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Conceptualizing benefit-sharing as the pursuit of equity in addressing global environmental challenges

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BENELEX Working Paper N. 1

Conceptualizing benefit-sharing as the pursuit of equity in addressing global environmental challenges

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Abstract

This paper develops a conceptual framework for the analysis of benefit-sharing in light of its gradual development in international law as a basis for more detailed legal analysis (in the areas of international biodiversity, climate change, human rights, oceans, food, agriculture and land law). It teases out the inter-State, intra-State and transnational dimensions of benefit-sharing, with a view to mapping its multiple manifestations, connections among them, and their implications for pursuing equity among and within States in addressing global environmental challenges.

Keywords

Benefit-sharing, international environmental law, human rights, law of the sea, equity

Conceptualizing benefit-sharing as the pursuit of equity in addressing global environmental challenges

1. The promises of benefit-sharing

Global environmental justice is often defined as the fair distribution of environmental burdens and benefits between States, as well as within States,¹ taking into account conditions of scarcity and inequality.² Along similarly elusive lines,³ equity in international law is understood as a distribution of costs and benefits that satisfies participants' expectations⁴ and 'characterizes both the results to be achieved and the means to be applied to obtain the result.'⁵ Benefit-sharing in particular is a prominent example of the operationalization of equity in international environmental law⁶ and has been subject to significant normative elaboration in international environment, oceans and human rights law⁷ in both an inter-State and intra-State dimension.⁸ Some consider that it is arguably emerging as 'an imperative policy choice' in international law.⁹

¹ Based on the discussion in A Nollkaemper, 'Sovereignty and Environmental Justice in International Law' in J Ebbeson and P Okowa (eds), *Environmental Law and Justice in Context* (CUP, 2009) 253, at 254.

² D Shelton, 'Describing the Elephant: International Justice and Environmental Law' in J Ebbeson and P Okowa (n 1) 55, at 58-59, referring to 'justice as equity.'

³ 'Equity has forever been associated with the pursuit of justice and this connection signals that it is one of the great features of human identity. But like the definition of justice itself, equity's full meaning remains sublimely elusive': C Rossi, *Equity and International Law: A Legal Realist Approach to International Decision-making* (Transnational Publishers, 1993), at 247.

⁴ T Franck, *Fairness in International Law and Institutions* (OUP, 1995), at 7, referring to a substantive notion of equity.

⁵ R Higgins, *Problems and Process: International Law and How We Use It* (OUP, 1994), at 225.

⁶ Francesco Francioni, 'Equity' in R Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP, 2012, online edition). Note that fairness and equity are usually used interchangeably in international environmental law: eg, F Soltau, *Fairness in International Climate Change Law and Policy* (OUP, 2009), at 141. Franck, however, sees fairness as a broader notion than equity. Accordingly, fairness encapsulates both the need for legitimacy and for *equity as justice* articulated in notions such as unjust enrichment, good faith, and reasonableness in resource allocation: Franck (n 4), at 47-80. The possible need to distinguish between these two notions in the context of benefit-sharing will be studied at a later stage of the project.

⁷ It should be noted that academic discussion on benefit-sharing can also be found in the area of medical law: see K Simm, 'Benefit-sharing: An Inquiry regarding the Meaning and Limits of the Concept of Human Genetic Research' (2005) 1 *Genomics, Society and Policy* 29 and G Laurie et al, 'Tackling Community Concerns about Commercialisation and Genetic Research: A Modest Interdisciplinary Proposal', paper presented at *Scientific Advancements in Medicine: Legal and Ethical Issues*, University of Birmingham, UK, 2005. Some cross-fertilization in this regard between international environmental and health law has already been studied: see M Wilke, 'A Healthy Look at the Nagoya Protocol - Implications for Global Health Governance' in E Morgera, M Buck and E Tsioumani (eds), *The 2010 Nagoya Protocol on Access and Benefit-Sharing in Perspective: Implications for International Law and Implementation Challenges* (Martinus Nijhoff, 2013) 123.

⁸ E Morgera and E Tsioumani, 'The Evolution of Benefit-sharing: Linking Biodiversity and Community Livelihoods' (2010) 20 *Review of European Community and International Environmental Law* 150.

⁹ S McCool, 'Distributing the Benefits of Nature's Bounty: A Social Justice Perspective', paper presented at the International Symposium on Managing Benefit-sharing in Changing Social Ecological Systems (Windhoek, Namibia, 5-7 June 2012), at 4.

But why single out benefit-sharing in the above burden-and-benefit equations?¹⁰ Mainly because benefit-sharing holds significant *promise*. It is an attractive commitment that -- even if vague in content and timeframe -- raises expectations that we may directly address perceived injustices about access, ownership and/or control of resources that are perceived not only as objects of regulation and cooperation, but also as embodiments of community interests.¹¹ Benefit-sharing serves to *frame*¹² equity issues by emphasizing the advantages (the positive outcomes or implications) of tackling global challenges so as to help motivate participation by different stakeholders.¹³ As Nollkaemper has aptly explained, frames 'play an essential, though not always recognized, role in the development of international law': they 'highlight parts of reality over others... so as to promote particular evaluations and policies, and ... have distinct normative and regulatory implications.'¹⁴ As a frame, benefit-sharing has the potential to facilitate 'convergence upon a *shared cooperative agenda*...[which depends on] each party's perception of the benefits it can secure from cooperation.'¹⁵ As such, benefit-sharing is part of a more general fairness discourse towards 'getting the parties to think in a new way about the value of resources, or indeed about what constitutes a resource.'¹⁶

These promises have been particularly prominent in the specific context of international biodiversity law, where benefit-sharing has blossomed. In that context, a plethora of hard and soft legal developments have spelt out the *content* of fair and equitable benefit-sharing in both the inter- and intra-State dimensions¹⁷ on the basis of consensus reached by 194 States (virtually the whole international community with the notable exception of the United States).¹⁸ Although (as discussed below) such developments in international biodiversity law have already exercised some influence on other international processes, their emergence and diffusion have occurred in a

¹⁰ With particular regard to burden-sharing, it should be clarified that the preference for benefit-sharing as a frame in international law does not exclude the need to also share burdens equitably. But the interface between burden- and benefit-sharing, as the two sides of the proverbial coin, is a little-explored area both from an empirical as well as a theoretical perspective: see brief remarks in that connection by K Baslar, *The Concept of the Common Heritage of Mankind in International Law* (Martinus Nijhoff, 1998) at 100; and J Murillo, 'Common Concern of Humankind and its Implications in International Environmental Law' (2008) 5 *Macquarie Journal of International and Comparative Environmental Law* 133, at 142.

¹¹ Paraphrasing, from the domain of medical law, Laurie et al (n 7) at 4 and 20-22.

¹² 'Framing essentially involves selection and salience. To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation': R Entman, 'Framing: Toward Clarification of a Fractured Paradigm' (1993) 43 *Journal of Communication* 51, cited by McCool (n 9), at 5. For a more in-depth discussion of the role of framing, see L Parks and E Morgera, 'An Inter-disciplinary Methodology for Researching Benefit-sharing as a Norm Diffusing in Global Environmental Law', BENELEX Working Paper 2 (SSRN, 2014).

¹³ Laurie et al (n 7) at 4.

¹⁴ A Nollkaemper, 'Framing Elephant Extinction' (2014) 3 *ESIL blogpost*.

¹⁵ CW Sadoff and D Grey, 'Cooperation on International Rivers: A Continuum for Securing and Sharing Benefits' (2005) 30 *Water International* 420, at 420 (emphasis added).

¹⁶ Franck (n 4), at 432.

¹⁷ This distinction has been first put forward in Morgera and Tsioumani (n 8).

¹⁸ Virtually global consensus provides 'symbolic validation' and therefore authority to international law: Franck (n 4), at 34.

remarkably obscure fashion.¹⁹ Partly for this reason, they remain little-studied. As a result, the legal content, status and implications of benefit-sharing in relation to a range of global challenges have never before been fully mapped or systematically evaluated either within the area of international biodiversity law or in relation to other areas of international law where recourse to benefit-sharing has also been made (notably, the international law of the sea and international human rights law).

This gap in the scholarship is regrettable as benefit-sharing ‘has the potential for both greater good and greater harm.’²⁰ As to the latter, benefit-sharing can be (and has already been) used as a superficial means to garner social acceptability for certain natural resource developments or regulations, and even to rubber-stamp inequitable and non-participatory outcomes that benefit ‘stronger’ parties (rich countries, powerful foreign investors) rather than as an instrument of equity for the vulnerable.²¹ The risks of benefit-sharing include discriminating against some groups of stakeholders, allowing fairness to be defined by dominating interests, permitting the identification of benefits based on a mismatch between science and policy,²² or contributing to frame environmental management in an inherently *exploitative* manner.²³ In all these cases, benefit-sharing amounts to a broken or empty promise at best.

One therefore needs to remain healthily skeptical²⁴ of benefit-sharing: a balanced approach is needed between understanding it merely as self-congratulatory rhetoric²⁵ or as a Sisyphean²⁶ concept that can be too easily criticized for aiming at the ever-moving target of equity. A systematic and critical examination is thus called for, because as long as the discourse on benefit-sharing remains vague and incoherent this promising idea is, more often than not, simply brushed to the side.²⁷ There is a clear need to enhance understanding of a confusing and inherently optimistic legal

¹⁹ This is indeed a critical shortcoming, as one of the conditions of legitimacy and fairness in international law is ‘textual determinacy’, that is ‘the ability of a text to convey a clear message, to appear transparent in the sense that one can see through the language of a law to its essential meaning. Rules which have a readily accessible meaning and which say what they expect of those who are addressed are more likely to have a real impact on conduct... The element of determinacy which affects a rule’s legitimacy also has its impact on perceptions of the rule’s fairness’: Franck (n 4), at 30-33.

²⁰ Simm (n 7), at 29.

²¹ Eg Inter-American Court of Human Rights, *Kichwa Indigenous Community of Sarayaku v Ecuador* (Merits and reparations, Judgment of 27 June 2012) para 194, where benefit-sharing was offered in exchange for obtaining the consent of the communities; or African Commission on Human and Peoples’ Rights, *Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya*, Comm. no 276/2003 (25 November 2009) para 274, where promised benefit-sharing in the form of revenue-sharing from a game reserve, job creation, relocation to fertile land and compensation were not delivered.

²² McCool (n 9), at 15.

²³ This concern resonates with ethical concerns against the commodification of nature: eg, (2013) 2 *Transnational Environmental Law* (special issue).

²⁴ Higgins (n 5), at 237, who calls for skepticism with regards to equity’s contribution to effectively ‘oiling the wheels of international law.’

²⁵ I am grateful to Euan McDonald for this comment.

²⁶ As other efforts related to global justice, benefit-sharing may be a ‘Sisyphean process that is intrinsically fragile and fraught with difficulties, perpetually encountering and attempting to work through the perils ... without necessarily overcoming them permanently... Yet the very existence of this possibility warrants attention, and should be better understood’: F Kurasawa, *The Work of Global Justice: Human Rights as Practices* (CUP, 2007), at 25

²⁷ This appears to be the conclusion reached by Simm (n 7), at 33-34 and 37-38.

phenomenon, with a view to assessing whether, when and why it leads to useful results²⁸ and when and why it does not. To that end, it appears necessary to analyze the growing international legal practice on benefit-sharing with a view to empirically identifying its contours, conceptualizing it, and questioning its role. Only then will it be possible to formulate concrete recommendations for ongoing international law- and policy-making processes, and to contribute to relevant theoretical debates,²⁹ including that on global environmental justice.³⁰

This paper is a first step in a long research journey in that direction. It develops a conceptual framework for the analysis of benefit-sharing in light of its gradual development in international law as a basis for more detailed legal analysis (in the areas of international biodiversity, climate change, human rights, oceans, food, agriculture and land law).³¹ While the proposed analysis takes international law as its starting point and as a fundamental area for investigation, it does not assume, however, that the legal concept of benefit-sharing necessarily *originates* in international law or that the research should stop at the international level.³² The proposed conceptual framework teases out the inter-State, intra-State and transnational dimensions of benefit-sharing, with a view to identifying the multiple directions of this enquiry, possible connections among them, and their implications for evaluating the theoretical and practical worth of benefit-sharing in pursuing equity among and within States in addressing global environmental challenges.

2. The Phenomenology of Benefit-sharing

The likely³³ first appearances of benefit-sharing are linked to international human rights law: the 1946 Universal Declaration of Human Rights recognized everyone's

²⁸ ...'there is no correct formula or approach, only more or less *useful* ones' when facing 'questions involving management of the environment [that] are challenging, nearly always impossible to find universal consensus on how they are framed, and never completely resolved': McCool (n 9), at 3 (emphasis added).

²⁹ Similarly to the approach put forward by E Tourme-Jouannet, *What is a Fair International Society? International Law between Development and Recognition* (Hart, 2013), at 3.

³⁰ Much still remains to be understood in the relatively recent debate on global environmental justice from a legal perspective: J Ebbeson, "Introduction: Dimensions of Justice in Environmental Law" in Ebbeson and Okowa (n 1) 1, at 35; also R Falk, 'The Second Cycle of Ecological Urgency: An Environmental Justice Perspective' in Ebbeson and Okowa (n 1) 39, at 42. With specific regard to benefit-sharing, it has been noted that 'Further confusing social discourse is a plethora of scientific activists and policy literature [on benefit-sharing] that ... use foundational concepts (such as equity) vaguely, and muddies important references between diverse forms of social justice.' McCool (n 9), at 3.

³¹ A Savaresi, 'The Emergence of Benefit-sharing under the Climate Regime: A Preliminary Exploration and Research Agenda', BENELEX Working Paper No 3 (SSRN, 2014) and E Tsioumani, 'Exploring Fair and Equitable Benefit-Sharing from the Lab to the Land (Part I: agricultural research and development in the context of conservation and the sustainable use of agricultural biodiversity)', BENELEX Working Paper 2 (SSRN, 2014). The law of the sea dimensions will be developed at a successive stage of the BENELEX project.

³² Parks and Morgera (n 12).

³³ There currently exists no comprehensive historic study of the evolution of benefit-sharing in international law, to the best knowledge of the author, and the BENELEX team is still working on a full mapping of its occurrences in international (hard and soft) legal instruments. Note also that in this type of research, the mapping stage may be 'ever-shifting': N Walker, *Intimations of Global Law* (CUP, forthcoming 2014), at 142-143.

right to ‘*share* in scientific advancement and its *benefits*’,³⁴ and the 1986 UN Declaration on the Right to Development recognized States’ duty to ensure the ‘active, free and meaningful participation in ...the *fair distribution of the benefits* resulting’ from national development for their entire population and all individuals.³⁵ Another prominent, early example is the 1982 UN Convention on the Law of the Sea (UNCLOS),³⁶ which created complex international machinery for the ‘*equitable sharing of financial and other economic benefits* derived from’ mining activities in the deep seabed (‘the Area’³⁷).

These references emerged in the context of the New International Economic Order (NIEO) - developing countries’ attempt at radically restructuring the global economic system by prioritizing the objective of development as part of the process of decolonization.³⁸ The NIEO developed the concept of national sovereignty over natural resources to support the self-determination of States to decide their economic development, and a human right to development to support the self-determination of peoples to decide about the economic, social and cultural aspects of human development.³⁹ In both cases, it called for international cooperation on the basis of *need*.⁴⁰ To that end, the NIEO implied ‘*changes in legal techniques*, since the established techniques have shown that they frequently serve only to perpetrate economic domination by a minority of States and make the possibility of transformations remote.’⁴¹ While the NIEO has formally disappeared from the international agenda, the discourse on ‘equitable globalization’ and the international agenda on sustainable development incorporated in Agenda 21 and the Millennium Development Goals can all be seen as ‘direct reminders’ of its call for equity⁴² and a rights-based approach to development.⁴³ In some ways, the NIEO may even have been turned into a general approach to international law, or at least to international environmental law: it entails substantial adjustments made through legal corrections based both on moral and practical exigencies of solidarity and cooperation including development aid.⁴⁴ And it has been enriched by recognition of cultural diversity (of

³⁴ Article 27(1) (emphasis added), which is reiterated in slightly different wording in Article 15 of the International Covenant on Economic, Social and Cultural Rights (ICESCR). See also Charter of the Organization of American States, Article 38; American Declaration on the Rights and Duties of Man Article XIII and Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, Article 14; and Arab Charter on Human Rights, Article 42.

³⁵ Article 2(3) (emphasis added).

³⁶ Note that the inter-State concept of benefit-sharing as enshrined in UNCLOS had already been expressed in the UN General Assembly Resolutions 2749 (XXV) of 1970 and 29/3281 of 1974 (‘Charter of Economic Rights and Duties of States’) Article 29.

³⁷ UNCLOS Article 140(1). The Area is ‘the sea-bed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction’ (UNCLOS Article 1(1)(1)) and ‘activities in the Area’ are all activities of exploration for, and exploitation of mineral resources (on the basis of the combined reading of UNCLOS Articles 140(3) and 133).

³⁸ UN General Assembly Resolutions 3201 of 1974 ‘Declaration on the Establishment of a New International Economic Order’ and 3202 of 1974 ‘Programme of Action for the Establishment of a New International Economic Order’.

³⁹ ME Salmon, ‘From NIEO to Now and the Unfinishable Story of Economic Justice’ (2013) 62 *International and Comparative Law Quarterly* 31.

⁴⁰ Rossi (n 3), at 200-201.

⁴¹ *Ibid*, at 202.

⁴² Tourme-Jouannet (n 29), at 86-87 and 37.

⁴³ Salmon (n 39), at 49.

⁴⁴ S Maljean-Dubois, ‘Justice et société internationale: l’équité dans le droit international de l’environnement’ in A Michelot (ed), *Equité et environnement* (Larcier, 2012), 355, at 258-9; W

different countries and of different groups, such as indigenous peoples) that has become an instrument of equality among and within States, 'officially bestowing a right to be different while being equal.'⁴⁵ The resulting effect of combining legal rules/practices in terms of development and recognition is, at the inter-State level, rules that aim to ensure equity in negotiations among States for the benefit of the least favored countries, and at the intra-State level, the protection of rights of marginalized individuals and communities over natural resources to respect their cultural identity and protect their economic resources and livelihoods.⁴⁶ As a result, the sovereignty of States over natural resources is no longer just a set of rights to be exploited to the exclusion of others, but has been progressively qualified by duties and responsibilities towards other States and communities, and redefined as a commitment to cooperate for the good of the international community at large.⁴⁷

Against this background, a connection between benefit-sharing and the use of natural resources, both among and within States, has been cemented. This is epitomized in the 1992 Convention of Biological Diversity (CBD) and developed in a series of consensus-based, soft-law decisions adopted by the CBD Parties and in the Convention's legally binding Protocol on Access and Benefit-Sharing (Nagoya Protocol), adopted in 2010. In parallel, in the area of international human rights law, attention has focused on benefit-sharing from the exploitation of the traditional lands and natural resources of indigenous peoples.⁴⁸ As a result of these developments, benefit-sharing is now surfacing in a variety of international legal developments in the areas of water,⁴⁹ land and food,⁵⁰ and corporate accountability,⁵¹ with little reflection on possible linkages and cross-fertilization.

This evolution may arguably be also explained by a more recent rationale for benefit-sharing than NIEO: the increasingly recognized need for a proper appreciation of ecosystems' intrinsic values and their tangible or intangible benefits to humans⁵² in meeting the food, health, and other needs of the world's growing population⁵³ - in

Scholtz, 'A Sustainable and Equitable Legal Order, in Environmental Law and Sustainability After Rio' in J Benidickson et al (eds), *Environmental Law and Sustainability After Rio* (Edward Elgar, 2011) 119, at 122 and 128.

⁴⁵ Tourme-Jouannet (n 29), at 121 and 149.

⁴⁶ Ibid.

⁴⁷ P Birnie, A Boyle and C Redgwell, *International Law and the Environment* (OUP, 2009), at 192.

⁴⁸ 1989 ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries, Article 15(2), whereby the 'peoples concerned shall wherever possible *participate in the benefits* of the exploration or exploitation of mineral and other resources pertaining to the lands of indigenous peoples.

⁴⁹ P Wouters and R Moynihan, 'Benefit-sharing in International Water Law' in F Loures and A Rieu-Clarke (eds), *The UN Watercourses Convention in Force: Strengthening International Law for Transboundary Water Management* (Earthscan, 2013) 321.

⁵⁰ Tsioumani (n 31).

⁵¹ Eg Report of the Special Rapporteur on Indigenous People' Rights, James Anaya (2010) UN Doc A/HRC/15/37, paras 73-75; and Expert Mechanism on the Rights of Indigenous Peoples, Progress Report on the Study on Indigenous Peoples and the Right to Participate in Decision-making (2010) UN Doc A/HRC/15/35. See discussion in E Morgera, 'From Corporate Social Responsibility to Accountability Mechanisms' in PM Dupuy and J Viñuales (eds), *Harnessing Foreign Investment to Promote Environmental Protection: Incentives and Safeguards* (CUP, 2013) 321 and 'Environmental Accountability of Multinational Corporations: Benefit-sharing as a Bridge between Human Rights and the Environment' in B Boer (ed), *Human Rights and the Environment* (OUP, forth. 2014).

⁵² Principles of the Ecosystem Approach, CBD Decision V/6 (2000), Operational Guidance 2, para 9.

⁵³ CBD preamble.

other words, the notion of *ecosystem services*.⁵⁴ This notion has facilitated the consideration of environmental challenges within the framework of the UN people-centered approach to global development and security.⁵⁵ The international community has gradually⁵⁶ espoused the view that without appropriate and explicit accounting of the multiple links between biodiversity and human development, other development objectives that conflict with biodiversity protection will continue to take priority.⁵⁷ On the one hand, the concept of ecosystem services intends to convey that applying economic thinking⁵⁸ to the use of biodiversity could help to clarify why prosperity and poverty reduction depend on maintaining the flow of benefits from ecosystems and why successful environmental protection needs to be grounded in sound economics.⁵⁹ On the other hand, this understanding has been interpreted as encouraging a greater use of economic and market-based instruments in the management of ecosystem services, where enabling conditions exist.⁶⁰ For that reason, ecosystem services raise divisive questions about the moral and cultural acceptability and the effectiveness of the pricing and marketing of ecosystem services, about inherent pressures towards their privatization, and more generally about the appropriate balance between ecosystem stewardship and ownership.⁶¹ The

⁵⁴ These benefits include: food, water, timber, energy and fiber (provisioning services); regulating services that affect climate, floods, diseases, wastes, and water quality; cultural services that provide recreational, aesthetic, and spiritual benefits; and supporting services such as soil formation, photosynthesis, and nutrient cycling: www.millenniumassessment.org/en/index.aspx. For legal analyses, E Blanco and J Razzaque, 'Ecosystem Services and Human Well-being in a Globalized World: Assessing the Role of Law' (2009) 31 *Human Rights Quarterly* 692 and B Pardy, 'The Logic of Ecosystems: Capitalism, Rights and the Law of 'Ecosystem Services' (2014) 5 *Journal of Human Rights and the Environment* 136.

⁵⁵ E Morgera, 'The 2005 UN World Summit and the Environment: The Proverbial Half-Full Glass' (2006) 15 *Italian Yearbook of International Law* 53.

⁵⁶ While the economic valuation of ecosystem benefits was already considered key for more effective biodiversity conservation in early normative developments under the CBD, it acquired traction with the global endorsement of the 2005 Millennium Ecosystem Assessment. Earlier developments include CBD Decision III/18 (1996) endorsing SBSTTA recommendation II/9 'economic valuation of biodiversity...recognizing that better understanding of full value of biodiversity at genetic, species and ecosystem level will greatly assist parties in their efforts to implement effective policy and management measures to meet the CBD objectives; recognizing that information on economic value is severely deficient and methods of providing this information need further development; recognizing that biodiversity provides a wide range of benefits representing significant use and non-use values, and some of these values are difficult to define in terms of economic value.' More recently, CBD Decision VIII/25 (2006) includes a series of options for the application of tools for valuation of biodiversity and biodiversity resources and functions.

⁵⁷ 'The fundamental problem of biodiversity loss can be addressed only if we find *new ways* of explicitly debating about value and importance': The Economics of Ecosystems and Biodiversity (TEEB), *Challenges and Responses* (OUP, 2014) at 9 (emphasis added).

⁵⁸ Note increased efforts to advance the use of economic valuation to mainstreaming environmental protection more effectively into development planning have been undertaken in the areas of climate change, biodiversity and desertification: N Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007); TEEB, *Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations* (2010), www.teebweb.org/; and Economics of Land Degradation' initiative, <http://eld-initiative.org/>. This approach is generally also predicated in UNEP, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication* (UNEP, 2011).

⁵⁹ TEEB (n 58), at 6.

⁶⁰ UNEP High-Level Brainstorming Workshop on Creating Pro-Poor Markets for Ecosystem Services: 10-12 October 2005, London, UK.

⁶¹ C Reid and W Nsoh, 'Whose ecosystem is it anyway? Private and public rights under new approaches to biodiversity conservation' (2014) 5 *Journal of Human Rights and the Environment* 112.

proponents of ecosystem services, however, openly acknowledge the limitations of *monetary valuation* particularly when biodiversity values are generally recognized and accepted socially and culturally,⁶² and have rather emphasized valuation in a broad sense in order to clearly address the drawbacks and limitations of economics as a means to achieving human well-being.⁶³ Accordingly, the international discourse on ecosystem services has also served to link environmental protection and poverty eradication, and to underscore the need for rights-based strategies to prevent biodiversity loss and its negative impacts on the vulnerable.⁶⁴ In addition to this emphasis on *vulnerability* (a modernized notion of *need* underlying the NIEO), the discourse of ecosystem services serves to draw attention to (largely unaccounted) *merit* of ecosystem service providers in contributing to global human well-being.⁶⁵ The interplay and tensions between the economic and non-economic dimensions of ecosystem services are clearly reflected in the concept of benefit-sharing as the sharing not only economic, but also socio-cultural and environmental benefits arising from biodiversity conservation and sustainable use. And the influence that the notion of ecosystem services has had across the board of multilateral environmental agreements may thus arguably explain the recent spread of benefit-sharing as a reward for ecosystem stewards in areas beyond international biodiversity law.⁶⁶

No academic study to date, however, has attempted to develop a comprehensive and systematic interpretation of benefit-sharing across different international regimes. This may be regarded, on the one hand, as the result of the fragmentation of relevant international efforts, and on the other hand, as the result of limited scholarly reflection on the overall scope of benefit-sharing and the broad implications of its ubiquity within and across international environmental regimes. The question of whether there is just one concept of benefit-sharing or many has thus remained unanswered.⁶⁷ To answer this question, it appears indispensable to specifically identify blindspots in the current scholarship against a preliminary phenomenology of benefit-sharing. For the purposes of conceptual clarity, a distinction between the inter-State, intra-State and transnational dimensions of benefit-sharing is proposed in the following sections.

2.1 *Inter-State benefit-sharing*

⁶² TEEB (n 58), at 11-12. On this point, see also TEEB, *The Ecological and Economic Foundations* (2010), Chapter 4 <http://doc.teebweb.org/wp-content/uploads/Study%20and%20Reports/Reports/Ecological%20and%20Economic%20Foundations/TEEB%20Ecological%20and%20Economic%20Foundations%20report/TEEB%20Foundations.pdf>

⁶³ TEEB (n 57), at 9.

⁶⁴ For instance, Third Edition of the Global Biodiversity Outlook: Implications for the Future Implementation of the Convention, CBD Decision X/4 (2010) paras 5(d) and (f), points to: enhancing the benefits from biodiversity to contribute to local livelihoods; empowering indigenous and local communities; and ensuring their participation in decision-making processes to protect and encourage their customary sustainable use of biological resources.

⁶⁵ T Sikor et al, 'Toward an Empirical Analysis of Justice in Ecosystem Governance' (2014) *Conservation Letters* doi: 10.1111/conl.12142, at 4.

⁶⁶ Eg, BA Nkhata et al, 'A Typology of Benefit Sharing Arrangements for the Governance of Social-Ecological Systems in Developing Countries' (2012) 17 *Ecology and Society* 1.

⁶⁷ B De Jonge, 'What is Fair and Equitable Benefit-sharing?' (2011) 24 *Journal of Agricultural & Environmental Ethics* 127; and D Schroeder, 'Benefit-sharing: It's Time for a Definition' (2007) 33 *Journal of Medical Ethics* 205, at 208.

Different articulations of benefit-sharing in its inter-State dimension co-exist in current international law. They represent different stages of development of this legal phenomenon. In addition, benefit-sharing appears to be adapting to the different statuses of different natural resources under international law, and therefore to be able to operate in the context of different limitations to the rights of States to explore these resources.⁶⁸

As anticipated, one of the earliest and still most complex formulations of benefit-sharing can be found in the law of the sea, whereby a unique regime internationalizes the ownership of the mineral resources of the deep seabed by subordinating exploration by any State to the authority of collective decision-making under an international body that directly manages these resources.⁶⁹ In this context, benefit-sharing is one of the key components of the principle of *common heritage of mankind*. The principle of common heritage has not been defined, but is characterized by a series of elements. Namely, it provides that: resources cannot be appropriated to the exclusive sovereignty of States, they must be conserved and exploited for the benefit of mankind, without discrimination and for peaceful purposes, and they are subjected to a unique international institution.⁷⁰ The latter embodies a multilateral shared management⁷¹ and benefit-sharing machinery that provides for all States to share rewards, even if they are unable to participate in the actual process of the extraction of natural resources.⁷² The equity rationale for such machinery was to redress the injustice deriving from ‘a resource that could ...in principle be exploited by anyone’ but that could effectively be accessed only by a few, high-tech States.⁷³ Although the articulation of benefit-sharing as part of the common heritage principle is one of the earliest, it has not yet been implemented. UNCLOS itself only stipulates that benefit-sharing must be equitable and non-discriminatory,⁷⁴ but leaves the development of precise rules and procedures, as well as specific decisions on the actual allocation of benefits, to the International Seabed Authority.⁷⁵ Due to the fact that activities in the deep seabed have not yet reached the stage of exploitation of resources, the Authority has not yet elaborated on benefit-sharing.⁷⁶

The principle of common heritage has not been applied in other international instruments after UNCLOS.⁷⁷ In current negotiations under the General Assembly,⁷⁸

⁶⁸ International law has traditionally regulated the use of natural resources by determining the basis on which rights are allocated among States, resulting in different sets of limitations to their freedom to exploit these resources: Birnie, Boyle and Redgwell (n 47), at 190 ff.

⁶⁹ Ibid, at 198 and 95.

⁷⁰ UNCLOS Articles 136-141.

⁷¹ Franck (n 4), at 76.

⁷² Birnie, Boyle and Redgwell (n 47), at 128-130 and 197.

⁷³ Higgins (n 5), at 130.

⁷⁴ UNCLOS Article 140(2).

⁷⁵ UNCLOS Article 160 (2)(f)(i) and (g).

⁷⁶ At present, the Authority has only developed rules on prospecting and exploration, and begun its consideration of rules on exploitation (www.isa.org.jm/en/mcode). See, however, preliminary discussion on the latter, including on benefit-sharing, in 'Towards the development of a regulatory framework for polymetallic nodule exploitation in the Area' (2013) UN Doc ISBA/19/C/5.

⁷⁷ See, however, reference to this principle in the context of international developments related to agriculture (Tsioumani (n 31)). Otherwise, the only exception, that predates UNCLOS, is Article 11(7) of the 'functionally inoperative' 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (John Sprankling, *The International Law of Property* (OUP, 2014) 177 and 185) Article 11(7) reads: ‘The main purposes of the international regime to be established shall

however, developing countries are proposing to extend the notion of common heritage to living resources - namely, marine genetic resources in areas beyond national jurisdiction. Interestingly, while developed countries oppose any extension of the principle (and presumably the institutional framework) of common heritage, they appear open to discuss an application of benefit-sharing outside of that context.⁷⁹ These negotiating positions contrast with the perception that benefit-sharing has been the most controversial element of common heritage, and as such responsible for the very cautious use of the common heritage principle in international law.⁸⁰ In effect, UNCLOS already includes another articulation of benefit-sharing that operates outside of the common heritage regime:⁸¹ it mandates States to share, through the multilateral benefit-sharing mechanism of the Area, revenues deriving from mining activities in areas under *national* jurisdiction,⁸² as opposed to global commons. These, and successive legal developments discussed below, suggest that benefit-sharing is an autonomous concept that is capable of operating beyond the framework of common heritage and fitting into different international legal regimes for natural resources.⁸³

An articulation of benefit-sharing in the context of international biodiversity law applies in a regime of *exchange* as a counterpart to States' access to genetic resources

include: ... (d) An equitable sharing by all State Parties in the benefits derived from those resources, whereby the interests and needs of the developing countries, as well as the efforts of those countries which have contributed either directly or indirectly to the exploration of the Moon, shall be given special consideration'; and discussion in Franck (n 4), at 76 and 78, and Birnie, Boyle and Redgwell (n 47), at 197. It may also be argued that the Madrid Protocol to the Antarctic Treaty represents 'an "in trust" model of common heritage equity': Franck (n 4), at 76, 78 and 404 and Birnie, Boyle and Redgwell (n 47), at 198.

⁷⁸ UN General Assembly Resolution 66/231 of 2011, para 167. For a discussion, eg, L De la Fayette, 'A New Regime for the Conservation and Sustainable Use of Marine Biodiversity and Genetic Resources Beyond the Limits of National Jurisdiction' (2009) 24 *International Journal of Marine and Coastal Law* 221; and P Drankier et al, 'Marine Genetic Resources in Areas beyond National Jurisdiction: Access and Benefit-Sharing' (2012) 27 *International Journal of Marine and Coastal Law* 375.

⁷⁹ E Morgera, 'Impressions on the UN General Assembly Working Group on Marine Biodiversity' (2010) 40 *Environmental Policy and Law* 67: even the United States only objected to 'enforcing' benefit-sharing through intellectual property rights, rather than to the idea of benefit-sharing as such (Summary and Analysis of the fifth meeting of the *Ad Hoc* Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction: 7-11 May 2012' (2012) 25:83 *Earth Negotiations Bulletin* at 3.

⁸⁰ Eg S Shackelford, ' (2009) The Tragedy of the Common Heritage of Mankind' 28 *Stanford Environmental Law Journal* 109, 128; and J Noyes, 'The Common Heritage of Mankind: Past, Present and Future' (2011-2012) 40 *Denver Journal of International Law and Policy* 447, at 451 and 469-470; J Frakes, 'The Common Heritage of Mankind Principle and the Deep Seabed, Outer Space, and Antarctica: Will Developed And Developing Nations Reach a Compromise?' (2003) 21 *Wisconsin International Law Journal* 409, at 417.

⁸¹ Although it is linked to the institutional framework managing the Area: UNCLOS Article 82(1) and (4), which read: 'The coastal State shall make payments or contributions in kind in respect of the exploitation of the non-living resources of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured... The payments or contributions shall be made *through the [International Seabed] Authority*, which shall distribute them to States Parties to this Convention, on the basis of equitable sharing criteria, taking into account the interests and needs of developing States, particularly the least developed and the land-locked among them.'

⁸² A Chircop, 'Commentary on Article 82' in A Prölss (ed), *The United Nations Convention on the Law of the Sea - A Commentary* (Hart, forth. 2014).

⁸³ *Contra* Baslar (n 10), who instead suggested that common heritage as such should be applied to other natural resources of different international legal status as a functional rather than territorial concept.

found on the territories (and under the sovereignty) of other States,⁸⁴ for research and development (R&D) purposes. The Convention on Biological Diversity⁸⁵ and its Nagoya Protocol⁸⁶ envisage a *bilateral*⁸⁷ inter-State arrangement for sharing with the country providing genetic resources the monetary and non-monetary benefits arising from R&D conducted by the country that sought access to these resources. In the specific context of these transactions, benefit-sharing is expected to realize equity in relation to the uneven natural distribution of genetic resources across different countries and the unevenly distributed capacities to develop these resources. It thus aims at striking a fair balance between the claims of a user country (and its individual users) to obtain vital and unique material for scientific research and protect resulting inventions that require considerable risk, time and effort in being developed, on the one hand, and the rights of provider countries (and of their indigenous peoples and local communities) to obtain equitable rewards for the genetic resources and traditional knowledge that they have conserved, on the other.⁸⁸ But although achieving fairness through benefit-sharing is a clear objective of the Protocol,⁸⁹ its operational provisions ultimately leave the actual achievement of fairness to

⁸⁴ Whether and to what extent the CBD and Nagoya Protocol apply to genetic resources in areas beyond national jurisdiction remains a matter of contention: see E Morgera, E Tsioumani and M Buck, *Unraveling the Nagoya Protocol: Commentary on the Protocol on Access and Benefit-sharing to the Convention on Biological Diversity* (Martinus Nijhoff, forth. 2014), at 81-83.

⁸⁵ CBD Article 15(7), which reads: 'Each Contracting Party shall take legislative, administrative or policy measures...with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. Such sharing shall be upon mutually agreed terms.' This understanding can also be found in other contemporary legal developments, such as Agenda 21, paras 15(4)(d), 15(4)(j) and 16(7)(a).

⁸⁶ The Nagoya Protocol Article 5 encapsulates both inter-State and intra-State dimensions of benefit-sharing and reads:

1. In accordance with Article 15, paragraphs 3 and 7 of the Convention, benefits arising from the utilization of genetic resources as well as subsequent applications and commercialization shall be shared in a fair and equitable way with the Party providing such resources that is the country of origin of such resources or a Party that has acquired the genetic resources in accordance with the Convention. Such sharing shall be upon mutually agreed terms.

2. Each Party shall take legislative, administrative or policy measures, as appropriate, with the aim of ensuring that benefits arising from the utilization of genetic resources that are held by indigenous and local communities, in accordance with domestic legislation regarding the established rights of these indigenous and local communities over these genetic resources, are shared in a fair and equitable way with the communities concerned, based on mutually agreed terms.

3. To implement paragraph 1 above, each Party shall take legislative, administrative or policy measures, as appropriate.

4. Benefits may include monetary and non-monetary benefits, including but not limited to those listed in the Annex.

5. Each Party shall take legislative, administrative or policy measures, as appropriate, in order that the benefits arising from the utilization of traditional knowledge associated with genetic resources are shared in a fair and equitable way with indigenous and local communities holding such knowledge. Such sharing shall be upon mutually agreed terms.

⁸⁷ Although note the possibility for a multilateral benefit-sharing mechanism to be established under Nagoya Protocol Article 10: see Morgera, Tsioumani and Buck (n 84), at 197-208.

⁸⁸ Francesco Francioni, *Genetic Resources, Biotechnology and Human Rights : The International Legal Framework*, Working Paper (Florence: European University Institute, 2006), <http://cadmus.eui.eu/handle/1814/6070>, at 20-21.

⁸⁹ Nagoya Protocol Article 1: the argument is developed in Morgera, Tsioumani and Buck (n 84), at 48-58.

contractual devices,⁹⁰ without providing any substantive criteria in that regard either at the stage of the regulation of such contractual negotiations in domestic law or their enforcement through international cooperation.⁹¹ Neither is there a mechanism under the Nagoya Protocol to assess the extent to which benefit-sharing is indeed fair and equitable in the context of specific ABS transactions.⁹² As modest experience on fair bilateral ABS deals has already been accrued,⁹³ it should be emphasized that State Parties have a due diligence obligation to limit and monitor private parties' contractual freedom in order to achieve fair and equitable benefit-sharing in the light of the objective of the Protocol.⁹⁴

Also a regime of exchange,⁹⁵ the International Treaty on Plant Genetic Resources for Food and Agriculture embodies the most sophisticated elaboration of benefit-sharing as a *multilateral* fund which allocates monetary and non-monetary benefits derived from facilitated access to plant genetic resources for food and agriculture that are included in the Treaty's Multilateral System (such as rice, potato and maize). Despite the fact that this international machinery for benefit-sharing has been in operation since 2008, however, monetary benefits have not yet materialised.⁹⁶ As a result, Parties to the Treaty have recently decided to establish an intersessional process tasked to develop a range of measures that will increase payments and contributions to the benefit-sharing fund in a sustainable and predictable long-term manner.⁹⁷

Only a few of the international regimes discussed in this section, however, clearly spell out what benefits are to be shared. Under the UNCLOS common heritage regime, the benefits are predominantly *economic*: profit-sharing and technology transfer,⁹⁸ although the sharing of scientific information is also expected.⁹⁹ The CBD

⁹⁰ Nagoya Protocol Article 5(1-2 and 5) and 10th preambular recital.

⁹¹ The Protocol provisions concerning these contractual devices (referred to as 'mutually agreed terms' or MAT) are invariably of a procedural character; some reference to substantive guarantees only transpires in the Protocol provision supporting indigenous and local communities in securing fairness and equity when negotiating MAT (Article 12(3)(b)) and in a more timid way on capacity building for developing countries (Article 22(4)(b)). A specific reference to equity in voluntary terms can also be found in Nagoya Protocol Article 22(5)(b).

⁹² M Tvedt, 'Beyond Nagoya: Towards a Legally Functional System of Access and Benefit-Sharing' in S Oberthür and K Rosendal (eds), *Global Governance of Genetic Resources: Access and Benefit Sharing After the Nagoya Protocol* (Routledge, 2013) 158, which confirms the concern already exposed by Francioni (n 6) para 25.

⁹³ F Wolff, 'The Nagoya Protocol and the Diffusion of Economic Instruments for Ecosystem Services in International Environmental Governance' in Oberthür and Rosendal (n 96) 134, at 135-139, 151 and 153 as part of broader trend in the incentive-based governance of biodiversity. CBD and World Conservation Monitoring Centre (WCMC), *Global Biodiversity Outlook* (CBD and WCMC, 2010), <http://gbo3.cbd.int/>, at 19, where it is stated that 'There are few examples of the benefit arising from the commercial and other utilization of genetic resources being shared with the countries providing such resources.'

⁹⁴ Morgera, Tsioumani and Buck (n 84), at 376-380.

⁹⁵ Another situation of exchange where benefit-sharing is employed (although not necessarily in an explicit manner) is the regulation of marine scientific research under UNCLOS: for a discussion, C Salpin, 'The Law of the Sea: A before and an after Nagoya?' in Morgera, Buck, and Tsioumani (n 7), 149.

⁹⁶ Tsioumani (n 31).

⁹⁷ E Tsioumani, 'Plant Treaty Governing Body Identifies Need to Enhance Multilateral System of Access and Benefit-sharing', BENELEX blogpost (2014), www.benelexblog.law.ed.ac.uk.

⁹⁸ UNCLOS Article 140. See Hoefelmeier 'Commentary on Article 140' in Prölss (n 81) and R Wolfrum, 'Common Heritage of Mankind' in Wolfrum (n 6), paras 18-19).

points to funding and technology transfers, as well as to the sharing of biotechnology.¹⁰⁰ According to the Nagoya Protocol, which contains the most elaborate list of benefits to be shared in its Annex, non-monetary benefits include the sharing of research and development results, collaboration in scientific research and development, participation in product development, admittance to ex situ facilities and databases,¹⁰¹ as well as capacity building and training.¹⁰² All these benefits are noteworthy in that they may contribute to long-term cooperative relations among parties. In addition, non-monetary benefits may be in-kind contributions to conservation efforts,¹⁰³ food and livelihoods security benefits, and other contributions to the local economy.¹⁰⁴ In turn, monetary benefits include joint ventures with foreign researchers and joint ownership of relevant intellectual property rights (IPR),¹⁰⁵ profits reaching the provider country in the form of access fees, up-front or milestone payments, royalties and license fees,¹⁰⁶ but also financial resources to contribute to conservation efforts (such as special fees to be paid to conservation trust funds).¹⁰⁷ Parties to the International Treaty on Plant Genetic Resources for Food and Agriculture have notably refined monetary benefits arising from the commercialization of agricultural varieties development even further by devising a system of standard payments by the users of genetic material accessed from the Multilateral System according to standard contractual terms, adopted multilaterally.¹⁰⁸ Overall, it remains to be seen whether the benefits identified so far by international legal instruments can be combined in an exhaustive list or whether the use of benefit-sharing under different regimes may lead to the identification of other benefits to be shared. As of yet, a definitive, comprehensive *typology* of benefits remains to be delineated.

Although the existing models of inter-State benefit-sharing are each far from fully or successfully operational, the concept of benefit-sharing appears to be expanding to other areas of international environmental law, at least through interpretation.¹⁰⁹ This

⁹⁹ M Lodge, 'The Common Heritage of Mankind' (2012) 27 *The International Journal of Marine and Coastal Law* 733, at 740.

¹⁰⁰ CBD Articles 1 and 19.

¹⁰¹ Nagoya Protocol Annex, 2(a-c) and (e).

¹⁰² Nagoya Protocol Annex, 2(d), (g-i), (n) and (j). Under the International Treaty on Plant Genetic Resources for Food and Agriculture, non-monetary benefits equally include exchange of information, access to and transfer of technology, capacity building.

¹⁰³ Nagoya Protocol Annex, 2(k) and (m).

¹⁰⁴ Nagoya Protocol Annex, 2(o) and (l).

¹⁰⁵ Nagoya Protocol Annex, 1(i) and (j).

¹⁰⁶ Nagoya Protocol Annex, 1(a-e).

¹⁰⁷ Nagoya Protocol Annex, 1(f).

¹⁰⁸ ITPGRFA Governing Body Resolution 2/2006. Users of material accessed from the MLS must choose between two mandatory monetary benefit-sharing options: a default benefit-sharing scheme, according to which the recipient will pay 1.1% of gross sales to the Treaty's benefit-sharing fund in case of commercialization of new products incorporating material accessed from the MLS and of restriction of its availability to others; and an alternative formula whereby recipients pay 0.5% of gross sales on all PGRFA products of the species they accessed from the MLS, regardless of whether the products incorporate the material accessed and regardless of whether or not the new products are available without restriction. See SMTA Articles 6(7) and 6(11) and discussion in Tsioumani (n 31).

¹⁰⁹ Eg Ramsar Convention, Resolution X.19 'Wetlands and river basin management: consolidated scientific and technical guidance' (2008), Annex, para 25 reads: 'Definitions of integrated water resource management and integrated river basin management are many and varied, but most reflect the principal philosophy of coordinated, collaborative decision-making across multiple land and water use sectors on multiple, connected scales, *in order to ensure that the social and economic benefits of land*

is the case, for instance, of the international law on *shared* natural resources that do not fall wholly within the exclusive control of any one State, but rather entail the exercise of shared rights by a group of States in geographical contiguity.¹¹⁰ In particular, benefit-sharing is emerging in the context of the international regulation of shared watercourses,¹¹¹ where national sovereignty is constrained by international procedural rules aimed at guaranteeing the consideration of other States' freshwater needs. In this context, benefit-sharing appears to challenge the traditional concern of international law with an *equitable use* of a shared resource, with a view to going beyond 'purely volumetric allocation of water.'¹¹² Thus, the role of benefit-sharing may also, arguably, be that of factoring into the equity rationale for international cooperation the economic, social, cultural and environmental benefits *arising from* the sustainable and equitable use of freshwater that are critical for poverty reduction and conflict prevention.

In the international climate change regime, practitioners and scholars have been reflecting on whether benefit-sharing may represent a useful concept to address equity concerns emerged in the Clean Development Mechanism and REDD-plus.¹¹³ In this case benefit-sharing would be utilized in the context of inter-State cooperation in delivering a global benefit arising from environmental protection efforts that remain under each State's sovereignty, but have become the 'legitimate object of international regulation and supervision' (common concern of mankind).¹¹⁴ Equity is thus being pursued through the differentiation of international obligations of developed and developing States¹¹⁵ in order to 'reconcil[e] the tensions between the

and water resource use can be sustained and shared equitably, while still protecting vital ecosystems and their services' (emphasis added); and UNECE 'Policy Guidance Note on identifying, assessing and communicating the benefits of transboundary water cooperation' (draft, May 2014) para 5 reads: 'There is scope for increasing transboundary water cooperation from quantity or quality issues to a broader set of issues, and by moving from "sharing water" (i.e. allocating water resources among riparian States) to "sharing the benefits of water" (i.e. managing water resources to achieve the maximum benefit and then allocating those benefits among riparian States, including through compensation mechanisms). There is even greater scope for increasing cooperation by moving from "sharing the benefits of water" to "realizing the broader benefits of water cooperation".'

¹¹⁰ Birnie, Boyle and Redgwell (n 47), at 192-4, who identify as belonging to the category of shared resources: transboundary river systems, semi-enclosed seas, shared mountain chains, shared forests, and migratory species.

¹¹¹ CW Sadoff and D Grey, 'Cooperation on International Rivers: A Continuum for Securing and Sharing Benefits' (2005) 30 *Water International* 420; M Abseno, 'The Concept of Equitable Utilisation, No significant Harm and Benefit-sharing under the River Nile Cooperative Framework Agreement: Some Highlights on Theory and Practice' (2009) 20 *Journal of Water Law* 86; R Paisley, 'Adversaries into Partners: International Water Law and the Equitable Sharing of Downstream Benefits' (2002) 3 *Melbourne Journal of International Law* 280.

¹¹² Wouters and Moynihan (n 49).

¹¹³ Eg S Huq and H Reid, 'Benefit Sharing under the Clean Development Mechanism' in D Freestone and C Streck (eds), *Legal Aspects of Implementing the Kyoto Protocol Mechanisms: Making Kyoto Work* (Oxford University Press, 2005) 230; C Luttrell et al, 'Who Should Benefit from REDD+? Rationales and Realities' (2013) 18 *Ecology and Society* 52.

¹¹⁴ Because the object of international regulation is of universal character, requires global common action, and gives rise to a common responsibility in the international community to assist in its protection: Birnie, Boyle and Redgwell (n 47), at 128 and 131.

¹¹⁵ The principle supports the role of developed countries in taking the lead in addressing global environmental issues, the allocation of less burdensome obligations on developing countries, and developed countries' obligations to transfer technology and 'new and additional' financial means to developing countries, to enable them to implement international environmental obligations: E Hey, 'Common but Differentiated Responsibilities' in Wolfrum (n 6).

need for universalism in taking action to combat global environmental problems and the need to be sensitive to individual countries' relevant circumstances.¹¹⁶ The latter notably encompass differences in countries' current economic abilities to address a global environmental challenge and their historical contributions to the emergence of such a challenge. This approach is embodied in the principle of common but differentiated responsibility, that has been seen as a 'test for the seriousness of efforts and willingness to cooperate' of developed countries.¹¹⁷ Notwithstanding intense policy and academic debate on common but differentiated responsibility, however, this principle has as yet eschewed 'an internationally shared understanding.'¹¹⁸ Against the background of this well-known debate, benefit-sharing may help to emphasize 'the need to ensure that developing countries actually *benefit* from mitigation activities beyond the mere financial revenues created by carbon credits.'¹¹⁹

In conclusion, inter-State benefit-sharing has established itself through treaty law either as a principle (in the CBD and Nagoya Protocol) or as a sophisticated mechanism, often backed by the creation of international institutional machinery (under the law of the sea and the International Treaty), to realize equity in the relations among States concerned with the global commons or situations of exchange. Some indications exist however, that, notwithstanding its limited success so far, benefit-sharing may also be emerging in inter-State relations concerned with shared resources and matters of common concern of mankind.

2.1.1 *Blindspots in the literature*

Benefit-sharing has been almost exclusively studied in the specific areas of the law of the sea (speculatively) and biodiversity. As to the latter, legal scholarship has predominantly focused on benefit-sharing in the context of access to genetic resources and traditional knowledge (the exchange regime mentioned above that is usually referred to as 'access and benefit-sharing' or ABS), over-emphasizing intellectual property implications.¹²⁰ Similarly, non-legal scholars have mostly analyzed benefit-sharing as a form of redistribution politics in the ABS context.¹²¹ Very few studies appear to have contributed to an understanding of inter-State benefit-sharing across different areas of international law.¹²²

¹¹⁶ T Honkonen, 'The Principle of Common but Differentiated Responsibility in Post-2012 Climate Negotiations' (2009) 18 *RECIEL* 257, at 259.

¹¹⁷ C Streck, 'Ensuring New Finance and Real Emission Reduction: A Critical Review of the Additionality Concept' (2011) 2 *Carbon and Climate Law Review* 158, at 159-160 and 168.

¹¹⁸ J Brunnée J, 'Climate Change, Global Environmental Justice and International Environmental Law' in Ebbesson and Okowa (n 1) 328.

¹¹⁹ Savaresi (n 31).

¹²⁰ Eg, RJ Coombe, 'Intellectual Property, Human Rights and Sovereignty: New Dilemmas in International Law Posed by Recognition of Indigenous Knowledge and the Conservation of Biodiversity' (1998) 6 *Indiana Journal of Global Legal Studies* 59; E Kamau and G Winter (eds), *Genetic Resources, Traditional Knowledge and the Law: Solutions for Access and Benefit Sharing* (Routledge, 2009).

¹²¹ C Hayden, 'Taking as Giving: Bioscience, Exchange, and the Politics of Benefit-Sharing' (2007) 37 *Social Studies of Science* 729; and De Jonge (n 67).

¹²² For instance the studies commissioned during the negotiations of the Nagoya Protocol: Study on the Relationship between an International Regime on Access and Benefit-Sharing and Other International Instruments and Forums that Govern the Use of Genetic Resources - The International Treaty on Plant Genetic Resources for Food and Agriculture and the Commission on Genetic Resources for Food and Agriculture of the Food and Agriculture Organization of the United Nations (2009) UN Doc

Intellectual property rights (IPRs) have been prominent because their (ab)use may create obstacles to access and use of resources (by privatizing previously common resources),¹²³ or to technology transfers, which is also a form of benefit-sharing. At the same time, IPRs can be a form of benefit-sharing,¹²⁴ and can provide a way to monitor and enforce benefit-sharing.¹²⁵ That said, there are many other forms of benefits to be shared (notably non-monetary ones), the breadth and potential of which remains to be fully explored in scholarship and practice.

The lack of systematic and in-depth comparison between disparate regulatory efforts precludes a full understanding of how benefit-sharing is developed and operates across inherently different international legal regimes. This is particularly significant as there is some evidence of cross-fertilization among these different international developments: countries participating in current debates on marine genetic resources in areas beyond national jurisdiction are debating the need to consider whether and to what extent it is possible to build upon the Nagoya Protocol and the ITPGR, or on the common heritage regime of the Area.¹²⁶

It thus remains to be established whether, how and to what extent benefit-sharing can effectively support (and crucially when it cannot) States in 'consider[ing] not only their own individual interests, but also the interests of other States, the community of States as a whole or both, when shaping their positions'¹²⁷.

In particular, as benefit-sharing under the international biodiversity regimes entails financial assistance and technology transfer towards developing countries,¹²⁸ the question arises as to its role in other international regimes whose object is characterized as a *common concern* of mankind and that routinely include financial assistance and technology transfer obligations, though there may not be explicit

UNEP/CBD/WG-ABS/7/INF/3/Part I; and Study on the Relationship between an International Regime on Access and Benefit-Sharing and Other International Instruments and Forums that Govern the Use of Genetic Resources - The Antarctic Treaty System (ATS) and the United Nations Convention on the Law of the Sea (UNCLOS) (2009) UN Doc UNEP/CBD/WG-ABS/7/INF/3/Part III.

¹²³ Controversial patent cases involving traditional knowledge and genetic resources include the cases of turmeric, neem, ayahuasca and hoodia. Eg, UK Commission on Intellectual Property Rights, *Integrating Intellectual Property Rights and Development* (London: Commission on Intellectual Property Rights 2002), 73. The discussion on the tensions between IPRs and traditional knowledge is very complex, and basically rests on the fact that traditional knowledge does not satisfy easily the general requirements of new and innovative creation for patentability and copyright, and its protection cannot be limited to a specific time period, as is the case for IPRs: eg P Cullet, 'Environmental Justice in the Use, Knowledge and Exploitation of Genetic Resources' in Ebbeson and Okowa (n 1) 371.

¹²⁴ 'Joint ownership of relevant intellectual property rights' appear both as a monetary and non-monetary form of benefit-sharing under the Nagoya Protocol: Annex, 1(j) and 2(q).

¹²⁵ See discussion on patent offices acting as checkpoint under the Nagoya Protocol Article 17(1): Morgera, Tsioumani and Buck (n 84), at 274-278.

¹²⁶ E Morgera, 'Benefit-sharing in Marine Areas beyond National Jurisdiction: Where Are We At? (Part I)', BENELEX blog post (2014), www.benelexblog.law.ed.ac.uk.

¹²⁷ R Wolfrum, 'Solidarity' in D Shelton (ed), *The Oxford Handbook of International Human Rights Law* (OUP, 2013) 401, at 404.

¹²⁸ CBD Article 1. For a discussion, see L Glowka, F Burhenne-Guilmin and H Synge, *A Guide to the Convention on Biological Diversity* (IUCN, 1994), at 15; and Morgera and Tsioumani (n 8), at 153-155.

reference to benefit-sharing.¹²⁹ And yet, focusing on the human rights implications across the board of inter-State financial and technological solidarity obligations,¹³⁰ brings back the notion of benefit-sharing. In the context, for instance, of the ongoing international effort to define ‘human rights to international solidarity,’¹³¹ reference is made to the sharing of environmental benefits and the responsibilities of the international society within a just and fair political and economic order in terms of environmental finance and technology transfer.¹³² This is also the case of current efforts to define the right to development as the equitable sharing of the environmental benefits of development.¹³³ It is further the case of recent efforts to conceptually clarify the human right to science, which is based on the earliest appearance of benefit-sharing in international law (the Universal Declaration of Human Rights),¹³⁴ and which underlines the need for further clarification of the modalities¹³⁵ and role of benefit-sharing vis-à-vis technology transfer,¹³⁶ as well as of

¹²⁹ This line of enquiry may be particularly promising, as under the CBD benefit-sharing in the form of financial and technology solidarity has only been explicitly addressed with reference to access to genetic resources (a situation of exchange), rather than more broadly with reference to the other two objectives of the Convention (conservation and sustainable use) that fit into the common concern approach: Eg, CBD technology transfer work programme, paras. 3.28 and 3.2.9.

¹³⁰ Eg, P Dann, 'Solidarity and the Law of Development Cooperation' in R Wolfrum and C Kojima (eds), *Solidarity: A Structural Principle of International Law* (Springer, 2010) 55; and discussion of a cosmopolitan notion of solidarity from a global justice and human rights perspective in Kurasawa (n 34) ch 5. Wolfrum (n 127), at 402-403, who sees solidarity as a representation of the fact that ‘a State has to sacrifice or at least limit its individual interests in favour of the overarching interest of the international community; however, every member of the international community, including the self-sacrificing ones, accrues benefits of such cooperation.’ See also K Wellens, 'Revisiting Solidarity as a (Re-)Emerging Constitutional Principle: Some Further Reflections' in Wolfrum and Kojima (n 130) 3.

¹³¹ Report of the Independent Expert on Human Rights and International Solidarity to the General Assembly (2013) UN Doc A/68/176, para 27(d).

¹³² The UN Independent Expert is presently preparing a draft declaration on the right of peoples and individuals to international solidarity that will also address these issues: *ibid*, paras 21, 26(f) and 27.

¹³³ In its so-called ‘third dimension’: Report of the High-level Task Force on the Implementation of the Right to Development on its Sixth Session: Right to Development Criteria and Operational Sub-criteria (2010) UN Doc A/HRC/15/WG.2/TF/2/Add.2, criteria 3(b)(i), referring to the availability of climate change funds for developing countries; multilateral agreements to reduce negative environmental impacts; distribution of contributions to climate change; and 3(b)(ii), referring to hazardous industries, dams, natural resource concessions. Another dimension of the right to development relate to the right of indigenous peoples to pursue their economic development through the use of their lands, territories and natural resources, which is also relevant to benefit-sharing and is discussed in section 2.2.2 below.

¹³⁴ This is the main conclusion in UN Special Rapporteur in the field of cultural rights, Report on the Right to Enjoy the Benefits of Scientific Progress and its Applications (2012) UN Doc A/HRC/20/26, para 1 (the ‘scope, normative content and obligations of States remain underdeveloped’); and the recommendation to the Committee on Economic, Social and Cultural Rights to develop a general comment on Article 15 of the ICESCR (*ibid*, para 75a-b). The Rapporteur suggested that the right to science encompasses: the right to access the benefits of science by everyone without discrimination, the opportunity for all to contribute to scientific research, the obligation to protect all persons against negative consequences of scientific research or its applications on their food, health, security and environment; and the obligation to ensure that priorities for scientific research focus on key issues for the most vulnerable: Report on the Right to Enjoy the Benefits of Scientific Progress and its Applications (*ibid*, paras 25, 30-43). See earlier academic discussion in A Chapman, 'Towards an Understanding of the Right to Enjoy the Benefits of Scientific Progress and its Application' (2009) 8 *Journal of Human Rights* 1.

¹³⁵ Report on the Right to Enjoy the Benefits of Scientific Progress and its Applications (n 134) para 64.

¹³⁶ *Ibid*, paras 66-69: in that connection, the Special Rapporteur pointed to an implied obligation for developing countries to prioritize the development, import and dissemination of simple and inexpensive technologies that can improve the life of marginalized populations rather than innovations

the role of intellectual property vis-à-vis the diffusion of scientific research.¹³⁷ In this connection, the right to science overlaps with the right to development,¹³⁸ as well as with efforts within the international biodiversity regime for advancing biodiversity-related scientific progress.¹³⁹ There therefore appears to be a little-studied duality of approaches to inter-State benefit-sharing (notably environmental financing and technology transfer), framing the question either in terms of multilateral environmental obligations among States or of the human rights obligations of States towards relevant individuals and communities.¹⁴⁰

It remains to be evaluated whether such a duplication of approaches will lead to overlapping efforts and conceptual confusion, or rather to mutually supportive efforts in interpreting inter-State obligations in light of their implications for human rights holders. As to the latter, the dual approach could serve to emphasize the binding nature and prioritize the implementation of these international environmental obligations¹⁴¹ that are usually characterized as voluntary commitments by developed States.¹⁴² In addition, the human rights approach could potentially afford individuals opportunities to claim protection in national and international law against governments¹⁴³ that do not comply with their financial and technological solidarity obligations. This would bring added value, as solidarity obligations are not usually reviewed under the compliance mechanisms established by multilateral environmental agreements.¹⁴⁴ Overall, the characterization of inter-State benefit-sharing under environmental treaties as human rights issues is a promising area of study for better understanding the ‘radical transformation in the nature of sovereignty or sovereignty rights over natural resources’ that is currently at play.¹⁴⁵

2.2 *Intra-State benefit-sharing*

that disproportionately favor educated and economically affluent individuals and regions; and to a corresponding obligation for industrialized countries to comply with their international legal obligations through provisions of direct aid, financial and material, as well as development of international collaborative models of research and development for the benefit of developing countries and their populations (ibid, para 68).

¹³⁷ In that regard, the Special Rapporteur advocates the adoption of a global good approach underpinned by a minimalist approach to IP protection (ibid, para 65). Her 2015 thematic report is expected to focus on the impact of intellectual property regimes on the enjoyment of the right to science and culture:

www.ohchr.org/EN/Issues/CulturalRights/Pages/impactofintellectualproperty.aspx.

¹³⁸ Report on the Right to Enjoy the Benefits of Scientific Progress and its Applications (n 134) para 21.

¹³⁹ Nagoya Protocol Article 8(a) on research contributing to the conservation and sustainable use of biodiversity: see discussion in Morgera, Tsioumani and Buck (n 84), at 179-184; and the CBD work programme on the Global Taxonomic Initiative (CBD Decision VI/8 (2002)).

¹⁴⁰ On the dual approach to the right to development, Tourme-Jouannet (n 29), at 45-47.

¹⁴¹ Birnie, Boyle and Redgwell (n 47), at 269.

¹⁴² Ibid, at 134.

¹⁴³ Ibid, at 41.

¹⁴⁴ F Romanin Jacur, ‘Controlling and Assisting Compliance: Financial Aspects’ in T Treves et al (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreements* (Asser Press, 2009) 419, at 435. Although note that both under the international climate change regime and under the CBD, Parties have agreed to some form of international monitoring of the implementation of solidarity obligations.

¹⁴⁵ Birnie, Boyle and Redgwell (n 47), at 41.

The intra-State dimension of benefit-sharing links environmental protection and respect for human rights much more explicitly than the inter-State dimension. Focusing on benefit-sharing within States specifically allows for the examination of a partial overlap (and incipient cross-fertilization) between international biodiversity law and human rights law in relation to the rights of indigenous peoples to their lands and natural resources, and to their traditional knowledge.

Four references to intra-State benefit-sharing can be found in treaty law. The 1989 ILO Convention concerning indigenous and tribal peoples contains the first: these peoples 'shall, wherever possible participate in the benefits' arising from the exploration and exploitation of natural resources pertaining to their lands, although the exact scope of this right was left undefined.¹⁴⁶ Ensuing developments under international human rights law have contributed to flesh out this concept only to a limited extent. In that respect it is notable that the most elaborate restatement of indigenous peoples' human rights, the UN Declaration on the Rights of Indigenous Peoples, does not make reference to benefit-sharing, although it has been argued that this notion is implicit in its provisions on indigenous peoples' rights to their lands, territories and natural resources.¹⁴⁷ In turn, the Convention on Biological Diversity is the second treaty in which intra-State benefit-sharing is encapsulated with specific regard to indigenous peoples' traditional knowledge. In this context, intergovernmental consensus among 194 States¹⁴⁸ has gradually but steadily been garnered in a series of soft-law guidelines and standards on a broader notion of intra-State benefit-sharing, also related to the customary sustainable use of biological resources. This normative work has culminated in the adoption of the third and fourth most sophisticated treaty-based expressions of intra-State benefit-sharing, limited, however, to the use of genetic resources and associated traditional knowledge: the ITPGR and the Nagoya Protocol. Given the uneven normative development of benefit-sharing in these different areas of international law, a start will be made here with the concept of intra-State benefit-sharing arising from international biodiversity law. In a second step, relevant developments in that area with those under international human rights law will be contrasted.

2.2.1 Intra-State benefit-sharing under international biodiversity law

Notwithstanding resistance among States to explicitly address human rights issues under the framework of the CBD,¹⁴⁹ a plurality of legal instruments have been adopted in that context to flesh out intra-State benefit-sharing with inputs from indigenous peoples and local community representatives.¹⁵⁰ These developments are,

¹⁴⁶ L Swepston, 'New Step in the International Law on Indigenous and Tribal Peoples: ILO Convention No. 169 of 1989' (1990) 15 *Oklahoma City University Law Review* 677, at 703-706.

¹⁴⁷ Namely, UNDRIP Articles 25-26: see UN Special Rapporteur on Indigenous Peoples Rights (n 51), paras. 76-77.

¹⁴⁸ As opposed to the limited membership of the ILO Convention (20 countries).

¹⁴⁹ E Morgera and E Tsioumani, 'Yesterday, Today and Tomorrow: Looking Afresh at the Convention on Biological Diversity' (2011) 21 *Yearbook of International Environmental Law* 3, at 15-16 and 18-23; and E Morgera, 'Against All Odds: The Contribution of the Convention on Biological Diversity to International Human Rights Law' in Alland et al (eds), *Unity and Diversity of International Law. Essays in Honour of Professor Pierre-Marie Dupuy* (Martinus Nijhoff, 2014) 983.

¹⁵⁰ Under the CBD Working Group on Article 8(j) (traditional knowledge), the participation of indigenous and local communities is ensured in all meetings, including contact groups, as community representatives serve as Friends of the Co-Chairs, Friends of the Bureau and Co-Chairs of contact

however, dispersed throughout a myriad of (generally long) decisions and expressed in convoluted, repetitious, disorderly and often heavily qualified language.¹⁵¹ most likely for this reason, their cumulative implications have escaped scholarly attention. As a starting point, it can be suggested that two distinct notions of intra-State benefit-sharing, based on two distinct rationales, have emerged under the CBD: the sharing of benefits arising from reliance on the *traditional knowledge* of indigenous peoples and local communities, and the sharing of benefits arising from the *ecosystem stewardship* of these communities.

a) Intra-State benefit-sharing from traditional knowledge

As to the former, intra-State benefit-sharing from traditional knowledge is explicitly addressed in the text of the Convention,¹⁵² albeit in qualified language,¹⁵³ and has been also linked to communities' customary sustainable use of biological resources.¹⁵⁴ Traditional knowledge has not received an international definition,¹⁵⁵ although under the CBD it is understood as the knowledge, innovations and practices of indigenous peoples and local communities that embody traditional lifestyles relevant for the conservation and sustainable use of biodiversity.¹⁵⁶ From a scientific perspective,

groups; any text proposal put forward by indigenous and local communities' representatives can be tabled if it is supported by at least one Party. Report of the Seventh meeting of the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions (2011) UN Doc. UNEP/CBD/COP/11/7, para 20.

¹⁵¹ Eg Ways and Means to Improve the Effectiveness of the Subsidiary Body on Scientific, Technical and Technological Advice, CBD Decision X/12 (2010), para 6. See discussion in Morgera and Tsioumani (n 149), at 6-7. It is probably for this reason that McCool (n 9), at 3, argues that 'while the CBD and the Nagoya Protocol themselves refer to benefit-sharing, I argue that there is little guidance as to what the concept of sharing means in this context.'

¹⁵² CBD Article 8(j). This understanding can also be found in other legal developments contemporary to the CBD, such as the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation, and Sustainable Development of All Types of Forests, para 12(d) and Agenda 21, paras 15(4)(g) and 15(5)(e).

¹⁵³ As opposed to the clearly mandatory language on inter-State benefit-sharing used in Article 15, the text of the Convention with regard to intra-State benefit-sharing is quite open-ended and controversial: it mandates '*encourage[ing]* the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices,' and its chapeau is qualified by the phrase 'as far as possible and appropriate.' Note also that the CBD preamble only stresses the 'desirability' of equitably sharing benefits arising from the use of traditional knowledge, innovations and practices relevant to the conservation of biodiversity and the sustainable use of its components. As a result, certain CBD Parties have raised doubts about the legal status of these provisions: C Chiarolla et al, 'Summary of the sixth meeting of the *Ad Hoc* Open-ended Intersessional Working Group on Article 8(j) and Related Provisions of the CBD, 2-6 November 2009' (2009) 9:482 *Earth Negotiations Bulletin*, at 7.

¹⁵⁴ CBD Article 10(c) reads as follows: 'Each Contracting Party shall, as far as possible and as appropriate: [...] Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.'

¹⁵⁵ Although one is being negotiated under the World Intellectual Property Organization with reference to the accumulated knowledge that is evolving, dynamic and holistic, and which provides indigenous peoples and local communities with a sense of identity as a key component of their cultural heritage: WIPO, *TK Documentation Toolkit. A Consultation Draft* (2012), www.wipo.int/export/sites/www/tk/en/resources/pdf/tk_toolkit_draft.pdf, at 21.

¹⁵⁶ On the basis of the wording of CBD Article 8(j): see definition of traditional knowledge in Akwé: Kon Voluntary Guidelines, CBD Decision VII/16C (2004), Annex. In this connection, certain commentators have also suggested that the reference to traditional knowledge, innovations and practices 'embodying traditional lifestyles' may exclude from benefit-sharing groups that descended from communities but have 'assimilated into mainstream, non-traditional economy and society': G Maggio, 'Recognizing the Vital Role of Local Communities in International Legal Instruments for

traditional knowledge can be understood as the knowledge built by a group through generations living in close contact with nature, and may comprise a system of classification, empirical observation about the local environment and a system of self-management that governs resource use.¹⁵⁷ From a legal perspective, its essential elements appear to be the link between the shared cultural identity of the communities and the land and biological resources that they traditionally occupy or use¹⁵⁸ and the existence of customary rules about the preservation and protection of such traditional knowledge. The key challenge is thus protecting the *communal way of life* that develops and maintains traditional knowledge.¹⁵⁹

Against this background, several consensus decisions adopted by CBD Parties have developed the notion of intra-State benefit-sharing from reliance on traditional knowledge and customary uses of natural resources of indigenous and local communities.¹⁶⁰ In this case, benefit-sharing addresses equity concerns deriving from colonization, mandatory assimilation, relocation and globalization that have resulted in the marginalization and erosion of communities' traditional knowledge systems,¹⁶¹ as well as abuses of the IPR system involving the misappropriation of traditional knowledge.¹⁶² While questions related to IPRs remain the most controversial with regard to intra-State benefit-sharing,¹⁶³ it is argued here that the scholarly literature, overemphasizing the relevance of IPRs in this regard, has ignored the vast array of other benefits that could be shared and that may be of even greater importance to indigenous peoples. Accordingly, benefit-sharing may concretize in the legal recognition and provision of support for community-based natural resource management,¹⁶⁴ as well as in the incorporation of traditional knowledge in

Conserving Biodiversity' (1997-1998) 16 *UCLA Journal of Environmental Law and Policy* 179-226, at 210. It can be counter-argued, however, that a more inclusive notion should be derived by reading the CBD in light of relevant international human rights norms: Morgera, Tsioumani and Buck (n 84), at 25-26.

¹⁵⁷ M Johnson, 'Research on Traditional Environmental Knowledge: Its Development and Role' in M Jonhson (ed), *Capturing Traditional Environmental Knowledge* (International Development Research Centre, 1992), at 52.

¹⁵⁸ In the light of the placement of CBD Article 8(j) in the context of *in situ conservation* (CBD Article 8).

¹⁵⁹ CBD Secretariat, 'How tasks 7, 10 and 12 could best contribute to work under the Convention and to the Nagoya Protocol' (2012) UN Doc UNEP/CBD/WG8J/8/4/Rev.2, para 23.

¹⁶⁰ On traditional knowledge and forest biodiversity, see CBD Decisions II/9 (1995), Annex, para 8, IV/7 (1998); on inland water biodiversity, CBD Decisions IV/4 (1998), Annex I, para 9(k)(ii) and VII/4 (2004), Annex para 9; in the Guidelines on Tourism and Biodiversity, CBD Decision V/25 (2000), para 4; on the work programme on mountain biodiversity, Decision VII/27 (2004), Annex, para 1.5.4; on work programme on island biodiversity, CBD Decision VIII/1 (2006), Annex Target 9.2; on the work programme on dryland biodiversity, CBD Decision VIII/2 (2006), Target 9.2; on the framework for monitoring implementation of the achievement of the 2010 target and integration of targets into the thematic programmes of work CBD Decision VIII/15 (2008), Target 9.2; and Tkarihwaïé:ri Code of Ethical Conduct on Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities, CBD Decision X/42, Annex, para 14.

¹⁶¹ For a comprehensive account of the threats and challenges that indigenous peoples face and the response of the international community, see UN Permanent Forum on Indigenous Issues (UNPFII), *State of the World's Indigenous Peoples* (UN, 2009).

¹⁶² For a succinct outline of the tensions between traditional knowledge and the IP system, see 'How tasks 7, 10 and 12' (n 159) paras 16-17.

¹⁶³ And for this very reason the question was eventually set aside in the negotiations of the Nagoya Protocol: see discussion by R Pavoni, 'The Nagoya Protocol and WTO Law' in Morgera, Buck and Tsioumani (n 7) 185, at 200-205.

¹⁶⁴ CBD Decision VI/22 (2002), para 31 and programme element 1.

environmental and socio-cultural impact assessments¹⁶⁵ and in natural resource management planning.¹⁶⁶ In all these circumstances, different equity concerns will have to be balanced: society at large will share in the benefits arising from having access to traditional knowledge, with the approval of its holders; and indigenous peoples will share in the benefits arising from the utilization of their knowledge by government, private sector or research institutions, through the enhanced protection of the rights that constitute the basis of their knowledge creation.

Benefit-sharing has also been developed into a legally binding obligation owed directly to communities in connection to a narrower understanding of traditional knowledge under the Nagoya Protocol - that is, traditional knowledge associated with genetic resources used for R&D purposes.¹⁶⁷ This is a novel provision and it is widely acknowledged that developed and developing countries alike will face significant challenges in implementing it.¹⁶⁸ In effect, CBD Parties have recently concluded that there are no international guidelines to support States' implementing efforts either with specific regard to traditional knowledge associated with genetic resources under the Nagoya Protocol or to the broader notion of traditional knowledge under the CBD, and no centralized mechanism for communities to report unlawful appropriation of their traditional knowledge exists.¹⁶⁹

Notwithstanding the significant hard- and soft-law developments related to traditional knowledge in international biodiversity law, therefore, more normative advances are needed to operationalize intra-State benefit-sharing: CBD Parties, therefore, recommended the elaboration of guidelines on benefit-sharing from traditional knowledge.¹⁷⁰

b) Intra-State benefit-sharing from ecosystem stewardship

The second notion of intra-State benefit-sharing emerges as a key component of the

¹⁶⁵ Akwé: Kon Guidelines (n 156) para 56.

¹⁶⁶ Addis Ababa Principles and Guidelines on the Sustainable Use of Biodiversity (CBD Decision VII/12 (2004), Annex II, operational guidelines to Principle 4 call for the incorporation of traditional knowledge in biodiversity management planning and for the resulting adaptive management plans to incorporate 'systems to generate sustainable revenue, where the benefits go to indigenous and local communities and local stakeholders to support successful implementation.' The CBD expanded work programme on forest biodiversity (CBD Decision VI/22 (2002) para 13) explicitly refers to the fair and equitable sharing of the benefits from forest-related traditional knowledge, emphasizing its link with sustainable use in the context of forest management by indigenous and local communities. See also Agenda 21, para 15(4)(g) and Johannesburg Plan of Implementation, para 44(j).

¹⁶⁷ Nagoya Protocol Articles 5(5) and 7: see discussion in Morgera, Tsioumani and Buck (n 84), at 126-130. See also benefit-sharing from farmers' traditional knowledge: combined reading of Articles 9(2)(a) and 13(3) ITPRG - discussed by Tsioumani (n 31).

¹⁶⁸ Morgera, Buck and Tsioumani, 'Conclusions' in Morgera, Buck and Tsioumani (n 7) 507, at 511.

¹⁶⁹ In October 2014, CBD Parties launched this work: CBD Decision XII/L.7D, preambular para 4 and para 2 (2014). Interestingly, the Secretariat document to prepare the discussion noted that under national law there are two approaches to benefit-sharing from traditional knowledge (direct payments to indigenous and local communities or payments to trust funds kept on behalf of indigenous and local communities), and otherwise referred to benefit-sharing guidelines elaborated by the Swedish Scientific Council in 1999: 'How tasks 7, 10 and 12' (n 161), paras 23, 45 and 47.

¹⁷⁰ This was a task already foreseen in the CBD Working Group Article 8(j) (CBD Decision V/16 (2000), Annex, Task VII).

ecosystem approach.¹⁷¹ CBD parties have spelt out that the ecosystem approach entails integrating adaptive management of land, water and living resources, and promoting their conservation and sustainable use in an equitable way, recognizing that human beings and their cultural diversity are an integral component of many ecosystems.¹⁷² In that vein, the ecosystem approach calls for incentivizing the good management practices of indigenous peoples and local communities, as well as of other stakeholders that are responsible for the production and sustainable management of ecosystem functions.¹⁷³ When indigenous peoples and local communities are concerned, it may of course be futile to distinguish their ecosystem stewardship from the application of their traditional knowledge,¹⁷⁴ as the two are in practice inextricably linked,¹⁷⁵ although such a distinction may still survive from a legal viewpoint.¹⁷⁶ Benefit-sharing in this context combines an equity concern for those that devote their efforts to and bear the risks of the conservation and sustainable use of biodiversity, and for the larger community that benefits from conservation and sustainable use but does not pay the costs associated with them. In addition, it points to practical concerns about counterbalancing short-term gains that would derive from ecosystem degradation by creating a stake in conservation for those that more closely interact with nature, thereby aiming at ensuring compliance with environmental protection law.¹⁷⁷

The ecosystem approach has inspired guidance on intra-State benefit-sharing in the context of biodiversity-based tourism,¹⁷⁸ the creation and management of protected areas,¹⁷⁹ and as an area to be explored in the conduct of environmental and socio-cultural impact assessments regarding natural resources traditionally owned or used

¹⁷¹ Principles of the Ecosystem Approach (n 52), para 9, which reads: ‘The ecosystem approach seeks that the benefits derived from these functions are maintained or restored. In particular, these functions should benefit the stakeholders responsible for their production and management. This requires, inter alia: capacity-building, especially at the level of local communities managing biological diversity in ecosystems; the proper valuation of ecosystem goods and services; the removal of perverse incentives that devalue ecosystem goods and services; and, consistent with the provisions of the Convention on Biological Diversity, where appropriate, their replacement with local incentives for good management practices.’ This appears to be reflected in the General Assembly Strategic Framework for 2012-2013 (UN Doc A/65/6/Rev.1), para 11(24)(b) and for 2014-2015 (UN Doc A/67/6 (prog 11)), para 11(16) (both reading: ‘Particular attention will be given to equity issues (including but not limited to access and benefit-sharing and how vulnerable and disadvantaged communities could be compensated or rewarded for their ecosystem stewardship’).

¹⁷² Principles of the Ecosystem Approach (n 52), paras A.1-4.

¹⁷³ Ibid, Annex, Operational Guidance 2, para 9; Refinement and elaboration of the ecosystem approach, CBD Decision VII/11 (2004), Annex, para 12.5.

¹⁷⁴ Bonn Guidelines on Access and Benefit-sharing, CBD Decision VI/24 (2002) Annex, para 48; and Tkarihwaié:ri Code (n 166) para 14.

¹⁷⁵ Note ‘the interrelationship between genetic resources and traditional knowledge [and] their inseparable nature for indigenous and local communities’: Nagoya Protocol preambular para 22.

¹⁷⁶ See the distinct provisions on benefit-sharing from genetic resources held by indigenous and local communities and those on benefit-sharing from traditional knowledge in the Nagoya Protocol: Morgera, Tsoumani and Buck (n 84), at 117-130.

¹⁷⁷ Principles of the Ecosystem Approach (n 52), Principle 8; Refinement and elaboration of the ecosystem approach (n 173), rationale to Principle 4.

¹⁷⁸ See also CBD work programme on mountain biodiversity (n 166) para 1(3)(7); Guidelines on Tourism and Biodiversity (n 160) para 4(a)-(b).

¹⁷⁹ Work programme on protected areas, CBD Decision VII/27 (2004) Annex, paras 2(1) and 2(1)(4) (while the latter refers to both benefit- and cost-sharing, the focus on benefit-sharing is clarified in CBD Decision IX/18 (2008), preamble para 5).

by indigenous peoples and local communities.¹⁸⁰ It has also more generally influenced and modernized the concept of sustainable use of biological resources.¹⁸¹ It may be argued that the ecosystem approach also underlies the Nagoya Protocol's provision whereby a benefit-sharing obligation is owed directly to indigenous and local communities as stewards of genetic resources 'held by them.'¹⁸²

Furthermore, as the ecosystem approach applies to all human interactions with nature, it provides a conduit for the integration of intra-State benefit-sharing across the board of environmental protection and management efforts, notably also under international environmental agreements that do not mention benefit-sharing as such or pay little attention to the role of indigenous peoples and local communities, such as the international climate change regime.¹⁸³

c) Common traits to intra-State benefit-sharing

In the case of traditional knowledge and ecosystem stewardship, benefit-sharing under the CBD appears to be conceived as a *reward*. It acknowledges and recompenses traditional knowledge holders and ecosystem stewards for their positive contribution to humanity's well-being that derives from the ecosystem services they provide, maintain or restore through their conservation and sustainable use practices, and from scientific advances and innovation that build on their traditional knowledge. It thus focuses on *forward-looking* identification of benefits that may help to improve and consolidate the conditions under which ecosystem stewards and traditional knowledge holders develop and maintain their knowledge and practices. Benefits to be shared to this end comprise information-sharing and capacity building such as full cooperation in scientific research and technology development, education, training to identify income alternatives, or assistance in diversifying management capacities. In addition, benefit-sharing can take the form of profit-sharing that derives from commercial products including trust funds, joint ventures and licenses with preferential terms, and from the levying of appropriate fees, or through the setting-up of revenue-sharing mechanisms when the revenue generated through conservation and sustainable use activities is accrued by the State or outside investors. It may also benefit communities economically through job creation within safe and hazard-free working environments and payment for ecosystem services.¹⁸⁴ Furthermore, it takes the form of supporting the economic activities of indigenous peoples and local communities by: fostering local enterprises, offering direct investment opportunities, facilitating access to markets, and supporting the diversification of income-generating (economic) opportunities for small and medium-sized businesses.¹⁸⁵

To some extent, the rewarding function of intra-State benefit-sharing may also

¹⁸⁰ Akwé: Kon Voluntary Guidelines (n 156) para 40.

¹⁸¹ Addis Ababa Principles and Guidelines (n 166) principles 4, 6 and 12; and incentive measures, CBD Decision VIII/26 (2006) para 3. See discussion in Morgera and Tsioumani (n 149), at 10.

¹⁸² Nagoya Protocol Article 5(2); see discussion in Morgera, Tsioumani and Buck (n 84), at 117-126.

¹⁸³ This would be, for instance, the justification for CBD decision XI/19 (2012) on REDD+.

¹⁸⁴ The relation between benefit-sharing and payments for ecosystem services will be studied in depth under the BENELEX project.

¹⁸⁵ Akwé: Kon Voluntary Guidelines (n 156) para 40 and 46; Addis Ababa Principles and Guidelines (n 166) rationale to Principle 4; Guidelines on Tourism and Biodiversity (n 160) paras 22-23 and 43); Bonn Guidelines (n 174) para 50.

contribute to enhance the protection of the rights of indigenous peoples and local communities, by enhancing their *participation* in relevant decision-making processes and leading to the legal recognition and factual support of their customary practices. The CBD work programme on protected areas, for instance, links the goal of promoting equity and benefit-sharing with legal recognition of indigenous and local community conserved areas, by engaging communities in participatory planning and governance.¹⁸⁶ Along similar lines, the CBD Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity point out that local people's involvement facilitates compliance with legislation, with benefit-sharing enhancing management regimes and compensating local stakeholders for their management efforts.¹⁸⁷ This proactive approach underlining inter-State benefit-sharing may thus also intertwine with *compensation* for inevitable negative impacts on communities' livelihoods that derive from certain environmental management choices.¹⁸⁸

2.2.2 Intra-State benefit-sharing under international human rights law

International human rights bodies have occasionally engaged with the concept of intra-State benefit-sharing in the context of indigenous peoples' rights to lands, territories and natural resources traditionally owned or used by them.¹⁸⁹ This trend has, however, clearly increased in the last few years,¹⁹⁰ and notably has become prominent in two seminal pieces of regional case-law, discussed below. Benefit-sharing has been invoked in relation to indigenous peoples' right to property of lands and natural resources,¹⁹¹ and their right to development¹⁹² (that is, their right to set

¹⁸⁶ Work programme on protected areas (n 179), whose programme element 2 is tellingly titled 'Governance, participation, equity and benefit-sharing': paras 2(1)(3)-2(1)(5).

¹⁸⁷ See Addis Ababa Principles and Guidelines (n 166) rationale to Principle 4 and operational guideline to Principle 12.

¹⁸⁸ *Ibid*, Principle 12; revised work programme on forest biodiversity (n 166), Goal 2, para f, which calls for mitigating socio-economic failures that lead to decisions resulting in forest biodiversity loss through market and other incentives for the use of sustainable practices, developing alternative sustainable income generation programmes and facilitating self-sufficiency programmes of indigenous and local communities; and Guidelines on Tourism and Biodiversity (n 160), para 43, when referring to the need to provide alternative ways for communities to receive revenue from biodiversity. For a discussion of compensation in international environmental law as a balancing exercise among threats that can be considered justified as long as there is effective maintenance of environmental protection levels, see A Langlais, 'Le droit de la biodiversité à l'aune du développement durable ou l'ouverture de nouvelles formes d'équité environnementale? L'exemple controversé de la compensation écologique in Michelot (n 44) 155.

¹⁸⁹ Committee on the Elimination of Racial Discrimination (CERD), Concluding Observations on Ecuador (2003) UN Doc CERD/C/62/CO/2, para 16; and Report of the UN Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples (2003) UN Doc E/CN.4/2003/90, para 66.

¹⁹⁰ Eg, UN Indigenous Peoples' Partnership, Strategic Framework 2011-2015, www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/publication/wcms_186285.pdf, making reference in the context of natural resources and extractive industries, 'promoting a framework for conflict prevention, participation, benefit-sharing and dispute resolution;'. Office of the UN High Commissioner for Human Rights, 'Indigenous Peoples and Human Rights: Setting a Framework for Consultation, Benefit-Sharing and Dispute Resolution' (2008) UN Doc A/HRC/EMRIP/2009/5; and Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes to the Human Rights Council (Human rights and Extractive Industries) (2012) UN Doc A/HRC/21/48, paras 36 and 69(h).

¹⁹¹ UNPFII, Review of World Bank operational policies (2013) UN Doc E/C.19/2013/15, para 27, making reference to UNDRIP Article 31; and Inter-American Court of Human Rights, *Case of the*

and pursue their own priorities for development, including the development of natural resources¹⁹³), also in the context of large-scale investments in farmland impacting on their right to food.¹⁹⁴ According to the former UN Special Rapporteur on Indigenous Peoples' Rights, benefit-sharing also supports the realization of indigenous peoples' rights to culture and non-discrimination.¹⁹⁵ All these rights are interlinked, and contribute to the overall right to self-determination of indigenous peoples, which significantly depends on their continued relationship with land and natural resources.¹⁹⁶ It can thus be argued that benefit-sharing in this context aims to address equity concerns related to the 'progressive plundering of indigenous lands and resources over time that has impaired or devastated indigenous economies and subsistence life and left indigenous peoples among the poorest of the poor.'¹⁹⁷ While it has been acknowledged in a human rights context that benefit-sharing is also called for when the traditional knowledge of indigenous peoples is at stake,¹⁹⁸ to the author's knowledge there has been no elaboration of benefit-sharing in this connection by human rights bodies.¹⁹⁹

As to the function of benefit-sharing in the human rights context, benefit-sharing has been portrayed as a form of *compensation* for the exploitation of traditionally owned lands and natural resources necessary for the survival of indigenous people,²⁰⁰ or for

Saramaka People v. Suriname (judgment on preliminary objections, merits, reparations and costs), 28 November 2007, para 138, where it is stated that 'The concept of benefit-sharing, which can be found in various international instruments regarding indigenous and tribal peoples' rights, can be said to be inherent to the right of compensation recognized under Article 21(2) of the [American] Convention [on Human Rights],' which is devoted to property rights. See also Special Rapporteur on the prevention of discrimination and protection of indigenous peoples and minorities Erica-Irene Daes, 'Indigenous Peoples and their Relationship to Land' (2001) UN Doc E/CN.4/Sub.2/2001/21, paras 44, 67, 69 and 101.

¹⁹² The African Commission (in the *Endorois* case, n 21, paras 294-295), noted that benefit-sharing 'serves as an important indicator of compliance for property rights; failure to duly compensate (even if the other criteria of legitimate aim and proportionality are satisfied) result in a violation of the right to property' and that according to the 1990 African Charter on Popular Participation in Development and Transformation 'benefit sharing is key to the development process.' See also Human Rights Council, Summary of the Panel Discussion on the Human Rights Council on the Theme 'The Way Forward in the Realization of the Right to Development: Between Policy and Practice,' 14 September 2011, para 4.

¹⁹³ UN Special Rapporteur on Indigenous Peoples' Rights, James Anaya, 'Progress report on study on extractive industries' (2012) UN Doc A/HRC/21/47, paras 50-52.

¹⁹⁴ Report of the UN Special Rapporteur on the right to food, Olivier De Schutter, 'Large-scale land acquisitions and leases: A set of minimum principles and measures to address the human rights challenge' (2009) UN Doc A/HRC/13/33/Add.2, paras 30-33.

¹⁹⁵ Rapporteur on Indigenous Peoples' Rights, Progress report on extractive industries (n 193) paras 50-52.

¹⁹⁶ J Anaya, *Indigenous Peoples in International Law* (2nd ed, OUP, 2004) at 141-144; and E Daes, 'An Overview of the History of Indigenous Peoples: Self-Determination and the United Nations' (2008) 21 *Cambridge Review of International Affairs* 7.

¹⁹⁷ Anaya (n 196), at 149.

¹⁹⁸ UNPFII, Review of World Bank Operational Policies (n 191) para 27.

¹⁹⁹ In comparison to the Nagoya Protocol, neither the ILO Convention No 169 or UNDRIP link benefit-sharing and traditional knowledge. See discussion in Morgera, Tsioumani and Buck (n 84), at 127-130; and D Craig and M Davies, 'Ethical Relationship for Biodiversity Research and Benefit-sharing with Indigenous Peoples' (2005) 2 *Macquarie Journal of International and Comparative Environmental Law* 31.

²⁰⁰ This is notably how benefit-sharing has been interpreted by the Inter-American Court of Human Rights in the influential *Saramaka Case* (n 191, paras 139-140), where it is stated that 'The concept of benefit-sharing... can be said to be inherent to the right of compensation recognized under Article 21(2)

the establishment of environmental protection measures negatively affecting indigenous peoples' rights to such lands and resources in two significant cases decided at the regional level.²⁰¹ The normative work of the UN Special Rapporteur on Indigenous Peoples' Rights, James Anaya, has similarly been characterized by an unclear interplay between benefit-sharing and compensation, even when he put forward the argument that the two are distinct.²⁰² Although the point remains to be fully fleshed out, it seems that benefit-sharing adds to compensation for material and immaterial *damage* (with the former including environmental damage affecting indigenous peoples' subsistence and spiritual connection with their territory)²⁰³ by also compensating for *broader, historical inequities* that have determined the situation in which the specific material and immaterial damage has arisen.²⁰⁴ Other human rights bodies that have identified a role for benefit-sharing separate from compensation for negative impacts on indigenous peoples' rights when development projects or conservation measures are located in indigenous peoples' lands or based on their natural resources²⁰⁵ did not elaborate on the point.

of the [American] Convention [on Human Rights]' (ibid, para 138); In the present context, the right to obtain 'just compensation' translates into a right of the members of the Saramaka people to reasonably share in the benefits made as a result of a restriction or deprivation of their right to the use and enjoyment of their traditional lands and of those natural resources necessary for their survival (Para 139); and 'benefit sharing may be understood as a form of reasonable equitable compensation resulting from the exploitation of traditionally owned lands and of those natural resources necessary for the survival of the Saramaka people' (ibid, para 140).

²⁰¹ In the *Endorois* case (n 21, paras 298-299 and 295) the African Commission on Human and Peoples' Rights Commission stated that 'In the present context of the Endorois, the right to obtain just compensation in the spirit of the African Charter translates into a right of the members of the Endorois community to reasonably share in the benefits made as a result of a restriction or deprivation of their right to the use and enjoyment of their traditional lands and of those natural resources necessary for their survival.'

²⁰² Anaya stated that the duty to share benefits is *independent of compensation measures*, although it 'responds in part to the concept of fair compensation for deprivation or limitation of the rights of the communities concerned, in particular their right of communal ownership of lands, territories and natural resources' (n 51, paras 67, 89 and 91). The point was further blurred in a successive report, where he noted that 'Direct financial benefits – beyond incidental benefits like jobs or corporate charity – should accrue to indigenous peoples because of the *compensation* that is due to them for allowing access to their territories, for giving up alternatives for the future development of their territories, for suffering any adverse effects', as well as for the 'significant social capital they contribute under the totality of historical and contemporary circumstances' ('Study on extractive industries and indigenous peoples' (2013) UN Doc A/HRC/24/41, para 76).

²⁰³ M Orellana, 'Saramaka People v Suriname Judgment' (2008) 102 *American Journal of International Law* 841, at 845 and 847.

²⁰⁴ For instance, in the *Saramaka* case, the Inter-American Court ordered the State to put in place a community development fund, making reference to the 'suffering and distress that the members of the Saramaka people have endured as a result of the long and ongoing struggle for the legal recognition of their right to the territory they have traditionally used and occupied for centuries ... as well as their frustration with a domestic legal system... For these reasons, and *on equitable grounds...*' (n 191, paras 200-201). This appears to resonate with Anaya's reference to 'the totality of *historical* and contemporary circumstances' in his 'Study on extractive industries and indigenous peoples' (n 202, para 76).

²⁰⁵ UNPFII, Review of the World Bank Operational Policy (n 191) para 27. This is the understanding referred to in reports of the committees set up to examine non-observance of ILO Convention No 169: eg, Ecuador (2001) ILO Doc GB.282/14/2, para 44(c)(3), where it recommends requesting the government to report information on the participation of indigenous peoples in the '*profits* from the oil-producing activities, as well as their perception of fair compensation for any damage caused by the exploration and exploitation of the zone;' and Bolivia (1999) ILO Doc. GB.272/8/1:GB.274/16/7, para 40, where it recommends requesting the government to report information on the participation of

In comparison with relevant developments under the CBD, therefore, international human rights law does not seem to have sufficiently elaborated benefit-sharing as a tool to empower indigenous peoples to be *equal partners* in natural resource development, environmental conservation, or research and development efforts linked to their lands, natural resources and knowledge. Rather, benefit-sharing under international human rights law has mainly remained focused on *victims* of the negative impacts arising from these efforts.²⁰⁶ In addition and possibly linked to this gap, developments in the area of human rights, as opposed to those under the CBD, have not spelt out the types of benefits that should be shared.²⁰⁷ Emphasis on backward-looking compensation may also have the disadvantage of creating the impression in the minds of regulators and the public that indigenous peoples' claims have been extinguished and no more is needed for justice to be done.²⁰⁸

A possible reason for the limited attention paid to benefit-sharing under international human rights law may be the emphasis placed on the complex and still unsettled notion of *free prior informed consent* (FPIC).²⁰⁹ Prior informed consent establishes the need to conduct consultations with indigenous peoples in good faith and in a culturally appropriate form with a view to giving indigenous people the opportunity to genuinely influence decisions affecting their rights, and make every effort to build consensus among all concerned.²¹⁰ FPIC is seen as the paramount procedural

indigenous peoples in the 'benefits of the concession and their receipt of fair compensation for any damage they may sustain as a result of this exploitation.'

²⁰⁶ This argument was explored in the specific context of benefit-sharing from the genetic resources and traditional knowledge of indigenous peoples in Morgera, Tsioumani and Buck (n 84) at 383. See also J Pasqualucci, 'International Indigenous Land Rights: A Critique of the Jurisprudence of the Inter-American Court of Human Rights in light of the United National Declaration on the Rights of Indigenous Peoples' (2009-2010) 27 *Wisconsin International Law Journal* 51, at 91-93.

²⁰⁷ Note for instance, that under the ILO Convention N 169 reference has simply been made to the fact that 'there is no single model for benefit-sharing as envisaged under Article 15(2) and that appropriate systems have to be established on a case by case basis, taking into account the circumstances of the particular situation of the indigenous peoples concerned': ILO, 'Monitoring Indigenous and Tribal Peoples' rights through ILO Conventions: A Compilation of ILO Supervisory Bodies' Comments 2009-2010', Observation (Norway), CEARC 2009/80th session, at 95). In addition, a commentary on the Convention only mentions that the right to benefit from the profits made from exploitation and use of natural resources (which include renewable and non-renewable resources such as timber, fish, water, sand and minerals) 'can take a variety of forms, including specific agreements with individual communities, negotiated agreements between states and self-governing territories or redistribution of taxes and revenues to specific indigenous peoples' development purposes': ILO, *Indigenous and Tribal Peoples' Rights in Practice: A Guide to ILO Convention No 169* (ILO, 2009), at 107-108. In the *Saramaka* case, the Inter-American Court suggested that the community development fund provides for 'educational, housing, agricultural, and health projects, as well as provide electricity and drinking water, if necessary, for the benefit of the Saramaka people' (n 191, para 201).

²⁰⁸ R Goodman and D Jinks, 'Social mechanisms to promote international human rights: complementary or contradictory?' in T Risse, S Ropp and K Sikkink (eds), *The Persistent Power of Human Rights* (CUP, 2013) 102, at 116.

²⁰⁹ Eg T Ward, 'The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation Rights within International Law' (2011) 10 *Northwestern Journal of International Human Rights* 54 (2011); DB Magraw and L Baker, 'Globalization, Communities and Human Rights: Community-Based Property Rights and Prior Informed Consent' (2006) 35 *Denver Journal of International Law and Policy* 413; and L Laplante and S Spears, 'Out of the Conflict Zone: The Case of Community Consent Processes in the Extractive Sector' (2008) 11 *Yale Human Rights and Development Law Journal* 69.

²¹⁰ Report of the Special Rapporteur on Indigenous Peoples' Rights to the Human Rights Council (2009) UN Doc A/HRC/12/34, paras 48 and 53; Anaya (n 202), at 152-154.

guarantee for the protection of indigenous peoples' rights from encroachment by the State (or private-sector operators, as discussed below). But its outer limits remain contentious, and the question of the circumstances under which indigenous peoples can say 'no' in particular remains thorny.²¹¹ In this connection, benefit-sharing is seen as an 'additional safeguard' to FPIC,²¹² together with impact assessment, remediation and compensation. Accordingly, benefit-sharing and FPIC need to be studied as intertwined procedural guarantees. The negotiations on benefit-sharing (including the scoping of benefit-sharing options in the context of environmental and socio-economic impact assessment, as foreseen under the CBD)²¹³ may contribute to culturally appropriate and effective consultations²¹⁴ to obtain FPIC. Agreement on benefit-sharing may thus precede and be a condition for the granting of PIC. At the same time, benefit-sharing will be the end-result of an FPIC process: the benefit-sharing arrangements will be the concrete expression of the accord granted by indigenous peoples on the basis of their own understanding and preferences.²¹⁵ The interplay between FPIC and benefit-sharing in light of relevant developments under international human rights and biodiversity instruments clearly runs deeper than this and remains an area for further clarification. It should also be considered that in real life the mere openness to engage in discussions on potential benefit-sharing may lead to the raising of expectations and pressure on communities to give their consent. That said, it may also be the case, which once again remains to be fully studied, that benefit-sharing may be required when FPIC is not (that is, in circumstances where the impact of relevant activities is not so severe to require FPIC, but only consultation with indigenous peoples).²¹⁶

In addition, as opposed to international guidance on FPIC in relation to proposed limitations of indigenous peoples' rights to lands and natural resources (as a protection against relocation or other negative impacts deriving from development projects, conservation measures or extractive activities on indigenous peoples' lands), there are currently no international standards that are adapted to the specificities of FPIC and benefit-sharing from the use of indigenous peoples' traditional knowledge. This gap has been recognized by CBD Parties and a process to develop international guidelines not only on benefit-sharing but also on FPIC, that was initiated in that context in late 2014.²¹⁷

²¹¹ FPIC 'should not be regarded as according indigenous peoples a general "veto power" over decisions that may affect them, but rather establishing consent as the objective of consultations with indigenous peoples': Report to the HRC (n 210) para 46; and Study on extractive industries and indigenous peoples (n 202) para 30, which reads '...it must be emphasized that the consent is not a free-standing device of legitimation. The principle of [FPIC], arising as it does within a human rights framework, does not contemplate consent as simply a yes to a predetermined decision, or as a means to validate a deal that disadvantages affected indigenous peoples. When consent is given, not just freely and on an informed basis, but also on just terms that are protective of indigenous peoples rights, it will fulfil its human rights safeguard role.'

²¹² Rapporteur on Indigenous Peoples' Rights, Study on extractive industries and indigenous peoples (n 202) para 52 (emphasis added).

²¹³ Akwé: Kon Guidelines (n 156) para 6(h).

²¹⁴ Expert Mechanism on the Rights of Indigenous Peoples, 'Follow-up Report on Indigenous Peoples and the Right to Participate in Decision-making with a Focus on Extractive Industries' (2012) UN Doc A/HRC/21/55, para 43.

²¹⁵ Rapporteur on Indigenous Peoples' Rights, Study on extractive industries and indigenous peoples (n 202) para 43.

²¹⁶ Pasqualucci (n 206), at 91.

²¹⁷ CBD Decision XII/L.7 D, para 2 (2014).

Overall, benefit-sharing under international human rights law remains at an early stage of development.²¹⁸ Furthermore, these normative developments remain to be systematically compared and contrasted with those under the CBD. This is particularly urgent as all international development banks have already adopted a synthesis of guidance from both areas of international law into their policies that requires benefit-sharing in relation to the relocation of indigenous peoples from their lands, projects with impacts on traditional lands and natural resources, the commercial use of traditional knowledge and the use of cultural heritage, as well as providing indications on intra-community benefit-sharing.²¹⁹ And certain concerns about adherence to relevant international standards have already been voiced: for instance, the World Bank's Indigenous Peoples Policy has been criticized for falling short of requiring benefit-sharing with indigenous peoples consistently with their ownership rights, including collective ownership of lands acquired by means other than traditional or customary occupation or use.²²⁰

An enquiry into intra-State benefit-sharing will ultimately turn to questions of sovereignty - the sovereignty of States²²¹ and the internal²²² sovereignty of indigenous peoples. This is due to the coexistence of indigenous peoples' self-government (through their autonomous structures that are based on customary laws), which is instrumental to their capacity to develop and maintain their distinctive cultures and lifestyles, including through their use of land and natural resources,²²³ and the significant limitations to the exercise of States' and peoples' sovereignty over national resources, which are established under international environmental agreements. This

²¹⁸ It is notable, for instance, that while the Inter-American Commission argues that the concept of benefit-sharing 'can be found in *various* international instruments regarding indigenous and tribal peoples' rights' (*Saramaka* case, n 191, para 138, emphasis added), it only made reference to CERD Concluding Observations on Ecuador (n 189) and the Report of the UN Special Rapporteur on indigenous peoples' rights (n 189). The same appears true for the human rights approach to inter-State benefit-sharing: in the context of the discussion on the rights to science, extensive reliance is made to multilateral environmental agreements in relation to technology transfer: Report on the Right to Enjoy the Benefits of Scientific Progress and its Applications (n 134), at fn 76.

²¹⁹ World Bank Operational Policy OP 4.12 and 4.10 (2004), paras 10 and 18-19: note that they are currently being reviewed and updated: <http://consultations.worldbank.org/consultation/review-and-update-world-bank-safeguard-policies>; Inter-American Development Bank, Operational Policy on Indigenous Peoples and Strategy for Indigenous Development (2006) at 7, 38-39; African Development Bank Group's Integrated Safeguards System: Policy statement and operational safeguards (2013) at 31, 35-36 and 40; Asian Development Bank, Safeguard Policy Statement, Appendix II-III (2009) at 7, 17, 46, 53 and 59-61; and European Bank for Reconstruction and Development, Environmental and Social Policy: Performance Requirements (2008) at 52, 55, 57, 61.

²²⁰ UNPFII, Review of World Bank operational policies (n 191) para 65.

²²¹ Both under international environmental law and under international human rights law: Anaya (n 196), at 7.

²²² J Summers, 'The Internal and External Aspects of Self-determination Reconsidered' in D French (ed), *Statehood and Self-Determination: Reconciling Tradition and Modernity in International Law* (Cambridge University Press, 2013) 229; F Lenzerini, 'Sovereignty Revisited: International Law and Parallel Sovereignty of Indigenous Peoples' (2006) 42 *Texas International Law Journal* 155. See also Special Rapporteur on the prevention of discrimination and protection of indigenous peoples and minorities Erica-Irene Daes, 'Indigenous peoples' permanent sovereignty over natural resources' (2004) UN Do E/CN.4/Sub.2/2004/30

²²³ Anaya (n 196), at 152.

line of enquiry is thus needed to shed light on self-determination as a *process* seeking to develop a *partnership* between States and indigenous peoples.²²⁴

2.2.3 Blindspots in the literature

Few legal scholars have explored the linkages between benefit-sharing and the enjoyment of indigenous peoples' right to self-determination through their unique relation with land and resources for their cultural, spiritual and livelihood needs, including the need for protection against unfair and unsustainable forms of natural resource exploitation.²²⁵ Similarly, few legal scholars have considered linkages between benefit-sharing and the protection of indigenous peoples from unjust forms of environmental protection.²²⁶ The incipient evidence of cross-fertilization between the CBD and human rights instruments in relation to intra-State benefit-sharing²²⁷ has not attracted due academic attention either. The fact that benefit-sharing is so far largely overlooked in the otherwise well-established debate on human rights and the environment²²⁸ is on the whole quite striking.²²⁹

As a result, it remains to be ascertained whether there are tensions or mutual supportiveness between international biodiversity and human rights law in their developments of benefit-sharing, considering their different premises informed by ecosystem stewardship, on the one hand, and self-determination and ownership of natural resources, on the other. Human rights lawyers have been skeptical or even critical of perceived 'unrealistic expectations regarding the conservationist behavior of indigenous peoples [that] may have detrimental consequences for the recognition and respect of their rights.'²³⁰ Nonetheless, from a general international law

²²⁴ M Fitzmaurice, 'The Question of Indigenous Peoples' Rights: a Time for Reappraisal?' in French (n 222) 349, at 375. The link between benefit-sharing and partnership is also emphasized by the UN Special Rapporteur on Indigenous Peoples' Rights, who argued that benefit-sharing 'not only address measures to mitigate or compensate for adverse impacts of projects, but also explore and arrive at means of equitable benefit-sharing in a spirit of *true partnership*' (Report of the Special Rapporteur on Indigenous People' Rights, n 51, para 53, emphasis added).

²²⁵ An exception is A Smagadi A, 'Analysis of the Objectives of the Convention on Biological Diversity - Their Interrelation and Implementation Guidance for Access and Benefit Sharing' (2006) 31 *Columbia Journal of Environmental Law* 243.

²²⁶ The lengthy monograph by E Desmet, *Indigenous Rights Entwined with Nature Conservation* (Intersentia, 2011) does not mention benefit-sharing; and grey literature on rights-based approaches to conservation has done so in a patchwork manner: T Greiber et al, *Conservation with Justice: A Rights-based Approach* (IUCN, 2009), at 20 and 31; and J Campese et al, *Right-based Approach to Conservation* (CIFOR and IUCN, 2009), at 17.

²²⁷ Report of the Special Rapporteur on Indigenous People' Rights (n 51), paras 73-75; Expert Mechanism, Progress Report (n 51) para 34.

²²⁸ Eg: A Boyle and MR Anderson (eds), *Human Rights Approaches to Environmental Protection* (OUP, 1998); F Francioni, 'International Human Rights in an Environmental Horizon' (2010) 21 *European Journal of International Law* 41; A Boyle, 'Human Rights or Environmental Rights: A Reassessment?' (2007) 18 *Fordham Environmental Law Review* 471; DK Anton and D Shelton, *Environmental Protection and Human Rights* (CUP, 2012); A Boyle, 'Human Rights and the Environment: Where Next?' (2012) 23 *European Journal of International Law* 613.

²²⁹ Although note that the recently appointed UN Independent Expert on Environment and Human Rights has briefly pointed to States' duty to ensure benefit-sharing from extractive activities in indigenous peoples' land and territories: Preliminary report on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (2012) UN Doc A/HRC/22/43, para 41, and mapping report (2013) UN Doc A/HRC/25/53, para 78. He also drew attention to benefit-sharing in the context of the right to science (preliminary report, para 21).

²³⁰ Desmet (n 226), at 41.

perspective it is clear that the 'right to dispose of natural resources should not be interpreted as a freedom to engage in unsustainable uses of the environment as it must be understood in the context of common responsibilities for maintaining the health of our ecological systems.'²³¹

A combination of the two perspectives is needed, however. Conceptually, the role of benefit-sharing vis-à-vis consultation and FPIC remains to be clarified, in particular in connection with the use of prior environmental and socio-cultural impact assessment and with regard to enhanced participation for indigenous peoples in relevant decision-making as a result of the consultation process²³² (and therefore as a form of benefit-sharing, rather than a means to achieve consensus on benefit-sharing). In addition, clarification is needed as to the role of benefit-sharing vis-à-vis compensation. This is particularly relevant in last-resort scenarios in which the pursuance of genuine objectives of public interest requires a proportionate limitation or even extinction of the rights of indigenous peoples upon their prior informed consent (to allow access to their territories by third parties, lose access to their territories and/or otherwise give up alternatives for the future development of their territories). In these cases, traditional compensation would be limited to trying to replace what has been lost with equivalent resources elsewhere - providing land that is commensurate (or better) in quality, size and value and livelihood restoration.²³³ Benefit-sharing as compensation, instead, would add to this effort to minimize negative impacts a more proactive approach to maximizing any benefits arising from this scenario. It would do so by creating long-term forms of partnership that allow *both* for *new* opportunities of income generation arising from the proposed development and *continued or enhanced* control over the use of the lands and resources affected by the development (for instance, with indigenous peoples (co-)managing new protected areas or having minority ownership interest in an extractive operation).²³⁴ In other words, the dividing line between compensation and benefit-sharing lies in the empowerment²³⁵ of beneficiaries with the result that *normative authority is shared* with indigenous peoples on the basis of an a priori recognition of communities as equal partners in environmental protection, natural resource management and development.²³⁶ In these

²³¹ Fitzmaurice (n 224), at 361. See also Birnie, Boyle and Redgwell (n 47), at 169 and Desmet (n 226, at 186-187) also admits that regional human rights tribunals have convened on this point. The right to own and use traditional resources also implies an 'obligation of stewardship toward the resource, for the benefit of future generations of the community and for the planet': see F Wiessner, 'The Cultural Rights of Indigenous Peoples: Achievements and Continuing Challenges' (2011) 22 *European Journal of International Law* 121, at 240.

²³² G Pentassuglia, 'Towards a Jurisprudential Articulation of Indigenous Land Rights' (2011) 22 *European Journal of International Law* 165, at 184 and 176, where the author argues that 'benefit-sharing, besides being a form of "reasonable equitable compensation"...effectively expands on the principle of effective participation.'

²³³ Eg Basic Principles and Guidelines on development-based evictions and displacement (2007) UN Doc A/HRC/4/18, Annex 1.

²³⁴ The latter example was Anaya's 'Study on extractive industries and indigenous peoples' (n 202), para 75.

²³⁵ This is a notion that the African Commission mentioned in relation to realizing the right to development: *Endorois* case (n 21) para 283. See also Orellana (n 203) at 846, who asks whether 'benefit-sharing cover[s] only those natural resources necessary for survival or all natural resources within the group's territory.'

²³⁶ This is the definition of empowerment, in light of global environmental justice, proposed by J-M Breton, 'De la genèse a la reconnaissance: la justice environnementale entre paradigme d'équité et réception fonctionnelle' in Michelot (n 44), 95, at 114 and 106-107.

cases, it seems that the understanding of benefit-sharing as a mere procedural safeguard under international human rights law²³⁷ may overlook substantive dimensions.

Attention should be also drawn to an additional dimension of benefit-sharing in the intra-State dimension: *intra-community* benefit-sharing.²³⁸ This addresses an equity concern that arises from benefit-sharing itself - that is, the need to prevent disruptive or divisive effects within beneficiary communities due to inequitable distribution of benefits only to certain members of the community or adverse impacts arising from different types of benefits on communities' identities and internal governance structures.²³⁹ This dimension appears to have received similar treatment under international human rights and biodiversity law: benefits to be shared with communities must be culturally appropriate and endogenously identified.²⁴⁰ That of course merely scratches the surface of the issues that may arise in relation to intra-community benefit-sharing: how to decide who should represent whom in the negotiations of a benefit-sharing agreement? What principles should apply to the distribution of community benefits within and between generations? How should plans be made for the achievement of sustainable development outcomes for local communities? How should local disputes about benefits and impacts be resolved? And how to build the capacity of local organizations to deal with these issues, without

²³⁷ Note that Anaya retracted his initial assessment that indigenous peoples have a 'right to benefit-sharing' (Report of the Special Rapporteur on Indigenous People' Rights (n 51) paras 67 and 76-78), and successively stated that it is 'more accurate' to refer to it as a safeguard for the protection of the substantive rights of indigenous peoples to their lands and natural resources (Progress report on study on extractive industries (193) para 52).

²³⁸ This is differentiated from benefit-sharing as 'benefit-distribution' by McCool (n 9).

²³⁹ For example, the Hoodia benefit-sharing agreement undermined communities' traditional values, knowledge and resource governance system, by exacerbating power and information asymmetries in and across the communities: P Munyi and H Jonas, 'Implementing the Nagoya Protocol in Africa: Opportunities and Challenges for African Indigenous Peoples and Local Communities,' in Morgera, Buck, and Tsioumani (n 7), at 217, 227. See also Guidelines on Tourism and Biodiversity (n 160) para II(27): 'When tourism development occurs, economic benefits are usually unequally distributed amongst members of local communities. There is evidence suggesting that those who benefit are often limited in number and that those who benefit most are often those who were at an economic advantage to begin with, particularly landowners who can afford the investment.'

²⁴⁰ From a human rights perspective, the Inter-American Court of Human Rights observed that 'any internal conflict that arises between members of the Saramaka community regarding [benefit-sharing...] must be resolved by the Saramaka people in accordance with their own traditional customs and norms, not by the State or this Court in this particular case.' Inter-American Court of Human Rights, *Case of the Saramaka People v. Suriname: Interpretation of the Judgment*, 12 August 2008, paras 25-27. As a result of the interpretation of human rights instruments, such as ILO Convention No. 169, Article 15(2) and UNDRIP Article 32. See also American Convention on Human Rights Articles 1(1) and 21. On the biodiversity side, see: refinement and elaboration of the ecosystem approach (n 173) para 1(8) and 2(1); and Tkarihwaïé:ri Code (n 166) para 14. Guidance on protected areas has also addressed these points, in weaker language: CBD Decision IX/18 (2008), Part A, para 19, where by the CBD COP 'Encourages Parties to ...ensure that benefits arising from the establishment and management of protected areas are fairly and equitably shared in accordance with national legislations and circumstances, and do so with the full and effective participation of indigenous and local communities and where applicable taking into account indigenous and local communities' own management systems and customary use.' See also the 2011 Principles for Responsible Agricultural Investment that Respect Rights, Livelihoods and Resources, Principle 12 (Endorsed by G20; prepared by FAO, WB, UNCTAD and IFAD).

unduly influencing their decisions?²⁴¹

Another significant research question at the intersection of international biodiversity and human rights law is whether and to what extent developments under the CBD and its Nagoya Protocol related to benefit-sharing have expanded the international human rights of indigenous peoples to *local communities*²⁴² - a category of unclear status in international human rights law.²⁴³ Local communities, however, are widely seen as key ecosystem stewards and holders of traditional knowledge,²⁴⁴ and a variety of human rights of general application (such as those related to subsistence²⁴⁵ and culture²⁴⁶) may be negatively affected by interferences with these communities' relations with land and natural resources. Along these lines, the ITPGR includes benefit-sharing among 'farmers' rights'²⁴⁷ and recent international soft-law initiatives have expanded the beneficiaries of benefit-sharing to 'tenure right holders' (i.e. those having a formal or informal right to access land and other natural resources for the realization of their human rights to an adequate standard of living and wellbeing)²⁴⁸ and small-scale fishing communities.²⁴⁹ These developments are particularly significant for most countries in the world (be they in the North or South) where non-indigenous rural communities are based. The notion of local communities also underscores the need for an analysis of agriculture- and fisheries-related *subsidies* both as a possible form of benefit-sharing and as a threat to the basic conditions underpinning the traditional knowledge and ecosystem stewardship of local communities.

These questions may have been obfuscated by arguments that the standard references

²⁴¹ Colin Filer, 'The development forum in Papua New Guinea: Evaluating Outcomes for Local Communities' in M Langton and J Longbottom (eds), *Community Futures, Legal Architecture: Foundations for Indigenous Peoples in the Global Mining Boom* (Routledge, 2012) 145, at 155

²⁴² Morgera, Tsioumani and Buck (n 84), at 383.

²⁴³ A Bessa, *Traditional Local Communities in International Law*, PhD thesis EUI, 2013, at 220, posits that the main difference between the international protection of indigenous peoples and of local communities lies in the right to self-determination of the former (that is, a focus on restoration of original entitlements and a high degree of autonomy), whereas local communities focus on social justice and participatory rights.

²⁴⁴ Desmet (n 226), at 69, who emphasizes their geographical proximity to and legitimate interest in land and natural resources. See also discussion in Morgera and Tsioumani (n 149), at 19-23, and inconclusive CBD Decision XI/14 (2012).

²⁴⁵ Bessa (n 243), at 235. Note that O De Schutter, 'The Emerging Human Right to Land' (2010) 12 *International Community Law Review* 303, at 324-325 and 319, argued that: 'There is no reason not to extend the recognition of communal rights beyond indigenous or traditional communities' particularly where the management of common pool resources at the local level proves effective. Along these lines, he also points to the role of the right to food to justify protection of local communities' special relationship with land and resources traditionally used.'

²⁴⁶ As traditional lifestyles are considered part and parcel of a broad notion of the human right to culture: Bessa (n 243), at 206 and 227.

²⁴⁷ ITPGR Article 9.2: see Tsioumani (n 31). Note also the ongoing international process to draft a Declaration on the rights of peasants and other people working in rural areas (2013) UN Doc A/HRC/WG.15/1/2.

²⁴⁸ FAO, *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* (2012), Article 8.6.

²⁴⁹ FAO, *Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication* (2013) para 5.1.

in CBD instruments to ‘indigenous and local communities’²⁵⁰ (rather than ‘indigenous peoples and local communities’) aim to *restrict* the rights of indigenous peoples,²⁵¹ and that the CBD *subjects* the protection of these rights to their compatibility with the environmental sustainability of their exercise.²⁵² These concerns, that are legitimate to the extent that they are confirmed in the practice of individual CBD Parties, appear legally ill-founded from a principled perspective. According to general international law, the CBD is to be interpreted and applied in light of applicable international human rights instruments, and the link between the protection of traditional knowledge and biodiversity conservation is simply a reflection of the subject-matter scope of the Convention (that is, it leaves the protection of other traditional knowledge to other instruments and processes). And even when the CBD text authorizes its Parties to depart from existing international human rights obligations, in the exceptional cases in which their exercise would cause serious damage to or threaten biological diversity,²⁵³ this should be understood as an obligation for CBD parties to negotiate an interpretation of the CBD and other international instruments that leads to the identification of a mutually supportive solution.²⁵⁴ The more appropriate questions to be asked are rather the following. Conceptually, to what extent does benefit-sharing add value in ensuring the respect of human rights when tackling environmental challenges by structuring and providing criteria for the necessary balancing of interests? And practically, under which conditions can benefit-sharing be misused or abused to ‘renegotiate’ the human rights that are at stake or simply to put a price-tag on the limitation of these rights?²⁵⁵

Both questions have great relevance, since it has been argued that under international human rights law ‘there is little indication of how to appreciate the relationship between indigenous land rights and potentially competing non-indigenous (third-party) rights over land.’²⁵⁶ In principle, benefit-sharing should be understood as a corollary to well-established and effectively protected human rights. But considering the reality of many (developed and developing) countries where natural resource-related rights are not settled, recognized or documented, benefit-sharing may also act as a pragmatic process to gradually create the infrastructure necessary for the full recognition, documentation and protection of human rights. The latter expectation was in effect at the basis of the community-based wildlife management experiments in Southern Africa, which were expected to formalize collective rights over natural resources and did result in both ecological recoveries and new local benefits, although only in exceptional cases did they result in genuine shifts of rights and authority over

²⁵⁰ Which was finally (albeit still in a qualified manner) resolved by CBD Parties in October 2014: CBD Decision XII/L.26 (2014). For an earlier discussion, see E Morgera and E Tsioumani, ‘Indigenous Peoples’ (2013) 23 *Yearbook of International Environmental Law* 224.

²⁵¹ Desmet (n 226), at 131.

²⁵² Ibid, at 132.

²⁵³ CBD Article 22(1).

²⁵⁴ E Morgera, ‘Far Away, So Close: A Legal Analysis of the Increasing Interactions between the Convention on Biological Diversity and Climate Change Law’ (2011) 2 *Climate Law* 85, at 88-89, and generally R Pavoni, ‘Mutual Supportiveness as a Principle of Interpretation and Law-Making: A Watershed for the WTO-and-Competing-Regimes Debate?’ (2010) 21 *European Journal of International Law* 649.

²⁵⁵ The concern has been raised by Orellana (n 203) at 847.

²⁵⁶ Pentassuglia (n 206) at 168.

natural resources to communities.²⁵⁷ Among the lessons learnt that have been recently documented is that legally recognized ownership rights should be vested with locally representative institutions to ensure appropriate incentives are in place for sustainable use,²⁵⁸ accompanied by sufficient forms of power and leverage to enforce and capitalize upon those rights.²⁵⁹ These experiences confirm that benefit-sharing should not be conceived and implemented in isolation from the wider legal landscape, from the politics that underlie it, or from a deep understanding of the customary systems, particularly the commons,²⁶⁰ within which benefit-sharing will be embedded.

Finally, answering all the questions raised above on intra-State benefit-sharing systematically also appears crucial to further understanding some technicalities of the interplay between international biodiversity and human rights law that may have significant practical implications. First, considering that the CBD counts on a virtually universal membership, it would help to understand whether CBD guidelines may apply more easily across international borders than human rights processes,²⁶¹ as international human rights instruments have varying membership²⁶² and there are significant limitations to their extraterritorial application.²⁶³ Second, as the monitoring of State practice under the CBD is non-existent,²⁶⁴ another question that merits discussion is whether international human rights enforcement mechanisms and bodies tasked to hear and investigate complaints²⁶⁵ may have the potential to contribute to *cross-compliance* with international standards related to benefit-sharing that have

²⁵⁷ F Nelson, 'Introduction' in F Nelson (ed), *Community Rights, Conservation and Contested Lands: The Politics of Natural Resource Governance in Africa* (Earthscan, 2010), 3, at 4 and 11.

²⁵⁸ M Gomera, L Rihoy and F Nelson, 'A changing climate for community resource governance: threats and opportunities from climate change and the emerging global market' in Nelson (n 257), 293, at 300.

²⁵⁹ F Nelson, 'Democratizing Natural Resource Governance: Searching for Institutional Change' in Nelson (n 257), 310, at 316.

²⁶⁰ For a legal analysis, B Weston and D Bollier, *Green Governance: Ecological Survival, Human Rights and the Law of the Commons* (CUP, 2013), who defines commons as 'collectively managed shared resources - a kind of social and moral economy or governance system of a participatory community of commoners (sometimes the general public or civil society, sometimes a distinct group) that uses and directly or indirectly stewards designated natural resources in trust for future generations' (at xix, fn 21).

²⁶¹ On the basis of the common concern of humankind: J Brunnee, 'Common Areas, Common Heritage and Common Concern' in D Bondansky, J Brunnee and E Hey (eds), *The Oxford Handbook of International Environmental Law* (OUP, 2007), 550; Birnie, Boyle and Redgwell (n 47), at 128-131.

²⁶² A Savaresi, 'The International Human Rights Law Implications of the Nagoya Protocol' in Morgera, Buck and Tsioumani (n 7) 53, at 58-59, underlines the fragmented nature of States' obligations in the human rights field. On the limited relevance of customary international law on human rights for climate change-related purposes, see J Knox, 'Climate Change and Human Rights Law' (2009-2010) 50 *Virginia Journal of International Law* 163, at 15. Note also the limits of current intergovernmental support for FPIC summarized by Ward (n 209), at 84.

²⁶³ E Cameron, 'Human Rights and Climate Change: Moving from an Intrinsic to an Instrumental Approach' (2009-2010) 38 *Georgia Journal of International and Comparative Law* 673, at 706. See also Knox (n 229) para 82, where it reads: 'Although it is clear that States have an obligation of international cooperation, which is of obvious relevance to global environmental problems such as climate change, clarification of the content of extraterritorial human rights obligations pertaining to the environment is still needed.'

²⁶⁴ Morgera and Tsioumani (n 149), at 24-25.

²⁶⁵ S Kravchenko, 'Procedural Rights as a Crucial Tool to Combat Climate Change' (2009-2010) 38 *Georgia Journal of International and Comparative Law* 613, at 616. Although one should not assume that human rights compliance bodies are necessarily effective: Cameron (n 263), at 706.

emerged under the CBD.²⁶⁶

2.3 *Transnational dimensions*

Distinguishing between benefit-sharing *among* States from benefit-sharing *within* States (between governments and communities) constitutes a useful and necessary starting point, as the inter- and intra-State dimensions of benefit-sharing raise differently conceived legal relations. In addition, at least in some cases (for instance, access to genetic resources) distinguishing the different dimensions of benefit-sharing provides a useful lens to *connect* different sources of inequity in the regulation and management of the environment among States (inter-State dimension) that trickle down to indigenous peoples and local communities (intra-State dimension).

That said, there are conceptual and practical reasons against completely detaching the inter-State dimension from the intra-State one. Transnational traits can in fact be identified in both dimensions.²⁶⁷ On one hand, the inter-State benefit-sharing system established by the Nagoya Protocol is ultimately operationalized through transnational law (private-law contracts between private users, such as research institutions and biotech companies in one country, and providers of genetic resources and traditional knowledge in another country).²⁶⁸ In addition, inter-State benefit-sharing may ultimately channel benefits directly to indigenous peoples or local communities: the multilateral benefit-sharing system under the International Treaty on Plant Genetic Resources for Food and Agriculture allocates funding directly to farmers in developing countries.²⁶⁹

On the other hand, intra-State benefit-sharing may involve inter-State relations when different communities residing in different States share certain traditional knowledge or resources.²⁷⁰ Or it may occur in the context of development cooperation, directly benefiting indigenous peoples and local communities. Although international human rights instruments do not contain provisions on development aid,²⁷¹ benefit-sharing

²⁶⁶ F Francioni, 'Environment' in A Cassese (ed), *Realizing Utopia: The Future of International Law* (OUP, 2012). For a comparative reflection on international human rights and environmental law in this regard, see C Tams, 'Enforcement' in G Ulfstein, T Marauhn and A Zimmermann (eds), *Making Treaties Work: Human Rights, Environment and Arm Control* (CUP, 2014) 391.

²⁶⁷ As defined by P Jessup, *Transnational Law* (Yale University Press, 1956), at 136 as 'all law which regulates actions or events that transcend national frontiers. Both public and private international laws are included, as are other rules which do not wholly fit into such standard categories.'

²⁶⁸ As is explicitly foreseen in CBD Article 15(7), last sentence, and the last sentence of Nagoya Protocol Article 5(1), where reference is made to 'mutually agreed terms.'

²⁶⁹ ITPGR Secretariat, Press Release, 'Board of Plant Treaty Announces New Benefits for Farmers In 11 Developing Nations, as Efforts Heat Up To Protect Valuable Food Crops In Face Of Threatened Shortages, Climate Change' (undated), ftp://ftp.fao.org/ag/agp/planttreaty/news/news0009_en.pdf. See Morgera and Tsioumani (n 8), at 158-159.

²⁷⁰ The Nagoya Protocol (Article 11) specifically foresees these cases, leaving it however to cooperation among relevant States and involvement of communities to decide how to address them: see Morgera, Tsioumani and Buck (n 84), at 209-215.

²⁷¹ Possible reliance on ICESCR Article 2(1) is explored to that end by D Bodansky, 'Climate Change and Human Rights: Unpacking the Issues' (2010) 38 *Georgia Journal of International and Comparative Law* 511; and Knox (n 262), at 202 and 206-218. Note also the adoption of human rights-based standards in the context of development processes and initiatives, such as the UN Human Rights

may have the potential to operationalize a human rights-based approach to environment-related development cooperation.²⁷² This would entail informing appropriate levels of financing and similarly appropriate choices of measures with poverty reduction concerns and bottom-up community empowerment in the development of environmental measures in a locally grounded and culturally appropriate way.²⁷³ Seen from a global justice perspective, aid may work as a minimal form of restitution for historical injustices, such as the extraction of natural resources without adequate compensation to local populations, or on the contrary generate and amplify status, power and information asymmetries between the party lending assistance and the one receiving it.²⁷⁴ Against this background, it is worth exploring whether and to what extent benefit-sharing can play a role in the global justice-inspired efforts at making aid a form of ‘substantively egalitarian North-South cooperation’ on the basis of recognition of cultural pluralism, deliberation ‘striving to construct zones of agreement and mutual interest’; and ‘democratization of expertise and skills through the training of local communities.’²⁷⁵

In addition, the role of the private sector in relations among States (for instance, with regards to the transfer of technologies in the hands of private companies²⁷⁶) and between certain States and communities situated in other States (for instance, when private companies participate in bilateral development cooperation or run foreign investment projects²⁷⁷) must be accounted for. Benefit-sharing in the triangular relationship between government(s), extractive industries and communities is probably the most controversial and relatively best documented example: significant experience has been accrued on the ground in the mining sector, ranging from insufficient or even abusive arrangements to tackle widespread environmental damage and human rights violations to instances of the genuine transformation of paternalistic arrangements into partnerships.²⁷⁸ At the international level, international soft-law developments have increasingly spelt out how benefit-sharing may contribute to delineate business responsibility to respect human rights and internationally agreed environmental goals by complementing or supplementing governmental efforts in the context of corporate accountability.²⁷⁹ The various CBD guidelines that contributed to delineate the evolving notion of benefit-sharing were framed so as to also directly

Based Approach to Development (<http://hrbportal.org/the-human-rights-based-approach-to-development-cooperation-towards-a-common-understanding-among-un-agencies>).

²⁷² Cameron (n 263), at 712-714. See also dual approach to international financial solidarity obligations discussed in section 2.1.1 above.

²⁷³ J von Doussa, A Corkery and R Chartres, 'Human Rights and Climate Change' (2007) 14 *Australian International Law Journal* 161, at 176. See generally J Ife, *Human Rights from Below: Achieving Rights through Community Development* (CUP, 2010).

²⁷⁴ Kurasawa (n 26), at 131.

²⁷⁵ *Ibid.*, at 135 and 144.

²⁷⁶ Bonn Guidelines (n 174) para 6(b).

²⁷⁷ 'Refinement and Elaboration of the Ecosystem Approach (n 173), annotations to rationale to Principle 4; and Biodiversity and Tourism Guidelines (n 160) para 23.

²⁷⁸ M Langton and J Longbottom (eds), *Community Futures, Legal Architecture: Foundations for Indigenous Peoples in the Global Mining Boom* (Routledge, 2012).

²⁷⁹ See generally, E Morgera, *Corporate Accountability in International Environmental Law* (OUP, 2009).

address private companies,²⁸⁰ and have been increasingly integrated into international standards on corporate environmental accountability.²⁸¹ On the other hand, normative developments under international human rights law have also spelt out the role of benefit-sharing in relation to business responsibility to respect the human rights of indigenous peoples to their lands and natural resources.²⁸² These aimed to complement the due diligence standards of corporate respect for human rights included in the UN Framework on Business and Human Rights²⁸³ - the first intergovernmental endorsement that private companies are to respect internationally recognized human rights by taking adequate measures to prevent, mitigate and remediate adverse human rights impacts over and above what is required of them by national laws, and independently of States' abilities and willingness to fulfill their human rights obligations. The UN Framework did not, however, make reference to the specific challenges faced in ensuring business responsibility for human rights such as those of indigenous peoples that are intrinsically linked to environmental protection. Benefit-sharing has thus contributed to fleshing out the due diligence standards of private companies with respect to indigenous peoples, while also emphasizing the environmental dimension of the business responsibility to respect human rights.²⁸⁴ That being said, several questions remain to be explored as to the interplay and cross-fertilization between international biodiversity and human rights standards in this regard, particularly in consideration of various ongoing international processes aimed at further defining corporate due diligence, and benefit-sharing in that context, in relation to land and natural resources.²⁸⁵ Furthermore, a deeper investigation of benefit-sharing in the relations between States, private foreign investors and communities is needed to reconsider the notion of equity that has emerged in international investment law.²⁸⁶

²⁸⁰ Although they are directed to governments, Akwé: Kon Voluntary Guidelines (n 156) para 1, are expected to provide a collaborative framework for governments, indigenous and local communities, decision makers and managers of developments (para 3). This is also the case of the Addis Ababa Principles and Guidelines (n 166) para 1 and the Guidelines on Tourism and Biodiversity (n 160) Annex, para 2.

²⁸¹ 2012 Performance Standards of the International Finance Corporation, www.ifc.org/ifcext/policyreview.nsf/Content/2012-Edition#PerformanceStandards; and, Organization for Economic Cooperation and Development, 'Final Statement by the UK National Contact Point for the OECD Guidelines for Multinational Enterprises', 25 September 2009, www.berr.gov.uk/files/file53117.doc, paras 44-46.

²⁸² For instance, Report of the Special Rapporteur on indigenous peoples' rights (n 51), paras 73-80; and Report of the Special Rapporteur on Indigenous Peoples' Rights to the Human Rights Council (n 210) paras 48 and 53. For a discussion, Morgera, 'From Corporate Social Responsibility' (n 51).

²⁸³ Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, John Ruggie. 'Protect, Respect and Remedy: A Framework for Business and Human Rights' (2008) UN Doc A/HRC/8/35, paras 25 and 58 (the Human Rights Council recognized the need to operationalize the framework through Resolution 8/7 of 2008, para 2).

²⁸⁴ For a discussion, Morgera, 'Environmental Accountability of Multinational Corporations' (n 51).

²⁸⁵ Eg, Committee on Food Security, Principles for Responsible Investment in Agriculture and Food Systems (adopted in October 2014), and draft international guidance on responsible agricultural investment been developed by the Organization for Economic Co-operation and Development (OECD) and the Food and Agriculture Organization of the United Nations (FAO): www.oecd.org/daf/inv/investment-policy/rbc-agriculture-supply-chains.htm.

²⁸⁶ M Paporinskis, *The International Minimum Standard and Fair and Equitable Treatment* (OUP, 2013); I Tudor, *The Fair and Equitable Treatment Standard in the International Law of Foreign*

Finally, a burgeoning transnational practice has emerged on benefit-sharing in connection with the use of ‘community protocols.’²⁸⁷ These are written documents in which indigenous peoples and local communities articulate their values, traditional practices and customary law concerning environmental stewardship, based upon the protection afforded to them by international environmental and human rights law.²⁸⁸ Crucially, through such an instrument, communities may be able to express their understanding of the most culturally and biologically appropriate form of benefit-sharing in a specific context, as a basis for cooperation with governments and private companies, as well as in terms of intra-community benefit-sharing. Community protocols operate through the interaction of international law, national law and the customary law of indigenous peoples and local communities: they serve to promote or facilitate the recognition or integration in statutory law of communities’ customary laws and procedures concerning their natural resources and their traditional knowledge, in light of relevant international human rights standards, through a bottom-up process aimed at articulating such laws and procedures in a way that can be more easily understood by national authorities. Critically for present purposes, a study of community protocols can help better understand how benefit-sharing is defined from the bottom up by communities and transnational legal advisors (NGOs and bilateral development partners), and whether and to what extent benefit-sharing operates as a platform for effective partnership-building between communities, governments and the private sector on the ground.²⁸⁹ In the case of the Nagoya Protocol, community protocols may also help understand how the inter- and intra-State dimensions of benefit-sharing interact with and relate to each other. And in effect these protocols have achieved formal recognition in the Nagoya Protocol.²⁹⁰

Overall, community protocols can thus be seen as an instrument of ‘legal mediation’ for communities, but they may also be misused to put ‘pressure upon communities to adapt local norms to international standards that may be exogenously interpreted by governments or outsiders.’²⁹¹ Promises and risks of community protocols, however, remain to be fully assessed: at the time of writing, literature assessing community protocols is still scant: existing studies are written by practitioners directly involved in the promotion of community protocols in the field and their recognition at the international level.²⁹²

Investment (OUP, 2008).

²⁸⁷ Eg, United Nations Environment Programme (UNEP), *Community Protocols for ABS* (undated), available at www.unep.org/communityprotocols/index.asp; H Jonas, K Bavikatte, and H Shrumm, ‘Community Protocols and Access and Benefit Sharing’ (2010) 12 *Asian Biotechnology and Development Review* 49; and a series of publications by Natural Justice, available at <http://naturaljustice.org/library/our-publications>.

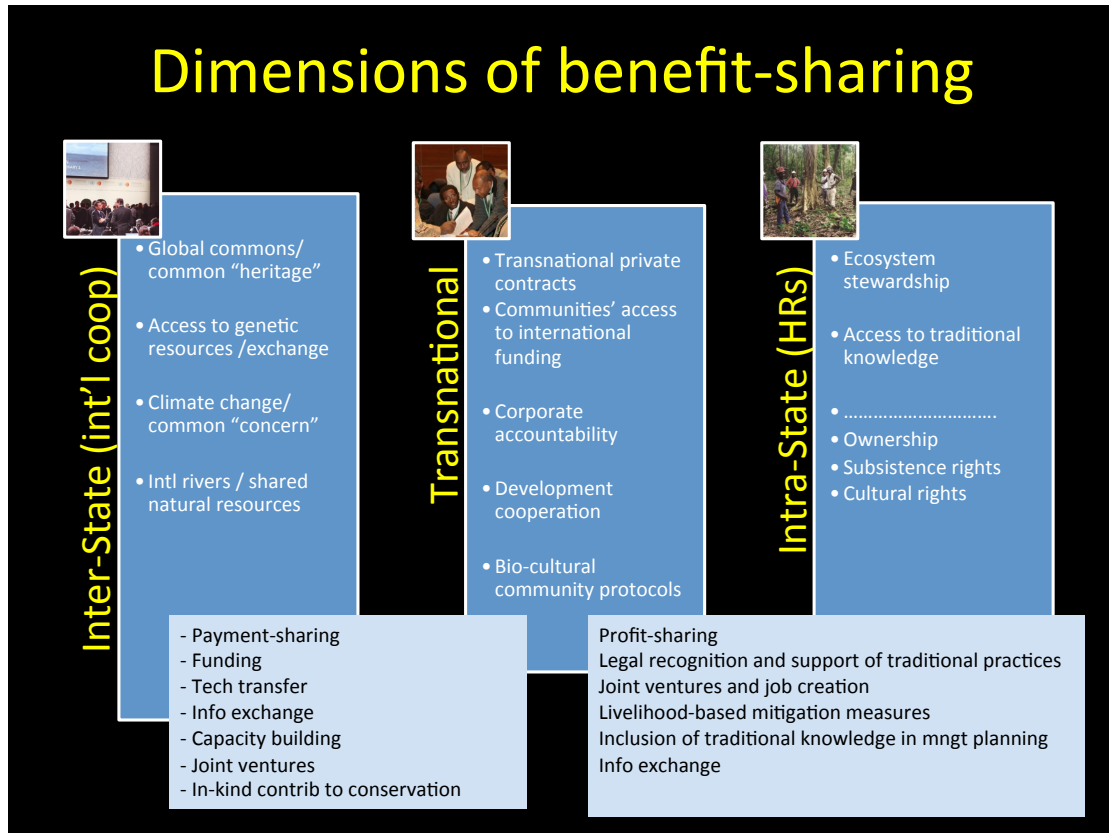
²⁸⁸ Morgera and Tsioumani (n 8), at 157-158.

²⁸⁹ This will be pursued through an empirical, inter-disciplinary investigation: see Parks and Morgera (n 12).

²⁹⁰ Nagoya Protocol, Arts 12 and 21.

²⁹¹ GA Sarfaty, ‘International Norm Diffusion in the Pimicikamak Cree Nation: A Model of Legal Mediation’ (2007) 48 *Harvard International Law Journal* 443,

²⁹² Eg, K Swiderska et al., *Biodiversity and Culture: Exploring Community Protocols, Rights and Consent*, Participatory Learning and Action Series no. 65 (International Institute for Environment and Development, 2012, <http://pubs.iied.org/14618IIED.html>, 28; H Jonas, H Shrumm and K Bavikatte, *Biocultural Community Protocols and Conservation Pluralism* (Natural Justice, 2010), http://naturaljustice.org/wp-content/uploads/pdf/BCPs_and_conservation_pluralism_jonas_et_al2010.pdf.



3. A conceptualization of benefit-sharing in international law

As illustrated in the figure above, juxtaposing the three dimensions of benefit-sharing helps appreciate the variety of legal notions and approaches (in the columns), and the variety of benefits (in the boxes), that come into play to address a diverse range of equity issues. Once the pieces have been put together, the sheer pervasiveness and complexity of this under-studied legal phenomenon points to the need for conceptualization.

As opposed to other approaches to equity, for which treaty law references are scarce²⁹³ or not 'accompanied by explanations of what equity means,'²⁹⁴ there has been significant production of hard and soft law²⁹⁵ that has crystallized consensus on benefit-sharing. Seen cumulatively, these developments related to benefit-sharing have the potential to 'recast the notion of obligation and introduce fundamental

²⁹³ Ciarán Burke, *An Equitable Framework for Humanitarian Intervention* (Hart, 2014), at 204.

²⁹⁴ Rossi (n 3), at 4.

²⁹⁵ Franck's seminal legal study on equity in international law-making (n 4) predated the dramatic evolution of international environmental law through COP decisions.

elements of fairness in the dealings of States.²⁹⁶

In first approximation, therefore, the continuous evolution of benefit-sharing appears to prove that intra-generational equity - a relatively recent and still unsettled concept in international law²⁹⁷ - has been applied outside the limited context of international environmental treaties that explicitly refer to it.²⁹⁸ Benefit-sharing operationalizes equity as a contextual balancing of interests²⁹⁹ within the current generation³⁰⁰ by addressing economic inequalities in ensuring ecological integrity,³⁰¹ while taking into account cultural diversity.³⁰² To that end, benefit-sharing has developed as a principle (thereby providing *criteria*) or as a mechanism (thereby providing a *process*) for resolving conflicts of interest and rights contextually and substantively,³⁰³ on the basis of a commitment towards narrowing 'the gap between the haves and have-nots.'³⁰⁴ Intra-generational equity, however, 'to be fair should also integrate an *inter-generational* equity approach,'³⁰⁵ and benefit-sharing should thus serve to factor in also the interests of future generations in its pursuance of environmental sustainability.³⁰⁶ Benefit-sharing, therefore, provides a concrete object for the study of the interplay between inter- and intra-generational equity.³⁰⁷

While the language of benefits is often used in international law and policy ('to the benefit of', 'maximizing benefits', etc), the legal concept that emerges from the foregoing discussion is distinctive in specifically referring to the fair and equitable *sharing* of benefits *arising* from environmental protection, management and regulation,³⁰⁸ with a view to reconciling competing State and community interests in equitably pursuing environmental sustainability.

²⁹⁶ Rossi (n 3), at 11-12; Scholtz (n 44), at 128.

²⁹⁷ Birnie, Boyle and Redgwell (n 47), at 123.

²⁹⁸ *Contra* *ibid*, at 123, who assert that 'it cannot easily be argued that equity in this form has any applicability outside the limited context of the Rio instruments in which it has so far been employed.'

²⁹⁹ *Ibid*, at 202.

³⁰⁰ It is worth noting that it may be more appropriate to speak of 'transgenerational equity' as several generations live in the same time period: E Gaillard-Sebilleau, 'L'équité transgénérationnelle: perspectives de justice pour les générations futures?' in Michelot (n 44), 51, at 52 and fn 52 (and sources cited therein).

³⁰¹ Birnie, Boyle and Redgwell (n 47), at 122.

³⁰² Equity as 'what is fair and reasonable in the administration of justice' entails in international law reaching 'a common sense of justice and fairness in a *culturally and politically divided society* as international society is today...reconciling, not only competing State interests, but also *different ethical and cultural views of the peoples of the world*': Francioni (n 6), paras 1-3, emphasis added.

³⁰³ These are key features of equity for Birnie, Boyle and Redgwell (n 47), at 202.

³⁰⁴ These are key features of equity for Franck (n 4), at 12-13.

³⁰⁵ S Jolivet, 'L'équité et la conservation du patrimoine naturel transfrontalier' in Michelot (n 44) 413, at 414; and Scholtz (n 44), at 126. See also K Bosselmann, 'A Legal Framework for Sustainable Development' in K Bosselmann and D Grinlinton (eds), *Environmental Law for a Sustainable Society* (New Zealand Centre for Environmental Law, 2002) at 150..

³⁰⁶ This is being explicitly considered by the International Seabed Authority, for instance: 'Towards the development of a regulatory framework for polymetallic nodule exploitation in the Area' (2013) UN Doc ISBA/19/C/5, para 5.

³⁰⁷ On the weight and political acceptability of intra-generational equity vis-à-vis inter-generational equity see: P Barresi, 'Beyond Fairness to Future Generations: An Intra-generational Alternative to Intergenerational Equity in the International Environmental Arena' (1997-1998) 11 *Tulane Environmental Law Journal* 59, and E Brown Weiss, 'A Reply to Barresi's 'Beyond Fairness to Future Generations' (1997-1998) 11 *Tulane Environmental Law Journal* 89.

³⁰⁸ Although benefit-sharing is also used with reference to international trade and globalization, for instance in the series of UN General Assembly resolutions on the role of the UN in promoting

What this legal concept denotes is, first, a situation in which different actors or groups of actors stand to benefit and a concerted effort is made in identifying and apportioning benefits through a dialogic process ('sharing'), rather than a unidirectional, likely top-down, flow of benefits.³⁰⁹ In facing the eternal question of what is and/or who can determine what is 'fair and equitable,' benefit-sharing should be understood as essentially geared towards *consensus-building*³¹⁰ - a process through which a substantive determination of what is fair can be arrived at to satisfy the expectations of those concerned.

Second, the legal concept of benefit-sharing focuses on *both* economic and non-economic aspects of equity. This can be understood by returning to the two key rationales underpinning the use of benefit-sharing and the identification of benefits to be shared: the NIEO agenda (with its emphasis on self-determination, need and solidarity) and the notion of ecosystem services (with its emphasis on vulnerability and merit, and on the inseparability of a healthy planet and human well-being in its social, cultural, health and developmental dimensions).³¹¹ The benefits to be shared are thus positive impacts on well-being³¹² that take account of the recipient's needs, values, priorities and cultural expectations, and ultimately are able to correspond to 'different understandings of justice.'³¹³ Against this background, the beneficiaries are primarily³¹⁴ developing countries in an inter-State dimension, and indigenous peoples and local communities in developed and developing countries in an intra-State dimension. These beneficiaries contribute to human wellbeing through their environmental practices in ways that are still largely unaccounted at the global and

development in the context of globalization and interdependence (eg A/RES/55/12 of 2000 calling for the integrated consideration of trade, finance, investment, technology transfer and developmental issues, and to that end re-emphasizes the urgency of coherent action by the United Nations, the Bretton Woods institutions and the World Trade Organization, as appropriate, along with the action of Governments, to *promote equitable and broad sharing in the benefits of globalization*, taking into account the specific vulnerabilities, concerns and needs of developing countries' (emphasis added), the phenomenology of benefit-sharing in that connection appears less explicit and is beyond the scope of this article.

³⁰⁹ Therefore going beyond the usual model of natural resource extraction, whereby the initial plans for exploration and extraction of natural resources are developed by the corporation, with some involvement by the State, but little or no involvement of the affected indigenous community, with the result that indigenous peoples are 'at best being offered benefits in the form of jobs or community development projects that typically pale in economic value in comparison to the profits gained by the corporation' (n 193, paras 68, 74 and 76).

³¹⁰ Former UN Special Rapporteur Anaya referred to benefit-sharing as one of the 'elements of confidence-building conducive to consensus': n 210, para. 53. Generally on the link between fairness in international law and consensus-building, Franck (n 4), at 14-16, and at 437 where it is noted that 'In the discursive search for mutuality, for areas of overlapping self-interest, the elements of fairness can play a role because everyone has an interest in being seen to act fairly'.

³¹¹ Note, in this regard, that the 'debate continues as to the appropriate principles to determine equitable allocation: need, capacity, prior entitlement, greatest good to the greatest number, strict equality of treatment': Shelton, (n 2), at 58-59. See also Nollkaemper (n 1), at 265-266.

³¹² Report on the Right to Enjoy the Benefits of Scientific Progress and its Applications (n 134) para 22; This appears in line with the understanding that equity more generally should correct injustices that lead to catastrophic repercussions for the *livelihood* and economic *well-being* of the *population* of the country concerned: ICJ, *Gulf of Main case*, [1984] ICJ Rep 246, para 342; UN Charter Article 55(a) and comments by Tourme-Jouannet (n 29), at 9; and Shelton (n 3), at 55.

³¹³ Simm (n 7), at 29-30.

³¹⁴ While the phenomenology of benefit-sharing predominantly focuses on developing countries and on indigenous peoples and local communities, certain references have also been made to 'stakeholders' more generally (Principles on the ecosystem approach (n 52) para 9).

local level and that are the most exposed to unsustainable and inequitable environmental management decisions and practices from the global to the local level. Accordingly, the range of benefits attached to the legal concept of benefit-sharing ultimately speak to *empowerment and partnership* on the international plane, as well as on the national and local planes. In other words, benefit-sharing is not just about distribution, but also about participation and recognition of distinct identities and histories and of the need to tackle different forms of domination. That said, similarly to the notion of ecosystem services,³¹⁵ the interplay and tensions between economic, socio-cultural and environmental benefits remain unclear and contentious, pointing to the need for further reflection on how to prevent benefit-sharing from being abused or working against its own purposes. The very fact that international instruments on benefit-sharing distinguish between *monetary* and *non-monetary* benefits,³¹⁶ rather than economic and non-economic ones, seems to reveal an underlying emphasis on economic aspects.³¹⁷

Third, the legal concept of benefit-sharing seeks to provide a distinctive starting point³¹⁸ for a balancing of interests geared towards providing ‘new perspectives and potentially fresh solutions to tricky legal problems.’³¹⁹ It tackles eternally controversial questions of access, ownership and/or control of a variety of natural resources (living ones, at the genetic, species and ecosystem level, and non-living ones), and related knowledge (be that ‘western’ scientific knowledge or traditional knowledge) by framing them as the opportunity to identify and allocate positive *implications* deriving from the conservation and sustainable use of natural resources (the benefits ‘arising from’). These are the local and global benefits that derive from allowing access to resources, such as access to genetic resources for scientific research or commercial innovation purposes, or access to natural resources for sustainable development or equitable conservation purposes. Or benefits that derive at the local and global level from the sustainable and equitable use of shared resources, such as the ecosystem and human health benefits arising from the sustainable and equitable use of shared watercourses. In doing so, benefit-sharing seeks to bring about a new understanding of the advantages that different stakeholders draw from different forms of cooperation related to the environment and of the possible options for structuring such cooperation as a global partnership. This approach remains to be studied in the context of legal scholarly debates on common goods³²⁰ and global public goods,³²¹ and

³¹⁵ See generally T Sikor (ed), *The Justices and Injustices of Ecosystem Services* (Earthscan, 2014).

³¹⁶ This distinction between monetary and non-monetary benefits has emerged in legal developments in the CBD framework, most notably the CBD Bonn Guidelines on Access and Benefit-sharing and the Nagoya Protocol (See L Glowka and V Normand, ‘The Nagoya Protocol on Access and Benefit-Sharing: Innovations in International Environmental Law’ in Morgera, Buck and Tsioumani (n 7) 21, at 23).

³¹⁷ I am thankful to Elsa Tsioumani for drawing my attention to this. A similar point has been made with reference to ecosystem services: ‘while an ecosystem services framing does not necessarily lead to a focus on monetary valuation and to a solution based on financial transactions, this has become the mainstream framing’: A Martin et al, ‘Just Conservation? On the Fairness of Sharing Benefits’ in Sikor (n 315) 69, at 84.

³¹⁸ Burke (n 293), at 135, considers equity as a ‘point of departure and not to encapsulate solutions to specific problems per se’.

³¹⁹ Which is a key feature of equity: *ibid*, at 251.

³²⁰ Eg, F Lenzerini and A Vrdoljak (eds), *International Law for Common Goods Normative Perspectives on Human Rights, Culture and Nature* (Hart, 2014).

³²¹ On global public goods and international law, see special issue of (2012) 23 *European Journal of International Law*.

distinctions may need to be drawn between conservation and sustainable use purposes, exhaustible and non-exhaustible resources, and rivalrous and non-rivalrous uses.

In conclusion, benefit-sharing has emerged as a legal concept of its own right in international law that is meant to realize equity in the relations among and within States. It is so flexible that it can fit within significantly different international legal approaches concerned, for different purposes, with natural resources, and that it can cross and connect different levels of regulation. But admittedly this initial conceptual sketch raises more questions than answers: benefit-sharing needs to be further studied in its interactions with self-determination, solidarity and consent between and within States, with a view to contributing to the well-established scholarly debates on the progressive transformation of national sovereignty and on the linkages between human rights and the environment, including in relation to business responsibility to respect human rights.

This is particularly urgent as empirical research in other disciplines reveals that benefit-sharing may in practice be a 'disingenuous win-win rhetoric', a 'Trojan horse of initial promises and later loss of control legitimized by narrative framings of the global public good':³²² it may help avoid 'more fundamental negotiations over access which is the real justice requirement' and exercises power through framing, by imposing a dominating knowledge approach on the less powerful.³²³ These grave concerns have been raised in the absence of a reflection on the opportunities and limitations of international law to prevent, address and remedy the injustices that may be brought about in the name of benefit-sharing and on the role of international law in progressively realizing equity through that concept. This gap needs to be filled:³²⁴ benefit-sharing as an international legal concept requires further theoretical *and* empirical investigation to fully evaluate, from a normative perspective, its worth in ensuring mutual supportiveness in the making and interpretation of international law³²⁵ facing the interconnected and multi-scalar climate, energy, biodiversity, water and food crises.

³²² Martin et al (n 317) at 84-88

³²³ Ibid.

³²⁴ Legal research appears as an indispensable complement to recent efforts at the crossroads of the social and natural sciences: in addition to Martin et al (n 317) and Nkhata (n 66), see R Wynberg and M Hauck, 'People, Power, and the Coast: A Conceptual Framework for Understanding and Implementing Benefit Sharing' (2014) 19 *Ecology and Society* 27; and E Van Wyk, C Breen and W Freimund, 'Meanings and Robustness: Propositions for Enhancing Benefit Sharing in Social-Ecological Systems' (2014) 8 *International Journal of the Commons* 576.

³²⁵ The emerging international legal principle of mutual supportiveness requires, at the interpretative level, that States disqualify solutions to tensions between competing regimes involving the subordination of one regime to the other; and, at the law-making level, that States exert good-faith efforts to negotiate and conclude instruments that clarify the relationship between competing regimes, when interpretative reconciliation efforts have been exhausted: Pavoni (n 254) at 661-669.