علـوم محـیـطی سال هشتم، شماره دوم، زمستان ۱۳۸۹
ENVIRONMENTAL SCIENCES Vol.8, No.2 , Winter 2011
11-28

Achieving Justice in Global Environmental Protection

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Abstract

This article is primarily concerned with the question of how far environmental justice is being and can be achieved within the international legal system. Justice has been conceived since ancient times as comprising not only norms, rules and the institutions by which these are implemented, but also the fundamental principles of fairness and equity both in the implementation of rules (so that one group in society is not unfairly advantaged or disadvantaged) as well as in the rules themselves. Hence, ensuring international environmental justice is not simply a matter of developing and implementing effective standards for the regulation of activities that damage the environment and other means of environmental protection and conservation. It is also important to recognise that the implementation of rules of law may not in itself represent a just outcome and that considerations of equity and fairness then come into play as, for example, in the discretion given to the International Court of Justice under its Statute to decide cases *ex aequo et bono*. Nationally, governments should seek to ensure that not only do the laws and rules governing the protection of the environment and related matters deal with these questions in a manner that ensures justice equally for all members of society (as far as this is possible) but also that their implementation is fair. On the international level, it is vital that the asymmetry of economic and political power that is the reality of the international community is not expressed as serious injustice with relation to access to, exploitation or enjoyment of environmental resources. As an illustrative case, the question of 'biopiracy' of traditional botanical knowledge is considered. This case demonstrates that the existing intellectual property and international trade rules unfairly advantage large corporations over local and indigenous communities and that the system established within the framework of the World Trade Organization and its main Agreements has exacerbated this imbalance of interests.

Keywords: Justice, Equity, Environmental protection and conservation, International environmental law, Biopiracy.

کارکرد عدالت در حفاظت جهانی محیط زیست

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چکیده

هدف اصلی این مقاله پرداختن به نقش و اهمیت اعمال عدالت در حفاظت از محیط زیست بین‌المللی است، اگرچه به اعمال این مساله در سطح دولت و جامعه نیز اشاره خواهد شد.به عنوان مقدمه تفاسیری از عدالت از آتن باستان به علاوه تفاسیری نوین‌تر معرفی می‌گردند.این تفاسیر نشان می‌دهند که عدالت نه تنها در برگیرنده‌ی نرم‌ها ،قواعد و نهادهایی که آنها به واسطه‌شان اجرا می‌شوند پنداشته می گردد، بلکه هر دو اصل بنیادین انصاف و برابر نگری را نیز در اجرای قواعد به نحوی که یک گروه در جامعه به طور غیر منصفانه بهره‌مند یا محروم نگردد در برمی‌گیرد.در سطح بین‌المللی جامعه مورد نظر، جامعه بین‌المللی تشکیل شده از دولت‌های دارای حاکمیت مستقل است.اگر این دیدگاه از عدالت را در سطح بین‌الملل اعمال کنیم ، می‌بینیم که تضمین عدالت محیط زیستی بین‌المللی صرفا مساله‌ی توسعه‌ی استانداردهای بین‌المللی برای حفاظت از محیط زیست نیست.اجرای قواعد و مقررات ممکن است نتایج عادلانه‌ای به دست ندهند و در این هنگام است که ملاحظات انصاف و برابر نگری حائز اهمیت می‌شوند.در سطح ملی، دولت‌ها بایستی تضمین کنند که قوانین حاکم بر حفاظت از محیط زیست به گونه‌ای اعمال شود که عدالت به طور مساوی برای همه اعضای جامعه تضمین گرددو اجرای آنها منصفانه باشد.در سطح بین‌الملل، واقعیات سیاسی، اقتصادی و اکولوژیک به این معنی است که دستیابی به نظم بین‌المللی مبتنی بر انصاف و برابر نگری در رابطه با محیط زیست آسان نیست و تلاش‌های جامعه بین‌الملل برای حل این مساله بررسی می‌شوند.

کلمات کلیدی: عـدالت، انصـاف، حفاظـت ار محـیط زیسـت، حقـوق بین‌الملل، سرقتزیستی

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Introduction

Some Views of Justice

Justice in Ancient Greece – Solon and Aristotle

Justice is by no means a new idea and has venerable historical roots. In ancient Athens, the great social and legal reformer Solon promulgated his celebrated law code in 597 BCE in which he viewed the achievement of justice as a key element in his aims (Todd, 1993). A particularly forward-looking element of Solon's thinking was that he regarded good order (*eunomia)* in society as being founded on social justice and that such a social order is to be derived from human not divine intervention and action.[1] This positivist view of social justice served as the foundation for Solon's social and legal reforms and was, for its time, a revolutionary notion that encompassed the idea of fairness in the treatment of ordinary people.

If we look at Aristotle, writing 250 years later, we find an understanding of justice that places greater emphasis on the importance of equality. In his *Politics*,[2] for example, Aristotle notes that "it appears that the just is equal, and so it is, but not for all persons only those that are equal" (Aristotle trans: T.A. Sinclair, 1977). Justice, then, is viewed as the fair distribution of political power and privilege. However, it is to our eyes a rather qualified view of justice that is based on the following assumption: if A is superior to B, then A is entitled to a larger share of the above. Although this highlights the centrality of equality, it does accept a degree of social and political inequality unacceptable to the modern mind.

If, then, we take Solon's and Aristotle's understandings of justice together (taking account at the same time of the differences of social and political organisation and aspiration of the time) we can identify two elements that remain essential to modern conceptions of justice – fairness and equality.

Modern Conceptions of Justice

The Oxford Law Dictionary defines justice as: "a moral idea that the law seeks to uphold in the protection of rights and the punishment of wrongs." This statement brings out the essentially moral character of justice as a guiding principle and the arena in which it operates, i.e. the ascription and guarantee of rights and the punishment of wrongs. As the previous discussion has shown, justice is concerned with the application of the notions of equality and fairness in the arena in which the law operates.

A hugely influential modern view of justice is that expressed by Rawls (1971), who introduces the idea of justice as a "social contract." In this, the guiding idea is that the principles of justice that underpin the basic structure of a society are the object of the original 'contract' or agreement upon which it is founded. Importantly, it should not be seen as a contract to establish a particular form of government; rather, this idea of a contract addresses the 'plurality' of a situation in which the division of the advantages from social co-operation must be divided according to principles acceptable to all parties. According to Rawls, these principles of justice are those that free and rational persons, concerned to further their own interest, would accept as defining the fundamental terms of their association when starting from an initial position of equality. The principles of justice thus derived specify (a) the kinds of social co-operation to be entered into and (b) the form of government to be established. According to Twining (2009: 86), many scholars had hoped that Rawls would provide a reconceptualization of his basic ideas that would extend them to the international and transnational sphere and, hence, develop a "robust theory of global justice". Although he did not do so, Rawls' core ideas for a practical theory aimed at providing a criterion of justice for basic institutions can be applied to the global system with a few adjustments (see also: Pogge, 2001). Hence, if we regard international environmental justice as a kind of metaphor for the above model, these principles should specify how States cooperate to protect and distribute the environment and its resources and the rules and institutions to be established for this end.

Here, then, we have a very different understanding of the role of equality in justice from that of Aristotle. In Rawls' view, the initially equal situation of the free and rational persons when entering into their social contract is a prerequisite for the existence of principles of justice. However, it should be note that this initial position of equality is a purely hypothetical construct that allows for a certain conception of justice to develop since no-one may know his or her status or advantages. Since all are therefore situated equally, no-one is in a position to design principles in favour of their own conditions. This position is one that we can see reflected in international law in the principle that all States as members of the international community are sovereign and equal, irrespective of their individual situations as regards the economy, resources, their environment, human resources etc. (Malanczuk, 1997:3; Kingsbury, 1998)

These principles, thus derived, are therefore based on fairness given that the parties in the initial situation are both rational and mutually disinterested. (Rawls, 1971)[3] What, then, are the principles of justice derived in this manner? First, they involve equality in the assignment of basic rights and duties. Second, social and economic inequalities can only be just if they result in compensating benefits for everyone, especially the least advantaged. Hence, there is no inherent injustice in greater benefits earned by a few as long as the situation of the less fortunate is thereby improved. This latter point is very relevant to the application of justice in the context of international environmental law since it is reflected in the struggle to reconcile the needs for economic development and environmental protection[4] (as expressed in the notion of sustainable development).

In a more recent work, Sen (2009) proposes a theory of justice that seeks to develop what he calls a 'realization-focused' approach as opposed to the 'transcendental institutionalism' favoured by Rawls and most other modern writers on justice.[5] Such an approach is concerned with social realizations resulting from actual institutions, behaviour and other influences rather than the ideal or perfectly just institutions of the latter theorists. Hence, rather than concentrating on the notion of the 'just society', Sen seeks to investigate realization-based comparisons that focus on the advancement and retreat of justice. This leads him to ask "how would justice be advanced?" rather than the transcendental-institutional question of "what would be perfectly just institutions?" This shifts the focus from institutions and rules to actual realizations in the societies involved and, as such, might seem of less relevance to a discussion of legal regulation and the related institutions. Since achieving environmental justice is the central issue here, it is an approach that can be of relevance to the discussion. As Sen asks:

> The question to ask in this context is whether the analysis of justice might be so confined to getting the basic institutions and general rules right? Should we not also have to examine what emerges in that society, including the kind of lives that people actually lead, given the institutions and rules …? (Page 10)

Informed by such a question, Sen later addresses directly the issue of sustainable development and environmental protection (at pp.248 *et seq.*). Here, he rejects the view of the environment as simply the 'state of nature' (i.e. the forest cover, the number and diversity of living species etc.) which would lead to the view that the best approach is to interfere with it as little as possible.[6] Rather, he takes the position that the value of the environment also consists of the opportunities it affords to people and that "the impact of the environment on human lives must be among the principal considerations in assessing the value of the environment" which then leads us to a notion of environmental sustainability that should be defined "in terms of the preservation and enhancement of the quality of human life" (Sen, 2009). Here, then, he espouses an unashamedly anthropocentric view of the environment as does the Rio Declaration (UNCED, 1992) discussed below. In relation to the role of development vis-à-vis the environment (the crux of sustainable development as an idea), Sen (at 249)

acknowledges that human activities related to the development process may well be environmentally destructive but asserts also that, "seeing development in terms of increasing the effective freedom of human beings brings the constructive agency of people engaged in environment-friendly activities directly within the domain of environment-friendly achievements." From this position, Sen rejects the restriction of the notion of sustainability to that of living standards[7] to the broader conception of 'sustainable freedom' that encompasses the preservation and expansion (where possible) of the substantive freedoms and capabilities of people today without compromising the capability of future generations to have similar – or greater - freedom. Such an expanded conception is one also that would seem closer to issues of justice, especially if we follow the realization-based comparative approach he espouses.

As Twining (2009) notes, the extent to which the canonical jurists seem to be anthropocentric (as opposed to taking a more eco-centric viewpoint) is quite striking. In Rawls' theory, justice as fairness is a virtue of social institutions, meaning human institutions. Similarly, Dworkin's (1986) basic notion of 'equal concern and respect' relates to human beings only. Moreover, concern for the interests of future generations is generally taken to mean *future human beings*. However, he asserts that these jurists do not necessarily exclude all eco-centric reasons and that Rawls (1971: 512), for example, acknowledges that we have moral duties in respect of animals and nature; however, he does not include these within his theory of justice as fairness as a political conception since it applies only to those who have a moral personality.

In the following section, I will consider what principles of justice can be identified in recent international environmental law- and policy-making.

Discussion

How Justice is Expressed in International Environmental Law

The Importance of equity

In this section, I am primarily concerned with examining recent international treaties and policy documents with a view to identifying principles and norms that can be seen to derive from the above conception of justice. However, before entering into that discussion, it is useful to remind ourselves of the role played by the notion of 'equity' (Akehurst, 1976) that allows the international community to take account of considerations of justice and fairness in the creation of a rule of international law and in the operation and application of such a rule (Sands, 2003). According to Shelton (2009: 58-9), one meaning of international justice equates it with equity in the sense of fairness, such as the equitable utilization of shared resources. Moreover, "environmental justice may be invoked in this context to mean procedural equity through decision-making based on relevant criteria with the participation of those affected." Equity, in this form, she equates with distributive justice (Shelton, 2009).[8]

Equity may also be a basis on which the International Court of Justice (ICJ) considers cases concerning the environment and its resources. Article 38 of the Statute of the International Court of Justice sets out the sources of law that the Court may use in deciding case, the main ones of which are treaty law, custom and general principles of law.[9] In the *North Sea Continental Shelf* cases, the Court referred to the concept of equity as a "direct emanation of the idea of justice". Equity was, according to the Court, a "general principle directly applicable as law" (hence, falling within one of the prescribed sources of law) that the Court should apply in order to "balance up the various considerations which it regards as relevant in order to produce an equitable result" (ICJ Reports (1969) 7:18). The ICJ has affirmed the status of equitable utilization as a fundamental and just norm in the field of shared natural resources in the *Gabčikovo–Nagymaros* Case.[10] This idea of equity is commonly employed in international environmental treaties and serves the convenient purpose of leaving the exact extent of rights and obligations expressed therein to be decided at a later time (often through guidelines set

out by a treaty-dependent intergovernmental or scientific committee on the basis of scientific data). This gives the treaty regime a much-needed flexibility in areas in which our state of knowledge and even the state of the environment itself is in constant flux. For example, Parties to the Climate Change Convention (see below) agree to be guided in their actions "on the basis of equity" and Annex I Parties will take account of the need for "equitable and appropriate contributions" by them for achieving the aims of the Convention.[11] This notion of equitability may be applied in a treaty to the distribution of a shared resource (such as fishes or inland freshwater)[12] or to the representation of Parties as members of committees established by the Convention.[13] As the ICJ ruling in the *Gabčikovo-Nagyamoros* case[14] suggests, the principle of equity will become increasingly important in relation to the allocation of shared resources of the environment. With regard to the central role played by this notion of equity/equitability in ensuring environmental justice, it is also worth noting here that this case is also significant for having been the first time that the Court made reference to the importance of sustainable development as a guiding consideration in environmental cases (Lowe, 2000). In paragraph 141 of its judgment in this case, the Court referred to the creation of "new norms and standards" in international law and noted that: "[t]his need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development."

In his examination of the question, Nollkaemper (2009: 257) has identified four conceptions of environmental justice: distributive justice, justice towards the environment (i.e. justice between people and the environment as such), environmental justice as intergenerational justice and environmental justice as social justice (primarily concerned with the State's domestic sphere). As does Shelton, he regards most environmental justice to be distributive justice in which environmental burdens and benefits and how they should be distributed are considered. Hence, global environmental justice refers to the *global* distribution of environmental burdens and benefits (at 259). With regard to environmental justice as intergenerational justice, he see this as being a kind of variant on distributive justice that focuses on distribution between different generations rather than distribution within the present generations (whether groups, peoples or states) (at 262). In terms of its complicated relationship with the related notions of sustainable development, equity and development itself, Nollkaemper (2009: 267) asserts that "environmental justice can be seen as one largely overlapping concept, working in the same direction" (see also: Dobson, 1999).

International 'soft law' instruments

For the purposes of this article, I include the Declaration on the Right to Development adopted in 1986 by the UN General Assembly since achieving justice with regard to enjoying the benefits of development (both on an international and national level) is an integral part of the theory of sustainable development. Indeed, in relation to the notion of sustainable development as articulated in the Rio Declaration (UNCED, 1992), Principle 3 refers to the need to find a means to meet "equitably" the developmental and environmental needs of both present and future generations. I do not wish to enter here into the discussion on ensuring environmental justice for future generations and the theoretical debate surrounding this which would merit a separate article in itself (see: Brown Weiss, 1989 & 1990; D'Amato, C., 1990; Lowe, 1999:26-29). Rather, it is relevant that in one of the two central principles[15] of the Rio Declaration, the primary international statement of sustainable development, we find explicit mention of the idea of equity.

Principle 3 also refers directly to the "right to development" which has its main expression in the 1986 UN Declaration which sets out in Article 8(1)[16] the national dimension of this right by requiring States

to "ensure, *inter alia*, equality of opportunity for all in their access to basics resources, education, health services, food, housing, employment and the fair distribution of income." Here we see an element that is essential to environmental justice in the national context, i.e. that all citizens, irrespective of their wealth, colour or other specific attributes should enjoy equally the environmental resources of the country and the equal protection of the law with regard to those resources. Hence, for example, if the law is to be applied to the location of polluting industries, poor and marginalised communities should not bear a disproportionate environmental burden of such decisions. Article 3(3) of the same Declaration then addresses the international dimension of the right to development and places on States the duty to promote "a new international economic order based on sovereign equality, interdependence, mutual interest and co-operation among all States."[17] This approach is mirrored in Principle 12 of the Rio Declaration (1992) which gives it a more environmentally-oriented spin:

> States shall co-operate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation.

In this statement, then, we can see that the application of environmental justice to the international plane includes creating a fair and just international economic system that allows all countries to enjoy economic growth and sustainable development in order better to protect their environment and prevent its degradation. This linkage between a just international economic order in which, for example, the trade regime is not weighted in favour of the developed world,[18] must be seen as central to the achievement of international environmental justice since the ability of States both to enjoy economic growth and protect their environment and its resources is deeply linked with this (see: Nijar, 2000). It is therefore by no means accidental that the notion of sustainable development as expressed in the Rio Declaration – now understood to be a fundamental approach to any international environmental policy- and law-making – contains such a strong emphasis on the right to development and international social and economic justice.[19] Furthermore, the need to ensure justice in relation to the international environmental standards required of States is also recognised, in view of the fact that "standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries" (Principle 11). This is important in such cases, for example, where a (usually developed) country may seek to impose import restrictions on a product from another State that applies les stringent environmental standards in its production process. This is also an important safeguard to prevent the imposition of unfair economic sanctions for environmental reasons on developing States with regard to standards that they are unable to achieve because of their level of under-development (Bianchi, 2001; Garcia, 2003; Sadeler, 2009).

A related approach taken in the Rio Declaration is that developing countries (especially the least developed and most vulnerable) enjoy a "special situation and needs" which require them to be given "special priority" with regard to environmental protection and development.[20] This is essentially the recognition that without reaching a sufficient level of development, it is hard if not impossible for a country to put into practice the vast range of international standards for environmental protection. Moreover, there is a deep issue of justice in this question given that the industrialised States of the world have reached to their current levels of development through the historical exploitation of the world's natural resources (often located within the territory of other States) and the pollution of the planet in this process. When we understand that as much as 90% of the historic CO2 emissions into the Earth's atmosphere was created by these few industrialised States of the 'North' over the last 150-200 years (Shiva, 1999:53), it is hard to argue

from a position of fairness and equity that the world's less developed and developing States should forgo their opportunity to enjoy economic growth and development because of the environmental disaster we face today.

In response to this asymmetry in responsibility for and ability to respond to global environmental damage, a principle has evolved in international environmental law known as the principle of "common but differentiated responsibility."[21] This principle recognises the common responsibility of all States to protect the global environment but, at the same time, environmental standards that may be differentiated on various grounds, including special needs and circumstances as well as the aforementioned reasons (Sands, 2003:285-9). It therefore accepts that developing countries have not contributed to the same degree as developed ones in global environmental pollution and degradation and that they also face greater challenges in implementing new international environmental standards in view of their lower levels of economic development. This principle, therefore, allows for a differentiated approach to the implementation of such standards between developed and developing States. In essence, then, we see here that the requirements of justice – in terms of equal access to economic development and a historical lack of fairness and equity in the international system – have overridden other, more traditional approaches to result in this new principle.

Apart from accepting the different pace and even degree with which developing countries may implement the obligations they have accepted under certain international treaties (where this is made explicit in the treaty text), the aforementioned principle is also significant for the requirement that arrangements be made in treaties for the transfer of technologies from (usually) more to less industrialised State to help them to achieve new environmental standards (Stone, 2004). However, the concept of 'common but differentiated responsibilities' (CBDR), is not without its critics. Brunnée (2009: 317) argues that the concept plays an important role in framing a debate *about* global climate justice; but it does not currently constitute a global principle *of* justice. Moreover, she states that "at the present time, the concept of CBDR raises at least as many questions about climate justice as it answers". This is because, although it represents the nucleus of an emerging framework for global burden sharing, "an internationally shared understanding of how and why mitigation and adaptation burdens should be allocated has yet to solidify" (at 327). Shelton (2009: 67) takes a more positive view, noting that "the 'common but differentiated responsibilities' principle provides a corrective justice basis for obliging the developed world to pay for past harms as well as present and future harms." Examples of both of these aspects of the principle will be seen below in relation to international treaties discussed.

A particular group of people for whom questions of justice and equity with regard to environmental protection have been at the forefront of their demands are indigenous people. Principle 22 of the Rio Declaration recognises that indigenous people and their communities and other local communities play a vital role in environmental management because of their special knowledge and traditional practices. For this reason, States should recognise their identity and culture, ensure their interests are met and enable their effective participation in the achievement of sustainable development. Again, all of this implies treating these frequently marginalised and forcibly assimilated sections of their population (Anaya, 1996) with fairness and justice as regards economic, social, cultural and environmental matters. In many cases, the violation of their environmental rights and the ensuing lack of environmental justice relate to the treatment of the natural resources of their traditional lands. This can have a devastating effect on indigenous communities that not only rely on environmental resources for their subsistence but also for the perpetuation of their traditional way of life and, even, their identity as a community.

These two inter-related factors are well-recognised in the Preamble to the UN Declaration on the Rights of Indigenous Peoples (2007)[22] as follows:

> *Convinced* that control by indigenous peoples over developments affecting them and their lands, territories and resources will enable them to maintain and strengthen their institutions, cultures and traditions …
>
> *Recognizing* that respect for indigenous knowledge, cultures and traditional practices contributes to sustainable and equitable development and proper management of the environment,

This position is further supported in later articles of this Convention that deal with indigenous peoples' rights to the ownership and control of their traditional lands (Articles 25-28) and, in Article 29(1), the clear statement that "Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources." In a decision taken by the Indian Environment Minister in late August 2010, he ruled that a British-based consortium would not be permitted to mine for bauxite in the ancestral lands of the Dongria Kondh, a tribal people of the Nyamgiri Hills in Orissa State in eastern India. The Minister acknowledged that this aluminium project would have been a "very serious violation" of environmental protection laws (Bunscombe and Dewar, 2010). This decision represented an important victory for this indigenous Indian tribe for whom the bauxite-rich mountain is their god, a living deity that provided them with everything they required to sustain their lives. Unfortunately, such decisions in favour of indigenous and tribal peoples with regard to applying environmental protection laws equally to them and their lands are not the norm. In many cases, such peoples and other marginalised and vulnerable groups in society face a disproportionate degree of environmental degradation due to the unequal and unfair implementation of environmental laws to the advantage of other, more powerful groups. A strong exposition of such a case in the United States with regard to the location of polluting energy producers near the homes of black and ethnic minority communities and other 'locally unwanted land uses' (LULUs) as the result of poor implementation of environmental zoning rules is given in Bullard (1999). These and similar cases constitute a lack of environmental justice in its clearest form.

International treaties

The international treaties addressing environmental questions that were adopted at or after the UN Conference on Environment and Development at Rio in 1992 contain expressions of the above approaches towards ensuring more environmental justice internationally. Here I take as my paradigm treaties the 1992 UN Convention on Biological Diversity ('CBD') (Bowman and Freestone, 1996) and the 1992 UN Framework Convention on Climate Change ('FCCC'), both adopted at Rio.[23] The CBD, for example, acknowledges in its Preamble that **"**special provision is required to meet the needs of developing countries, including the provision of new and additional financial resources and appropriate access to relevant technologies." This is then expressed in terms of an obligation on developed States Parties in Article 16 to provide and/or facilitate "access to and transfer of technology … to developing countries … under fair and most favourable terms." The requirement under Article 12 to "establish and maintain programmes for scientific and technical education and training … and provide support for such education and training for the specific needs of developing countries" is a further element in redressing a perceived lack of fairness in the current situation. Given the subject-matter of this Convention, it is not surprising that one of the important aspects of environmental justice that it addresses is the fair and equitable sharing of benefits from the exploitation of genetic resources; indeed, the fact that many developing countries are those that "provide genetic resources" is noted in Article 16(3)

which is a further reason for ensuring this. One of the key elements in ensuring fairness in relation to the imposition of international environmental standards must be the provision of financial support to countries that cannot afford them and Article 20 of the CBD provides for developed country Parties to provide "new and additional financial resources to enable developing country Parties to meet the agreed full incremental costs to them of implementing measures" required by the Convention. This is a direct expression of the principle of common but differentiated responsibility mentioned above and it is further elaborated by paragraph 4 of that same article.[24]

The FCCC, as another environmental treaty adopted at the Rio Conference, also reflects the concern for greater justice in the imposition and implementation of global environmental obligations. In the view of Birnie and Boyle (2002: 532), "the [Climate Change] Convention did achieve an equitable balance acceptable to the great majority of developed and developing states" and this can be seen in certain of its provisions in particular. (See also: Churchill and Freestone, 1991) Among the principles set out in Article 2 is included the need to give "full consideration" to the "specific circumstances of developing country Parties, the stipulation that policies and measures to protect the climate against anthropomorphic change "should be appropriate to the specific conditions of each Party" and that Parties should "cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth … particularly [in] developing country Parties." One of the strongest recognitions of the need for an equitable international system for the control of climate change emissions is found in Article 4 which sets out certain obligations specifically targeted towards "developed country Parties" (and some other Parties specified in Annexes I, II or III) that include assisting developing country Parties that are particularly vulnerable to the adverse effects of climate change and promoting, facilitating and financing transfer of and access to environmentally sound technologies and know-how. Notably, at paragraph 7, this article states directly that the "extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed Parties" of their obligations related to financing and technology transfer. Here, then, is a clear statement of the differential standards applied to developed and developing States as part of an equitable approach as well as the quid pro quo that requires action from developed States Parties as a prerequisite for the required action by developing country Parties.

With regard to the special case of indigenous peoples, the 1989 Convention on Indigenous and Tribal Peoples (Convention No.169) of the International Labour Organization[25] recognised in its Preamble both the "distinctive contributions of indigenous and tribal peoples to the cultural diversity and social and ecological harmony of humankind" and also that "in many parts of the world these peoples are unable to enjoy their fundamental human rights to the same degree as the rest of the population of the States within which they live." Here then, in a nutshell, we see both the inequality and injustice faced by indigenous peoples in many countries as well as their important role in ensuring environmentally sustainable forms of development.

This latter fact is supported in both the Food and Agriculture Organisation's International Agreement on Plant Genetic resources (2001)[26] and the UN Convention on Biological Diversity (1992). The FAO Agreement (2001) refers to the contribution of "indigenous and local communities and farmers" to conserving plant genetic resources while Article 8(j) of the CBD celebrates to the "knowledge, innovations and practices of indigenous and local communities" and requires Parties to "encourage the equitable sharing of benefits arising from the utilization of such knowledge, innovations and practices." However, although recognition of this special contribution that indigenous peoples may have to environmental

sustainability – as is true also of the pastoral, tribal peoples of Iran, for example – is important, here we are most concerned with the unfortunate fact that they represent groups whose rights are frequently less respected than those of other members of society. This is as true of environmental rights as other legal and human rights. Many cases of the violation of such rights and the ensuing lack of environmental justice relate to the treatment of the natural resources of their traditional lands (Posey and Dutfield, 1997). This is despite the provision in Article 15(1) of the 1989 ILO Convention that: "The rights of the peoples concerned to the natural resources pertaining to their lands shall be specially safeguarded. These rights include the right of these peoples to participate in the use, management and conservation of these resources."

'Biopiracy' of Traditional Knowledge and Innovations – An Illustrative Case

Indeed, it is with regard to issues of control and ownership of the natural resources of the environment that many of the clearest cases of international environmental injustice have occurred. Shiva (1999: 53), one of the most influential advocates for the environmental rights of indigenous communities in India, has gone so far as to describe the inequality in the international trading system, the application of environmental protection globally and the appropriation of the world's natural resources by a few rich countries and their corporations as a form of global "environmental apartheid". In this characterisation, she manages to distil not only the inequitable nature of resource allocation between (and within) States but also the wholly imbalanced and unequal paths towards development enjoyed by countries of the 'North' and 'South'. As is noted above, the CBD explicitly recognises that developing countries are the source of much of the genetic diversity of the world and its provisions regarding the sharing of benefits from their exploitation as well as ensuring the prior informed consent of countries of origin to this exploitation aimed at ensuring international fairness and equity with regard to the use of such resources (Cullet, 2009).

However, the evidence would suggest that, in reality, such fairness is lacking in the relationship between the large, multinational concerns that exploit these resources for pharmaceuticals and agribusiness and which are almost without exception headquartered in industrialised States of the 'North'. Examples of this lack of justice in the international system as regards access to the exploitation of the world's natural resources and the sharing of economic and other benefits from this (including medicinal drugs developed from plants on the basis of traditional botanical knowledge) abound (Posey and Dutfield, 1997; Coombe, 2001; Schuler, 2004; Brown, 2003). Two famous cases can be cited here that make clear the issues involved. The first relates to the medicinal use of the spice turmeric which has been used in Indian and Iranian traditional medicine as an antiseptic for millennia. In the 1990s, its chemical properties that gave it this antibacterial quality were described by scientific laboratory methods and then patented by a US-based pharmaceutical company. As a result, if this patent was upheld internationally, traditional healers who have used turmeric for thousands of years would no longer be able to make commercial claims regarding its antibacterial properties (Anon, 1998). The second relates to the US patenting of the genetic strain of basmati rice, a rice strain that has been developed over many thousands of years through the innovation and knowledge of local Himalayan farmers (Sharma, 2005). Again, we see how knowledge and innovation made over thousands of years by local communities in the third world has effectively been hijacked by western Big Business that has the power, resources and modern scientific skills to be able to take out patents on such knowledge (Agarwal and Narain, 1996; Jayaraman, 1999).

Given the great totemic importance of turmeric for traditional medicine, the aforementioned patent was successfully challenged by the Indian government. However, many other examples can be found of

traditional knowledge and innovations regarding the exploitation of environmental resources that have been hijacked in this manner with the result that they are now owned not by the peoples who learned about and even developed them through millennia of experience and practice but by private businesses based many thousands of miles away. In such cases of 'biopiracy' there lies a fundamental problem at the heart of the international intellectual property law regime that the World Intellectual Property Organization (WIPO) has been seeking to address since 2000 the late 1990s. (WIPO, 2006; Wendland, 2004).[27] Essentially, the ability to take out a patent requires that an individual or corporation show that they have made an 'innovative step' to create something new. To do this in the case of plant genetic resources, for example, requires access to modern laboratory facilities and the application of recognised scientific method as well as the ability to describe in legally-acceptable terms the final innovation or discovery. Moreover, it also requires that an individual 'author' of the discovery be named (which could be a registered company as a legal 'person') which, in the case of a traditional tribal community that has developed certain knowledge and innovations over thousands of years is itself a challenge (Blake, 2001; Wendland, 2004; Cullet, 2009). One interesting response to this problem has been the policy of the Indian Government to create digital databases of its traditional knowledge that it makes available to patent offices worldwide as an attempt to prevent foreign patents being taken out on traditional Indian remedies (Wendland, 2007).

The adoption in 1994 by the World Trade Organization of the Agreement on Trade-related Aspects of Intellectual Property (TRIPS) has exacerbated this by seeking to ensure a near-global coverage of international IP rules by harmonizing IP standards globally.[28] This would result in the protection only of private rights through recognizing and protecting only the rights of formal innovators, i.e. those able to satisfy the formal requirements of the international patenting regime. In this way, what has traditionally been a commonly-held resource of the community that is freely shared becomes a privately-owned property that they no longer have the right freely to use and exploit (Cullet, 2009; Nijar, 2000; Dutfield, 1997). Indeed, as da Cunha (2001) makes clear, knowledge that has been in the public domain in one country may become privatised through the exercise of an IP right (usually through taking out a patent) in another State and TRIPS would the require the country of origin to honour that private right. This is effectively the usurpation of traditional knowledge systems from the domain of common knowledge – the 'intellectual commons' as Shiva (1999:62) refers to it – by huge transnational corporations in a form of modern piracy. It is by their far superior wealth and power that they are able to dominate and exploit the intellectual property system in this manner.

Conclusion

As this article has attempted to demonstrate, the achievement of environmental justice within the international legal system is not simply a matter of developing and implementing effective standards for the regulation of activities that damage the environment and other means of environmental protection.

Justice has been conceived since ancient times as comprising not only norms, rules and the institutions by which these are implemented, but also involves the fundamental principles of fairness and equity both in the implementation of rules (so that one group in society is not unfairly advantaged or disadvantaged) but also in the rules themselves. It is also important to recognise that the implementation of rules of law may not in itself represent a just outcome. Hence the discretion given to the International Court of Justice under its Statute to decide cases *ex aequo et bono*. Hence, also, the conclusion reached in the previous section that the existing system of intellectual property rules unfairly advantages large corporations over local and indigenous communities and that the international trading system established within the framework of the

WTO and its main Agreements has exacerbated this imbalance of interests.

On the national level, governments should seek to ensure that not only do the laws and rules governing the protection of the environment and related matters deal with these questions in a manner that ensures justice equally for all members of society (as far as this is possible) but also that the way in which these laws is implemented does not advantage one group of society over another on the basis of their level of wealth, level of education, colour, ethnicity or sex. In Iran and other countries with important and ecologically-important nomadic and tribal peoples this is a particularly significant point.

On the international level, it is vital that the asymmetry of economic and political power that is the reality of the international community does not become expressed as serious injustice with relation to access to, exploitation or enjoyment of environmental resources. In a world where the effects of anthropogenic climate change and over-population are leading increasingly to major environmental and human security challenges, the need to champion global environmental justice becomes ever more relevant. As members of the human family, we all have an equal right to the enjoyment of a safe and healthy environment and to a fair and equitable access to its finite resources and their benefits.

Notes

1. In a famous quotation, he stated that: "Our city will never perish by the decree of Zeus; or the will of the blessed immortal gods …But the citizens themselves in their wildness wish to destroy this great city, trusting in wealth." (Fragment 4.1, 26-29)
2. "For all [political systems] aim at justice of some kind, but they do not proceed beyond a certain point and are not referring to the whole of absolute justice when they speak of it. Thus it appears that the just is equal, and so it is, but not for all persons only those that are equal … We make bad mistakes if we neglect this 'for whom' when we are deciding what is just … It is an error to suppose that men unequal in one respect, e.g. property, are unequal in all, just as it is an error to suppose that men equal in one respect, e.g. that they are free men, are equal in every respect." (*Politics*, Book III.9)
3. "One feature of justice as fairness is to think of the parties in the initial situation as *rational and mutually disinterested* … Moreover, the concept of rationality must be interpreted as far as possible in the narrow sense, standard in economic theory, of taking the most effective means to given ends." (John Rawls, *Theory of Justice*, 1971)
4. In this article, "protection" is the preferred terminology as the term of art used in international law It is understood to encompass the notions of protection, prevention (of both exiting and potential threats), conservation, preservation and safeguarding.
5. Sen argues (at p.7) that both of these approaches derive from the thinking of Enlightenment philosophers such as Adam Smith and Mary Wollstonecraft, on the one hand, and Thomas Hobbes and Jean-Jacques Rousseau on the other.
6. An approach we can identify in the earlier environmental treaties (of the 1960s and 1970s) that took a strongly conservationsist view.
7. As presented in the seminal Brundtland Report's celebrated reference to "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" WCED (1987).
8. "In international environmental law, equity has been utilized most often *infra legem*, in an effort to fairly allocate and regulate scarce resources to ensure that the benefits of environmental resources, the costs associated with protecting them, and any degradation that occurs (that is, all the benefits and burdens) are fairly shared by all members of society. In this regard, equity is an application of the principles of distributive justice, which seek to reconcile competing social and economic policies

in order to obtain the fair sharing of resources. It does this by incorporating equitable principles in legal instruments to mandate fair procedures and just results. An example is the reliance in watercourse agreements on equitable utilization of shared waters as a principle to allocate the resource among riparian states."

9. Article 38(1)(a), (b) and (c). Another way in which the Court may apply equity in deciding a case is to decide it *ex aequo et bono* as prescribed by Article 38(2) of the Statute, if the Parties to the dispute agree. Thus far, however, no case has been decided in this manner.
10. *Case Concerning the Gab˘c´ıkovo–Nagymaros Project (Hungary/Slovakia)* (1997) ICJ *Reports* 7. This case was a dispute between Hungary and Slovakia (as the successor to Czechoslovakia) over the use of the Danube River as a shared waterway. The Court ruled that Slovakia, by taking the unilateral decision to build a dam on its stretch of the river, deprived Hungary of its right to an equitable and reasonable share of the natural resources of the Danube.
11. Arts. 1 and 15(7). This Convention is discussed further below.
12. For example, the 1995 UN Straddling Stocks Agreement and the UN Law on the Non-navigational Uses of International Watercourses (1997).
13. As in the membership of the World Heritage Committee established under UNESCO's 1972 World Heritage Convention (Art.8(2)) and for membership of the Council of the International Seabed Authority established by Art.161(1)(e) of 1982 UN Convention on the Law of the Sea, both of which require equitable geographical representation or distribution in their membership.
14. *Vide supra* n.9.
15. Principle 3 is regarded as balanced with Principle 4 to express the central idea of balancing the interests of both environment and development and, respectively, of developed and developing States.
16. This reads: "States should undertake, at the national level, all measures necessary for the realisation of the right to development and shall ensure, *inter alia*, equality of opportunity for all in their access to basics resources, education, health services, food, housing, employment and the fair distribution of income… Appropriate economic and social reforms should be carried out with a view to eradicating all social injustices."
17. This reads: "States have the duty to co-operate with each other in ensuring development … [and] should realise their rights and fulfil their duties in such a manner as to promote a new international economic order based on sovereign equality, interdependence, mutual interest and co-operation among all States …"
18. A charge often made against the economic system supported by the World Trade Organization (WTO) and its main agreements: the General Agreement on Trade and Tariffs (GATT) and the associated Agreement on the Trade Related Aspects of Intellectual Property (TRIPS), both adopted in 1994.
19. Principle 4(2) notes that "Sustained action is required to promote more rapid development of developing countries. As a complement to the efforts of developing countries, effective international co-operation is essential in providing these countries with appropriate means and facilities to foster their comprehensive development." In addition, Principle 5 states that "All States and all people shall co-operate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of people of the world."
20. Principle 6 reads: "The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment

and development should also address the interests and needs of all countries."

21. This is clearly expressed in Principle 7 of the Rio Declaration that reads: "In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources that they command."
22. UN Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295,U.N. Doc. A/RES/47/1(2007), adopted UN General Assembly, 13 September 2007. Available online: http://www.ohchr.org/english/issues/indigenous/docs/draftdeclaration.pdf.
23. UN Convention on Biological Diversity (UN, 1992), available online: <http://www.cbd.int/convention/convention.shtml>; UN Framework Convention on Climate Change (UN, 1992) [31 ILM 849 (1992)].
24. This reads: "The extent to which developing country Parties will effectively implement their commitments under this Convention will depend on the effective implementation by developed country Parties of their commitments … related to financial resources and transfer of technology and will take fully into account the fact that economic and social development and eradication of poverty are the first and overriding priorities of the developing country Parties."
25. UN Declaration on the Rights of Indigenous Peoples (adopted UN General Assembly, 13 September 2007), online: http://www.ohchr.org/english/issues/indigenous/docs/draftdeclaration.pdf.
26. International Treaty on Plant Genetic Resources for Food and Agriculture (FAO, 2001), online: <http://www.fao.org/ag/cgrfa/itpgr.htm>online ref>.
27. By the establishment of its Intergovernmental Committee on Genetic Resources, Traditional Knowledge and Folklore in August 2000.
28. Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakech, 15 April 1994, 33 *ILM* (1994) 197 (hereafter TRIPS Agreement). Article 27(3)(b) of TRIPS specifically requires all member states to 'provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof '. As a result, "TRIPS gives member states a margin of appreciation in determining how to implement their obligation to introduce plant variety protection" (Cullet, 2009: 378).

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