WIREs Climate Change 1, at 3.

66 N Nasiritousi and B Linnér, 'Open or closed meetings? Explaining nonstate actor involvement in the international climate change negotiations' (2016) 16 International Environmental Agreements 127, 140-141.

and to the further disenfranchisement of particular non-state actors.[67] Concerning the MRV system, Chapter 4 found that neither the international assessment and review process (IAR) nor the international consultation and analysis process (ICA) provides opportunities for active observer participation, which has been criticized as 'fail[ing] to acknowledge the crucial role that civil society can play in the context of this transparency mechanism'.[68] In addition, the modalities, procedures and guidelines (MPGs) to implement the Paris Agreement, contained in the Katowice climate package (also known as the Paris Agreement rulebook), do not provide opportunities for active public participation in the enhanced transparency framework (ETF) established by the Paris Agreement. Therefore, both the current MRV systems and its future replacement -the ETF- provide for the same degree of observer participation.

In addition, Chapter 4 explored the parties' acknowledgement in the Paris Agreement that they should honour their existing human rights obligations when taking climate action in order to ascertain the meaning of said acknowledgement for public participation. Chapter 4 found that such an acknowledgement basically shows acceptance by the parties that climate change jeopardizes the full enjoyment of human rights. It also highlights the potential that human rights obligations have to inform implementation of climate laws and policies. Although climate law does not expressly refer to ensuring effective participation, the human right to participate in public affairs requires parties to the relevant human rights treaties to adopt measures that ensure effective public participation, including at the international level. The acknowledgement in the Paris Agreement reinforces this obligation. The human right to participate in public affairs could thus complement climate provisions on observer participation in UNFCCC international decision-making processes.

Indeed, Chapter 4 studied in detail the human right to participate in public affairs in order to determine whether and how it could complement climate law in such a way as to contribute to enhancing observer participation in international UNFCCC decision-making processes. It focused on the relevant provisions of the International Covenant on Civil and Political Rights (ICCPR) and the American Convention on Human Rights (ACHR), including subsequent interpretations by the institutions in charge of overseeing their implementation. Chapter 4 found that both the ICCPR and the ACHR require states to adopt measures that ensure effective opportunities to exercise the right to participate in public affairs. Parties to the UNFCCC that are also party to those treaties are bound by this obligation. In addition, decisions of the Inter-American Court of Human Rights have identified several additional obligations related to the participation of indigenous peoples. Although only binding between the state

67 ibid at 142.

68 S Duyck, 'MRV in the 2015 Climate Agreement: Promoting Compliance through Transparency and the Participation of NGOs' (2014) 3 Carbon and Climate Law Review 175, quote from the abstract.

parties and in respect of those particular cases, these judicial decisions could be considered as subsidiary means for determining what the right to participate in public affairs entails with regard to indigenous peoples. Furthermore, as stated in the UNGA Declaration on Human Rights Defenders, the right to participate in public affairs includes the right to submit criticism and proposals to improve the functioning of organizations concerned with public affairs.[69] Although not legally binding, the Declaration on Human Rights Defenders is grounded in international human rights law and may have an effect on the treaties it interacts with.[70] Also in a non-binding way, the 2018 OHCHR *Draft Guidelines for States on the Effective Implementation of the Right to Participate in Public Affairs* provide guidance concerning, *inter alia*, measures that ensure meaningful participation[71] and advise that public participation should be allowed and proactively encouraged at all stages in international decision-making processes.[72] Finally, Chapter 4 found that the right to participate in public affairs encompasses international decision-making processes as well as decision-making on all matters of public concern (connecting to the issue of climate change as a common concern of humankind discussed in Chapter 3) and consequently covers international UNFCCC decision-making processes.

Based on its findings – showing that the human right to participate in public affairs could complement climate law – Chapter 4 answers the research question 'How could the right to participate in public affairs complement climate law and possibly contribute to enhancing observer participation in international climate change decision-making?' by suggesting possible complementarities. First, Chapter 4 suggests that the human rights obligation to adopt measures that ensure effective opportunities to participate could complement the climate obligation to cooperate in taking measures to enhance public participation stipulated in Article 12 of the Paris Agreement.[73] It submits that the phrase 'cooperate in taking measures' requires parties to 'work jointly' towards enhanced public participation but fails to oblige them to also 'work separately' towards said end. The obligation to enhance public participation is required from parties acting as a group, not individually. This emphasis on collective action could lead to an understatement of individual state action and thus lessen the effectiveness of parties' efforts to achieve enhanced public

69 UNGA 'Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms' UN Doc A/RES/53/144 (8 March 1999) art 8.

70 It refers specifically to the ICCPR as one of the 'basic elements of international efforts to promote universal respect for and observance of human rights' and to the importance of other human rights instruments adopted at the regional level. Ibid., Preamble.

71 Human Rights Council 'Draft guidelines for States on the effective implementation of the right to participate in public affairs: Report of the Office of the United Nations High Commissioner for Human Rights' UN Doc A/HRC/39/28 (20 July 2018) paras. 63, 64, 68, 70, 73 and 85.

72 Ibid., para. 100.

73 Paris Agreement, n. 23, art 12.

participation. The human rights obligation to adopt measures that ensure effective participation could correct such an understatement since it obliges state parties to the relevant treaties to take individual action as well. In this way, individual states' human rights duty to ensure effective participation could complement UNFCCC parties' collective duty to cooperate in taking measures to enhance public participation.

Second, concerning processes reviewing the implementation of parties' commitments, Chapter 4 suggests that the review stage of the ETF established by the Paris Agreement could allow observers to provide information and views concerning parties' national reports. In this way, the expert review report would not only address the challenges faced and the progress made by the reporting party towards achieving emission reduction targets, but also take note of how those challenges and progress affect the interests of specific groups represented by observers. The expert review report could thus provide a more comprehensive consideration of the party's implementation and achievement of its NDC in order to identify areas for improvement. In addition, the facilitative multilateral consideration of progress (FMCP) could allow observers to submit written questions electronically prior to the FMCP session. During the FMCP session, observers could be allowed to ask oral questions to the party under FMCP or, similarly to the procedure of the Universal Periodic Review of the Human Rights Council, they could be allowed to make oral general comments.[74] Finally, the UNFCCC secretariat could be mandated to include the questions submitted by observers and the responses thereto in the party's record.

5 SUSTAINABLE DEVELOPMENT

The SDGs could guide institutions governing the ocean commons towards becoming more effective, accountable and inclusive. The SDGs promote a new conception of ocean commons governance through encouraging public participation in decision-making as a way of strengthening institutions at all levels.

Research questions: What is the state of affairs regarding the use and protection of high seas fisheries and deep seabed minerals? What is the situation of public participation in institutions governing these resources and the legal framework applicable thereto? What role for public participation in the Sustainable Development Goals (SDGs)? What is the legal nature of the SDGs? In what way could

74 UNGA 'Human Rights Council' UN Doc A/RES/60/251 (3 April 2006) para 5(e); Human Rights Council 'Institution-building of the United Nations Human Rights Council' UN Doc A/HRC/RES/5/1 (18 June 2007) Annex para 31. See also Duyck (n 68) at 185, submitting that the procedures of the Universal Periodic Review (UPR) provide useful lessons for the MRV process with respect to stakeholder participation.

SDG 14 (sustainable use of marine resources) and SDG 16 (building strong institutions at all levels) influence institutions governing high seas fisheries and deep seabed minerals for sustainable resource governance?

Despite the fact that the international community has actively promoted public participation in environmental governance since the 1992 Rio Declaration and its Principle 10, the existing conception of ocean commons governance primarily involves states and industry organizations and restricts access to civil society. Chapter 5 examined public participation in institutions governing the use and protection of high seas fisheries and deep seabed minerals -i.e. regional fisheries management organizations (RFMOs) and the International Seabed Authority (ISA, Authority)- and explored whether and how the Sustainable Development Goals (SDGs) could guide the actions of these institutions towards becoming more effective, accountable and inclusive.

Chapter 5 described the state of affairs regarding the use and protection of high seas fisheries and deep seabed minerals. It found that notwithstanding the efforts made by the international community to protect the marine environment, the ocean faces several challenges including overfishing, acidification, pollution and biodiversity loss. This situation has been described as 'a cycle of declining ecosystem health and productivity'[75] and found to be caused by, inter alia, weak high seas governance.[76] This is reflected in inadequate transparency and compliance-reporting mechanisms and very little accountability at the global level.[77] In addition, Chapter 5 found that public access to information and participation in global environmental governance has led to increased transparency, accountability, effectiveness and legitimacy of decision-making processes,[78] and has been actively promoted by the international community since the 1992 Rio Declaration and its Principle 10, which the Aarhus Convention and the Escazú Agreement converted to international law. Furthermore, Chapter 5 found that the type of development envisioned by the 2030 Agenda for Sustainable Development and its accompanying SDGs is that it should not only be sustainable, but also inclusive. In the Agenda, states agree to foster peaceful, just and inclusive societies, declaring that this

75 Global Ocean Commission, *From Decline to Recovery: A Rescue Package for the Global Ocean* (2014) <http://www.some.ox.ac.uk/research/global-ocean-commission/> at 16

76 Ibid. at 16-18.

77 Ibid. at 7. See also D. Bhomawat, 'Shark-finning: Damage to Global Commons' (2016) *Environmental Policy and Law* 46, 56, 61; S. Kopela, 'Port-State Jurisdiction, Extraterritoriality, and the Protection of Global Commons' (2016) *Ocean Development and International Law* 47, 89.

78 See, e.g., J. Ebbesson, 'Principle 10: Public Participation' in Jorge E. Viñuales (ed) *The Rio Declaration on Environment and Development* (OUP 2015); T. Kramarz and S. Park, 'Accountability in Global Environmental Governance: A Meaningful Tool for Action?' (2016) *Global Environmental Politics* 16(1), 6; T. Bernauer and R. Gampfer, 'Effects of Civil Society Involvement on Popular Legitimacy of Global Environmental Governance' (2013) *Global Environmental Change* 23, 439.

'is an agenda of the people, by the people and for the people – and this, we believe, will ensure its success';[79] while SDG 16 sets the goal of building effective, accountable and inclusive institutions at all levels.

Chapter 5 examined the situation of public participation in institutions governing high seas fisheries (RFMOs) and deep seabed minerals (ISA) as well as the legal framework applicable thereto. It found that public participation in RFMOs and the ISA is restricted. Concerning public participation in RFMOs, although civil society organizations have played a role in 'pushing the RFMOs towards a more precautionary approach'[80] and 'contributed to raising political and public awareness of the need for change'[81] in the way RFMOs work, it has nevertheless been documented that 'in most RFMOs [NGOs] struggle to have their views heard and discussed and are often frustrated that they are not taken seriously in the decision-making process'.[82] Some RFMOs request a participation fee from NGOs, which is perceived as 'a way to effectively discourage observer participation'.[83] Article 12 of the Fish Stocks Agreement[84] provides that the procedures for the participation of NGOs in RFMOs 'shall not be unduly restrictive'.[85] Bearing in mind that lack of financial resources was found to be the main reason for poor representation of NGOs from low-income countries in international environmental institutions,[86] charging a fee, which can reach up to 500 USD to attend each meeting,[87] could be interpreted as a practice that unduly restricts access for NGOs from low-income countries, and thus contravenes Article 12 of the FSA. In addition, NGOs from high-income countries

79 Transforming our world: the 2030 Agenda for Sustainable Development, UN Doc A/RES/70/1, 21 October 2015 ('2030 Agenda'), para. 52.

80 *Ibid.* at 13.

81 Food and Agriculture Organization of the United Nations, *The State of World Fisheries and Aquaculture 2016: Contributing to Food Security and Nutrition for All* (Rome 2016) <http://www.fao.org/3/a-i5555e.pdf>, at 95.

82 Report of the Independent Review, International Commission for the Conservation of Atlantic Tunas (ICCAT) PLE-106/2008, September 2008 ('ICCAT 2008 Report') at 71.

83 Ibid., at 29.

84 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 (4 August 1995) 2167 U.N.T.S. 3, article 2 (FSA). Straddling fish stocks occur both within a country's exclusive economic zone and in the adjacent high seas (UNCLOS article 63) e.g., cod, jack mackerel and squid. Highly migratory fish stocks regularly travel long distances through both the high seas and areas under national jurisdiction (UNCLOS article 64 and Annex I), e.g., tuna, swordfish and oceanic sharks.

85 *Ibid.*

86 A.N. Uhre, 'Exploring the Diversity of Transnational Actors in Global Environmental Governance' (2014) *Interest Groups and Advocacy* 3, 59.

87 Report of the Independent Performance Review of ICCAT 2016, <https://www.iccat.int/Documents/Other/0-2nd_PERFORMANCE_REVIEW_TRI.pdf> at 61.

dominate participation leading to a relatively limited diversity.[88] Considering that many developing countries have difficulty covering the high cost of adequate fisheries governance regimes,[89] less restrictive participation policies could give NGOs from low-income countries the opportunity to voice their concerns within the established governance structures. Furthermore, fishing industry representatives are far more numerous than civil society organizations[90] indicating that conservation interests – primarily put forward by NGOs – are under-represented.

Concerning participation in the ISA, Chapter 5 found that although the number of observers has increased in recent years and civil society organizations have organized side events and workshops during the ISA's annual sessions,[91] challenges nevertheless exist regarding access to information and public participation in decision-making processes at the ISA. Chapter 5 pays particular attention to public access to information and participation in the Legal and Technical Commission (LTC), one of the organs of the ISA Council.[92] This is because of the significant competences invested in the LTC for the protection of the marine environment and because 'lack of transparency of the work of the LTC has been heavily criticized'.[93] Chapter 5 found that although the LTC could decide to hold open meetings, for instance when discussing 'issues of general interest to members of the Authority, which do not involve the discussion of confidential information',[94] in practice, however, the LTC rarely holds open meetings because of the confidentiality required of LTC members.[95] Because the LTC does not have procedures in place to determine which of the data provided by contractors is confidential, the contractor determines confidentiality.[96] Currently, all data contained in contract applications and annual reports of contractors submitted to the LTC are

88 M.T. Petersson, L.M. Dellmuth, A. Merrie and H. Österblom, 'Patterns and trends in non-state actor participation in regional fisheries management organizations', 104 *Marine Policy* (2019) 146-156.

89 World Bank, *The Sunken Billions Revisited: Progress and Challenges in Global Marine Fisheries* (Washington DC 2017) <http://hdl.handle.net/10986/24056> at 18.

90 Petersson *et al.*, n. 88, at 153.

91 A. Jaeckel, 'Current Legal Developments International Seabed Authority' (2016) 31 *The International Journal of Marine and Coastal Law* 706, 717 – 718.

92 United Nations Convention on the Law of the Sea (10 December 1982) 1833 U.N.T.S. 3, arts. 163 and 165.

93 Periodic Review of the International Seabed Authority pursuant to UNCLOS Article 154, Final Report (30 December 2016) (Seascape Consultants Ltd.) <https://www.isa.org.jm/files/documents/EN/Art154/Rep/ISA154-FinalRep-30122016.pdf> at 2.

94 Rules of Procedure of the Legal and Technical Commission ('ROP LTC') <http://www.isa.org.jm/files/documents/EN/Regs/ROP_LTC.pdf> Rule 6.

95 *Ibid.* Rule 11(2).

96 J.A. Ardron, 'Transparency in the Operations of the International Seabed Authority: An Initial Assessment', 95 *Marine Policy* (2018) 324-331. See also *Co-Chairs Report of Griffith Law School and the International Seabed Authority Workshop Environmental Assessment and Management for Exploitation of Minerals in the Area* (Surfer's Paradise, 23-26 May 2016) ('Co-Chairs

treated as confidential including environmental data.[97] This contravenes UNCLOS and the Exploration Regulations, which expressly provide that environmental data shall not be deemed confidential.[98]

Chapter 5 examined the role of public participation in the SDGs. SDG 16 is to 'promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels'.[99] Strong institutions (effective, accountable and inclusive) are instrumental in promoting peaceful and inclusive societies and providing access to justice for all. Therefore, Chapter 5 specifically focused on the goal of building strong institutions and the role of public participation in achieving such a goal in the context of the ocean global commons. Three of the targets supporting the achievement of SDG 16 directly contribute to building strong institutions. Target 16.6 is to 'develop effective, accountable and transparent institutions at all levels'; target 16.7 is to 'ensure responsive, inclusive, participatory, and representative decision making at all levels'; and target 16.10 is to 'ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements'.[100] In this way, SDG 16 highlights the role that public participation plays in achieving the goal of strong institutions for sustainable governance. The goal is to build strong institutions *at all levels* of governance, therefore including institutions managing the ocean global commons. In addition, according to the three relevant targets, strong institutions are to be built through effectiveness, accountability, and transparency,[101] responsiveness, inclusiveness, participation and representation,[102] and through public access to information.[103]

With regard to the legal nature of the SDGs, Chapter 5 found that although not legally binding, the SDGs have nevertheless the capacity to influence national and international law and policy. Indeed, states are expected to take ownership and translate the SDGs into domestic public policies.[104] In addition,

---

Report') <https://www.isa.org.jm/files/documents/EN/Pubs/2016/GLS-ISA-Rep.pdf> at 23.

97 Ardron, n. 96, at 326. See also *Co-Chairs Report of Griffith Law School and the International Seabed Authority Workshop Environmental Assessment and Management for Exploitation of Minerals in the Area* (Surfer's Paradise, 23 – 26 May 2016) ('Co-Chairs Report') <https://www.isa.org.jm/files/documents/EN/Pubs/2016/GLS-ISA-Rep.pdf> at 23.

98 UNCLOS, n. 92, Annex III, article 14(2); Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, ISBA/19/C/17 (22 July 2013), Regulation 36(2); Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area, ISBA/18/A/11 (27 July 2012), Regulation 38(2); Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area, ISBA/16/A/12/Rev.1 (7 May 2010), Regulation 38(1).

99 2030 Agenda for Sustainable Development, n. 79, at 25.

100 *Ibid.* at 25 – 26.

101 Target 16.6.

102 Target 16.7.

103 Target 16.10.

104 2030 Agenda, n. 79, para. 66.

as stated in paragraph 10, the 2030 Agenda is grounded in international human rights treaties[105] arguably reinforcing states' international legally binding obligations to protect human rights.[106] Furthermore, the Agenda encourages states to achieve the SDGs in accordance with existing international agreements,[107] which strongly suggests consensus on combining or integrating such agreements with the SDGs in order to achieve the overarching goal of sustainable development.[108] Specifically, SDG 14 directs efforts to enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS,[109] suggesting that there was general agreement on combining UNCLOS and the SDGs to achieve sustainable oceans. Seen in this light, UNCLOS provides a normative framework for implementing SDG 14, while SDG 14 draws attention to priority areas regarding ocean sustainability. As discussed in Chapter 5, this potential for synergy between UNCLOS and the SDGs has been acknowledged by the ISA and is beginning to appear – albeit more timidly – in the work of the RFMOs. Because the SDGs are deeply rooted in international law and call on states to fulfil their legally binding obligations in the light of their vision and ambition to transform our world by 2030, including those derived from the Law of Sea, SDGs 14 and 16 could guide institutions managing high seas fisheries and deep seabed minerals in the direction of becoming more effective, accountable and inclusive and thus promote a more sustainable use of marine resources in areas beyond the limits of national jurisdiction.

Based on its findings – showing that the SDGs could guide institutions governing the ocean commons towards a more effective, accountable, inclusive and sustainable use of marine resources- Chapter 5 suggests that the interplay between UNCLOS, the FSA and the SDGs could guide RFMOs' efforts towards making rules on NGO participation less restrictive, for instance through substantially reducing or eliminating NGO participation fees. In addition, such interplay could encourage more RFMO performance review procedures to include NGO representatives. Furthermore, Chapter 5 submits that the interplay

105 *Ibid.* para. 10, which reads: 'The new Agenda is guided by the purposes and principles of the Chapter of the United Nations, including full respect for international law. It is grounded in the Universal Declaration of Human Rights, international human rights treaties, the Millennium Declaration and the 2005 World Summit Outcome. It is informed by other instruments such as the Declaration on the Right to Development.'

106 In this regard, it has been submitted that '[m]any SDGs are weaker than their human rights counterparts, and many fail to reference specific, binding human rights standards and instruments.' See L.M. Collins, 'Sustainable Development Goals and human rights: challenges and opportunities' in D. French and L. Kotzeì (eds.), *Sustainable Development Goals: Law, Theory and Implementation* (Edward Elgar 2018).

107 Agenda 2030, n. 79, para. 67; SDG 3, target 3b; SDG 3, target 3a; SDG 10, target 10a; SDG 13, target 13a; SDG 14, target 14c.

108 See R.E. Kim, 'The Nexus Between International Law and the Sustainable Development Goals' 25 *RECIEL* (2016), 16 – 17.

109 Agenda 2030, n. 79, target 14c.

between UNCLOS, the ISA Exploration Regulations and the SDGs could guide actions towards strengthening the LTC for instance through creating procedures to determine confidentiality of data provided by contractors; providing public access to all environmental data available to the ISA; ensuring public participation in all LTC meetings discussing environmental matters.

From the perspective of public participation, the existing conception of ocean commons governance is one in which states and industry organizations are the main actors and civil society organizations are relegated to a secondary role. SDG 16 specifically encourages public access to information and participation in decision making as a way of strengthening institutions at all levels. Transparent, accountable and effective institutions are crucial at a time in which unsustainable fishing practices and imminent exploitation of deep seabed minerals threaten to deepen the ocean's rate of ecological decline. SDG 16 thus supports the achievement of SDG 14 – conserve and sustainably use the ocean and marine resources – providing a guiding framework to construct the institutional strength necessary to achieve ocean sustainability. Consequently, Chapter 5 submits that the SDGs promote a new conception of ocean commons governance through encouraging public participation in building the necessary strong institutions. In the new conception, civil society organizations join states and industry organizations as principal actors in achieving sustainable governance of high seas fisheries and deep seabed minerals in the Area. The actions proposed in Chapter 5 could support RFMOs and the ISA in moving much closer to achieving SDG 14.

6 Overarching conclusions

The principles of community of interests and common concern of humankind promote the reconcilement of PSNR and the common interests of states sharing natural resources. The principles of public participation and sustainable development promote the inclusion of non-state actors. The principles discerned, examined and evaluated in this dissertation are interrelated as well as interact with other principles of international law and should be interpreted in context.

Based on the problems identified and discussed in the Introduction – namely (1) the reconcilement of the exercise of permanent sovereignty over natural resources and the equitable use and protection of resources that are shared by two or more states; (2) the insufficient legal conceptualization of the common interests and concerns that exist between states sharing natural resources; and (3) the inclusion of non-state actors in governing processes – this dissertation examined, in addition to the research questions specific to each chapter, the following general research questions:

> *What principles of international law promote the reconcilement of the exercise of permanent sovereignty over natural resources and the common interests of states*

sharing natural resources? How are such common interests conceptualized in international law?

What principles of international law promote the inclusion of non-state actors in the governance of shared natural resources?

The purpose was to discern, examine and assess principles of international law that could address the problems identified. Principles that could promote coherence in state practice by guiding states' action regarding the equitable utilization and environmental protection of shared resources. The 1978 UNEP Draft Principles, which remain the most influential effort to provide principles applicable to all shared natural resources,[110] do not address the exercise of sovereignty over shared resources, community of interests and common concerns among states, or non-state actor participation in shared resource governance. Building on the 1978 UNEP Draft Principles, the principles discerned in this dissertation reflect subsequent developments in international law as well as current trends relating to shared resource governance.

Accordingly, the answers to the general research questions are as follows. Based on the findings and conclusions in Chapters 2 and 3, I submit that the principles of community of interests and common concern of humankind promote the reconcilement of the exercise of permanent sovereignty over natural resources and the common interests between states sharing natural resources. Community of interests does so through stressing the unity of the shared drainage basin, the duty to cooperate as well as riparian solidarity, and the harmonization of riparians' national laws and policies on water governance. Common concern of humankind promotes such a reconcilement through emphasizing the unity of the biosphere, the interdependence of humanity and the environment, and the need for international cooperation at a global scale to address issues of common concern successfully.

In addition, based on the findings and conclusions in Chapters 4 and 5, I submit that the principles of public participation and sustainable development promote the inclusion of non-state actors in the governance of shared natural resources. The normative content of the human right to public participation could complement climate rules on observer participation and thus contribute to enhancing the effective engagement of observer organizations in international climate change decision-making processes. Sustainable development, as conceived in the SDGs, promotes the inclusion of non-state actors in the governance of shared natural resources through encouraging public participation in decision-making as a way of strengthening governing institutions at all levels.

110 UNEP Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States, 17 I.L.M. 1091 (1978).

Furthermore, based on the findings and conclusions in Chapter 1, the first step in search of an answer to the first general question, I submit that approaching the issue of sovereignty over shared natural resources mindful of the differences between PSNR and SSNR could promote that shared resource governance remains increasingly focused on cooperation and less oriented towards protecting states' territorial interests. Concerning transboundary aquifer governance in particular, Chapter 1 submitted that awareness of the differences between PSNR and SSNR could also contribute to making debates about sovereignty over transboundary aquifers – characterized at the time Chapter 1 was published by the expression of firmly held opinions both in academia and within UN organs – less complex.

The principles discerned must not be seen in isolation since they interact with other applicable principles of international law. For this reason, in addition to the principle in focus in each chapter – namely sovereignty (Chapter 1), community of interests (Chapter 2), common concern of humankind (Chapter 3), public participation (Chapter 4) and sustainable development (Chapter 5) – , the chapters discussed related principles applicable to the governance of the resource at issue. Therefore, in the context of transboundary waters, Chapters 1 and 2 discuss the principle of transboundary cooperation and equitable and reasonable utilization. Chapter 2 also discusses the principle of PSNR. In the context of atmospheric governance, Chapter 3 discusses the principle of international cooperation while Chapter 4 brings forward a human rights approach to public participation in climate change decision-making, implying the principle of respect for human rights. Finally, in the context of ocean commons governance, Chapter 5 also discusses the principle of public participation. The interaction between the principles discerned and other applicable principles of international law strengthens the principle in focus and its potential to guide states in achieving sustainable governance of shared natural resources.

The principles discerned also relate to one another. The overarching principles are PSNR and sustainable development. Although not a principle in focus in this dissertation, the principle of international cooperation appears throughout. As I submit in Chapter 1, PSNR should be seen, as regards shared resources, in the light of the differences between PSNR and SSNR found in Chapter 1. In this light, SSNR regulates the benefit sharing from, and the environmental protection of, shared resources through international cooperation. The principle of sustainable development in turn guides the international community in harmonizing economic development, environmental protection and human rights for present and future generations. International cooperation is pivotal in achieving sustainable development. Each of the discerned principles relates to sovereignty; each chapter approaches the problem, research questions, argument and proposals from the perspective of sustainable development. How are the principles discerned interrelated?

The principle of community of interests – when set forth in a water treaty or interpreted as such – relates to PSNR because it influences and qualifies the way sovereignty over shared water resources is exercised. It does so mainly through emphasizing the unity of the shared drainage basin and the resulting duty to cooperate, riparian solidarity and community of law. Community of interests also relates to the principle of public participation by promoting the inclusion of the riparian populations as subjects of rights and duties, including the right to water and sanitation, and the right to public participation in decision-making processes concerning shared drainage basins. Concerning sustainable development, as discussed in Chapter 2, community of interests promotes the sustainable governance of shared water resources through furthering the protection of ecosystems – ecosystems approach – and the rights of the riparian populations.

The principle of common concern of humankind applies to issues which transcend state boundaries and sovereignty, requiring collective action at the global level. It calls on states to establish broad forms of international cooperation and strike a balance between the competing demands of community interest and PSNR. Because climate change is a legally acknowledged common concern of humankind, the principle of common concern also relates to public participation in climate change decision-making processes, as discussed in Chapter 4. In addition, as discussed in Chapter 3, sustainable development is one of the five principles that guide states' actions concerning issues of common concern. The principle in question is arguably also related to that of community of interest. As discussed in Chapter 2, it has been argued that the availability and use of fresh water should be recognized as a common concern of humankind.[111]

Finally, the principle of public participation relates to sovereignty through promoting the inclusion of non-state actors in the governance of shared natural resources. As discussed in Chapter 4, states parties to the relevant human rights treaties have the obligation to adopt measures that ensure effective opportunities to participate in public affairs – which include climate change – and including at the international level. In addition, as discussed in Chapter 5, the principle of public participation relates to that of sustainable development through the inclusion in the SDGs of public participation in decision-making as a way of strengthening institutions at all levels. Public participation relates to the principles of community of interests and common concern of humankind in the ways described in the previous two paragraphs.

The interrelationship between the discerned principles and other principles of international law, as well as that of the discerned principles among themselves, suggests that the role of the discerned principles could be strengthened if interpreted in an integrated way. According to the Vienna Convention on the Law of Treaties, a treaty shall be interpreted in context and in the light

111 Edith Brown Weiss, International Law for a Water-scarce world (2013) 70-77.

of its object and purpose.[112] Together with the context, there shall be taken into account 'any relevant rules of international law applicable in the relations between the parties'.[113] The discerned principles – which are contained in treaties – must therefore be interpreted in context, considering all relevant principles and rules of international law relating to the sustainable governance of shared natural resources. From a broader perspective, the discerned principles should also be interpreted in the light of the constant and progressive development of international law in the field of sustainable development, acknowledging that economic development, environmental protection and respect for human rights are interrelated and should be addressed in an integrated manner,[114] also as regards shared natural resources.

7 Concluding remarks

The sustainable governance of shared natural resources is essential to protect ecosystems and human rights as well as to promote peaceful relations among states sharing resources. As demonstrated in this thesis, shared natural resource governance – i.e. the norms, institutions, and processes that determine how state sovereignty over shared natural resources is exercised, how decisions are made, and how non-state actors have access to, participate in, and are affected by the management of said resources – [115] presents problematic areas concerning mainly the reconcilement of state sovereignty and the common interests of states sharing resources, and the inclusion of non-state actors in governing processes. The principles discerned, examined and evaluated in this thesis – community of interests, common concern of humankind, public participation and sustainable development – could contribute to addressing these problems. In addition, approaching the issue of sovereignty over shared natural resources mindful of the differences between PSNR and SSNR could promote state cooperation and facilitate negotiations.

Treaty regimes and soft law international instruments dealing with shared natural resources increasingly recognize the interconnectedness of the earth's biosphere as well as the linkage between a healthy environment and the protection of human rights. They also acknowledge the need to engage non-state actors in the governance of transboundary and global natural resources. Two crucial international instruments adopted during the course of this study,

112 Vienna Convention on the Law of Treaties, adopted 23 May 1969, in force 27 January 1980, 1155 UNTS 331, Art. 31(1).

113 Ibid. Art. 31(3)(c).

114 New Delhi Declaration, n 47, Principle 7.

115 As mentioned in the Introduction, this definition is adapted from that of natural resource governance in IUCN, *Natural Resource Governance Framework Assessment Guide: Learning for improved natural resource governance* (2016) <https://www.iucn.org/sites/dev/files/content/documents/the_nrgf_assessment_guide_working_paper.pdf> at 1.

namely the Paris Agreement and the 2030 Agenda for Sustainable Development, are shaping the way states approach the governance of shared waters, the atmosphere and the ocean commons. The Paris Agreement reiterates the recognition in the UNFCCC that climate change is a common concern of humankind along with the need for international cooperation. In the context of the topics discussed in this thesis, the Paris Agreement reinforces the UNFCCC by laying down the obligation to strengthen cooperative action in certain areas, providing for enhanced public participation, acknowledging that parties should comply with their existing human rights obligations when taking climate action, and by placing the global response to climate change in the context of sustainable development.[116] The Paris Agreement is particularly relevant to the issues concerning the atmosphere discussed in Chapters 3 and 4 of this dissertation. To date, 187 of the 197 Parties to the UNFCCC have ratified the Paris Agreement showing that it will continue to have a great influence on atmospheric governance.

In the 2030 Agenda for Sustainable Development, the international community agreed to 'transforming our world' including through sustainably managing natural resources.[117] As stated in the Agenda, natural resource depletion and adverse impacts of environmental degradation including freshwater scarcity, climate change and ocean degradation, add to and exacerbate the list of challenges that humanity faces.[118] States envisage a world in which the 'use of all natural resources – from air to land, from rivers, lakes and aquifers to oceans and seas – [is] sustainable'[119] and commit, by 2030, to 'achieve the sustainable management and efficient use of natural resources.'[120] Three of the 17 Sustainable Development Goals relate specifically to the governance of the resources examined in this thesis, namely SDG 6 'Ensure availability and sustainable management of water and sanitation for all', SDG 13 'Take urgent action to combat climate change and its impacts', SDG 14 'Conserve and sustainably use the oceans, seas and marine resources for sustainable development'. In addition, SDG 15 'Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss' is relevant to the sustainable governance of transboundary ecosystems and biodiversity. As argued in Chapter 5 of this dissertation, SDG 16 supports the achievement of SDG 14 through providing a guiding framework to build the institutional strength necessary to attain ocean sustainability. In a similar way, SDG 16 could support the achievement of SDGs 6, 13 and 15.

116 Paris Agreement, n. 23, Preamble, Arts. 2 (1), 10, and 12.
117 Agenda 2030, n. 79, Preamble, para. 6, at 2.
118 Ibid. para. 14.
119 Ibid. para. 9.
120 Ibid. SDG 12, target 12.2.

The SDGs are increasingly being considered in governing processes regarding shared waters, the atmosphere and the ocean commons. UNGA resolutions on the law of transboundary aquifers adopted after the adoption of the 2030 Agenda acknowledge SDG 6 in the Preamble.[121] Concerning climate change, Decision 1/CP.24 of the Conference of the Parties to the UNFCCC notes that the high-level ministerial dialogue on climate finance 'underscored the urgent need to […] align financial flows with the objectives of the Paris Agreement and the [SDGs]'.[122] In addition, Decision 9/CP.24 encourages parties to strengthen adaptation planning taking into account linkages with the SDGs[123] and invites parties and relevant entities working on national adaptation goals and indicators to 'strengthen linkages with the monitoring systems of the [SDGs]'.[124] Finally, as discussed in Chapter 5, both RFMOs and the ISA have acknowledged the relevance of the SDGs for the governance of high seas fisheries and deep seabed minerals respectively.

The SDGs, contained in a UNGA resolution, are not legally biding. However, as discussed in Chapter 5, this does not mean that the SDGs lack the capacity to influence national and international law and policy.[125] The same holds true for other soft law instruments examined in this thesis, e.g., intergovernmental conference declarations such as the 1992 Rio Declaration on Environment and Development; and guidelines and recommendations such as the 1978 UNEP Draft Principles on shared resources, and the ILC Draft Articles on the Law of Transboundary Aquifers. Instruments of such a kind are grounded in international law. They refer to principles and rules of international law in their preambles and embody them in the main text (principles, guidelines,

121 UNGA 'The law of transboundary aquifers', UN Doc A/RES/71/150 (20 December 2016), Preamble, para. 4; UNGA 'The law of transboundary aquifers', UN Doc A/RES/74/193 (30 December 2019), Preamble, para. 4.

122 Decision 1/CP.24 'Preparations for the implementation of the Paris Agreement and the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement', UN Doc FCCC/CP/2018/10/Add.1 (19 March 2019) para. 10.

123 Decision 9/CP.24 'Report of the Adaptation Committee', ibid. para. 6.

124 Ibid. para. 14.

125 Several ways in which the SDGs could be 'non-binding yet influential' have been explored in the literature. See e.g., R.E. Kim, 'The Nexus Between International Law and the Sustainable Development Goals' (2016) *RECIEL* 25(15), 16, arguing that the SDGs are grounded in international agreements and are best conceptualized as a '*subset* of existing intergovernmental commitments'; O. Spijkers, 'The Cross-fertilization Between the Sustainable Development Goals and International Water Law' (2016) *RECIEL* 25(39), 40 – 41, stating that if states are influenced by the SDGs when applying a treaty, this could constitute relevant subsequent practice of such treaty in accordance with the Vienna Convention on the Law of Treaties; Mallory Orme, Zoë Cuthbert, Francesco Sindico et al., 'Good Transboundary Water Governance in the 2015 Sustainable Development Goals: A Legal Perspective' (2015) 40 *Water International* 969, 970 – 971, stating that although the SDGs are not legally binding, they 'still have governing implications' because states must 'translate the SDGs into national targets, and develop and implement policies to achieve the SDGs' and 'engage not only across sectors but also across borders'.

recommendations). Some soft law instruments encourage states to comply with their existing treaty obligations. For instance, the SDGs encourage states to achieve the SDGs in accordance with existing international agreements,[126] which strongly suggests consensus on combining or integrating such agreements with the SDGs in order to achieve sustainable development.[127] If we agree that 'contemporary international law is often the product of a complex and evolving interplay of instruments, both binding and non-binding',[128] the interplay between the binding legal framework and the non-binding international instruments could encourage and even facilitate the proposals in this dissertation, thereby promoting sustainable shared resource governance.

In a context steadily more permeated by states' commitment to implementing the 2030 Agenda, the principles of community of interests, common concern of humankind, public participation and sustainable development, along with awareness of the differences between PSNR and SSNR, could contribute to the sustainable governance of shared natural resources as proposed in each of the five chapters of this dissertation.

The principle of community of interests could contribute to the sustainable governance of shared water resources by promoting riparian cooperation and solidarity, the formation of a community of law among riparian states, the ecosystems approach and the rights of the riparian populations. The principle of common concern of humankind could contribute to the sustainable governance of the atmosphere by stressing the essentiality of a healthy atmosphere to human wellbeing and environmental integrity, and the need for global cooperation to effectively address atmospheric degradation. The principle of public participation could contribute to the sustainable governance of the atmosphere, high seas fisheries and deep seabed minerals. As a human right, public participation could complement climate law and thus contribute to enhancing observer participation in international climate change decision-making processes. As a means to achieving sustainable development, public participation could contribute to strengthening institutions at all levels of governance in order for them to become more effective, accountable and inclusive. Finally, the principle of sovereignty over natural resources is a fundamental overarching principle. The notion of sovereignty over shared natural resources (SSNR) developed in this thesis draws attention to the differences between PSNR and SSNR – based on the nature of the resources over which they are exercised (exclusive versus shared), their original purpose (strengthening political and economic self-determination versus benefit sharing and

126 Expressly mentioning World Trade Organization (WTO) agreements and the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), the World Health Organization Framework Convention on Tobacco Control, the Convention on the Rights of the Child, the United Nations Framework Convention on Climate Change, and the United Nations Convention on the Law of the Sea (UNCLOS).

127 See Kim, above n 23, 16 – 17.

128 A. Boyle and C. Chinkin, *The Making of International Law* (Oxford 2007) 210.

environmental protection) and their distinctive rights and duties (right to freely dispose of exclusive resources versus duty to cooperate in managing shared resources). The notion of SSNR promotes awareness of said differences and emphasizes international cooperation in the governance of natural resources that are shared by two or more states.

Principles promote coherence and consistency in international law and provide a guiding framework for its implementation.[129] As suggested in the Introduction, the principles discerned, examined and assessed in this thesis could serve as the initial foundation for a set of principles on sustainable shared resource governance. Such a set of principles could offer a general framework to guide states in an integrated way regarding the equitable utilization and environmental protection of their shared resources and promote coherence in state practice. Based on the findings, answers to the research questions and conclusions in each of the five preceding chapters, which have been summarized in the present concluding chapter, I submit that the discerned principles could, in the proposed ways, contribute to the sustainable governance of shared natural resources.

129 Final Report of the Expert Group Workshop on International Environmental Law Aiming at Sustainable Development, Washington DC, 30 September-4 October 1996, UN Doc UNEP/IEL/WS/3/2 (4 October 1996) Annex I at para. 29; P. Sands and J. Peel, *Principles of International Environmental Law* (CUP 2018, 4th ed.) at 392; D. Bodansky, 'The United Nations Framework Convention on Climate Change: A Commentary' 18 *Yale Journal of International Law* 2 (1993), at 501; P. Birnie, A. Boyle and C. Redgwell, *International Law & the Environment*, (OUP 2009, 3rd ed.) at 28.