

Achieving the 1.5 °C objective: just implementation through a right to (sustainable) development approach

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Abstract Achieving the 1.5 °C objective of the Paris Agreement on Climate Change in a just manner requires equitably sharing the responsibilities and rights that relate to this objective. This paper examines how international law concerning the Right to Promote (Sustainable) Development can contribute to determining what would be a “just” approach to achieving the 1.5 °C objective. This entails building on both the Right to Development (RtD) and the Right to Promote Sustainable Development (RtPSD). The RtD is a central notion within international human rights law and the RtPSD has been adopted under the UN Framework Convention on Climate Change (UNFCCC). Based on a literature review and legal analysis, we argue that, although the two Rights are *prima facie* different, in the context of the unanimously adopted Agenda 2030, including the SDGs, they partly complement and partly merge with each other. Together they provide a framework for assessing how a just transition towards a low greenhouse gas development process could be achieved and what this means for phasing out fossil fuels especially in the context of prospective oil producing countries.

Keywords Right to Development · Right to Promote Sustainable Development · Carbon budget · Human rights · Climate change

Abbreviations

CBDRRC Common but Differentiated Responsibilities and Respective Capabilities

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CDM	Clean Development Mechanism
DC(s)	Developing country/countries
HR	Human Rights
HRC	Human Rights Council
IPCC	Intergovernmental Panel on Climate Change
NIEO	New International Economic Order
OPEC	Organization of the Petroleum Exporting Countries
PA	Paris Agreement
REDD	Reducing Emissions from Deforestation and Forest Degradation
RtD	Right to Development
RtPSD	Right to Promote Sustainable Development
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNOHCHR	United Nations Office of the High Commissioner for Human Rights
WTO	World Trade Organization

1 The imperative of the 1.5 °C objective: Introduction

As part of this special issue on *Achieving 1.5 °C and Climate Justice*, this paper develops an international law perspective on how two interpretations of the Right to Development can help realize this objective in a just manner. The Paris Agreement (PA) to the United Nations Framework Convention on Climate Change (UNFCCC 2015) is half-hearted in its commitment to a just approach. It notes only “the importance *for some* of the concept of ‘climate justice’, when taking action to address climate change” (PA 2015, italics added). This position represents a difficult compromise between the developing countries’ (DCs) call for climate justice and the industrialized countries’ reluctance about this notion at the time (with, respectively, India and the USA being very vocal on this matter).

The reality is that transformational changes in development patterns are required for achieving a 2 °C world and yet more radical changes if one is to reach the more stringent target of 1.5 °C. The 1.5 °C objective is preferable to the 2 °C objective because it saves at least half of the world’s coral reefs compared to losing them all, could keep sea level rise below 1 m, could limit ocean acidification to moderate levels and could avoid extreme impacts on the hydrological cycle and food production (Schleussner et al. 2016). However, current Nationally Determined Contributions are more in line with a 2.7–3.7 °C world (Levin and Fransen 2015). Achieving the 1.5 °C objective with a 50% certainty is possible—although difficult—and would delay global wealth accumulation by 4 years over 2010–2100 (UNEP 2014). This cost calculation excludes the co-benefits of mitigation and the costs of adaptation and residual impacts. Longer delay would make this objective unachievable (Rogelj et al. 2015; IPCC-3 2014). Achieving 1.5 °C objective implies that “CO₂ emissions would need to be zero as early as 2045 and no later than 2065, with negative emissions thereafter. Total GHG emissions would reach zero as early as 2060 and no later than 2080, with negative emissions thereafter” (Hare et al. 2014:5).

The collective achievement of this target requires a radical reinterpretation of development. This article explores how the evolving notions of the Right to Development (RtD) within international development and human rights law, and the Right and Duty to Promote

Sustainable Development (RtPSD) in the UNFCCC, can contribute to this reinterpretation. While at first sight these are very different notions, in the course of this article we will show that the RtD and the RtPSD are not quite so different in the post-2015 world.

This article addresses what is required and permissible under international law and not whether that is politically possible. Clearly this calls for interpretation and argumentation that goes beyond the location of commas and their implications (Bodansky 1993; Biniac 2016; French 2005; Schrijver 2008), to assess the substantive meaning of the various relevant international instruments (Higgins 1994; Moellendorf 2011), especially in the light of new realities. In relation to climate change, both the relatively new PA and Agenda 2030 (UNGA 2015) are potentially transformational. They represent the latest global consensus, respectively, on climate change and the international agenda for development (including the Sustainable Development Goals (SDGs) to be realized by 2030). The PA and Agenda 2030 emphasize, more firmly than ever before, that development, sustainability and human rights are central to understanding and tackling the problems around curbing climate change.

Agenda 2030 expresses universal commitment to the goal of sustainable development encompassing economic, social (including human rights) and environmental elements. The SDGs are “integrated and indivisible and balance” these three dimensions (UNGA 2015: 1; Arts 2017). They aim to explicitly reduce inequality between and within states (Goal 10), address climate change (Goal 13) and realize Agenda 2030 “in a manner that is consistent with the rights and obligations of States under international law” including the RtD (UNGA 2015 paras. 10 and 35). Agenda 2030 is innovative in that it is universally applicable, requiring all states, whether industrialized or developing, to implement the SDGs nationally and, when able, to contribute to international cooperation for sustainable development.

These developments make it urgent to consider possible just steps forward on the challenging 1.5 °C objective and to explore the implications of relevant soft and hard international law norms in this respect. We argue below that the RtD and the RtPSD jointly provide a critically important framework for further detailing these new realities around climate change in terms of the rights and duties of states. Section 2 sketches the applicable general international legal framework emerging from the PA, the RtD and the RtPSD, and the international norms on which these build. Section 3 proposes a unifying legal framework to analyse climate justice which is applied to the question of who can use the remaining carbon budget illustrated by the dilemmas that surround prospective developing country oil producers (see Sect. 4). Overall conclusions will be drawn at the end of this article.

2 The Paris Agreement, the RtD and the RtPSD

2.1 The Paris Agreement and its principles

The PA specifies both a framework within which the identified climate change measures are to be taken and the core elements of such measures. Its Preamble contains principles relevant for determining what a “just” approach to formulating and realizing such measures would entail. These are the UNFCCC principles “including [...] equity and common but differentiated responsibilities and respective capabilities” (repeated in PA Art. 2(2)); special consideration of the needs and circumstances of DCs, and least developed countries in particular; and attention for “the intrinsic relationship that climate change actions,

responses and impacts have with equitable access to sustainable development and eradication of poverty”. The PA’s Preamble also labels climate change “a common concern of humankind” and clarifies that Parties should “respect, promote and consider their respective obligations on human rights, [...] and the *right to development*, as well as gender equality, empowerment of women and intergenerational equity” [emphasis added].

Article 2(1) calls for: a temperature-based long-term objective, increasing adaptive capacity and climate resilience, promoting low greenhouse gas emissions development and making finance flows consistent with the above “in the context of sustainable development and efforts to eradicate poverty”. Thus, and in line with Agenda 2030, the PA also requires that climate action is consistent with sustainable development while eradicating poverty and respecting human rights.

The PA is also subject to the five principles of Article 3 of the UNFCCC including the precautionary approach, protection of vulnerable countries, the RtPSD and the common but differentiated responsibilities and respective capabilities (CBDRRC) principle. The latter refers to the differences in implementation capacity and responsibility of the parties to the UNFCCC which co-determine their implementation obligations (Preamble, Art. 3(10), 4(1)).

Thus, the PA refers to the RtD in its Preamble and is bound by the RtPSD as included in the UNFCCC. The question is whether the location of the RtD in the PA’s Preamble as against the operational text, and the way it has been clustered with other rights, denies it legal significance (see Biniat 2016; Bodansky, Brunnée and Rajamani 2017: 311–312). We argue here (a) that the inclusion of the RtD in the PA’s Preamble sets it higher than excluded elements certainly for those who have accepted it under other international legal instruments and (b) that it is qualified by the RtPSD in the UNFCCC 1992. We now compare these two rights in their evolving context, as represented in Table 1.

Table 1 shows that the RtD can be traced back to the developing country struggle for a New International Economic Order (NIEO). Barely four years after the UN General Assembly Declaration on the RtD had been adopted (UNGA 1986), the arguably narrower RtPSD appeared in the UNFCCC rather than the RtD (UNFCCC Art. 3(4); Bodansky 1993: footnote 310). This was possible as the 1992 UNFCCC negotiations were small, less exposed to public scrutiny, and there was less pressure on the industrialized countries to accept developing country positions (Bodansky 1993: 502). While the developing countries wanted to include the RtD and objected to sustainable development as a new conditionality, industrialized countries preferred the duty to promote sustainable development. The USA objected to the RtD because of its alleged vagueness and because it might be used to demand financial compensation. The ultimate compromise is reflected as the RtPSD:

The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change (UNFCCC, Art. 3.4)

During the UNFCCC negotiations, the comma in the first sentence was shifted from after to before the word “promote” to change the meaning from a Right to Sustainable Development to a Right to Promote Sustainable Development (Biniat 2016: 46; Bodansky 1993). While grammatically the comma holds significance, we argue that, like the RtD which needs to be progressively fulfilled (Windfuhr 2000), the RtPSD also needs to be progressively fulfilled, and hence, there is limited policy significance in the placement of

Table 1 Evolution of the RtD and the RtPSD. *Source:* Building further on Gupta 2010

Year	RtD	RtPSD
1960s	New International Economic Order	–
1966	Covenant on Civil and Political Rights [the RtD idea is embedded in Art. 1(1)]	–
1966	Covenant on Economic, Social and Cultural Rights [the RtD idea is embedded in Art. 1(1)]	–
1969	UNGA Declaration on Social Progress and Development	–
1981	Adoption of RtD in African Charter on Human and Peoples' Rights [Art. 22]	–
1986	UNGA Declaration on RtD	–
1992	Rio Declaration on Environment and Development [Principle 3]	–
1992	Debated but excluded from the final text of the FCCC	FCCC [Art. 3(4)]
1993	Vienna Declaration and Programme of Action [para. 10], adopted by the World Conference on Human Rights in Vienna	–
1998	Intergovernmental Working Group on the RtD established by the UN Commission on Human Rights (still active in 2017)	–
2000	Millennium Declaration [Para. 11]	–
2001	Durban Declaration and Programme of Action, adopted by the World Conference against Racism, Racial Discrimination, Xenophobia and Related Intolerance [Preamble and Art. 19 and 78]	–
2005	World Summit Outcome Document [Paras. 24b and 123]	–
2008	Human Rights Council Resolution on Climate Change and Human Rights [2 references to RtD]	–
2015	Paris Agreement on Climate Change [Preamble]	–
2015	Agenda 2030/SDGs [Paras. 10 and 35]	Agenda 2030/SDGs does not mention the RtPSD as such, but does provide its context

the comma. Moellendorf (2011)—the only scholar to explore the RtPSD explicitly in an academic publication—also focused on the substance of the right, rather than the semantics of the language. Clearly, in the early 1990s DCs did not want the conditionality of sustainable development and the USA did not want the right at all, in line with its history of objecting to economic, social and cultural rights. Interestingly, the UNFCCC provision on the RtPSD (Art. 3(4)), by stating that states parties “should, promote sustainable development,” nevertheless clearly counterbalances that right with an (admittedly soft) obligation to do so. It would perhaps also be relevant to note that the USA added a footnote to the titles of articles in the Climate Convention to weaken the effect of the article entitled “principles”, but since it missed the key language “not intended to have any legal effect”, legal scholars have argued about whether this has had a significant impact on the interpretation of these principles. The following three subsections compare the RtD and the RtPSD.

2.2 State right versus human right

The RtPSD in combination with the word “should” implies both an unqualified right and a soft obligation to promote sustainable development under international law for all states. This has potential for conceptualizing and addressing the tensions between the collective efforts required for realizing the 1.5 °C objective and their repercussions for individual states. However, the UNFCCC’s understanding of the RtPSD—as being a *state* right and soft obligation—arguably diverges from the dominant interpretation of the RtD as a human and/or peoples’ right. Furthermore, while the right and duty apply to each country individually, we argue that where one state’s rights are affected by another state’s behaviour, there is an extraterritorial component to this RtPSD as well. This is especially so when read in relation to the generic duty to cooperate for international development, a long-standing norm in international law (Arts and Tamo 2016: Sect. 4.1; Schrijver 2008: 164–167; French 2005: 67–70), and the evolution of the RtD.

Following de-colonization, initially the RtD was conceived as a human right (M’Baye 1972; Garcia-Amador 1990). Thereafter DCs who felt that their development prospects were affected negatively by international law argued in favour of the state’s RtD as part of their quest to establish a NIEO, to demand the redistribution of international resources (Uvin 2007; Marks 2004), undo past colonial injustices, and promote self-determination (Ngang 2017; Rajagopal 2013) and structural change at macro- rather than micro-level (Villaroman 2010; Sengupta et al. 2005). Hence, the early documents promoting a post-colonial legal order shared the UNFCCC’s statist vision on the RtD, including the Declaration on Social Progress and Development which prioritized the:

right and responsibility of each State [...] to determine freely its own objectives of social development, to set its own priorities and to decide in conformity with the principles of the Charter of the United Nations the means and methods of their achievement without any external interference (UNGA 1969: Article 3(e)).

Only in second instance, and only “as far as they are concerned, each nation and people” were stated to incur the same right (*ibid.*). However, the final UNGA Resolution on the RtD framed the RtD again as “an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized”. It also included the “full realization of the right of peoples to self-determination” (Art. 1 UNGA 1986; cf. Arts and Tamo 2016).

However, the reference to self-determination could be construed as also implying a collective state right (Udombana 2000) and the UNGA Declaration (Art. 2(3)) also submits that “States have the right and the duty to formulate appropriate national development policies” and has many more ambiguities. According to Uvin (2007: 598):

This was the kind of rhetorical victory that diplomats cherish: the Third World got its Right to Development, while the First World ensured that the right could never be interpreted as a greater priority than political and civil rights, that it was totally non-binding, and that it carried no resource-transfer obligations.

The RtD has been extensively discussed since (see, for example, Chowdhury et al. 1992; VerLoren van Themaat and Schrijver 1992; Arts 1996; Villaroman 2011; Rajagopal 2013; Arts and Tamo 2016). However, whether it is an individual or community right or also a state right remains contested (Adam 2006; Piron 2002; Udombana 2000; Kirchmeier 2006). The focus on individuals rather than on states is convenient for the industrialized

countries because it diverts attention from the structural inequalities between states (arguably no longer possible under SDG 10), is consistent with neo-liberal trends of moving away from government to governance, deregulation and privatization (Rajagopal 2013: 896), and puts the main responsibilities on DCs themselves. In contrast, the RtPSD clearly is a general state right and responsibility applicable to all states.

2.3 Development versus promoting sustainable development

The RtPSD pursues sustainable development which calls for considering economic, social and ecological aspects and reconciling the rights of current and future generations (WCED 1987; Rio Declaration 1992). It establishes at the very least that it is legitimate and lawful for states to promote sustainable development. One step further than this would be to imply a right to progressively achieving sustainable development. While this right by no means has crystalized fully in current international law, it might entail seeking revisions of old codifications of international law norms and obligations, for example in the light of sustainable development impact assessments, and applying sanctions or trade incentives to promote sustainable development. The latter was already found in 2004 to be in principle compatible with the World Trade Organization by the WTO Appellate Body (as reported in Schrijver 2008: 229).

Originally, the RtD focused purely on development as a “comprehensive economic, social, cultural and political process” and ignored environmental aspects (UNGA 1986, Preamble; Arts and Tamo 2016: 231). It allowed for the “inalienable right to full sovereignty over all their natural wealth and resources” and by extension the externalization of ecological impacts. It also called for the participation of all in decision-making and that resource exploitation should benefit the entire population. It saw humans as the subject and object of development, allowing them to develop their full potential, meeting material and non-material needs, and realizing human rights including in the spheres of participation, non-discrimination, social security and self-reliance (UNGA 1986; Udombana 2000).

2.4 International versus domestic components

Another question revolves around the nature of the domestic and international components of both rights. The RtPSD emphasizes state’s rights and responsibilities to promote sustainable development and that states should ensure that climate policies and measures are integrated with national development strategies and are context specific (Art. 3(4) UNFCCC). It acknowledges that development is essential for addressing climate change. This corresponds to the 1990s scientific expectation that as societies developed they would pollute more, but after a critical threshold they would pollute less: the environment Kuznets curve (Gupta 2014).

However, using “should” rather than “shall” weakens the nature of the obligation. While the RtPSD itself does not elaborate on the international component, since it has to be interpreted in line with the rest of the UNFCCC’s text, one can argue that the RtPSD is linked to the other principles including the CBDRRRC principle and provisions such as Article 4(7) which makes DC action contingent upon international support. In addition, the RtPSD requires taking into account the policies of all states when the issue concerned is global (Moellendorf 2011). Thus, either way, ultimately both national and international elements may arise in relation to the RtPSD.

The RtD explicitly has domestic and international components (UNGA 1986; Udombana 2000). The former relate, for example, to the state obligation to promote the

development prospects of citizens. In one case, the African Commission for Human and People's Rights examined whether a community was allowed to effectively participate and whether it gained as a consequence of the final decisions made. The Commission then decided that Kenya had violated the RtD of the indigenous community whose lands were to be used for a game reserve (*Endorois v. Kenya* 2010). Among other things, this case demonstrated that the RtD is justiciable. Other emerging public interest litigation worldwide is also beginning to challenge domestic interpretations of the legal and policy space for climate action. Examples include the Urgenda Case in the Netherlands; *Juliana v USA*; and the case of nine-year-old Ridhima Pandey who is suing the Government of India before the National Green Tribunal for inaction on climate change (Urgenda Foundation 2017; Our Children's Trust 2017; Farand 2017). This emerging jurisprudence, on a core aspect of sustainable development, makes important contributions to clarifying issues such as the justiciability of sustainable development matters and the domestic implications of various relevant international obligations of states in the realm of sustainable development.

The international dimension of the RtD includes state obligations for international cooperation to achieve the RtD, making it operate as a solidarity right. This implies among others that "States have the duty to cooperate with each other in ensuring development and eliminating obstacles to development" and that they "have the duty to take steps, individually and collectively, to formulate international development policies with a view to facilitating the full realization of the right to development" (respectively, Art. 3(3) and 4(1) UNGA 1986). The external component focuses on securing justice in a global context because, although some think that human rights, participatory and extraterritorial approaches can prevent the harms of neo-liberal capitalism promoted by globalization, the question is whether one can simply tweak the system at the margin (Rajagopal 2013: 895). SDG 16 on promoting "peaceful and inclusive societies for sustainable development" access to justice for all and building "effective, accountable and inclusive institutions" at all levels explicitly recognizes this. Another question is whether the RtD and the RtPSD also imply a right to development assistance (e.g. financial, technical and technological). While many DCs take the position that they do, this is questioned by industrialized countries (Kirchmeier 2006; Windfuhr 2000; Marks 2004). While such a right has not been explicitly recognized (Ngang 2017), some argue that selected international soft and hard law provisions (Abbot and Snidal 2000) recognize the state obligation to support DCs through international development cooperation, including finance and technology transfer (Arts and Tamo 2016). Many UN human rights treaties explicitly connect the resource base that states have for implementing those treaties to the possible necessity of international cooperation, and impose an obligation to provide development assistance on the states who are able to do so (ibid). The principle of CBDRRC and the measures referred to in the UNFCCC (e.g. Article 4.7) and PA explicitly take a similar approach. Furthermore, the fact that industrialized states are providing development assistance and committing to new and additional assistance is important state practice and can be used to underpin the position that customary law is being built in this field (Sengupta 2003). This is also broadly in line with the UN Office of the High Commissioner of Human Rights' interpretation that: "States should share resources, knowledge and technology in order to address climate change. International assistance for climate change mitigation and adaptation should be additional to existing ODA commitments" (UNOHCHR 2015: 2 para. 5). However, these matters and their consequences are still contested. Thus, they are addressed in vague terms in relevant international treaties or more explicitly in soft law instruments. Accordingly, the quantitative descriptions of the financial provisions related to the PA are not included in

Table 2 Comparison of the RtD and the RtPSD

	RtD	RtPSD
History	Emerged from DC demand for a NIEO expressed in various international law instruments since 1981	Emerged in UNFCCC (1992)
Legal status	Explicitly included in soft law instruments and in the binding African Charter on Human and Peoples' Rights. Indirectly expressed in various UN human rights treaties (e.g. CRC and CRPWD). Received considerable political and legal attention. Worked on since 1998 by the intergovernmental Working Group on the RtD. In 2016, the UN Human Rights Council decided to appoint a new special rapporteur on the RtD	Included in the operational part of a legally binding convention (UNFCCC) but did not get much attention. The PA refers to the RtD in the Preamble
State vs human right	Primarily a right of individuals and peoples within DCs; embedded within contested discussions about the rights of developing states and the obligations of developed states vis a vis the international order	Primarily a right and responsibility of all states to themselves; where one state's right is affected by another state, we argue that there is a corresponding responsibility
Interpretation of "development"	Traditionally recognizes economic, social, cultural and political aspects of "development"	Seeks the integration of ecological/ environmental dimensions into "development"
Scope	Applies to actual individuals and peoples	Applies to both current and future generations
Domestic component	State obligations to individuals and peoples within its jurisdiction (UNGA 2015 Art. 9)	State responsibility ("should"), not hard obligation ("shall"), to promote sustainable development (UNFCCC Art. 3(4))
International component	State responsibilities to individuals and peoples outside its jurisdiction	Not explicit but can be derived from the understanding that this has morphed from the RtD and must be read in the light of the other content of the UNFCCC (such as CDBRRC)
A right to development assistance	Not explicitly codified in those terms. There is rich state practice in international development cooperation but for most this is not motivated by the intention to implement a right to development assistance	Not explicitly codified. Arguably the RtPSD needs to be interpreted in the light of the other content of the UNFCCC. This, for example, calls on developed states to provide additional resources to DCs for climate change action and makes a developing country's climate change action dependent on assistance from other countries [Art. 3 and 4(7)]

its operational part but in a decision of the Conference of the Parties. On the basis of the material presented thus far, Table 2 compares the two rights as they currently stand.

3 Towards a framework uniting the RtD and RtPSD

3.1 Introduction

Some argue that the RtD is vague (Slinn 1999, Obiora 1996), a political aspiration rather than a right (Windfuhr 2000), misused to promote globalization and neo-liberal discourses by aid agencies and thus amounts to no more than a “fig leaf for the continuation of the status quo” (Uvin 2007: 500). Some argue that the RtPSD is similarly vague and non-committal and arguably does not govern the content of the convention and its follow-up (Bodansky 1993; Biniiaz 2016).

However, are the contestations now moot in the light of the new realities of the PA and Agenda 2030? While Agenda 2030 does not mention the RtPSD, it does refer to the UNFCCC which includes the RtPSD. In addition, it is “informed by” the Declaration on the RtD (UNGA 1986), aims to “build peaceful, just and inclusive societies that provide equal access to justice and that are based on respect for human rights (including the right to development)” (UNGA 2015: paras. 10 and 35) and requires consideration of the economic, environmental and the social aspects of development including climate change (see 1).

We argue that even though Agenda 2030 is soft law, together with the PA it provides a strong argument for revisiting critically earlier codifications of the two rights especially as achieving the 1.5 °C objective requires a radical redefinition of development. Despite the *prima facie* differences between the two rights and the compromises they reflect, one could argue (a) that in general terms they are not quite as different anymore in the SDG era, and that (b) specifically under the Paris Agreement, action to curb climate change should implement both.

3.2 Synergistic and complementary aspects

Based on six reasons, we argue that the drastic action required for achieving the 1.5 °C objective needs to be in line with the RtD and RtPSD. First, the PA refers to the RtD in its Preamble and formulates the RtPSD and a corresponding soft obligation (UNFCCC Art 3(4)), and the SDGs are subject to the RtD and the UNFCCC (Agenda 2030, par 10, 35, 31 and Target 13a). In the post-2015 world, they must be interpreted in line with the inter-related, integrated and indivisible SDGs, and with the general corpus of international law regulating development, human rights and environmental matters. This has major implications for the ways in which countries develop and for equitably sharing responsibilities.

Second, while the RtD applies in the first place to humans and groups, and the RtPSD to states, the combination of both in the PA requires us to look at these two sets of actors comprehensively.

Third, while the RtD has explicit domestic and international components of itself, this remains unclear for the RtPSD. However, if the latter is read in line with the four other principles of the UNFCCC, including the CDBRRC, this clearly gives the RtPSD an international dimension as well.

Fourth, thus far the RtD might be interpreted as relying heavily on economic growth helping to realize “development” and externalizing the environment in order to allow for the unhampered development of individual potential (Rajagopal 2013: 894; Ngang 2017; Arts 2017). However, in the context of collective human demand leading to crossing planetary boundaries, such development is now qualified and has to be limited if we want to stay within the Earth’s carrying capacity (e.g. Rockström et al. 2009). Hence, the RtD’s dependence on continued economic growth is no longer possible and needs to be revisited (Rajagopal 2013; Moellendorf 2011) in terms of sustainable development as agreed to in the SDGs (Arts and Tamo 2016: 238). As Fig. 1 shows, the SDGs and the PA require that development is both socially and ecologically inclusive and this may mean moving away from defining economic development in terms of growth to human well-being, from finding a centre-left point in the triangle on the left to a middle point in the triangle on the right (Gupta and Pouw 2017).

Fifth, while thus far the RtD has mainly been predicated upon the outdated model of linear growth, the RtPSD in the context of the 1.5 °C objective requires that the remaining carbon budget be divided among countries. The question is whether this is to be done equitably or not. We argue that a human rights approach requires both reducing emissions and enhancing adaptive capacity (UNOHCHR no date and 2015; Arts 2009). But more than that, when the RtPSD is read in line with the RtD and the SDGs as well as the CBDRRRC principle, this also requires reducing inequality between states and therefore an equitable sharing of the carbon budget (see Holz et al. (2017), this issue and our elaboration in 4).

Sixth, it is precisely the above reason, requiring an equitable sharing of the carbon budget, that has made industrialized countries reluctant to accept the RtPSD using linguistic tricks to minimize its impact. We argue that comma placement in the RtPSD in the UNFCCC is semantics. The fact is that states have to move away from development towards sustainable development and this can be framed in terms of the word “promoting”

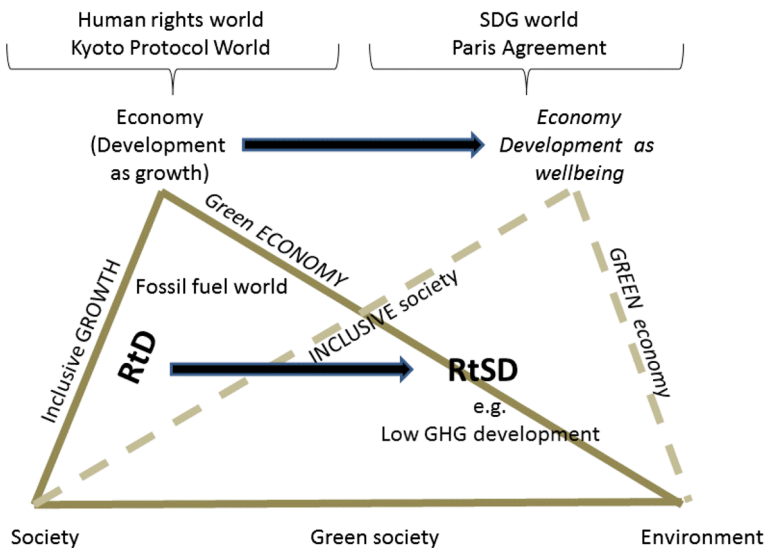


Fig. 1 Changing nature of the right to development in the post-SDG world. *Source:* Adapted from Gupta and Pouw 2017

as showing progressive implementation. While one could argue that under the CBDRRRC and RtD the industrialized countries should decarbonize faster than the DCs, they both have to move rapidly if they are to phase out CO₂ possibly as early as 2045. Here again the RtD and the RtPSD complement each other well and, when considered jointly, lead the way to new and more integrated approaches.

3.3 Towards sharing the responsibility of achieving 1.5 °C

Thus, in terms of their concrete implications, the RtD and the RtPSD are not quite so different in the post-2015 world. In the light of Agenda 2030 and the PA, the RtD's neglect of the environment and the RtPSD's inclusion of the environment represent an area in which the two will need to merge and require consequently a redefinition of development in general and a call for decarbonization in particular. The RtD's and the RtPSD's focus on domestic and international aspects are complementary. Although both rights ultimately strive to protect individual and peoples' rights, they also imply that the responsibilities of achieving 1.5 °C have to be equitably shared by all states. Such a just transition would require meeting certain criteria that we propose in Table 3. The criteria emerge from integrating the RtD and the RtPSD and are based on existing international law norms even though expressed strongest in soft law instruments. We have classified the criteria by focusing on mitigation, adaptation and development challenges as these are critical to climate policy and addressed them at both domestic and international level.

4 Applying this framework to the challenge of fossil fuel use

4.1 Introduction

Achieving the 1.5 °C goal reduces the carbon budget so much that it potentially severely hinders the development prospects of the developing world (Okereke and Coventry 2016). Although various reports have called for drastic emission reduction as early as 1990 (e.g. IPCC 1990), the USA has successfully delayed targets and timetables (Bodansky 1993; Biniiaz 2016) reducing the room for an equitable solution. It opposed targets in the UNFCCC, did not ratify the Kyoto Protocol and Doha Amendment and has announced its withdrawal from the PA (US Department of State 2017). Between 1990 and 2017, there has only been a period of 5 years (2008–2012) in which industrialized countries (excluding the USA and Canada) had a formal commitment to reducing their emissions. The Doha Amendment with targets for industrialized countries for 2012–2020 has yet to enter into force. Thus, we question whether an equitable sharing of responsibilities as envisaged in the UNFCCC has emerged (Gupta 2014). Since the window for taking action is closing rapidly, sharing the carbon budget has been undertaken through “bottom-up” commitments in the PA that do not yet add up to what is needed. So, while the UNFCCC (Art. 3(1)) stipulates that states have CBDRRRC and that “developed country Parties should take the lead thereof”, this has been insufficiently implemented. We now develop the RtD/RtPSD argument further in relation to oil/gas exploitation.

Table 3 Integrated Right to Sustainable Development elaborated in relation to climate change action

Integrated Right to Promote Sustainable Development		Domestic/ Internal		
		Development	Justification	
Integrated Right to Promote Sustainable Development	Domestic/ Internal	Development	Elaboration of the right in criteria Whether people/communities are allowed to effectively participate Whether people/communities gain as a consequence of the final decisions	RtD (UNGA) 1986 Endorois v. Kenya 2010
		Mitigation	Human Rights (HR) protection requires GHG mitigation. Mitigation related domestic target sharing should not violate HR (e.g. the rights to life, health, privacy, property, water, food, clean environment, self-determination). Mitigation measures (e.g. promoting biofuels and market mechanisms such as the CDM and REDD) should not violate human rights.	HR violations are not acceptable under international HR law; see also UN Guiding Principles on Business and Human Rights
		Adaptation	HR protection requires national adaptation policy. Adaptation strategies, measures and mechanisms as such should not violate HR. Likewise, shouldering adaptation costs should not trigger HR violations.	
	International/External	Development	The right to sovereignty over natural resources is subject to not causing harm to others	Trail Smelter case, Art. 2 Rio Declaration;
			Latecomers to development have a preferential RtD	UNGA RtD discussions; preamble UNFCCC
			The PA implicitly require decarbonisation of development	Art. 2(1)(a) by calling for sustainable development and a temperature target
			All countries have the RtPSD and the related responsibilities in relation to decarbonisation of development	See UNFCCC Art 3(4)
		Mitigation	HR protection and RtPSD require global emission target	The decision to adopt a long-term temperature target in the PA aims at preventing serious climate change and Art 2(1) also mentions 'in the context of sustainable development'
			Mitigation requires equitable sharing of the carbon budget in relation to 1.5°C in line with the CBDRRC principle in order not to compromise on the sustainable development prospects of states.	RtD and arguably RtPSD
	Adaptation	HR protection requires international funding mechanisms in line with the CBDRRC principle; and this must not inhibit the sustainable development prospects of states.	RtD, UNGA Human Right to Water and Sanitation, RtPSD	
		HR protection requires global adaptation strategy and finance especially to protect the most vulnerable countries (e.g. small island states) and groups (e.g. indigenous peoples and children).	UNHRC; Art 4(3) UNFCCC; Art. 13 UNFCCC; Articles on Loss and Damage PA	
		Adaptation strategy, measures and mechanisms should not violate the HR of people(s)	Since human rights are protected under human rights law as acknowledged in the Preamble of the PA	
		Extraterritorial HR might create an obligation to receive climate refugees.	Not yet addressed in current international law	

4.2 Sharing the carbon budget and the oil/gas prospects of aspiring producers

There is a total amount of permissible carbon emissions (carbon budget) consistent with the 1.5 °C norm. Since more than two-thirds of this budget has been utilized already, there is little room left to emit carbon and according to the Carbon Tracker¹ 80% of the oil/gas reserves will have to remain underground. Developing countries such as Kenya see themselves as prospective producers of such reserves and anticipate this to generate high economic growth (Bos and Gupta 2016). From an equity perspective, even China has a considerable share of the budget left, whether one takes 1950, 1990 or 2005 as a cut-off date (Dellink et al. 2009). However, the USA and Russia continue to use their reserves without restraint. This raises the question who should be allowed to use the remaining permissible oil/gas reserves. Is it the North and OPEC or other DCs? Should latecomers to development be denied the right to use fossil fuels? And how does this relate to the RtD integrated with the RtPSD? We answer this by applying the criteria presented in Table 3 to this problem in Table 4.

Thus, while we appreciate that DCs argue that it is now their turn to emit, the fact that fossil fuels are destined to be obsolete raises the issue of whether it is wise for prospective producers to engage in production in the near future as that might lock them into a fossil fuel economy and leave them eventually with stranded assets. Instead perhaps they should try and negotiate financial compensation for their stranded resources which would allow existing producers not to phase out fossil fuel extraction prematurely.

5 Overall conclusion

We have explored how international law, and in particular the RtD and the RtPSD, can contribute to determining what a “just” approach to achieving a 1.5 °C world entails. We have shown that, although the RtD and the RtPSD are different in terms of their evolution, scope, domestic and international dimensions, and the degree to which they may have transitioned from soft to hard law (see Tables 1, 2), in the era of the SDGs and the Paris Agreement the two rights sometimes complement each other (e.g. in terms of domestic and external dimensions) and sometimes merge with each other (e.g. in terms of including the environmental dimensions and questioning continued growth). We have elaborated on possible criteria that emerge from a merger of the RtD and RtPSD in relation to climate change action and how this could be applied in terms of sharing the carbon budget (see Tables 3, 4). This usefully complements other approaches to elaborate on sharing the carbon budget (see, for example, Holz et al. this issue).

In relation to the 1.5 °C target, we draw six conclusions. First, there is rhetorical commitment to a just approach in the Paris Agreement of 2015, as has been the case in the UNFCCC of 1992, as embodied in the RtPSD and the CBDRRRC principles. However, the historical records of action since 1992 show that, although DCs have been allowed to increase their emissions, deciding how to reduce emissions in a just manner has not been achieved thus far. Second, achieving the 1.5 °C objective requires a global phasing out of fossil fuels by 2045–2065. This will affect the development prospects of individuals and peoples under the RtD and of developing (and possibly industrialized) countries, if such prospects are seen in conventional terms. This situation thus requires a radical

¹ Carbon Tracker is “a not for profit financial think tank aimed at enabling a climate secure global energy market by aligning capital market actions with climate reality”. See <http://www.carbontracker.org/>.

Table 4 Applying the integrated Right to Promote Sustainable Development to fossil fuel exploitation

Integrated Right to Promote Sustainable Development	Domestic/ Internal	Elaboration of the right in relation to fossil fuel use		
		Development	Extracting reserves requires the explicit participation of local people; related benefits must be shared equitably, e.g. in terms of energy access and redistributing revenues; the externalities must be minimized or compensated as they lead to HR violations and local ecological destruction	
		Mitigation	HR protection requires GHG mitigation. Mitigation could be in tension with energy access in SDG 7 but can be resolved through emphasis on clean energy. Investment in long-term oil/gas dependent infrastructure for extraction, production, distribution and use builds on technology that is destined to be obsolete, so brings heavy costs that cannot be recovered.	
	International/External	Adaptation	When DCs enlarge fossil fuel dependence, they also become more responsible for the domestic adaptation policies and costs, which raises their domestic economic costs.	
		Development	While states have sovereignty over their own resources, there is no justification for causing harm to others. However, latecomers to development may claim a preferential right to use their resources. So there is a strong argument to allow DCs more of the carbon share.	
		Mitigation	Since HR protection requires a target of 1.5°C, the related carbon budget needs to be equitably shared between countries. However, it may be wiser for DCs not to invest in new fossil fuel technologies as these are destined to become obsolete. Instead, conversion of their fair share of the carbon budget into a budget for investing in renewables that can enable meeting SDG 7 should be preferred.	
		Adaptation	HR protection requires a global adaptation strategy and in particular one that supports DCs. This becomes more difficult if DCs also engage in large scale oil exploitation and thereby themselves exacerbate the problem.	

interpretation of the RtD. Hence, and third, this basically calls on all states to redefine their development paths. This is no longer a question of sharing the carbon cake—which is a zero sum game—but a question of identifying and developing along country specific decarbonized development paths. Fourth, the question whether DCs have the right to delay a phase-out is now moot for two reasons: (a) there is no time for them to really exploit fossil fuels and develop a fossil fuel-based economy because a HR approach requires a phase-out possibly as early as 2045 and (b) when one invests in fossil fuel, the risk of stranded assets is very high. Fifth, this does not imply that industrialized countries such as the USA and Canada have not arguably violated the RtD and RtPSD of the DCs. However, DCs would do better to explore how to develop sustainably than postpone action while demanding compensation for the continued use of fossil fuels in the North. Sixth, the space for sustainable climate change action is now increasingly being tested in domestic courts,

both in developing and industrialized countries. Case law mobilizing human rights arguments as well as other discourses can help to advance the substance of the integrated Right to Sustainable Development as suggested in this article.

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References

- Abbot, K., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.
- Adam, E. (2006). Preface to Kirchmeier, F. (2006). *The right to development: Where do we stand?* Dialogue on Globalization Occasional Papers No. 23. Geneva: Friedrich-Ebert-Stiftung.
- Arts, K. (1996). Implementing the right to development? An assessment of European Community development cooperation. In P. Baehr et al. (Eds.), *Human rights in developing countries year book 1996* (pp. 37–74). The Hague: Kluwer Law International/Nordic Human Rights Publications.
- Arts, K. (2009). A child rights perspective on climate change. In M. A. Mohamed Salih (Ed.), *Climate change and sustainable development: New challenges for poverty reduction* (pp. 79–93). Cheltenham: Edward Elgar.
- Arts, K. (2017). Inclusive sustainable development: a human rights perspective. *Current Opinion in Environmental Sustainability*. doi:10.1016/j.cosust.2017.02.001.
- Arts, K., & Tamo, A. (2016). The right to development in international law: New momentum 30 years down the line? *Netherlands International Law Review*. doi:10.1007/s40802-016-0066-x.
- Biniarz, S. (2016). Comma but differentiated responsibilities: Punctuation and 30 other ways negotiators have resolved issues in the international climate change regime. 6 *Michigan Journal of Environmental & Administrative Law*, 37. <http://repository.law.umich.edu/mjeal/vol6/iss1/2>. Accessed 30 May 2017.
- Bodansky, D. (1993). The united nations framework convention on climate change: A commentary. *Yale Journal of International Law*, 18, 451–588.
- Bodansky, D., Brunnée, J., & Rajamani, L. (2017). *International climate change law*. Oxford: Oxford University Press.
- Bos, K., & Gupta, J. (2016). Inclusive development, oil extraction and climate change: A multilevel analysis of Kenya. *International Journal of Sustainable Development and World Ecology*. doi:10.1080/13504509.2016.1162217.
- Carbon Tracker (2017). What is carbon tracker? *Carbon tracker initiative. Financial specialists making carbon investment risk real today in the capital Market*. N.p., n.d. <http://www.carbontracker.org/> Accessed May 30, 2017.
- Chowdhury, S. R., Denters, E., & de Waart, P. J. I. M. (Eds.). (1992). *The right to development in international law*. Dordrecht: Martinus Nijhoff Publishers.
- Dellink, R., den Elzen, M., Aiking, H., Bergsma, E., Berkhout, F., Dekker, T., et al. (2009). Sharing the burden of financing adaptation to climate change. *Global Environmental Change*, 19(4), 411–421.
- Endorois v. Kenya (2010). Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya, ACommHPR Communication 276/2003 (adopted May 2009, approved by the African Union January 2010) (Endorois case) para 22 and 297-8.
- Farand, C. (2017). Nine-year-old girl files lawsuit against Indian Government over failure to take ambitious climate action, *The Independent*, 1 April 2017. <http://www.independent.co.uk/environment/nine-ridhima-pandey-court-case-indian-government-climate-change-uttarakhand-a7661971.html>. Accessed 29 May 2017.
- French, (2005). *International law and policy of sustainable development*. Manchester: Manchester University Press.
- Garcia-Amador, F. V. (1990). *The emerging international law of development: A new dimension of international economic law*. New York: Oceana Publications.
- Gupta, J. (2010). Global governance: development cooperation. In J. Gupta & N. van de Grijp (Eds.), *Mainstreaming climate change in development cooperation: Theory, practice and implications for the European Union* (pp. 99–133). Cambridge: Cambridge University Press.
- Gupta, J. (2014). *The history of global climate governance*. Cambridge: Cambridge University Press.

- Gupta, J., & Pouw, N. (2017). Towards a transdisciplinary conceptualization of inclusive development. *Current Opinion in Environmental Sustainability*, 24, 96–103.
- Hare, B., Schaeffer, M., Serdeczny, P. and Schleussner, C-F, (2014). Is it possible to return warming to below 1.5 °C within this century?, Science background note on the World Bank report. *Turn down the heat: Confronting the new climate normal*. <http://climateanalytics.org/publications/2014/is-it-possible-to-return-warming-to-below-1-5c-within-this-century.html>. Accessed 28 May 2017.
- Higgins, R. (1994). *Problems and process: International law and how we use it*. Oxford: Clarendon Press.
- Holz, C., Athanasiou, T., and Kartha, S. (2017). Fairly sharing 1.5—National fair shares of a 1.5 °C-Compliant global mitigation effort, *International Environmental Agreements: Politics, Law and Economics*, this issue.
- IPCC. (1990). *Climate Change: The IPCC response strategies*. Geneva: IPCC Secretariat, UNEP and WMO.
- IPCC-3. (2014). *Climate change mitigation*. Cambridge: Cambridge University Press.
- Kirchmeier, F. (2006). *The right to development: Where do we stand?* Dialogue on Globalization Occasional Papers No. 23. Geneva, Friedrich-Ebert-Stiftung.
- Levin, K., Fransen, T. (2015). INSIDER: why are INDC studies reaching different temperature estimates? World Resources Institute. November 9. <http://www.wri.org/blog/2015/11/insider-why-areindc-studies-reaching-different-temperature-estimates> Accessed May 28, 2017.
- M'baye, K. (1972). Le droit au développement comme un droit de l'homme. *Revue des droits de l'homme*, 5, 503–534.
- Marks, S. (2004). The human right to development: Between rhetoric and reality. *Harvard Human Rights Journal*, 17, 137–168.
- Moellendorf, D. (2011). A right to sustainable development. *The Monist*, 94(3), 433–452.
- Ngang, C. C. (2017). Towards a right-to-development governance in Africa. *Journal of Human Rights*. doi:10.1080/14754835.2016.1274645.
- Obiora, L. A. (1996). Beyond the Rhetoric of a Right to Development. *Law Policy*, 18(2–3), 355–418.
- Okereke, C., & Coventry, P. (2016). Climate justice and the international regime: Before, during, and after Paris. *WIREs Climate Change*. doi:10.1002/wcc.419.
- Our Children's Trust (2017). Juliana V. US Climate Lawsuit. <https://www.ourchildrenstrust.org/us/federal-lawsuit/> Accessed July 10, 2017.
- PA (2015). Paris Agreement on Climate Change, FCCC/CP/2015/10/Add.1. http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf Accessed May 28, 2017.
- Piron, L.-H. (2002). *The right to development: A review of the current state of the debate*. London: Department of International Development.
- Rajagopal, B. (2013). 'Right to development and global governance: Old and new challenges twenty-five years'. *Human Rights Quarterly*, 35(4), 893–909.
- Rio Declaration (1992). Rio Declaration on Environment and Development. Report on the United Nations Conference on Environment and Development, 3-14 June 1992, UN doc. A/CONF.151/26/Rev.1 (Vols.I-III). Rio de Janeiro: UNCED.
- Rockström, J., et al. (2009). Planetary boundaries: Exploring the safe operating space for humanity. *Ecology and Society*, 14(2), 32–65.
- Rogelj, J., et al. (2015). Energy system transformations for limiting end-of-century warming to below 1.5C. *Nature Climate Change*. doi:10.1038/nclimate2572.
- Schleussner, C.-F., et al. (2016). Differential climate impacts for policy-Relevant limits to global warming: The case of 1.5 °C and 2 °C. *Earth System Dynamics*. doi:10.5194/esd-7-327-2016.
- Schrijver, N. (2008). *The evolution of sustainable development in international law: inception, meaning and status, pocketbooks of the Hague Academy of International Law*. Leiden/Boston: Martinus Nijhoff.
- Sengupta, A. (2003). Development co-operation and the right to development. In Morton Bergsmo (Ed.), *Human rights and criminal justice for the downtrodden: Essays in honour of Asbjørn Eide* (pp. 371–402). The Hague: Martinus Nijhoff Publishers.
- Sengupta, A., Negi, A., & Basu, M. (2005). *Reflections on the right to development*. New Delhi: Sage Publications India.
- Slinn, P. (1999). The international law of development: A millennium subject or a relic of the twentieth century? In W. Benedek, H. Isak, & R. Kicker (Eds.), *Development and developing international and European law* (pp. 299–318). Frankfurt: Peter Lang.
- Udombana, N. (2000). The third world and the right to development: Agenda for the next millennium. *Human Rights Quarterly*, 22(3), 753–787.
- UNEP (2014). *The emissions gap report 2014: A UNEP synthesis report*. Nairobi: UNEP.
- UNFCCC (1992). United Nations Framework Convention on Climate Change (UNFCCC), *International Legal Materials*, 31.

- UNGA (1969). *Declaration on Social Progress and Development*, Resolution 2542 (XXIV), December 11, 1969.
- UNGA (1986). *Declaration on the Right to Development*, Resolution A/RES/41/128, December 4, 1986.
- UNGA (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*, UN Doc. A/RES/70/1.
- UNOHCHR (2015). Key messages on human rights and climate change. http://www.ohchr.org/Documents/Issues/ClimateChange/KeyMessages_on_HR_CC.pdf Accessed July 7, 2017.
- UNOHCHR (no date). Human rights and the 2030 agenda for sustainable development. <http://www.ohchr.org/EN/Issues/MDG/Pages/The2030Agenda.aspx> Accessed May 29, 2017.
- Urgenda Foundation (2017). The Urgenda climate case against the Dutch government, <http://www.urgenda.nl/en/> Accessed July 10, 2017.
- US Department of State (2017). 'Communication regarding intent to withdraw from Paris agreement', Media note, Office of the spokesperson, Washington, DC. <https://www.state.gov/r/pa/prs/ps/2017/08/273050.htm> August 4, 2017.
- Uvin, P. (2007). From the right to development to the rights-based approach: How 'human rights' entered development. *Development in Practice*. doi:10.1080/09614520701469617.
- VerLoren van Themaat, P., & Schrijver, N. (1992). Principles and instruments for implementing the right to development within the European Community and in Lomé IV states. In S. Chowdhury et al. (Eds.), *The right to development in international law* (pp. 89–112). Dordrecht: Martinus Nijhoff Publishers.
- Villaroman, N. G. (2010). The right to development: Exploring the legal basis of a supernorm. *Florida Journal of International Law*, 22, 299–332.
- Villaroman, N. G. (2011). Rescuing a troubled concept: An alternative view of the right to development. *Netherlands Quarterly of Human Rights*, 29(1), 13–53.
- WCED. (1987). *Our common future: Brundtland report of the World Commission on Environment and Development*. Oxford: Oxford University Press.
- Windfuhr, M. (2000). Economic, social and cultural rights and development cooperation. In Frankovits A. and Earle, P. (eds.), *Working together: The human rights based approach to development cooperation*, Stockholm Workshop 16–19 October 2000, Sweden: SIDA. <http://www.hrca.org.au/wp-content/uploads/2008/05/part1.pdf> Accessed May 28, 2017.