
A Fundament and Two Pillars

The Concept of Sustainable Development 20 Years after the Brundtland Report

Gerd Winter

1 The Report

The World Commission on Environment and Development (WCED), also known as the “Brundtland Commission” after the name of its chair, presented its report on “Our Common Future” in 1987. The work of the Commission was intense and controversial, yet the final text was adopted unanimously.¹ Its central message was encapsulated in the term “sustainable development,” understood as the use of natural resources in a manner “that meets the needs of the present without compromising the ability of future generation to meet their own needs” (Report 2, 1²). The report ends with a dramatic appeal for urgency: “We are unanimous in our conviction that the security, well-being, and very survival of the planet depend on such changes, now” (12, 126).

Twenty years have since passed. This is an excellent opportunity to see which trajectory the concept of sustainability has taken over the years. In doing so, I concentrate on conceptualisations within the politico-legal field.³ My thesis is that the principle of sustainability has been padded out, drained of sense and, hence, disarmed. A renewed reading of the WCED Report suggests that the scope of the principle has to be defined more narrowly. Only if it can bite would it make sense to establish it as a principle or even rule of law. In its catch all shape it will rather be misused for greenwashing unsustainable practices.

2 The Three-pillar Concept of Sustainability

Since the publication of the WCED Report a three-pillar concept has emerged and been agreed upon by almost any official document addressing the issue.⁴ A major step in this direction was taken by the UN Conference on Environment and Development (UNCED) of 1992 with its bridging the gap between developmental needs and environmental protection. Many more international and national declarations have propagated the concept. For instance, the WTO Ministerial Declaration of Doha of 2001 states on the relationship between trade, development and environment:

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¹ For the genesis of the Report, see H.-Chr. Bugge's contribution in this volume.

² The first number refers to the relevant chapter, the second to the paragraph within a chapter of the WCED Report.

³ This implies that I focus on statements by publicly legitimized bodies and leave aside the excessive literature dealing with the topic. References to the WCED Report can be found in parentheses and refer to its chapters and paragraphs.

⁴ For an account of the semantic development of the concept see Cordonier Segger and Khalfan 2004, pp. 15-50; Voigt 2006.

We are convinced that the aims of upholding and safeguarding an open and non-discriminatory multilateral trading system, and acting for the protection of the environment and the promotion of sustainable development can and must be mutually supportive.⁵

The Johannesburg Plan of Implementation of 2002⁶ framed the principle as follows:

These efforts will also promote the integration of the three components of sustainable development — economic development, social development and environmental protection — as interdependent and mutually reinforcing pillars. Poverty eradication, changing unsustainable patterns of production and consumption and protecting and managing the natural resource base of economic and social development are overarching objectives of, and essential requirements for, sustainable development.

In the definition of the “German Council for Sustainable Development,” sustainability means

to equally consider environmental, social and economic aspects. Thus, future-oriented management means: We have to leave our children and grandchildren an intact ecological, social and economic system. The one cannot be achieved without the other!

In very different wordings, this concept has occasionally found its way into law. For instance, the preamble of the WTO agreement designs the following (somewhat intricate) scale:

Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to *raising standards of living*, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the *production of and trade in goods and services*, while allowing for the *optimal use of the world's resources* in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at *different levels of economic development*.
(My emphasis)

Another attempt to ponder the different interests is contained in Article 2 EC Treaty:

⁵ http://www.wto.org/english/thewto_e/minist_e/minor_e/mindecl_e.htm.

⁶ http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm.

The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in Articles 3 and 4, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of *employment* and of *social protection*, equality between men and women, sustainable and non-inflationary *growth*, a high degree of competitiveness and convergence of *economic performance*, a high level of protection and improvement of the quality of the *environment*, the raising of the standard of living and *quality of life*, and economic and social *cohesion* and solidarity among Member States. (My emphasis)

It can also be encountered in some EC secondary legislation, such as fisheries law:

The objective of the Common Fisheries Policy should therefore be to provide for sustainable exploitation of living aquatic resources and of aquaculture in the context of sustainable development, taking account of the *environmental, economic and social aspects* in a balanced manner.⁷ (My emphasis)

Although not always clearly cut, “sustainable development” in these statements is the generic term for a long number of single concerns which however can be assembled as three overall concerns: social welfare, economy, and environment.

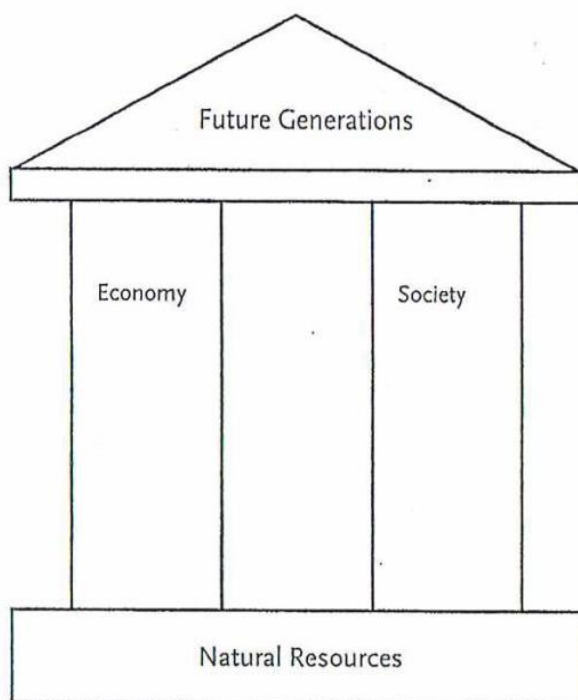
It is true, the three pillars concept has challenged environmentally indolent sectoral laws and policies to take account of environmental implications. However, “to add colour, texture and shading to our interpretation” of the law⁸ is a far cry from the existential connotation of “sustainability”. In the version of the Brundtland Commission and scholars who have strengthened this aspect in the aftermath,⁹ “sustainable development” means that socio-economic development remains “sustained,” i.e. bearable, supported by its basis, the biosphere.¹⁰ Thus the biosphere becomes of “fundamental” importance. Economy and society are the weaker partners, as the biosphere can exist without humans, but humans certainly cannot without the biosphere. Therefore, humans, while exploiting nature, have to respect its limitations, a need they are able to fulfill, as they possess the potential of reason and hence of pondering alternative patterns of behavior. The appropriate picture is therefore not three pillars but rather a fundament and two pillars standing on it.

⁷ Council Regulation (EC) No 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries, OJ L 358, p. 59.

⁸ See the often cited remark of the WTO Appellate Body in United States – Import Prohibition of Certain Shrimp and Shrimp Products of 6 November 1998, WTO Doc WT/DS58/AB/R, at No 153.

⁹ As, notably, Daly 1996. See for an overview Voigt 2006, pp. 59-88.

¹⁰ In German “sustainable” is translated by “nachhaltig” or “dauerhaft”. These words do not adequately reflect the bearing. Instead they stress the time dimension, i.e. that something (humans, the economy, etc.) shall persist or endure.



In contrast, in its three-pillar version the term "sustainable" loses its reference to this material basis and merely means that the three aspects shall coexist as equivalent entities. In the case of conflict, they shall be balanced, mutual consideration must be taken and compromise found.

However, as the biosphere (although objectively flexible to a certain extent) cannot reflect on itself and its relationship with humans, as it is reckless and uncompromising, the three-pillar concept leads easily to mock compromises. Sacrifices of nature, as commanded by

prevailing short term economic or social interests, may become destructive for economy and society in the long.

Let us take an example: Fishing quotas set annually by the EC Council are regularly larger than the reproduction rate of certain fish species. The Council usually justifies this by referring to the safeguard of jobs and food security. This argumentation is quite compatible with the three-pillar concept, because a compromise was drawn between human economy (the fisheries sector), social welfare (supply of fish to consumers) and natural resources (fish stock). However, it can also entail the collapse of entire fish populations. Such short-term compromise could avenge itself on humans in the long run as food supplies shrink and jobs are lost. A second example: In relation to third world development policies the three-pillar concept would permit action according to the slogan "economy first, environment later" if politics decide that economic development is more important. Water, soil, the atmosphere and biodiversity could fall prey to such priority choices. Nature will not mind, because it does not have a mind. But against all compromise it will simply refuse to provide the resources any further. In the long run, it will rob the two other pillars of developing countries of their fundament.

Advocates of the three pillar concept might react by stressing that far from striving for short term compromises it seeks long lasting arrangements, and would therefore not subscribe to short-term gains with long-term damages. They might propound that rules of respecting nature as a fundament must be developed. This is commendable, but then the concept merges into "strong sustainability," which will be discussed later.

3 The Concept of Future-proof Politics

At even greater distance to the notion of the biosphere's bearing capacity stands another increasingly common concept of sustainable development that can be termed the concept of "future-proof politics" (zukunftsfähige Politik).

Accordingly, sustainable development stands for the postulate that each and every policy has to be oriented towards protecting the needs of future generations. The German Federal Government has embraced this concept especially, and laid down ten management rules for sustainability, which it introduces as follows:

Every generation must solve its own problems rather than passing them on to the next generation. At the same time it must make provision for foreseeable future problems. This applies to conserving the natural resource base on which life depends, to economic development and to social cohesion and demographic change.¹¹

In view of future generations, for instance, not only must natural resources be preserved but the national debt kept under tight control, pension provisions shall be oriented towards personal responsibility, education improved, the family promoted as core socialization institution, etc.¹²

On the international level the Johannesburg Implementation Plan also contains formulations which take sustainability as a cover for all kinds of desirable policies:

Continue to promote open, equitable, rules-based, predictable and non-discriminatory multilateral trading and financial systems that benefit all countries in the pursuit of sustainable development.¹³

Fortunately, in its practical work the UN Commission on Sustainable Development, which was set up to monitor sustainable policies, does not embrace this limit-less concept but rather adopts the three pillar version.¹⁴

The EU Treaty too leaves environmental concerns behind in its use of the term sustainable development. In Art. 2 the first objective of the Union is stated as

¹¹ <http://www.bundesregierung.de/Content/DE/StatischeSeiten/Breg/ThemenAZ/nachhaltigkeit-2007-04-13-die-10-managementregeln-der-nachhaltigkeit.html>.

¹² German Federal Government, *Perspektiven für Deutschland: Unsere Strategie für eine nachhaltige Entwicklung*. (2002) <http://www.bundesregierung.de/Content/DE/StatischeSeiten/Breg/ThemenAZ/nachhaltigkeit-2006-07-27-die-nationale-nachhaltigkeitsstrategie.html>.

¹³ Chapter V No. 47 a).

¹⁴ See the Commission's website <http://www.environment.gov.au/commitments/uncsd/index.html>.

to promote economic and social progress and a high level of employment and to achieve balanced and sustainable development, in particular through the creation of an area without internal frontiers, through the strengthening of economic and social cohesion and through the establishment of economic and monetary union, ultimately including a single currency in accordance with the provisions of this Treaty.

It is characteristic of this variant of sustainability that it includes policy areas beyond environmental policies. Though just as in the three pillar concept (as well as, of course, in the WCED notion), the common framework is the concern for future generations, those definitions do not challenge the environmental dimension of policies.

A vague term such as sustainability can certainly be defined differently, but if it is solely and very generally oriented towards future-proofing of policies, it becomes a mere platitude. In the past, governments worried about the future of society as well. To capture this fact in the present with the term sustainability has the side effect of stripping it of its original sharpness, clarity and effectiveness. By contrast, the three-pillar concept at least aims at bridging society, economy and nature, by suggesting a balance between the three different interests. But by misjudging the actual larger weight of nature, it propagates the equivalence of all three pillars, which leads it to elude conceptual work giving nature its proper weight.

4 The WCED Version

It is exactly this work that has been carried out by the Brundtland Commission. Now let us engage with its substantial ideas, and those problems it left open.

In the report, the distinction surfaces again and again between, on the one hand, the material level of the exchange between society and nature and, on the other, the level of societal reflection about nature. I will deal with both successively.

4.1 The Level of Material Exchange Between Society and Nature

For the material level, the Commission sets up the following principles:

- in general, renewable resources like forests and fish stocks need not be depleted provided the rate of use is within the limits of regeneration and natural growth, (Report 2, 11);
- as for non-renewable resources, like fossil fuels and minerals, [...] the rate

of depletion should take into account the criticality of that resource, the availability of technologies for minimizing depletion, and the likelihood of substitutes being available, (Report 2, 12);

- the raw materials and energy of production processes are only partly converted to useful products. The rest comes out as wastes. Sustainable development requires that the adverse impacts on the quality of air, water, and other natural elements are minimized so as to sustain the ecosystem's overall integrity. (Report 2, 14)

In sum and somewhat more precisely, these so-called rules of strong sustainability say that renewable resources shall not be used beyond the reproduction rate, nonrenewable resources shall be managed economically and be replaced by renewable ones, and the absorption capacity of environmental media for pollutants shall not be exceeded. These rules have been and still are the subject of lively debate; two aspects of which shall be emphasized here.¹⁵

One concerns the replaceability of natural resources, or, according to the relevant discourse, natural capital. A position, termed as weak sustainability, stresses that natural capital can be replaced with real capital (in particular technology) and with financial capital (with which resources can be bought). The weakness of this viewpoint is obvious: Humans cannot reconstruct the biosphere by technical means; under social aspects indemnification is usually inferior; financial capital can lose its value and is of no use if there is nothing left to buy.¹⁶ Limited substitutions are, however, acceptable.¹⁷

The second aspect illuminates the Brundtland version's limiting of resources to the material basis which disregards the regulatory and cultural functions of nature. This is remedied by the idea of ecosystem-services as expounded in the Millennium Ecosystem Assessment.¹⁸ In this view besides material services – the “supporting services” such as nutrient cycling and soil formation and the “provisioning services” such as the supply of food and water – “regulatory services” such as climate, flood and disease regulation are revealed as well as “cultural services” such as the provisioning of aesthetic, spiritual, educational and recreational values.

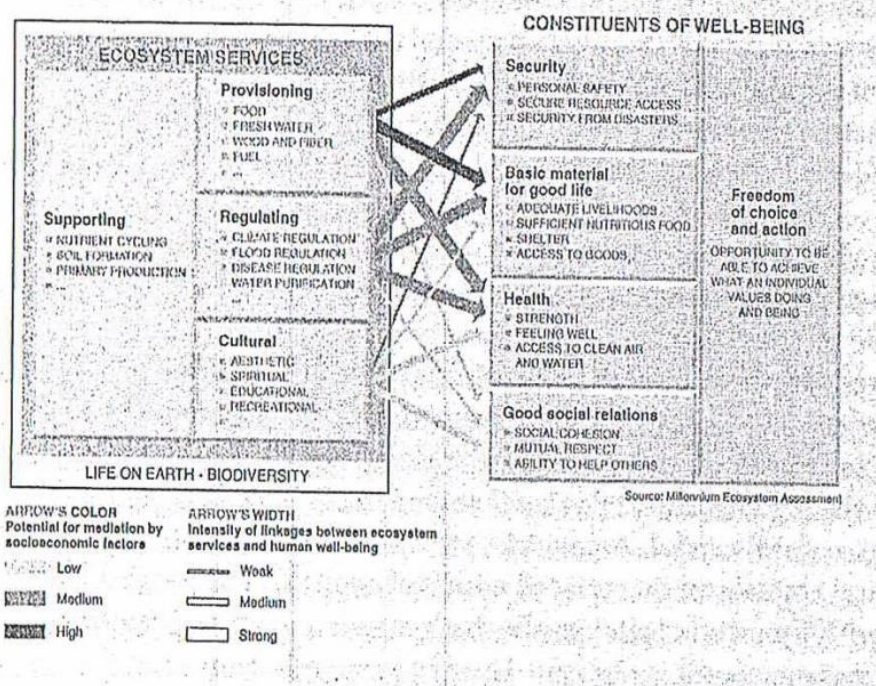
¹⁵ Cf. especially Rat von Sachverständigen für Umweltfragen 2002, ch. 1.3.1.1.

¹⁶ The example of the island Nauru is well known. Phosphate mining, the revenue of which was invested on the financial market, destroyed 80 percent of its land area. This guarantees inhabitants a relatively high income, but the remaining agricultural land surface does not feed them. Alcoholism and diabetes are rampant. The financial resources are not immune to capital market crises.

¹⁷ See in summary Ott/ Döhring, 2004, pp. 101-38.

¹⁸ Millennium Ecosystem Assessment 2005. See figure below.

Interdependencies between ecosystem-services and social welfare (Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: Synthesis*, Washington, DC: Island Press 2005, p. VI):



4.2 The Level of Societal Reflection and Regulation

Apart from the above outline of the reality of the exchange between nature and society, the Brundtland Commission sets up rules for the self-reflection of society and its relationship to the biosphere. It demands such reflections from enterprises, consumers and state institutions alike.

Reflecting their nature consumption for enterprises means to at least plumb win-win-chances. Thus, it is stated under the heading "produce more with less" (ch. 8):

Those companies that did respond innovatively are today often in the forefront of their industry. They have developed new products, new processes, and entire plants that use less water, energy, and other resources per unit of output and are hence more economic and competitive. (Report 12, 98)

Regarding consumers, the Commission urges them to reflect on their needs:

Perceived needs are socially and culturally determined, and sustainable development requires the promotion of values that encourage consumption standards that are within the bounds of the ecologically possible and to which all can reasonably aspire. (2, 5)

This is accompanied by a turn from quantitative to qualitative thinking:

Sustainability requires views of human needs and well-being that incorporate such non-economic variables as education and health enjoyed for their own sake, clean air and water, and the protection of natural beauty. (2, 39)

The Commission thus declines claims often heard later that there is no need for consumers to curb aspirations because more eco-efficient technology will make up for any growth in consumption. It does not elaborate on questions of consumer abstention but sets a ground for further discussion: that consumers will have to reduce their ambitions, but also that there is now more qualitative and thus better satisfaction to be won from confinement.

The Commission reminds state institutions in particular to reflect on their relation to nature:

The ability to anticipate and prevent environmental damage requires that the ecological dimensions of policy be considered at the same time as the economic, trade, energy, agricultural, and other dimensions. They should be considered on the same agendas and in the same national and international institutions. (Overview No. 38)

Regarding national accounting, it pushes for the comprehensive inclusion of nature consumption into cost calculation (2,36).

The process of economic development must be more soundly based upon the realities of the stock of capital that sustains it. This is rarely done in either developed or countries of the global South. For example, income from forestry operations is conventionally measured in terms of the value of timber and other products extracted, minus the costs of extraction. The costs of regenerating the forest are not taken into account, unless money is actually spent on such work. Thus figuring profits from logging rarely takes full account of the losses in future revenue incurred through degradation of the forest. Similar incomplete accounting occurs in the exploitation of other natural resources, especially in the case of resources that are not capitalized in enterprise or national accounts: Air, water, and soil. In all countries, rich or poor, economic development must take full account in its measurements of growth of the improvement or deterioration in the stock of natural resources. (2, 36)

Once more, by directing state institutions towards the integration principle the Commission touches a fundamental point. Integration in this sense is not just a general cheap claim that every concern must be reflected by any other concern. Rather, it challenges precisely those policies which have hitherto been regarded as environmentally neutral, as e.g. taxation, budget and lending policies, trans-

portation policies, product harmonization policies, company law, competition law, etc.

4.3 The Relationship Between Industrial and Developing Countries

The two-sided approach – the circularity of material flows and the integration at the level of reflection – applies, according to the Commission, not only to industrialized, but also to developing countries. This shows the way out of two dead ends, i.e. the overexploitation of environmental resources by poverty and hardship, obvious in the example of overgrazing, on the one hand, and inconsiderate growth in some transition countries, on the other hand. At the same time, a specific responsibility of the industrialized countries is suggested – an early trace of the principle of a common, yet differentiated responsibility, which today appears in treaties under international law and stands at the threshold to a new customary law rule. On the one hand, industrialized countries were to take special responsibility due to their high consumption of resources, on the other hand, they would have to support development through investment assistance, the opening of markets and the transfer of technology.

The Brundtland Report already laid out many substantial elements for a world agenda of sustainable development. In contrast, the three-pillar concept with its hollow orientation towards compromise and the concept of future-proof politics with its disintegration of the relation between people and nature represents a step backward.

However, the report evades two central problems, which are still not solved satisfyingly: The problem of scaling and the problem of juridification. I will discuss them in turn.

5 The Open Question of Scale

If it is to be determined, from what point on the regeneration or absorption capacity of a resource (or, in the terminology of the Millennium Assessment Report, the preservation of an ecosystem service) is under threat, the level of analysis comes into view. Should the individual be preserved, or the population, the species, the ecosystem or merely the biosphere as a general framework?

The Brundtland Report distinguishes between important and less important elements of nature. It advocates the absolute imperative of preserving species:

The loss of plant and animal species can greatly limit the options of future generations: so sustainable development requires the conservation of plant and animal species. (2, 13)

In contrast, geographically recurring units – individuals, populations and habitats – must perhaps yield to economic or social priorities:

Economic growth and development obviously involve changes in the physical ecosystems. Every ecosystem everywhere cannot be preserved intact. A forest may be depleted in one part of a watershed and extended elsewhere, which is not a bad thing if the exploitation has been planned and the effects on soil erosion rates, water regimes, and genetic losses have been taken into account. [...] most renewable resources are part of a complex and interlinked ecosystem, and maximum sustainable yield must be defined after taking into account system-wide effects of exploitation. (2, 11)

It remains unresolved, however, how the threshold for absolute protection should be defined, concerning the number and geographical distribution of individuals, populations and habitats. It is also unresolved under which conditions individual ecosystems, say a horn-beam forest, an estuary or heath should be preserved or allowed to be destroyed or turned into a different ecosystem.¹⁹ Unquestionably, there has to be a threshold, one which lies lower for individual than for all specimens of the habitat type, but what number of remaining individuals indicates the threat of extinction of the type? Still more complicated is where such a threshold is to be found for the maintenance of the regulatory and cultural services of nature.²⁰

Looking at criteria to mark thresholds, the traditional approach in relation to biodiversity has been the rarity of species or ecosystems as related to the past, the national territory of states and specified biogeographical regions. This is the approach taken by the EC Directives constituting the EU wide network of protected habitats called Natura 2000.²¹

Provided the relative value of species and habitats has been determined and scaled, this must be juxtaposed with criteria of allowable sacrifices for the sake of economic or social welfare goals. The economic or social benefit drawn from such sacrifices must itself be scaled in order to reflect the corresponding-difference of value of the species or habitat adversely affected. This means that jobs may be lost and industrial installations disallowed if the natural asset encroached upon is deemed the more valuable.

¹⁹ See further on this issue WBGU 1999.

²⁰ The German Scientific Advisory Committee on Global Environmental Change (WBGU) suggests that "from a systemic point of view, a categorical ban has to apply to all human interventions where global closed loops are demonstrably at risk", see WBGU 1999, p. 41 (p. 27 in the English version), yet without specifying any thresholds (see Ott/Döring 2004, p. 148).

²¹ See Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, Art. 1 lit. c) by which natural habitat types of Community interest are defined, and Annex III which lists the criteria of selection of sites.

In the EC Natura 2000 scheme, two steps are established of this kind: imperative reasons of overriding public interest, including those of a social or economic nature, as a first level, and overriding public interest confined to considerations relating to human health or public safety and to beneficial consequences for the environment as a second. In any case, less intrusive alternatives must be considered. If the sacrifice of natural assets proves to be unavoidable and legitimized by overriding interests, compensation measures must be taken in order to ensure the overall coherence of the Natura 2000 network. The overall structure of this approach is a double scale of corresponding interests of nature and society.

In Germany this structure of balancing nature and societal needs is extended to "normal," i.e. not endangered species and habitats. Starting from the judgment that in an industrialized country such as Germany any natural site is worth protecting, a balancing scheme was enacted which very much resembles the EC scheme. By starting with a priority of preserving any part of nature and thus shifting the burden of justification onto human encroachment, the German scheme, unlike the EC's, assumes that the present state of nature exploitation is so advanced as to effectively rule out more intrusion or at least enact compensation.

Taking the German and European schemes together, the overall balancing structure is as follows:

Concerning "normal" nature, the so-called German encroachment scheme ("Eingriffsregelung")²² requires detrimental activities ("Eingriffe"²³)

- 1) preferably to be avoided;
- 2) if unavoidable, to be compensated by restoration measures nearby,
- 3) or replaced by restoration measures at other sites; and
- 4) if neither avoidable nor restorable, the detrimental activity must be weighed against all claims on nature and landscape;
- 5) if the activity is found more important, monetary compensation has to be made which must be spent on nature conservation measures of undetermined kinds.

Concerning more valuable nature, EC law,²⁴ as transposed by MS law, sets up the following equation:

- 1) in Natura 2000 sites no adverse effect to the integrity of the site is allowed;
- 2) projects inducing such effects can however be permitted in exceptional cases:

²² Art. 19 of the German Federal Nature Conservation Act (BNatSchG).

²³ "Eingriffe" are in § 18 BNatSchG defined as "changes to the shape and appearance or utilization of land or changes to the groundwater table with its close correlations to inhabited soil compartments, that may significantly impair the ecosystem, or the natural scenery."

²⁴ Art. 6 paras 3-6 Directive 92/43/EEC.

- a) if rare species and habitat types are concerned, a project must rest in a compelling public interest that cannot be satisfied by alternative, less intervening measures. Given this case, compensation has to be provided for, which works to maintain the general coherence of the network Natura 2000;
- b) if prioritized threatened species and habitats are concerned, the requirements are insofar tighter as only health and environmental protection provide justification for a project, excluding social and economic public interests. The latter concerns may however be taken into consideration, if the Commission renders an affirmative opinion in this respect.

These scales can serve as an example of rules of sustainable development which ensure the preservation of basic functions of nature on the one side and allow for differentiated encroachments on the other. A more modern version would probably enrich these criteria by the regulatory functions of species and habitats within overarching ecosystems as well as by their cultural contributions.

Rules of this kind have also been developed for other ecosystem services. For instance quality objectives for air, water and soil pollution can be regarded as thresholds for the sustainable use of the capacity of air, water and soil to degrade substances. Still, they are less sophisticated than the habitat preservation rules because they do not involve the scaling of the relative importance of natural resources and the relationing with scales of importance of human uses. For many other services however, including, notably, the climate system, science based rules of sustainable use are still lacking in toto.²⁵

6 The Open Question of Juridification

6.1 Contributions of WCED

The WCED Report also leaves open how the concept of sustainable development should be turned from policy into binding law. A working group of environmental law experts of the Commission had unanimously agreed to a catalogue of fundamental individual rights and state obligations, including the right of the individual to appropriate environmental conditions:

All human beings have the fundamental right to an environment adequate for their health and well being (Report Annex I, Nr. 7)

²⁵ The climate gas reduction targets of the Kyoto Protocol, for instance, were a result of political bargaining rather than scientific study of what the climate system can absorb. See Oberthuer and Ott 1999, pp. 115-

as well as a variant of international responsibility, which moves the current state of the international common law towards the notion of precaution:

States shall take all reasonable precautionary measures to limit the risk when carrying out or permitting certain dangerous but beneficial activities and shall ensure that compensation is provided should substantial transboundary harm occur even when the activities were not known to be harmful at the time they were undertaken. (Report Annex I, Nr. 11)

The Commission could not agree on the catalogue of the working group. It nevertheless states generally that it is intolerable having the law drag behind actual environmental degradation:

National and international law has traditionally lagged behind events. Today, legal regimes are being rapidly outdistanced by the accelerating pace and expanding scale of impacts on the environmental base of development. Human laws must be reformulated to keep human activities in harmony with the unchanging and universal laws of nature. (12, 80)

The WCED stresses again the principle of integration as the guiding principle for state action and the necessity for better development co-operation. It advocates a juridification of the protection of the natural livelihood within and between states. The Commission leaves the methods for this enterprise, however, to individual legal cultures:

It is recommended that governments take appropriate steps to recognize these reciprocal rights and responsibilities. However, the wide variation in national legal systems and practices makes it impossible to propose an approach that would be valid everywhere. Some countries have amended their basic laws or constitution; others are considering the option of a special national law or charter setting out the rights and responsibilities of citizens and the state regarding environmental protection and sustainable development. Others may wish to consider the designation of a national council or public representative or 'ombudsman' to represent the interests and rights of present and future generations and act as an environmental watchdog, alerting governments and citizens to any emerging threats. (12, 84)

Thus the Commission, although calling for accelerated juridification, leaves it open whether states improve their constitutions or regular legislation, and whether they establish material requirements or procedural safeguards. Not mentioned is international law, although of course also on that level juridification must proceed.

6.2 The Terminology of Principles

Before looking at what progress has been made over the 20 years since the WCED's programmatic call, a methodological remark is appropriate.²⁶ Often, sustainable development is propagated as a principle of a given level of law. Whoever does so should explain what he or she means by "principle". Drawing on legal philosophical terminology I will understand by principle a general proposition "behind" more concrete rules. Principles help to interpret rules and fill lacunae left by rules. While rules are conclusive, principles are open for relativization by other opposing principles. Legal principles are law, not just policies, concepts or political ideals, which are sometimes also termed principles. Thus legally binding principles should be distinguished from political principles.

While (legally binding) principles are normally phrased in broad language the term should not be extended to completely indeterminate elements.²⁷ The very notion of bindingness presupposes that what is binding must be identifiable. Also in social life propositions, if too broadly phrased, do not create legitimate expectations and, from there, bindingness.²⁸ For instance, if a government says that it will take the will of the people seriously, nobody would take this as a binding commitment.

6.3 Levels and Areas of Juridification

Equipped with a range of terms we can now sketch the extent to which sustainable development has been assigned legal value by international and EU law.

As for international law some confusion results from the difference between general principles of law in the sense of Art. 38 para 1 lit c) ICJ-Statute and rules of treaty and customary law in the sense of Art. 38 para 1 lit a) and b) ICJ-Statute. Drawing on the philosophical terminology I suggest that all three sources contained in Art. 38 para 1 ICJ-Statute can be either principles or rules in the methodological sense. This means that treaty "rules" (lit. a)) and customary "law" (lit. b)) as well as "principles" (lit. c)) in the statutory sense can be principles or rules in the methodological sense. For instance, a treaty may well contain principles, as it may customary law. Likewise, a general principle of law may well be so conclusive that it has the methodological quality of a rule.

A further confusion stems from the common understanding that besides general principles of law in the sense of Art. 38 para 1 lit c) ICJ-Statute there

²⁶ See for further explanation Winter 2006, pp. 597-604.

²⁷ I cannot go into details here. See the related controversy between Paulus 2001, pp. 211-217, who postulates a core meaning of propositions, and Koskenniemi 2005, pp. 590-596 who defends the constructive potential of indeterminacy.

²⁸ Herberg 2007.

are general principles of international law. Some scholars juxtapose these two kinds of principles, thus acknowledging the existence of a fourth category of international law, general principles of international law.²⁹ Others categorize the general principles of international law under Art. 38 para 1 lit. c) ICJ-Statute.³⁰ It is not necessary to discuss this here. More important is the fact that many of the relevant scholars and, in fact, some jurisprudence of international courts, share the understanding that general principles of international law can emerge from mere opinion (be it based on legal conscience or political majority) rather than contract and custom.³¹

Taking this terminology as a basis I believe the proposition of sustainable development can neither be regarded as a principle of international customary law nor as a general principle of law or international law. The most widely accepted definition (the three pillars concept) is just too vague to qualify for legal bindingness.³² Its extreme indeterminacy is the major reason for why the three pillars concept cannot (and I believe should not) become a legal principle or rule, neither as treaty law, nor as customary law, nor as "general principle" in the sense of Art. 38 para 1 lit. c) ICJ-Statute. Even with this indeterminate meaning (or because of that?) the ICJ and other international jurisprudence have by now only spoken of a concept rather than a legal principle.³³ Maybe this is fortunate because as a principle it could too easily be misused to greenspeak any decision.

Can we say that the more precise meaning of sustainability – stark sustainability in the sense here proposed – is a legal principle or even a legal rule? Undoubtedly it is specific enough to qualify as a legal norm. Yet, it is not widely enough accepted to represent the general *opinio iuris* required for general principles of (international) law.

It is true that "sustainable development" as a term and/or as broken down into three or more incompletely balanced elements can be found in a number of treaties, such as the WTO treaty as well as the EU and EC treaties.³⁴ But even if contracted, such formulations are too wide to become binding law. The maximum legal value they are given is to serve as political guidance. Precisely this is the reason why the said treaties class sustainable development and its elements of balancing as an objective (WTO, EU) or task (EC), not as a rule or principle.³⁵

In contrast to the general notion, area specific formulations of the concept do have attained legal value. In that respect it is advisable to distinguish between two categories of content, precepts on the material exchange between society and nature and precepts on the reflection of society on nature.

²⁹ Cassese 2005, pp. 64 and 188.

³⁰ Maurmann 2008.

³¹ See Voigt 2006, pp. 211-217.

³² Contrastingly, Voigt 2006, pp. 217-249 sees the indeterminacy of the notion as an advantage which may accelerate its acceptance.

³³ *Gabcikovo-Nagymaros Case* [1997] ICJ Rep. 78, at No. 140. For the discussion of the judgment see *Cordonier Segger/Khalfan* 2004, pp. 45-50.

³⁴ See citations *supra* chapter 2.

³⁵ See Frenz and Unnerstall 1999, p. 176 ff.

1) *Material exchange between nature and society*

Sustainability gains more specific content if it is related to the use of certain resources rather than to the catch all term development. An important example of a more specific formula is the CBD. It proposes the term sustainable use of biodiversity which it defines as follows³⁶:

'Sustainable use' means *the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.* (My emphases)

It is true that the definition is still rather broad but at least it is more precise than unspecified mutual respect expressed in the three pillar concept. A bit more elaborate is the definition given by the OSPAR Convention³⁷:

Recognising that concerted action at national, regional and global levels is essential to prevent and eliminate marine pollution and to achieve sustainable management of the maritime area, that is, the management of human activities in such a manner that *the marine ecosystem will continue to sustain the legitimate uses of the sea* and will continue to meet the needs of present and *future generations.* (My emphases)

On the level of the EC treaty an example is provided by Article 174 EC which demands the "prudent and rational utilisation of natural resources".

While these formulations are of a medium level of generality and thus apt to be called principles, even more specific content can be found in sector related secondary EC law. For instance, the EC Regulation on organic production defines a sustainable management system for agriculture as a system that:

- ii) respects nature's systems and cycles and sustains and enhances the health of soil, water, plants and animals and the balance between them;
- iii) contributes to a high level of biological diversity;
- iv) makes responsible use of energy and the natural resources, such as water, soil, organic matter and air;
- v) respects high animal welfare standards and in particular meets animals' species-specific behavioural needs.³⁸

For the exploitation of living resources the already mentioned Fisheries Regulation contains a similarly specific precept which defines sustainable use as:

³⁶ Art. 2 CBD.

³⁷ OSPAR Convention, preamble 2nd consideration.

³⁸ Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labeling of organic products and repealing Regulation (EEC) No 2092/91, OJ L 189 p. 1, Art. 2(1).

the exploitation of a stock in such a way that the future exploitation of the stock will not be prejudiced and that it does not have a negative impact on the marine eco-systems.³⁹

An even more elaborate example is the set of scales on nature protection reconstructed above. Formulations of this specificity are conclusive enough to be regarded as rules rather than mere principles.

2) *Reflection of humans on nature*

In its reference to social reflection, the proposition of sustainability appears as an integration concept, i.e. all actors have to consider the natural resources dimension of every single one of their decisions. I submit that a proposition of environmental integration is sufficiently determinate to qualify for a legally binding principle or even rule provided there is *opinio iuris* among states or a contractual basis.

For lack of wide consensus among states the environmental integration concept is however not yet a general principle of (international) law. Nevertheless, as it is confined to a procedural requirement of decision-making it may more easily win support in the future for it does not bind the substance of decisions. Beyond political decision-making the concept may even be addressed to legal methodology in general. It has the potential of readjusting the very art of legal reasoning. This art has since long been characterized by the balancing of interests at stake in a legal dispute. But usually it had been inner-societal conflicting interests – the poor and the rich, the powerless and the powerful, the South and the North, etc. – that were to be balanced. The concept of environmental integration transcends this inner-societal focus by alerting legal reasoning to conflicts between man and nature. In this sense the WTO Appellate Body's quest "to add colour, texture and shade to our interpretation" may gain new significance.⁴⁰

In terms of international treaty law the integration concept does appear in a few cases. For instance, the CBD obliges the contracting parties to

integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

In more definite terms the concept of integration is codified in Article 6 EC:

Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development.

³⁹ Council Regulation (EC) 2371/2002 Art. 3(e).

⁴⁰ See above Fn 8.

In this formulation, integration is not only a programmatic clause but legally binding.⁴¹ It has the rather procedural meaning, which should nevertheless not be underestimated, that each political measure has to give reasons on whether it damages natural resources and whether this could be avoided. As such it is conclusive and cannot be pondered against other competing concerns. Therefore, it is not only a principle but even a rule having the power to override secondary law infringing it.

7 Conclusion

The debate about sustainable development has so often no impact, because it overburdens the term of sustainable development. It strives to cover all elements of good policy, and is thereby at best overtaxed and at worst abused. An indeterminate definition is also unsuitable for the juridification of the concept. Sustainable development can only be cast into law rules if its scope and content is confined and at the same time made more ambitious. Although this may complicate the process of juridification the resulting legal principles and rules will certainly be more effective. The concept should be focused on the exchange between humans and nature, and it should represent the literal meaning of "sustainable", i.e. a humanity bearable for the biosphere. The adequate metaphor is therefore a fundament and two pillars rather than the common three pillars. For the balancing of the relationship between mankind and nature, the WCED Report has already laid down important considerations pointing into the direction of stark sustainability and environmental reflexivity, which is why it is very worthwhile to be revisited. But still there remains a plethora of points to clarify, like, in particular, the relationing of weights of nature preservation and human uses on different scales. In the course of such concretizations, the construction of law can advance.

⁴¹ Krämer 2007, 1-27.

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