

**Governance of Social-Ecological Change:
A Legal Response Based on Constitutional
Environmental Law**

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**Governance of Socio-Ecological Change:
A Legal Response Based on Constitutional Environmental Rights and Norms**

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ABSTRACT

The governance of socio-ecological change (SEC) often devolves on public authorities, leaving ordinary people largely exposed to its effects. The power to ensure sustainable and long-term governance of SEC or to opt for a short-term focus on prosperity and profit belongs in many instances to decision-makers of the state. This power is, however, accompanied by qualified responsibilities where governors are constrained *inter alia* by the provisions of international and domestic law. Constitutional law in particular may serve as a restraining factor in too liberal a use or even the misuse of power. Constitutional law may also serve as a direction indicator and barometer for governors. Amongst other constitutional socially-oriented provisions, provisions pertaining to the environment may be particularly entwined with the notion of SEC.

The hypothesis that the majority of countries' constitutional law contains one or more substantive provision related to peoples' environment raises the question whether or not the law and these provisions *per se* offer instrumentation that could assist in the governance of SEC on a long-term basis. In response to this question, this paper focuses in particular on the positive obligations that result from substantive constitutional environmental rights or foundational norms. A number of generic elements are extracted from international human rights and environmental law as far as it concerns the *fulfillment* of positive environmental obligations by governments. The generic elements by and large translate into generic activities or focus areas that governments may be expected to promote. It is shown how these elements or generic activities can be employed to interpret constitutional law and to further develop domestic regulatory frameworks to the benefit of the long-term governance of SEC.

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Developments in Germany, Namibia and South Africa are discussed to elucidate the theoretical line of argumentation in this contribution.

KEY WORDS

socio-ecological change, environmental rights, environmental principles of state policy, integrated planning, fulfillment of environmental rights

LIST OF ABBREVIATIONS

CBO	=	Civil-based organisation
CDP	=	City Development Plan
ICLEI	=	International Council for Local Environmental Initiatives
IDP	=	Integrated Development Plan
IEL	=	International environmental law
IL	=	International law
IUCN	=	World Conservation Union
EIA	=	Environmental Impact Assessment
EU	=	European Union
NDP	=	National Development Plan
NGO	=	Non-governmental organization
PPS	=	Public-private partnerships
SEC	=	Social-ecological change
UN	=	United Nations
UNEP	=	United Nations Environmental Programme
UNESCO	=	United Nations Educational Scientific and Cultural Organisation

Through the centuries, men have grappled with the problems posed by their changing environment. In modern society, this task takes on a new sense of urgency as scientific and technological advances occur in a geometric progression. Law and legal institutions play a vital role in this change process by influencing the extent to which interests favoring or opposing change are recognised, encouraged or impeded. Thus perceived, law is a social institution for achieving desired ends, and a prime consideration in legal analysis must be the capacity of legal institutions to adjust to the changing social environment.¹

The very function of law as a social institution demands that change be managed.²

1. Introduction

It seems impossible to aptly define and pinpoint the parameters of social-ecological change (SEC). It can arguably best be described as an ever-present phenomenon that involves progress and/or recoil in the composition and functioning of, and relationships in communities of people as well as in the natural environment.³ Bearing this description in mind, the notion of SEC is certainly not an invention of our time. However, some of the unsustainable effects of SEC are unquestionably now much more prominently than before and captivate the minds, *inter alia*, of the scientific community.⁴

Law, sociology and environmental science are often explored and presented as separate disciplines and bodies of knowledge. These disciplines emanate, *inter alia*, from different ideologies and are traditionally focused on divergent facets of (regulated) life on earth. The distinction of each of these from the other in scientific thought may therefore be merited. It is, however, not unthinkable for some of the

¹ Dienes in Nagel (ed) *Law and Social Change* 33.

² Dienes in Nagel (ed) *Law and Social Change* 41.

³ According to Nagel in Nagel (ed) *Law and Social Change* 8 social change may be viewed as a restructuring of the basic ways in which people in a society relate to each other with regard to, *inter alia*, government, culture, family life and the environment. On ecological change, Kirdar in Kirdar (ed) *Change: Threat or Opportunity?* 1 holds that ecological change (particularly related to continuing deterioration of the world ecology and environment) is primarily caused by unsustainable patterns of production and consumption (particularly in industrialised countries) and persistence of poverty and restricted economic opportunities (particularly in developing countries). Although not discussed in detail in this paper, ecological change relates to a large extent to global warming and a vast number of unpleasant related phenomena. For example, it also relates to the depletion of non-renewable natural resources and the perishing of diverse species. The consequences of ecological change are not easy to comprehend and perhaps not all of them have yet been revealed to man. Some of the known consequences, however, relate to drought, desertification, soil erosion, acid rain, the flooding of river basins and plains, increased numbers of natural disasters, rising sea-levels, and a famine that may subsequently impact on agricultural growth, industry, transportation, habitation, prospective economic growth and health.

⁴ See, *inter alia*, Kirdar in Kirdar (ed) *Change: Threat or Opportunity?* 3 on the historic development of environmental degradation and change generally.

challenges of our time (inclusive of those related to SEC) to necessitate a fusion and intersection of law, sociology and environmental science to arrive at generally acceptable solutions and responses. Kirdar⁵ observes that '(t)he emerging conception that environment and development are very closely linked shows that the world is increasingly confronted with issues that affect people as a whole. It also shows that most of these issues are interlinked and multidimensional...Their solutions require multidisciplinary joint undertakings.'

Until recently the notion of human rights received little attention both in sociology⁶ and environmental sciences generally. One of the reasons for this could be entrenched in the (somewhat distorted) view that rights are mere 'legal constructions or philosophical abstractions'⁷ but another could be that until recently no real need existed for these disciplines to intersect with the field of human rights. The governance of SEC may arguably require a change to this position. The governance of SEC in the main devolves on public authorities, leaving the ordinary people, those who bear the effects of SEC, largely exposed. The power to ensure sustainable and long-term governance of SEC or to opt for a short-term focus on prosperity and profit belongs in many instances to decision-makers of the state. This power is, however, accompanied by qualified responsibilities where public authorities are constrained by, *inter alia*, international and domestic human rights law.⁸ Constitutional law in particular may serve as a restraining factor where power might otherwise be misused.⁹ Constitutional law may, however, also serve as a direction indicator and barometer for state legislatures and executive bodies. Amongst other constitutional socially-oriented provisions, provisions pertaining to the environment may be particularly entwined with the notion of SEC.¹⁰

⁵ Kirdar in Kirdar (ed) *Change: Threat or Opportunity?* 7.

⁶ Anleu *Law and Social Change* 200. This absence can be partly attributed to sociologists' overwhelming concern with the social and the consequential focus on collectivities such as communities and families, whereas rights have at times been interpreted as individual attributes.

⁷ See Anleu *Law and Social Change* 200.

⁸ Refer also to the ideas conveyed in Anleu *Law and Social Change* 227.

⁹ Judge Venkatachaliah in Commonwealth Secretariat *Developing Human Rights Jurisprudence* 255, 262 puts it that '(a) written constitution is a charter of limited government...it seeks to avoid concentration of power by built-in checks and balances and constitutes the foundation of the legal system' and further that '(t)he role of government is to provide constitutional protection for fundamental freedoms and adequate institutional mechanisms for their enforcement.'

¹⁰ This paper will only focus on constitutional environmental law. Still, as far as the environment is regarded as inseparably linked with social aspects the title of this paper and the final proposals made embrace the notion of social-ecological change and not only ecological change.

The hypothesis that the majority of countries' constitutional law contains one or more provision related to peoples' environment¹¹ raises the question whether or not the law and these provisions *per se* offer instrumentation that could assist in the governance of SEC on a long-term basis. Should this be the case, the question may be extended to consider also the scope of such application of the law. In response to these questions, this paper focuses in particular on the positive obligations that result from substantive constitutional environmental rights or foundational provisions. In modern democracies, the positive duties implied by, *inter alia*, constitutional environmental provisions have to impact on decisional behaviour. A number of generic elements can be extracted from international human rights and environmental law as far as it concerns the fulfillment of positive environmental obligations by government. The extracted elements by and large translate into generic activities or focus areas that

¹¹ Note that environmental rights contained in different instruments often show rather insignificant differences in meaning, scope and application – especially environmental rights contained in domestic constitutions. The meaning of 'environment' in different environmental rights often also differs. Whilst section 24 of the *Constitution of the Republic of South Africa*, 1996 provides for the right to 'an environment that is not detrimental to health or well-being', the *Constitution of Namibia*, 1990 in article 95(1) refers to the right of people to have policies implemented aimed at the maintenance of ecosystems, essential ecological processes and biological diversity and the utilisation of living resources on a sustainable basis. The *Constitution of Swaziland* of 2005 (article 216) states that '(e)very person shall promote the protection of the environment for the present and future generations', that '(u)rbanisation or industrialisation shall be undertaken with due respect for the environment' and that the government 'shall ensure a holistic and comprehensive approach to environmental preservation and shall put in place an appropriate environmental regulatory framework', the *Constitution of Lesotho* of 1993 (article 36) provides that the country shall adopt policies designed to protect and enhance the natural and cultural environment of Lesotho for the benefit of both present and future generations and shall endeavor to assure to all citizens a sound and safe environment adequate for their health and well-being and the *Constitution of Mozambique* of 1990 (article 37) that '(t)he State shall promote efforts to guarantee the ecological balance and the conservation and preservation of the environment for the betterment of the quality of life of its citizens.' Article 19 of the *Constitution of Chile* of 1980, as a further example, provides for a right to live in an environment free of contamination and article 42 of the *Constitution of the Russian Federation* of 1993 reads that '(e)veryone has the right to a favourable environment, to reliable information about its state, and to compensation for damage caused to his health or property by ecological offences'. For the formulation of and discussion on the environmental rights in the constitutions of, amongst others, India, the Philippines, Colombia, the United States, Peru, Portugal, South Korea, Honduras, Uganda, Bangladesh, Spain and the Netherlands, see Lavrysen and Theunis 2007 *Liber Amicorum Paul Martens* 363-382, Hill *et al* 2004 *Georgetown International Environmental Law Review* 382-391, Symonides 1992 *International Journal for Legal Information* 27-28, Ferreira 1999 (1) *Journal of South African Law* 91 and Nickel 1993 *Yale Journal of International Law* 284. For the duties that arise from differently phrased environmental rights in different national constitutions, see Popović 1996 *Columbia Human Rights Law Review* 572-573 and Sands 1996 *European Human Rights Law Review* 602. Commonly, rights not explicitly or exclusively intended to serve an environmental purpose could also be employed to afford legal protection to the relationship between humans and the environment. These rights arguably do not fit the definition of 'environmental rights' *per se* and include, for example, the rights to life, dignity or privacy and procedural rights such as the rights of access to information or just administrative action. See, *inter alia*, Hill *et al* 2004 *Georgetown International Environmental Law Review* 374.

governments may be expected to promote. This contribution investigates how these elements or generic activities can be employed to interpret constitutional environmental provisions and to further develop domestic regulatory frameworks to the benefit of the governance of SEC. Developments in Germany, Namibia and South Africa are discussed to elucidate the theoretical line of argumentation in this contribution.

2. The scene set by international law

International environmental law (IEL)¹² and regional environment law¹³ often trigger and/or influence domestic environmental law developments. Environmental law generally is a relatively young addition to domestic law frameworks. In instances where open-ended legal objectives or aims appear in domestic law (whether it be in constitutional law, ordinary law or policy) domestic courts may have to turn to internationally-developed principles, guidelines or law for assistance in the judicial interpretation of these ambiguous provisions. International law (IL) is generally accepted as being able to illuminate and reinforce ill-defined and inadequate domestic constitutional law.¹⁴ Bodansky¹⁵ holds in this regard that international sources are useful in constitutional interpretation for two reasons: they can be sources of good ideas and they can provide empirical evidence of how a prospective legal rule operates in practice.

One of the areas of IL that is of particular relevance for domestic constitutional law is international human rights law. This holds true generally but also for constitutional environmental law. Literature on international human rights and IEL agree on the

¹² The sources of international law generally include international conventions, international custom, the general principles of law recognised by civilised nations, judicial decisions and the teachings of valued publicists. Refer to Dugard *International Law* 27. A distinction can be made between so-called binding international law and non-enforceable international law (soft law). See Dugard *International Law* 37-38. A typical example of how IEL influences domestic environmental law is where a country subsequent to having ratified the Kyoto Protocol designs a domestic environmental law to meet the obligations set in the international instrument. An example of regional influences would be where a European country designs a domestic law based on a Directive of the European Community (EC) pertaining to integrated pollution control or air quality standards.

¹³ The environmental law of, *inter alia*, the European Union, the African Union, the Southern Africa Development Community or the Inter-American regional system.

¹⁴ See, *inter alia*, Tshosa *National Law and International Human Rights Law* 10.

¹⁵ Bodansky 2004 *Georgia Journal of International and Comparative Law* 425. See also Birnie and Boyle *International Law* 257.

need for fundamental protection of the environment and highlight a number of links between peoples' environment and their human rights generally.¹⁶ IL in fact transcends mere esoteric agreement on these issues and various IL sources offer rules, principles, guidelines and criteria by means of which to take environmental rights protection further – also in domestic contexts.¹⁷ The most prominent IEL and human rights law instruments that imply or reflect on fundamental environmental rights protection include:

- Universal Declaration of Human Rights of 1948;¹⁸
- International Covenant on Economic, Social and Cultural Rights of 1966;¹⁹
- International Covenant on Civil and Political Rights of 1966;²⁰
- Stockholm Declaration of 1972;²¹
- United Nations World Charter for Nature of 1982;²²

¹⁶ See, *inter alia*, Lavrysen and Theunis 2007 *Liber Amicorum Paul Martens* 363-382, Burns “Green Rights and an Environmental Management System” 13, Picolotti in Picolotti and Taillant (eds) *Linking Human Rights* 48 and Hill *et al* 2004 *Georgetown International Environmental Law Review* 374. Human rights that are directly related to peoples' environment include, for example, the rights to life, human dignity and equality.

¹⁷ Birnie and Boyle *International Law* 259.

¹⁸ This instrument serves as the foundation of internationally recognised human rights. Article 25(1) states that ‘(e)veryone has the right to a standard of living adequate for the health and well-being of himself and his family’. See further, amongst others, Eide 1999 *Norwegian Institute of Human Rights Human Rights Report* 131.

¹⁹ Article 11(1) provides that state parties to the ICESCR recognise the right of everyone to an adequate standard of living for himself and his family, including, *inter alia*, housing and the continuous improvement of living conditions and that state parties will take appropriate steps to ensure the realisation of this right. Article 12(1) furthermore states that state parties ‘recognise the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.’ Article 12(2)(b) elaborates on the latter by providing that the steps to be taken by state parties to achieve the full realisation of this right ‘shall include those necessary for the improvement of all environmental and industrial hygiene.’

²⁰ Article 6(1) provides that every human being has the inherent right to life and that it should be protected by law.

²¹ Principle 1 states that: ‘(m)an has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.’ The protection and improvement of the human environment is proclaimed in principle 2 to be a major issue which affects the well-being of people and which is a duty of all governments. Principle 13 establishes that ‘(i)n order to achieve a more rational management of resources and thus to improve the environment, states should adopt an integrated and coordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve the environment for the benefit of their population.’ Principle 23 determines, *inter alia*, that with reference to national standards it will be essential in all cases to consider the systems of values prevailing in each country. See further Giorgetta in Schrijver and Weiss (eds) *International Law* 383-385, Hill *et al* 2004 *Georgetown International Environmental Law Review* 375 and the United Nations Environmental Programme (UNEP) Declaration of the United Nations Conference on the Human Environment <http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=97&ArticleID=1503> .

- United Nations World Commission on Environment and Development (WCED) Report on Sustainable Development (Brundtland Report) of 1987;²³
- Rio Declaration (including Agenda 21) of 1992;²⁴
- United Nations Vienna Declaration and Programme of Action of 1993;²⁵

²² The World Charter proclaims thirteen principles on nature conservation that are expected to direct human conduct and its effects on the natural environment. It poses some important obligations related to environmental rights. Article 14 establishes that the principles of the Charter should reflect in the law and practice of states. Article 17 states that funds, programmes and administrative structures necessary for nature conservation should be provided and article 21 determines that states and other public authorities shall implement the international legal provisions for the conservation of nature and the protection of the environment. Article 22 establishes that '(t)aking fully into account the sovereignty of states over their natural resources, each state shall give effect to the provisions of the Charter through its competent organs and in co-operation with other states'. Importantly also, article 23 determines that '(a)ll persons, in accordance with their national legislation, shall have the opportunity to participate, individually or with others, in the formulation of decisions of direct concern to their environment.'

²³ Annex 1 of this report proposes legal principles for environmental protection and sustainable development. See Annex 1 (Summary of Proposed Legal Principles for Environmental Protection and Sustainable Development adopted by the UNCED Experts Group on Environmental Law). Arguably the most important of these for the purpose of this study are principles 1 and 4 which state that '(a)ll human beings have the fundamental right to an environment adequate for their health and well-being' (principle 1) and that states shall establish adequate environmental protection standards and monitor changes in environmental quality and resource use (principle 4). The Brundtland Report, *inter alia*, declares in par 4.5 that states should '*find ways* to recognise and protect the rights of present and future generations to an environment adequate for their health and well-being.' (own emphasis).

²⁴ Whilst principle 1 of the Rio Declaration articulates an anthropocentric rationale for environmental protection and sustainable development it does not establish an environmental right *per se*. Principle 2 establishes that states have, in accordance with the Charter of the UN and the principles of IL, the sovereign right to exploit their own resources pursuant to their own policies. States are therefore to a large extent left with a discretion as to how to go about managing the environment of their communities. Principle 11 provides that states shall enact effective environmental legislation and that environmental standards, management objectives and priorities should reflect the environmental and development contexts to which they apply. Principle 22 provides that indigenous people and their communities as well as other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should furthermore, *inter alia*, enable local communities' effective participation in the achievement of sustainable development. The Rio Declaration also contains the well-known Agenda 21 and Local Agenda 21. Agenda 21 constitutes an agenda for sustainable development in the 21st century for which government should take responsibility on a voluntary basis. The focal points in Agenda 21 include integrated provision of environmental infrastructure, establishment of partnerships, public participation, environmental impact assessment and monitoring. Local Agenda 21 (LA 21) unpacks Agenda 21 for local authorities. On the Rio Declaration see Boyle and Freestone (eds) *International Law* 2-4, Handl in Eide *et al Economic, Social and Cultural Rights* 308, Verschuuren *Het Grondrecht* 179, Hill *et al* 2004 *Georgetown International Environmental Law Review* 375-376 and Simpson and Jackson 1997 *Environmental and Planning Law Journal* 271-272. On Local Agenda 21, see Lafferty and Eckerberg (eds) *From the Earth Summit to Local Agenda 21* and Nolte *Lokale Agenda 21*.

²⁵ The preamble to the Declaration recognises and affirms that: '(a)ll human rights derive from the dignity and worth inherent in the human person, and that the human person is the central subject of human rights and fundamental freedoms, and consequently should be the principal beneficiary and should participate actively in the realisation of these rights and freedoms.' Articles 1 and 5 along the same lines determine that the protection and promotion of human rights and fundamental freedoms are the first responsibility of governments. Article 11 states that the right to development should be fulfilled so as to meet equitably the developmental and environmental needs of present and future generations. Article 13 recognises that there is a need for states to create favourable conditions at the national, regional and international levels to ensure the full and effective enjoyment of human rights and provides that states should eliminate obstacles to the enjoyment of these rights. Quite importantly,

- United Nations Ksentini, Special Rapporteur's Report on Human Rights and the Environment and the Draft Declaration of Principles on Human Rights and the Environment of 1994;²⁶
- Copenhagen Declaration (World Summit on Social Development) of 1995;²⁷
- Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) of 1998;²⁸
- Declaration of Bizkaia on the Right to the Environment of 1999;²⁹
- United Nations Millennium Declaration (Millennium Development Goals) of 2000;³⁰

article 83 states that governments are urged to incorporate standards as contained in international human rights instruments in domestic legislation and also to strengthen national structures, institutions and organs of society which play a role in promoting and safeguarding human rights. In support of the idea of standards, article 98 states that to strengthen the enjoyment of economic, social and cultural rights (inclusive of environmental rights), additional approaches should be examined such as a system of indicators to measure progress in the realisation of the rights set forth in the ICESCR.

²⁶ A set of draft principles is contained in Annex 1 to this report. Principle 2 confirms that all persons have the right to a secure, healthy and ecologically sound environment. Amongst others aspects the principles focus on inter-generational equity, access to environmental information, environmental and human rights education, participation in environmental decision-making and the need for administrative, legislative and other measures to further environmental aims. See also Dommen in Picolotti and Taillant *eds Linking Human Rights* 107, Hill *et al* 2004 *Georgetown International Law Review* 376 and Déjeant-Pons and Pallemerts *Human Rights* 14-15.

²⁷ This Declaration contains the commitment of the heads of states and governments to 'fulfil their responsibility for present and future generations by ensuring equity among generations and protecting the integrity and sustainable use of the environment (principle 26(b)). Principle 26(n) furthermore underlines the importance of transparent and accountable governance and administration in all public and private national and international institutions.

²⁸ The Aarhus Convention, although ratified mostly by European countries arguably played a profound role in furthering the environmental rights milieu of our time. Article 1 provides for 'the right of every person of present and future generations to live in an environment adequate to his or her health or well-being.' With reference to the Aarhus Convention, Giorgetta in Schrijvers and Weiss (eds) *International Law* 401 remarks that it 'is the clearest statement in international law to date of a fundamental right to a healthy environment'. See also Verschuuren 2005 *Yearbook of European Environmental Law* 29-30. The Convention provides that to be able to assert the environmental right, citizens in countries must have access to accurate and up-to-date environmental information, should be entitled to participate in environmental decision-making and should have access to justice in environmental matters.

²⁹ The preamble to the Declaration states that the right to the environment cannot be exercised unless sufficient quality information is available. The Declaration confirms that '(e)veryone has the right, individually or in association with others, to enjoy a healthy, ecologically balanced environment' (article 1) and that amongst other entities, public authorities are responsible for protecting, and if applicable, restoring the environment (article 2). The Bizkaia Declaration furthermore confirms existing ideas and responsibilities of governments pertaining to the monitoring of the quality of the environment (article 3); transparent decision-making related to environmental concerns or issues (article 4) and the need for public education and awareness (article 7). Article 9 refers to the implementation of the right to the environment and requires of states parties to adopt *all measures* required to guarantee the right to a healthy, ecologically balanced environment (own emphasis). Reference is made to the availability of up-to-date information, the eradication of poverty, and vulnerable persons and groups. See further Giorgetta in Schrijver and Weiss (eds) *International Law* 385.

- Earth Charter of 2000;³¹ and
- Johannesburg Declaration on Sustainable Development and the Johannesburg Plan of Action of 2002.³²

All of the instruments above form part of what can be called a contemporary environmental rights explosion in IL. This explosion was in some instances accompanied and in others followed by a constitutional environmental rights boom. Recent years have marked the birth of environmental rights and principles/norms in a vast number of domestic constitutions.³³ It is generally accepted that these

³⁰ The Millennium Declaration contains eight major development goals generally referred to as the Millennium Development Goals. Article 21 states that members of the UN should ‘spare no effort to free all humanity, and above all our children and grandchildren, from the threat of living on a planet irredeemably spoilt by human activities, and whose resources would no longer be sufficient for their needs.’ Article 24 states that no effort should be spared to promote democracy and to strengthen the rule of law, as well as respect for internationally recognised human rights and freedoms. The seventh of the eight Millennium Development Goals addresses the vision of ensuring environmental sustainability. On the link between the Millennium Development Goals and human rights, see Alston 2005 *Human Rights Quarterly* 755-829.

³¹ The Earth Charter was developed by the Earth Charter Commission and is a global consensus statement on the meaning of sustainability, the challenge and vision of sustainable development, and the principles by which sustainable development is to be achieved. It is, *inter alia*, employed as a basis for peace negotiations; a reference document in the development of global standards and codes of ethics; a resource for governance and legislative processes; a community development tool and an educational framework for sustainable development. Principle 2(a) acknowledges a right to own, manage and use natural resources but within certain limits, and stipulates that communities at all levels should guarantee human rights and fundamental freedoms (principle 3(a)). Principles 9 and 12 take these ideas further by calling for the right, *inter alia*, to potable water, clean air and safe sanitation and the right of all to a natural and social environment supportive of human dignity, bodily health and spiritual well-being. Specific calls are furthermore made for education (principles 9 and 14), information and participation (principles 13(a) and (b)). Principle 13 calls for the strengthening of democratic institutions at all levels, and the provision of transparency and accountability in governance.

³² The Johannesburg Declaration recognises the role of governments in advancing and strengthening sustainable development (article 5) and reaffirms that sustainable development requires long-term perspectives and broad-based participation in policy formulation, decision-making and implementation at all levels. In article 30 of the Declaration, state parties undertake to strengthen and improve government at all levels, for the effective implementation of Agenda 21, the Millennium Development Goals and the Johannesburg Plan of Implementation. The Johannesburg Plan of Implementation outlines what remains to be done in specific areas, including the laying down of targets for achieving human rights and developmental goals. It recognises that ‘(g)ood governance within each country ... is essential for sustainable development’ (paragraph 4); that ‘respect for human rights and fundamental freedoms is essential for achieving sustainable development’ (paragraph 5) and that state parties ‘at all levels should be encouraged to take sustainable development considerations into account in decision-making, including in national and local development’ (paragraph 19).

³³ The primary difference between constitutional environmental rights and constitutional environmental principles of state policy, lies therein that the former is justiciable where often the principles serve to provide constitutional *direction* to the state without being enforceable by individuals before a court of law. Directive principles are contained, *inter alia*, in the constitutions of Spain, Ireland, Germany, India, China, Yugoslavia and Czechoslovakia. Directive principles generally require primarily positive action and have less of a ‘negative’ character than, for example, traditional civil and political rights. See Bakshi *The Constitution of India* 88 and Nair and Jain *The Constitution of India* 32. The meaning, scope and intention of constitutional directives of state policy have attracted a lot of scholarly attention

constitutional environmental provisions require respect, protection and fulfillment on the part of state governments.³⁴ Yet constitutional environmental provisions are often open-ended, imprecise and rather vague.³⁵ One of the ways in which to estimate what constitutional environmental provisions require of state governments is to consider how similar provisions are generally construed and interpreted in the IL milieu. This holds particularly true as far as it concerns the extraction of positive obligations from these provisions. This means, in other words, that IL can assist countries in estimating the type of government conduct required for authorities to abide by their obligation, *inter alia*, to fulfil the fundamental environmental provisions contained in the constitution.³⁶

Constitutional environmental rights are often categorised as socio-economic rights and constitutional environmental principles/norms can similarly have a socio-economic nature where their realisation depend on the availability of state resources.³⁷ The Limburg Principles on the Implementation of the ICESCR of 1987 (the Limburg Principles),³⁸ the Maastricht Guidelines on Violations of Economic, Social, and

over the years. For some recent analyses see Sharma *Directive Principles* 52-63, Bakshi *The Constitution of India* 88-126, Nair and Jain *The Constitution of India* 31-46, Saharay *The Constitution of India*. It is important to value the fact that despite their unenforceability, fulfillment of the principles of state policy remains a constitutional duty of the state and should be pursued in the context of the rule of law and good governance.

³⁴ See principle 3 of the Limburg Principles on the Implementation of the ICESCR of 1987, guideline 6 of the Maastricht Guidelines on Violations of Economic, Social, and Cultural Rights of 1997 and Dankwa *et al* 1998 *Human Rights Quarterly* 705 on the three-level 'typology' of obligations. See also Eide 1999 *Norwegian Institute of Human Rights Human Rights Report* 141. From 'respect' for socio-economic rights it is understood that states should refrain from interfering with the enjoyment of social, economic and cultural rights. A negative duty is hence implied. See Malherbe 2005 *Austrian Journal of Public and International Law* 113, Klein in Klein (ed) *The Duty to Protect and Ensure Human Rights* 298, Eide 1999 *Norwegian Institute of Human Rights Human Rights Report* 141, Leckie and Gallagher (eds) *Economic, Social and Cultural Rights* xx and Brand in Brand and Heyns (eds) *Socio-Economic Rights* 9. From 'protection' of socio-economic rights, it is understood that states should prevent violations of these rights by third parties. See guideline 6 of the Maastricht Guidelines on Violations of Economic, Social, and Cultural Rights of 1997, Klein in Klein (ed) *The Duty to Protect and Ensure Human Rights* 300-301, Eide 1999 *Norwegian Institute of Human Rights Human Rights Report* 141, Leckie and Gallagher (eds) *Economic, Social and Cultural Rights* xxi-xxii, Malherbe 2005 *Austrian Journal of Public and International Law* 113 and Brand in Brand and Heyns (eds) *Socio-Economic Rights* 10.

³⁵ See for example Kamenka and Erh-Soon Tay (eds) *Human Rights* 43 and Merrills in Bodansky *et al* (eds) *International Environmental Law* 673-674.

³⁶ The judiciary in different countries will obviously not adopt concepts or elements from non-binding international instruments that are inconsistent with their constitutions. However, as is argued by Malherbe 2005 *Austrian Journal of Public and International Law* 124 in the context of South Africa '(c)ourts will be 'hard pressed'' not to follow the international interpretation and application of socio-economic rights when indeed consistent with the Constitution of South Africa.

³⁷ See amongst others Verschuuren *Het Grondrecht op Beskerming van het Leefmilieu* 31 and Brand in Brand and Heyns (eds) *Socio-Economic Rights* 3.

³⁸ UN doc. E/CN.4/1987/17, Annex; and *Human Rights Quarterly*, Vol. 9 (1987): 122-135.

Cultural Rights of 1997 (the Maastricht Guidelines)³⁹ as interpretative texts and IL jurisprudence (decisions of international courts)⁴⁰ are aids that assist in clarifying the meaning and structural analysis of the fulfillment of socio-economic rights in a general sense.⁴¹ From these two principle and guideline documents it may be derived that the requirement for fulfillment of constitutional environmental provisions implies that governments should: employ legislative, administrative, judicial, economic, budgetary, social and educational measures to this effect;⁴² ensure equality for right-holders;⁴³ that activities which are expressly required should be conducted progressively, without delay and within the powers of the state;⁴⁴ that any obstacles in the way of such fulfillment should be removed;⁴⁵ that the identification of a minimum substantive standard should be maintained (this is the minimum core obligation to be

³⁹ See for the Maastricht Guidelines 1998 *Human Rights Quarterly* 691-701. Although the Maastricht Guidelines relate primarily to the ICESCR it is, according to principle 5 thereof, equally relevant to the interpretation and application of other norms of international and domestic law in the field of economic, social and cultural rights. See also Eide 1999 *Norwegian Institute of Human Rights Human Rights Report* 141 and Dankwa *et al* 1998 *Human Rights Quarterly* 705.

⁴⁰ Judiciaries and adjudicating bodies often strengthen the law by reflecting on veiled meanings and by construing directives. In the absence to date of an international environmental court, existing international tribunals and domestic courts remain to strengthen and interpret environmental rights. Adjudicating bodies may be crucial in assessing states' 'margin of discretion' and in enlightening, *inter alia*, the role of the executive in fulfilling environmental rights.

⁴¹ Eide 1999 *Norwegian Institute of Human Rights Human Rights Report* 132 states that the obligation to fulfil can be divided twofold: the obligation to facilitate and the obligation to provide. The obligation to facilitate requires states to take measures creating conditions by which individuals can take the necessary steps to take care of their own needs and the obligation to provide corresponds with the idea of providing a 'safety-net.'

⁴² The idea is conveyed that legislative measures alone are insufficient for the fulfillment of socio-economic rights. See principles 17 and 18 of the Limburg Principles.

⁴³ Principles 27 and 28 of the Limburg Principles.

⁴⁴ Principle 72 of the Limburg Principles and guideline 8 of the Maastricht Guidelines. The notion of 'progressive realisation' does not, however, serve as a pretext for the non-fulfillment of environmental rights. Similarly, states will not be able to justify derogations from or limitations of environmental rights because of, for example, different social, religious and cultural backgrounds. See Alston *et al* 1998 *Human Rights Quarterly* 694. The Constitutional Court of South Africa in the case of *Government of the RSA v Grootboom* 2000 11 BCLR 1169 (CC), 2001 1 SA 46 (CC) observed that progressive realisation in this instance of the right to housing imposes a duty on the state to move as expeditiously and effectively as possible. See Malherbe 2005 *Austrian Journal of Public and International Law* 117-118. Some authors also refer to a margin of appreciation which implies a degree of discretion or 'freedom of maneuver.' See Hughes *et al Environmental Law* 97.

⁴⁵ Guideline 7 of the Maastricht Guidelines. For specific violations through acts of commission and acts of omission, see guidelines 14 and 15. Note specifically that the following acts of omission amongst others will constitute the violation of socio-economic rights on the part of states generally: failure to regulate activities of individuals or groups so as to prevent them from violating economic, social and cultural rights (guideline 15(d)); failure to utilise the maximum of available resources towards the full realisation of rights (guideline 15(e)); failure to monitor the realisation of economic, social and cultural rights, including the development and application of criteria and indicators for assessing compliance (guideline 15(f)); failure to remove obstacles to allow for the fulfillment of rights (guideline 15(g)) and failure to meet a generally accepted international minimum standard of achievement, which is within its powers to meet (guideline 15(i)).

met); the targets should subsequent set and monitoring mechanisms developed⁴⁶ and that states should employ policy as a medium to facilitate fulfillment.⁴⁷

Recent years have seen a number of important and related steering decisions *inter alia* by the European Court of Human Rights (ECHR) and the African Commission on Human and Peoples' Rights.⁴⁸ Some of the most pertinent decisions that addressed the positive duties of governments in terms of environmentally relevant rights include *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001),⁴⁹ *López Ostra v Spain* (1994),⁵⁰ *Guerra and Others v Italy* (1998),⁵¹ *Hatton and other v UK* (2001)⁵² and *Taskin and others v Turkey* (2004).⁵³ In each of

⁴⁶ Guidelines 9 and 11 of the Maastricht Guidelines.

⁴⁷ Guidelines 16, 18 and 19 of the Maastricht Guidelines. See also guideline 25 which expects of promotional and monitoring bodies, for example, an Ombudsman or human rights commission, to address violations of socio-economic rights as vigorously as civil and political rights.

⁴⁸ The basis for action in these cases was not exclusively environmental rights or provisions. Environmental issues have been addressed also by making use of rights contained in IL instruments such as the rights to life, association, expression, information, political participation, personal liberty, equality, health, decent living conditions, decent working environments, family life and legal redress. Shelton in Piccolotti and Taillant (eds) *Linking Human Rights* at 3 remarks that 'international organs and tribunals expanded or reinterpreted' many of these guarantees 'in light of environmental concerns'. See further Shelton in Piccolotti and Taillant (eds) *Linking Human Rights* 11-12, 13 and Robb (ed) *International Environmental Law Reports* Volume 3 for a compilation of the most prominent decided cases up to 2001.

⁴⁹ In the decision by the African Commission on Human and Peoples' Rights on Communication 155/96, the Nigerian government was found in violation of the article 24 environmental right contained in the African Charter on Human and Peoples' Rights. Shelton referred to this decision as the 'the first full exposition of a human rights approach to environmental protection.' See Shelton 2002 *Yearbook of International Environmental Law* 202 and further Van der Linde and Louw 2003 *African Human Rights Law Journal* 167-187, Brand in Brand and Heyns (eds) *Socio-Economic Rights* 3, Beyerlin 2005 *Heidelberg Journal of International Law* 526-527 and Centre for Human Rights *Compendium* 159-169.

⁵⁰ *López Ostra v Spain* (1994), Strasbourg, application 16798/90. In this case the government of Spain's inaction resulted in non-fulfilment of the environmental obligations imposed by article 8 of the European Convention on Human Rights. See further Robb (ed) *International Environmental Law Reports* Volume 3 201-229, Sands *Principles of International Environmental Law* 301, Hill *et al* 2004 *Georgetown International Environmental Law Review* 374, Ulvsbäck *Individual Environmental Protection* 185-193, Shelton in Piccolotti and Taillant (eds) *Linking Human Rights* 14-15, Eleftheriadis in Alston (ed) *The EU and Human Rights* 535 and Miller *Environmental Rights* 18-21.

⁵¹ *Guerra and Others v Italy* (1998), Strasbourg, application 14967/89. In this case the Italian government was found in contravention of the environmental claims that are read into article 8 of the European Convention on Human Rights, where it failed to provide timely and essential environmental information on a hazardous chemical factory enabling participants to assess the risk of living nearby this plant. See further Robb (ed) *International Environmental Law Reports* Volume 3 260-293, Sands *Principles of International Environmental Law* 301-302 and Eleftheriadis in Alston (ed) *The EU and Human Rights* 535.

⁵² *Hatton and other v UK* (2001), Strasbourg, application 36022/97. In this case the European Court of Human Rights addressed the issue of noise pollution (as a form of environmental pollution) in the context of the regulation of night flights at Heathrow Airport. See further, *inter alia*, Ulvsbäck *Individual Environmental Protection* 185-193.

⁵³ *Taskin and others v Turkey* (2004), Strasbourg, application 46117/99. In this case the government of Turkey was successfully challenged before the European Court of Human Rights based on an alleged violation of citizens' environmental rights due to authorised gold mining activities that had serious

these cases the judicial bodies raised certain issues that illuminated what governments' fulfillment of environmental rights obligations may entail. Some of the key dicta arising from these deliberations were that environmental rights compel public participation in environmental decision-making, gather and sharing of environmental information environmental information sharing,⁵⁴ pursuance of compliance with and enforcement of environmental law;⁵⁵ that a government should 'move its machinery towards the actual realisation' of environmental rights;⁵⁶ that authorities may be expected to order or permit independent scientific monitoring of threatened environments,⁵⁷ that authorities should conduct and make known environmental and social impact studies prior to major developments;⁵⁸ that environmental information must feed into decision-making processes and policy development;⁵⁹ that authorities should protect their citizens from exposure to dangerous effects of activities when these are indicated by an EIA;⁶⁰ that governments are obliged to prevent serious damage to citizens' health caused by pollution (inclusive of noise pollution) from industrial sites or caused by incidents at industrial sites – even where the industries are privately owned and managed,⁶¹ and that governments should weigh up individuals' rights against those of communities, an

environmental and health impacts. See also Hill *et al* 2004 *Georgetown International Environmental Law Review* 398-390 for a discussion of the foreign law decision, *Montana Environmental Information Center v Department of Environmental Quality*, 988 P2d 1236 (Mont 1999) where the Montana Supreme Court applied the highest level of scrutiny to matters implicating residents' constitutional right to a clean and healthy environment.

⁵⁴ *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001), *Taskin and others v Turkey* (2004) and *Guerra and Others v Italy* (1998).

⁵⁵ *Hatton and Others v United Kingdom* (2001) and *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001),

⁵⁶ *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001) at par 47. The machinery of a state can be interpreted to include legislative and administrative functionaries as well as other organs of state inclusive of the different spheres or levels of government and of course the governance endeavor itself.

⁵⁷ *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001).

⁵⁸ *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001) and *Taskin and others v Turkey* (2004).

⁵⁹ *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001), *Taskin and others v Turkey* (2004) and *Guerra and Others v Italy* (1998).

⁶⁰ *Taskin and others v Turkey* (2004).

⁶¹ State authorities may, for example, be expected to remove residents from a dangerous or exposed site. See *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001), *Fadeyeva v Russia* (2005), Strasbourg, application 55723/00, *Moreno Gomez v Spain* (2004), Strasbourg, application 4143/02 and *Oneryildiz v Turkey* (2004), Strasbourg, application 48939/99. The latter case was, however, decided in terms of article 2 of the European Convention.

action which could require for economic considerations with environmental impact to be weighed up against environmental rights.⁶²

It is argued that bearing the above IL instruments, interpretative texts and case law in mind it is possible to extract a number of generic elements for the fulfillment of fundamental environmental rights and principles in general. It is in other words possible to distill from IL key facets of the fulfillment of constitutional environmental provisions. These elements/facets could serve to indicate to governments the *type* of affirmative actions required on their part where their constitutions require fulfillment of an environmental right or a related fundamental provision.

3. Generic activities distilled

With reference to the IL instruments discussed above, it is proposed that at least seven elements can be distilled for the fulfillment of constitutional environmental provisions generally.⁶³ The primary significance of these elements lies in their ability to assist authorities in estimating the type of positive action that may be required in terms of ambiguously phrased constitutional environmental provisions. The elements may arguably be crucial also in the long-term governance of SEC. This idea is unpacked below. The following seven generic elements are proposed:⁶⁴ public participation; collection and dissemination of environmental information; development and implementation of environmental law, policy and programmes; compliance with and enforcement of environmental law; the provision of environmental infrastructure; and the establishment of partnerships and environmental education.⁶⁵ These elements have a non-static nature and translate into what may be called ‘generic activities’

⁶² *Social and Economic Rights Action Centre for Economic and Social Rights (SERAC) v Nigeria* (2001) and *López Ostra v Spain* (1994). The ECHR found in the latter case that the aims intended with an environmental provision (a right) are important considerations in this balancing act.

⁶³ This paper is focused in the particular on the positive obligations of the executive and legislative branches of the state. Accordingly, no attention is paid to the obligations that may befall the judicial branch of government. However, the fulfillment of environmental rights, when taking into account the role of judicial bodies, may necessitate the addition of an eighth element that focuses on access to justice and issues related to *locus standi*.

⁶⁴ In the context of this paper, environmental justice and equality are not regarded as separate elements but are perceived as inextricably intertwined with each of the seven elements proposed. This links with the idea of Malherbe 2005 *Austrian Journal of Public and International Law* 113-114 that a special relationship exists between the right to equality and all other socio-economic rights.

⁶⁵ Leckie and Gallagher (eds) *Economic, Social and Cultural Rights* xxii describe three generic elements for the fulfillment of socio-economic rights generally. These have been absorbed in the expanded list of elements proposed in this paper.

which direct towards affirmative or positive action on the part of governments towards fulfillment of their constitutional environmental obligations. Each generic activity lends itself to in-depth analysis. For the purposes of this paper these are, however, only succinctly described.

3.1 *Public participation*⁶⁶

By whatever name (public participation, citizen involvement, indigenous peoples' rights, local community consultation, etc) the idea that people and entities should engage and be engaged in their governance is 'gaining ground and rapidly expanding in both law and practice.'⁶⁷ Participation links with the idea of participatory democracy and is, *inter alia*, defined as the 'genuine involvement of all social actors in social and political decision-making processes that potentially affect the communities in which they live and work.'⁶⁸ In the environmental context public participation also relates to the notion of environmental justice.⁶⁹ Public participation or participation in environmental decision-making may even be viewed as a procedural sub-right to substantive environmental rights.⁷⁰ As a generic activity in

⁶⁶ Public participation in relation to environmental rights is expressly or implicitly called for, *inter alia*, in the Rio Declaration (principles 10, 20 and 22), Agenda 21 (chapter 23), Local Agenda 21, the Ksentini Report (paragraph 70 and principle 18 of the Draft Principles thereto), the Brundtland Report (principle 6), the Earth Charter (principle 13(b)) and the Aarhus Convention (articles 6-8). It features also in international environmental case law. See par 2 above.

⁶⁷ Pring and Noé in Zillman *et al* (eds) *Human Rights in Natural Resource Development* 11.

⁶⁸ Picolotti in Picolotti and Taillant (eds) *Linking Human Rights* 50.

⁶⁹ Environmental justice incorporates considerations of distributional justice, social equity and fairness among human beings. On the notion of environmental justice generally see, amongst others, Feris *Environmental Justice*, Glazewski 1999 *Acta Juridica* 1-35, Stacy 1999 *Acta Juridica* 36-70, Cowen 1999 *Acta Juridica* 121-141, Kidd 1999 *Acta Juridica* 142-160, Glinski 2003 *Verfassung und Recht in Ubersee* 49-74, Flournoy 2003 *Columbia Journal of Environmental Law* 87, Kloepper *Umweltgerechtigkeit*, Hiskes 2005 *Human Rights Quarterly* 1346-1364 and Mickelson in Bodansky *et al* (eds) *International Environmental Law* 285-290. According to Verschuuren and Ebbesson's accounts, Habermas views regulated public participation and transparency as essential for the legitimacy of law and this implies that procedure must not only provide for public participation, but must also give equal opportunities to the parties involved to influence one another and to limit the authorities' discretion when making a final decision. See Verschuuren 2005 *Yearbook of European Environmental Law* 31 at fns 18 and 19.

⁷⁰ See, *inter alia*, Taylor in Ginther *et al* (eds) *Sustainable Development and Good Governance* 205-209, Giorgetta in Schrijver and Weiss (eds) *International Law* 397, Picolotti in Picolotti and Taillant (eds) *Linking Human Rights* 49, Verschuuren 2005 *The Yearbook of European Environmental Law* 29, Steele and Jewell in Jewell and Steele (eds) *Environmental Decision-Making* 1, Kiss in Picolotti and Taillant (eds) *Linking Human Rights* 32, 36-39, Birnie and Boyle *International Law* 261-265, Verschuuren 2002 *Yearbook of Human Rights and Environment* 108, Earthrights 2002 *Yearbook of Human Rights and Environment* 227, Shelton in Picolotti and Taillant (eds) *Linking Human Rights* 6-8, Saladin in Picolotti and Taillant (eds) *Linking Human Rights* 57-59, 63-66, Symonides 1992 *International Journal for Legal Information* 33-34, Déjeant-Pons and Pallemarts *Human Rights* 23 and Glinski *Verfassung und Recht in Ubersee* 66. Refer for some challenges related to public

the fulfillment of constitutional environmental provisions, public participation relates to popular involvement, *inter alia*, in environmental decision-making processes of authorities related to prioritisation or development, for example. It requires continuous active involvement of all stakeholders affected by, or who may have an interest in, environmental decisions or decisions that may have environmental impact.⁷¹ Not all governance endeavors necessarily involve a well-structured decision-making process.⁷² Public participation should be understood to relate also to the participation of the public in specialised environmental governance activities such as the monitoring of environmental performance, environmental needs analysis and the collection of environmental data.⁷³ Public participation as an element for the fulfillment of environmental rights hence transcends the idea of merely participating in environmental decision-making processes. To contribute to the fulfillment of environmental rights, public participation should be viewed as requiring the formal⁷⁴ and less formally structured participation of people in environmental governance generally.⁷⁵ This may prevent a situation where, for example, policy is drafted or documents are produced by the state (at any level) followed by a ‘public relations exercise’ guised as a public participation meeting.⁷⁶

The modalities of participation will in different countries be affected and determined, *inter alia*, by the legal systems, government structures, traditions and culture of the countries. This implies that in similar cases, different public participation patterns and instruments may be required.⁷⁷ However, it is argued that participation in *local* environmental governance may everywhere generally be crucial. Since local government is the level or sphere of government closest to right-holders, local

participation also to Fine and Owen 2005 *Hastings Law Journal* 901-981 and Feichtinger and Pregernic 2005 *European Environment The Journal of European Environmental Policy* 212-227.

⁷¹ Public participation should arguably not be confined to the ‘public concerned’ but should allow ‘any person’ and all sectors in society to participate. See Verschuuren 2005 *Yearbook of European Environmental Law* 29-30. Stakeholder-identification is accordingly an important facet of public participation. See, *inter alia*, Ferreira 1999 (1) *Journal of South African Law* 113.

⁷² See further Du Plessis 2008 *Potchefstroom Electronic Law Journal* (to be published in 2008).

⁷³ This links with the idea that participation embraces both the rights to know and to review. See Saladin in Picolotti and Taillant (eds) *Linking Human Rights* 57.

⁷⁴ Formal participation arguably takes place through politically elected representatives in the democratic government structure and structured public participation meetings or processes in advance of a specific type of decision.

⁷⁵ Modes of informal participation may typically include petitions or the possibility to lodge complaints or suggestions.

⁷⁶ Robinson in Jewell and Steele (eds) *Environmental Decision-Making* 54.

⁷⁷ Symonides 1992 *International Journal for Legal Information* 33.

government is best situated to attract public participation. Still, the real impact and value of public participation in local environmental governance will largely depend on the level of devolution of environmental decision-making power in government and the presence or absence of good intergovernmental communication and cooperation.⁷⁸

Participation is often thought to hamper and delay the decision-making process⁷⁹ and this opinion may be well founded. The innovation and creativity of authorities are required in facilitating participation and aligning public input *inter alia* with governance endeavors, planning and resource utilisation on the part of the state. Public participation is two-sided. It is process-related where it is viewed as an end in itself, and it is substantive where it contributes to some further important outcomes/achievements.⁸⁰ Participation in environmental decision-making is an effective tool to establish long and short term environmental priorities, to offer solutions to environmental challenges (inclusive of SEC), and to prepare, execute and apply the most practicable environmental option.⁸¹

⁷⁸ In the absence of good intergovernmental cooperation and communication, public input on, for example, the most pressing needs of a particular society will remain stuck in the local level knowledge-base regardless of the fact that often a particular environmental need or challenge requires the intervention of regional and national government.

⁷⁹ Verschuuren with reference to Ebbesson remarks that participation is costly, time-consuming and obstructive and could to some extent even repress differences. See Verschuuren 2005 *Yearbook of European Environmental Law* 40 at fn 48 and Robinson in Jewell and Steele (eds) *Environmental Decision-Making* 54.

⁸⁰ Pring and Noé in Zillman *et al* eds *Human Rights in Natural Resource Development* 22.

⁸¹ Piccolotti and Taillant (eds) *Linking Human Rights and the Environment* 50-53. Piccolotti outlines four basic modalities of public participation, namely: informative participation, consultative participation, participation in decision-making and participation in management. The four conditions to ensure the enjoyment of the right to participate are said to be access to information, autonomy, political willingness and stakeholder identification. See also Verschuuren 2005 *Yearbook of European Environmental Law* 29-33. Participation may also be crucial for environmental risk identification in policy and law-making processes. See Page and Proops (eds) *Environmental Thought* 27. In the context of fulfilling the constitutional environmental claims of people, it is proposed that public participation may be practically relevant for the following reasons. Affected persons likely to be otherwise unrepresented in, for example, environmental assessment and decision-making processes are provided an opportunity to present their views. Communities may provide useful additional information to decision-makers—especially when cultural, social or environmental values are involved that cannot be quantified easily. And the accountability of political and administrative decision-makers is likely to be reinforced if environmentally relevant processes are open to public view. Openness puts pressure on administrators to follow, for example, a required procedure in all cases. Without integrating the viewpoints of citizens, environmental policy runs the risk of being delayed early in the implementation phase. Public participation enhances community ownership of decisions and resultant outcomes because of the community being part of the wider decision-making process. Also, stakeholder engagement may result in partnerships or alliances between interested parties and local government; and public confidence in the reviewers and decision-makers can be enhanced since citizens clearly can see in every case that all environmentally-relevant issues have been fully and carefully considered.

3.2 *Collection and dissemination of environmental information*⁸²

As the second generic element, environmental information relates to the idea of *publicare*.⁸³ Generally, it may be very difficult for a government to fulfil its constitutional environmental obligations without access to up-to-date and accurate information on the state of the environment. Consensus exists that the collection and dissemination of environmental information, the provision of access to environmental information, and the incorporation of available environmental information in the design of policy, law and decision-making processes are all equally important considerations.⁸⁴ As was the case with public participation, the collection and fair dissemination of environmental information can be viewed as establishing a subsidiary procedural right to substantive environmental rights.⁸⁵

Environmental information stands at the core of estimating, *inter alia*, the extent and impacts of ecological change, and often requires sophisticated data-collection methods.⁸⁶ The type of information required may include, amongst other measurable factors, data on environmental impacts, the properties of hazardous substances, pollution and emission levels, the success rate of conservation strategies, the state of

⁸² Collection and dissemination of environmental information in relation to environmental rights are expressly or implicitly called for, *inter alia*, in the Aarhus Convention, the Rio Declaration (principle 10), Agenda 21 (chapter 23), Local Agenda 21 and the Ksentini Report (principle 15 of the Draft Principles thereto). They feature also in international environmental case law. See par 2 above.

⁸³ *Publicare* means 'making known.' See Hallo 1997 *Recente Ontwikkelingen in Het Europees Milieurecht* 11.

⁸⁴ See, *inter alia*, Kimber in Jewell and Steele (eds) *Environmental Decision-Making* 140-143, Belotsky 1998 *Tel Aviv University Studies in Law* 288, Kiss in Picolotti and Taillant (eds) *Linking Human Rights* 32, Birnie and Boyle *International Law* 261-265, Verschuuren *Yearbook of Human Rights and Environment* 108, Earthrights 2002 *Yearbook of Human Rights and Environment* 227, Shelton in Picolotti and Taillant (eds) *Linking Human Rights* 3-6, Vukosovic 1990 *Revista Juridica U.P.R* 894, Gavouneli 2000 *Tulane Environmental Law Review* 303, Symonides 1992 *International Journal for Legal Information* 29-31, Saladin in Picolotti and Taillant (eds) *Linking Human Rights* 61 and Verschuuren 1993 *Austrian Journal of Public and International Law* 70.

⁸⁵ Hallo in Pâques and Van Pelt (eds) *Recente ontwikkelingen in het Europees Milieurecht* 11-12 prefers to speak of the 'right to know' instead of the 'right of access to environmental information' based on the idea that the right to know is broader than the right of access to environmental information.

⁸⁶ Robinson in Jewell and Steele (eds) *Environmental Decision-Making* 53 remarks with reference to Dovers that '(g)iven the pervasive uncertainty' surrounding environmental decision-making, we need a profound increase in ecological research and monitoring, and stronger statutory and informational bases for gathering, co-ordinating and communicating information.'

environmental infrastructure and the rate of resource consumption.⁸⁷ As a generic activity relating to the fulfillment of constitutional environmental provisions, authorities may have no choice but to disseminate sufficient and accurate environmental information amongst stakeholders at regular intervals.⁸⁸ It is important for the most appropriate means or methods for data collection to be explored and to establish the most suitable media by means of which to fairly disseminate environmental information. An extended positive obligation of government may be to compel the private sector to collect and disseminate environmental information and to report in public on environmentally relevant activities and footprints.⁸⁹

Environmental information may not be filtered to reveal only ‘what is good for people to know’ and should be factually correct and valid. In as far as the collection and dissemination of environmental information establishes an element for the fulfillment of constitutional environmental duties, authorities should ensure that environmental information remains at all times non-discriminatory and accurate. Access to accurate environmental information could be a crucial pre-requisite, *inter alia*, for well-informed public participation, environmental law, policy and programmes development, environmental law compliance and enforcement and environmental education.⁹⁰ It may arguably be impossible also to plan governance strategies in the long or short term, without information being available on, for example, baseline environmental status’ and longitudinal ecological and social trends.

3.3 Development and implementation of environmental law, policy and programmes⁹¹

The positive obligations posed by constitutional environmental provisions are mostly directed towards the legislative and executive branches of state governments. It

⁸⁷ Refer to Robinson in Jewell and Steele (eds) *Environmental Decision-Making* 53.

⁸⁸ See Fabra 2002 *Yearbook of Human Rights and Environment* 208. This idea has been reiterated also in international case law. See par 2 above.

⁸⁹ See Du Plessis 1999 *Stellenbosch Law Review* 9.

⁹⁰ The right to claim access to environmental information will, however, not under all circumstances be absolute – it could at times be subject to limitation in terms, for example, of the right to privacy.

⁹¹ The development and implementation of environmental law, policy and programmes in relation to environmental rights is expressly or implicitly called for, *inter alia*, in Agenda 21, Local Agenda 21 and the Ksentini Report (principle 22 of the Draft Principles thereto). It featured also as a particular point of importance in the SERAC decision. See par 2 above.

follows that fulfillment of environmental rights in the third place requires suitable supplementary domestic environmental law, policy and programmes.⁹² The idea of having an obligation to design and implement laws, policies and programmes is in itself, rather woolly. The question that begs to be answered is what type of issues should these instruments address? How comprehensive must they be? How many of what? When is it appropriate to address an issue in an enforceable law, and when is it preferable to address it by means of an unenforceable policy or programme? The answers to these questions are directly related, amongst other aspects, to the nature of the government structure, the extent of legislative and executive decentralisation, the constitutional powers of the legislature and executive, the state of the environment, and the socio-economic conditions of a country. It is therefore impossible to provide clear and generically applicable answers to the question. A few observations should, however, be made in this regard.

The development, subsequent to the inception of a constitutional environmental provision, of a framework of environmental *laws (legislation)* on broad areas such as environmental management, environmental impact assessment, integrated planning, integrated pollution control, water, air, biodiversity etc may be inevitable. These laws should arguably be aligned, to an extent appropriate to a particular country, with internationally recognised environmental principles, standards, management systems, best practical environmental options and mechanisms for compliance and enforcement. Framework laws should also be clear on who is bound by them and who is accountable for their implementation and enforcement. Furthermore, these laws must provide clear definitions, for example, of ‘the environment’ or ‘pollution’. Such issues can be addressed in *policy documents* instead, in which instance at least two factors need to be borne in mind: (1) policies are generally unenforceable before a court of law and usually only public entities can in some way be held accountable in terms thereof and (2) policy is more flexible than legislation in the sense that it can usually be amended more easily.⁹³ Whether a law or a policy is more suitable for the

⁹² De Wet *Constitutional Enforceability* 38 contends that legislation is often needed ‘to give a more concrete shape to constitutional rights.’

⁹³ Ferreira 1999 (1) *Journal of South African Law* 92, 106, 291 holds that the implementation of socio-economic rights (inclusive of environmental rights) can be vastly dependent on matters of policy. He proceeds to state that environmental policy may serve a particularly important role as a means to hold governors accountable for commitments made. He also makes a strong case that the implementation of socio-economic rights largely depends on policy considerations. Several advantages and disadvantages

fulfillment of constitutional environmental obligations may depend on different factors in different contexts. Some views on this issue are conveyed below. The development of *programmes*⁹⁴ (such as for example programmes related to climate change that involve the public and private sector, programmes aimed at improved corporate social responsibility or projects related to environmental-friendly supply chain management) may at times be particularly useful in furthering constitutional environmental provisions. They need not necessarily be developed by organs of state or exclusively by organs of state. Programmes are generally less formal and fixed than laws or policies and often have an envisaged beginning and end as well as a very particular goal. The usefulness of programmes to advance the fulfillment of constitutional environmental provisions lies in the fact that these instruments can be used to achieve, *inter alia*, the aims of different laws or policies – including cross-sectoral laws and policies.⁹⁵ Programmes can, however, also have aims that are not necessarily based on the objectives of other laws or policies.

The detail, scope and suitability of different laws, policies and programmes will depend on *inter alia* the government structure and conditions in a particular state. What may, however, hold generally true is that the development of law, policy and programmes as a generic activity for the fulfillment of environmental rights should be viewed as a crucial means to introduce guidelines, commitments, objectives, targets, indicators, substantive standards and requirements and specific duties to facilitate the fulfillment of constitutional environmental provisions.⁹⁶ The framing of legislation and policy and subsequent environmental programmes may furthermore be crucial to establishing an acceptable minimum standard of environmental performance.⁹⁷ Laws, policies and programmes can be designed so as to have short or long-term goals and can therefore facilitate the long-term governance of SEC, for example. They can also be the means to amalgamate most of the generic activities inherent in the fulfillment

exist pertaining to the use of legislation or policy documents. Due to length constraints these will not be elaborated upon in this contribution.

⁹⁴ The notions of programmes and projects can for the purpose of this paper be viewed as two sides of the same coin and to carry the same meaning. Programmes and projects in the context used here are indicative of activities other than law and/or policy-making.

⁹⁵ See, *inter alia*, Leckie and Gallagher (eds) *Economic, Social and Cultural Rights* xxii.

⁹⁶ The inception and use of accurate and scientifically validated environmental information and interdisciplinary cooperation may be fundamentally important in the development of law, policy and programmes.

⁹⁷ See Alston *et al* 1998 *Human Rights Quarterly* 697.

of constitutional environmental provisions. As will be discussed below, it is proposed in this paper that the long-term governance of SEC must be entrenched in law (domestic legislation) through suitable provisions that provide for circular long-term planning

3.4 Compliance and enforcement⁹⁸

For the law to have significance it needs to be shadowed by compliance and enforcement.⁹⁹ Compliance with and enforcement of environmental law naturally follow on the design and implementation of environmental law, and establish the fourth generic activity for the fulfillment of constitutional environmental provisions. Compliance in this context refers to the meeting of obligations in terms of environmental law, whilst compliant behaviour is behaviour that conforms to legal rules.¹⁰⁰ Enforcement seeks results, and refers to the set of actions that governments and/or others take to achieve legal compliance within a determined regulated community and to correct or halt situations that arise from activities beyond the confines of the law.¹⁰¹ Enforcement therefore relates to the ‘implementation of consequences’ of non-compliance. These consequences may vary from financial penalties to legal action following inspections or negotiations.¹⁰²

In his reflection on the duties generated by environmental rights, Nickel¹⁰³ remarks that an effective system of environmental protection requires a governmentally enacted system of environmental regulation that, *inter alia*, sets safety standards for all processes and substances. This system must encourage or pressure those using these processes and substances to comply with its regulations, and impose penalties

⁹⁸ Compliance and enforcement in relation to environmental rights are expressly or implicitly called for, *inter alia*, in guidelines 16, 17, 19 and 25 of the Maastricht Guidelines. Compliance and enforcement also features as a particular point of importance in the López Ostra decision. See par 2 above.

⁹⁹ See for example Eide 1999 *Norwegian Institute of Human Rights Human Rights Report* 146.

¹⁰⁰ Crossen 2004 *Georgetown International Law Review* 477 and Hutter *Compliance: Regulation and Environment* 13-14.

¹⁰¹ International Network for Environmental Compliance and Enforcement (INECE) Principles of Enforcement 2005 at [Twww.inece.org/enforcementprinciples.html](http://www.inece.org/enforcementprinciples.html). On the meaning of enforcement in general, see Wolfrum *Means of Ensuring Compliance* 30-31.

¹⁰² See Crossen 2004 *Georgetown International Law Review* 478.

¹⁰³ Nickel 1993 *Yale Journal of International Law* 286.

on those who fail to comply.¹⁰⁴ For example, violations of environmental rights may occur through the direct actions of government or the activities of other entities insufficiently regulated by government.¹⁰⁵ As a generic activity in the fulfillment of environmental rights, compliance and enforcement therefore apply to the private sphere as a community regulated by government, but also to government as a public entity regulated and governed by the law. It is therefore important to comprehend that when it comes to compliance with and enforcement of environmental law, the state or government is simultaneously a regulated entity and an entity responsible for regulation. Compliance and enforcement of law generally, but environmental law in particular, may be one of the means through which state governments can control SEC and prevent avertable detrimental SEC caused by illegal behaviour. As far as it pertains to positive action, government may also be expected to develop, for example, licences or incentives to induce compliance, and to establish well-equipped and trained enforcement agencies.

3.5 Provision of environmental infrastructure¹⁰⁶

The fifth activity for fulfillment of socio-economic rights generally is the provision of environmental services/infrastructure. Environmental infrastructure in this context directly relates to planning¹⁰⁷ whilst environmental service delivery relates to the provision of potable water supply and management, energy, solid waste management, waste-water collection and treatment, and sanitation. Perhaps at the heart of the fulfillment of environmental rights in developing or under-resourced countries is government's provision of sufficient, non-discriminatory environmental infrastructure.

¹⁰⁴ The monitoring, compliance and enforcement of environmental rights in IL are contentious issues that fall beyond the scope of this discussion. However, the effectiveness of IL generally is also dependent on the assistance of states in the monitoring of IL rights in a domestic context. On this matter see Sands in Cameron *et al* (eds) *Improving Compliance* 52, 53 and Nollkaemper 2002 *Yearbook of International Environmental Law* 166, 181. States, by means of their governments, similarly have to monitor the realisation of rights within their jurisdiction by means of an effective compliance and enforcement regime. See Mitchell in Cameron *et al* (eds) *Improving Compliance* 11-13.

¹⁰⁵ See Alston *et al* 1998 *Human Rights Quarterly* 697.

¹⁰⁶ Provision of environmental infrastructure in relation to environmental rights is expressly or implicitly called for, *inter alia*, principle 28 of the Limburg Principles and guideline 9 of the Maastricht Guidelines.

¹⁰⁷ Ferreira 1999 (3) *Journal of South African Law* 445 holds that implementation of the environmental right in the South African context largely depends on proper and suitable planning – as does justified and sustainable development.

Environmental infrastructure is an important part of the immediate physical environment of people. Environmental infrastructure often constitutes the means by which people get access to natural resources such as clean water and air. Their access to environmental infrastructure, as well as the efficiency and maintenance of environmental infrastructure by government, more often than not determines peoples' sense of government's fulfillment of their constitutional environmental claims. The Maastricht Guidelines refers to the 'minimum core obligation to ensure the satisfaction of, at the very least, minimum essential levels' of rights.¹⁰⁸ The minimum essential level for the fulfillment of constitutional environmental provisions arguably relates to the provision of environmental infrastructure. An environmental right is void of any meaning for people where they do not even have access to basic environmental amenities. In so far as environmental infrastructure is crucial, *inter alia*, in access to sanitation and hygienic living conditions, it is also directly related to peoples' right to human dignity and the notion of environmental justice.¹⁰⁹ It should be added that to provide sufficient environmental infrastructure that will be sustainable in the long term, public bodies may require public input (participation) as well as, *inter alia*, statistical information.¹¹⁰

3.6 Partnerships¹¹¹

It has been argued that environmental management and governance require the establishment of multi-level partnerships and coordination in public and private domains.¹¹² Constitutional environmental provisions generally address all organs of state (levels and functionaries of government). The fulfillment of the obligations posed by these provisions may require the establishment of cooperative partnerships

¹⁰⁸ Guideline 9.

¹⁰⁹ See also par 3.1.

¹¹⁰ This reflects also on the interrelatedness of the different generic activities.

¹¹¹ The formation of partnerships in relation to environmental rights is expressly called for, *inter alia*, in the Rio Declaration, Agenda 21 and LA 21. See also the UN's voluntary multi-stakeholder initiative called Partnerships for Sustainable Development of the UN Department of Economic and Social Affairs, Division of Sustainable Development at <http://www.un.org/esa/sustdev/partnerships/partnerships.htm> and Fabra 2002 *Yearbook of Human Rights and Environment* 209.

¹¹² Nel "Innovative Partnerships – Delivering flexible short course training exposures to build capacity in environmental management: Some learning points". Paper delivered at the Southern Africa Regional Expert Conference on Innovative Conservation Learning for Poverty Eradication and Sustainable Development, May 2006, Stellenbosch, South Africa.

between different state bodies, for instance. It is deduced from IL that the sixth generic activity for the fulfillment of environmental rights is authorities' establishment of partnerships with a number of parties inclusive of: right-holders; other organs of state (different spheres and line-functionaries of government as well as traditional leadership); the private sector; public bodies in foreign jurisdictions; non-governmental organisations (NGOs); community based organisations (CBOs); and international organisations such as the IUCN,¹¹³ UNEP¹¹⁴ and ICLEI.¹¹⁵

The fulfillment of environmental rights, if one considers for example, environmental data collection and dissemination or the provision of environmental infrastructure, may often compel public authorities to establish working partnerships with the private sector and even with the community in which it operates. It is similarly not unthinkable for the authorities of different countries to establish cross-border partnerships that will enable or assist different governments in fulfilling their positive duties in terms of a constitutional environmental provision.

Key partnership-themes that may relate to the fulfillment of environmental rights may typically include: exchange of environmental information and data; environmental co-operation; exchange and sharing of information on best environmental practices and scientific environmental knowledge as well as reciprocal sharing of environmental expertise. In the implementation of laws and policies and programme management, various forms of public-private-partnerships such as joint ventures, outsourcing, franchising, build-operate-transfers and environmental agreements could benefit, for example, models of natural resource management and environmental service provision.¹¹⁶ Streck¹¹⁷ observes that the positive obligations derived from environmental rights cannot be the mandate of a single sector (the public sector) or a single level (national government) alone. Instead, to fulfil the obligations imposed by constitutional environmental provisions, governments may inevitably have to work on

¹¹³ World Conservation Union. See IUCN <http://www.iucn.org/>.

¹¹⁴ UN Environmental Programme. See UNEP <http://www.unep.org/>.

¹¹⁵ International Council for Local Environmental Initiatives. See ICLEI <http://www.iclei.org/>. See for an interesting development in the EU as far as the conclusion of target-based tripartite contracts and agreements between the EU, the EU countries and regional and local authorities are concerned, Krämer 2005 *Yearbook of European Environmental Law* 722.

¹¹⁶ Krugmann *Fundamental Issues* 22-23.

¹¹⁷ Streck 2002 *Yearbook of International Environmental Law* 72.

a long-term basis with partners from other sectors at a variety of levels, including local, national, regional and global levels.¹¹⁸ The long-term governance of SEC may similarly depend on cross-disciplinary relationships (typically in the fields of sociology, law and natural sciences) and maintenance of open communication channels generally.

3.7 *Environmental education*¹¹⁹

Education is an often neglected albeit potentially very important aspect of the fulfillment of socio-economic rights generally.¹²⁰ Provision and promotion of environmental education (not merely environmental awareness) not only form part of the promotion of environmental rights amongst people, but should also constitute the last of the generic activities for the fulfillment of constitutional environmental provisions.¹²¹ According to Symonides¹²² ‘(t)he progress in environmental education which goes beyond cognition (awareness and comprehension) into valuation and attitudinal formation can be seen as a very important factor for the implementation of the right to a healthy and balanced environment.’ The notion of environmental education takes the element of environmental information sharing further by implying that, apart from only sharing facts and data with environmental rights-holders, people

¹¹⁸ Partnerships, for example, with environmental experts and institutions with improved infrastructure or additional resources may also be employed to ease the burden of the state with regard to its positive constitutional duties.

¹¹⁹ Environmental education in relation to environmental rights is expressly called for, *inter alia*, in the Ksentini Report (principle 17 of the Draft Principles thereto), the Limburg Principles (principle 32) and the Earth Charter (principles 9(b) and 14). Article 29 of the Convention on the Rights of the Child of 1989 furthermore provides that the education of the child should be directed towards developing respect, *inter alia*, for the natural environment. Sands and Werksman in Ginther *et al* (eds) *Sustainable Development and Good Governance* 185 show that an increasing number of international environmental agreements impose positive obligations on states to take measures to improve public education and awareness on environmental matters.

¹²⁰ See, *inter alia*, Volodin in Fischer-Buder *Human Rights* 16.

¹²¹ Refer to, amongst others, Earthrights 2002 *Yearbook of Human Rights and Environment* 227, Vukosovic 1990 *Revista Juridica U.P.R* 894 and Symonides 1992 *International Journal for Legal Information* 31-33. d’Engelbronner-Kolff in d’Engelbronner-Kolff (ed) *Institutionalisation of Human Rights* 152-163 argues that an educated public opinion is essential to the protection of human rights generally and the development of further means of implementation. The obstacles to human rights awareness that the author raises include, *inter alia*, illiteracy, underdevelopment and cultural problems (especially related to women). Furthermore, human rights education should be designed in a way that takes into account the legal reality, levels of development and cultural traditions. A case is made by d’Engelbronner-Kolff for developed programmes which not only provide people with information on the existence and meaning of human rights, but which also aim at changing the living, working and learning conditions of people.

¹²² Symonides 1992 *International Journal for Legal Information* 33.

should be educated on what to do with the information they receive.¹²³ The positive duty of governments is hence two-fold: (1) people should be comprehensively educated on issues related to their environment and (2) people should be capacitated to act upon the environmental knowledge gained.

Environmental education can accordingly not be viewed as something which belongs to the curricula of educational centres. Environmental education should focus on the sustainable transfer of environmental knowledge and knowledge-based skills between rights- and duty holders at different levels. Typical focus points for environmental education as an element for fulfillment of environmental rights would, for example, include environmental management; the meaning of sustainable development; environmental law principles; environmental justice and equity, ecological cycles; means to reduce waste production; improved consumption patterns and the environmentally harmful impacts of human activity.¹²⁴ Environmental education must be directed at promotion of environmental responsibility and states may opt for international assistance on education focus points and methods.¹²⁵ For the long-term governance of SEC it may be crucial to educate people (children, adult learners, civil society in general, public office bearers and politicians) on the long-term effects of SEC and measures to prevent detrimental SEC and also to build systematically on existing knowledge bases.

3.8 Assessment

It is not unthinkable for several options to be available to countries in getting around the predicaments posed by ambiguities in constitutional law. One of the options

¹²³ Robinson in Jewell and Steele (eds) *Environmental Decision-Making* 58 argues that education should play a central role, *inter alia*, in information-based approaches to pollution-control.

¹²⁴ See Symonides 1992 *International Journal for Legal Information* 32.

¹²⁵ The United Nations Decade of Education for Sustainable Development (2005-2014), for which the UN Educational, Scientific and Cultural Organisation (UNESCO) is the lead agency, aims to integrate the principles, values, and practices of sustainable development into all aspects of education and learning. It aims to encourage changes in behaviour that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations. See Education for Sustainable Development http://portal.unesco.org/education/en/ev.php-URL_ID=23279&URL_DO=DO_TOPIC&URL_SECTION=201.html and Fischer-Buder *Human Rights* 17-20. Education for sustainable development, according to UNESCO, mirrors the concern for education of high quality and demonstrable characteristics such as interdisciplinary and holistic learning for sustainable development embedded in a whole curriculum rather than as a separate subject, shared values, critical thinking, multi-method learning, participatory decision-making and locally relevant education in a language that is accessible.

already proposed in this paper is to turn, at least as far as constitutional environmental law is concerned, to IEL and international human rights law. IEL and international human rights law (even where contained in international soft law) serve as direction indicators pertaining to what may be expected of governments in fulfilling positive obligations imposed by constitutional environmental provisions. With reference to a number of key IL instruments at least seven elements for the fulfillment of constitutional environmental provisions were extracted above. As was indicated, these elements direct attention to the need for action or ‘deeds’ on the part of government, and hence translate into what can be referred to as ‘generic activities’. It is proposed in this paper that these generic activities: (1) provide clarity as to what it may mean for governments to satisfy the obligation to fulfil constitutional environmental provisions and (2) should be viewed as basic legal ‘requirements’ for the process of governing SEC on a long-term basis. The first part of the proposal is factually based on what is contained in the IL instruments discussed. The second, more inventive part of the proposal is based on the idea that the long-term governance of SEC requires concerted positive action on the part of the executive and legislative branches of state governments. It requires of governments to meet certain ‘criteria.’ Long-term governance of SEC can arguably be sustainable only with the direct participation of governed entities and communities; when governance strategies and decisions are based on sound environmental information that can foretell future trends and challenges; in as far as it is captured and planned for in resilient and apt legislation, policy or programmes; to the extent that governing and governed communities are committed to compliance with and enforcement of related legislation; where environmental infrastructure is provided in equal fashion to all who is entitled thereto; in so far as good inter-governmental working relationships and strong partnerships between government and other sectors are established for the sharing of resources, knowledge and capacity and to prevent overlap in functions; and to the extent that people exposed to (and perhaps also to some extent responsible for) SEC are sufficiently and coherently educated, *inter alia*, on good environmental practices and the severe consequences of leaving prolonged environmental footprints.

4 Constitutional environmental law and developments in Germany, Namibia and South Africa

To bring this paper to a close with no more than a theoretical argument on the link between the fulfillment of constitutional environmental provisions and the long-term governance of SEC would be to leave this contribution in a rather embryonic stage of development. Hence, some developments in Germany, Namibia and South Africa are discussed in the process of working towards a generically applicable conclusion on the dormant albeit promising role of constitutional law in the long-term governance of SEC.

4.1 Germany

Article 20(a) of the Constitution or Basic Law of the Federal Republic of Germany, 1949 (*Grundgesetz*)(GG) states that with regard to its responsibility towards future generations, the state should protect the natural foundations of life, and the animals, in the framework of constitutional order through legislation that is pursuant to law and justice.¹²⁶ Article 20(a) establishes the so-called *Staatziel Umweltschutz* – an objective constitutional obligation on the state. Although not designed as an environmental right that can be enforced by citizens,¹²⁷ the *Staatziel Umweltschutz* has a legal character¹²⁸ and anchors the notion of sustainable development in the GG.¹²⁹ Article 20(a) implies, *inter alia*, that all state organs must operate with due regard to the environment.¹³⁰ The *Staatziel Umweltschutz* accordingly has normative content-value and is anthropocentric in nature in as far as it aims to benefit humans.¹³¹ The importance of this constitutional provision is contained in the fact that the environmental norm imposes negative and positive obligations on the part of all government bodies and structures in Germany. Illustrative of the point made

¹²⁶ For an account of the inclusion of the article 20(a) norm and a number of the consequences or results that followed refer *inter alia* to Brandner and Meßerschmidt *Umweltschutz und Recht* 155, 221-223, Schmidt-Bleibtreu and Klein *Grundgesetz* 699-700, Sachs *Grundgesetz Kommentar* 870-871, Kloepfer in Dolzer and Thesing (eds) *Protecting our Environment* 357 and Storm *Umweltrecht Einführung* 51.

¹²⁷ Kloepfer in Dolzer and Thesing (eds) *Protecting our Environment* 358.

¹²⁸ Sachs *Grundgesetz Kommentar* 874, Jarass and Pieroth *Grundgesetz* 495 and Brandner and Meßerschmidt *Umweltschutz und Recht* 224.

¹²⁹ Nolte *Lokale Agenda 21* 177.

¹³⁰ Kloepfer in Dolzer and Thesing (eds) *Protecting our Environment* 360, Schlemminger and Wissel (eds) *German Environmental Law* 18, Storm *Umweltrecht Einführung* 53, Erbguth and Schlacke *Umweltrecht* 44 and Schmidt-Bleibtreu and Klein *Grundgesetz* 701.

¹³¹ Sachs *Grundgesetz Kommentar* 871, 875 and Kloepfer in Dolzer and Thesing (eds) *Protecting our Environment* 366.

earlier, except for referring to ‘legislation’ article 20(a) is rather ambiguous on the type of positive action it requires on the part of government.

Considering the environmental governance endeavors that take place throughout Germany as well as the decentralisation of environmental decision-making power, it is impossible to argue that government is not involved in some form of positive action to the advancement of the *Staatziel Umweltschutz*. However, since article 20(a) cannot be enforced by the citizenry before a court of justice there will rarely be an opportunity (or reason) for the judiciary or the executive and legislative branches of government to pause and deliberately estimate whether government’s positive action is sufficient. It could therefore happen that for a number of different reasons (such as government prioritisation or the nature of the political climate), one or more of the generic activities is absent from or neglected in the governance endeavor. Fulfillment of constitutional environmental provisions and simultaneous long-term governance of SEC necessitate that such a situation be avoided. One option could be to capture government commitment to the generic activities in a single legal instrument or policy, amongst other things.

Over the last two decades a German city has initiated an endeavor that serves as a good example of how the generic activities can be amalgamated into a single SEC-friendly policy. Since the 1970s the local government of Heidelberg in the federal state of Baden-Wurttemberg has been engaged in the development and implementation of what is called a *Stadtentwicklungsplan* or city development plan (CDP).¹³² The primary aim with the CDP is to guide and determine all development and policy decisions of the local government of Heidelberg. The CDP is a transparent local policy for action towards sustainability, that assumes responsibility for social co-existence and environmental governance.¹³³ The generic elements for fulfillment of environmental rights can be detected in both the design and substantive content of the CDP. Indirectly the CDP seems to assimilate the obligations of the city government

¹³² The development of the CDP is directly related, *inter alia*, to the environmental obligations imposed by the article 20(a) environmental norm in the GG and a replica provision contained in articles 3(a) and (b) of the Constitution of Baden-Wurttemberg.

¹³³ The CDP intends to establish a modern urban development policy that deals with all aspects of community life – where the social dimension of ‘living together’ is accounted for as well as environmental and economic challenges. Refer to the *Heidelberg City Development Plan 2010 Guidelines and Goals* of 1997 2.

in terms of the *Staatziel Umweltschutz* contained in the GG as well as in the Constitution of Baden-Württemberg.¹³⁴ The CDP has many facets to it, most of which do not fall within the scope of this paper, but one particular feature of the plan is noteworthy. The CDP is not a linear planning instrument with an envisaged beginning and end. It is a circular, long-term instrument in which clear provision is made for broad objectives, smaller targets that serve as benchmarks, indicators for each target area, progress assessment, reporting, and future planning and alteration based on assessment results. The targets in the CDP are detailed and clear benchmarks are set out. The target areas in the CDP are rather inclusive and relate to urbanism, regional cooperation and development, employment, housing, environment, mobility, social matters and culture.¹³⁵ For every CDP target area, a catalogue of 85 related indicators were developed with the assistance of several expert institutions as well as with framework federal indicators and indicators of the environmental authorities of Baden-Württemberg in mind. The indicators in the environmental target area, for example, describe the state or status of, or trends related to, specific components of the environment or environmental governance that fit the powers and obligations of the local authority.¹³⁶ These indicators enable identification of potential trouble spots (also those posed by SEC) and accentuate strong points in the LEG endeavour of the local authority.

The generic activities for the fulfillment of the *Staatziel Umweltschutz* are covered, in that the CDP is a policy in terms of or related to article 20(a);¹³⁷ the drafting process of the CDP compels extensive public participation and input¹³⁸ and is reliant on the establishment of partnerships (also with the scientific community) at different levels;¹³⁹ the whole CDP assessment and reporting process relies on the collection and dissemination of environmental information;¹⁴⁰ and as part of different target areas

¹³⁴ It is furthermore aligned with the vision and aspirations of LA 21 and hence absorbs the city's voluntary obligations in terms of this IL instrument.

¹³⁵ Sound budget management, public participation, lifestyle diversity, gender equity, migration and intercultural orientation, local co-operation and involvement of the academic sector in the city are integrated with each of the target areas.

¹³⁶ The indicators serve as auxiliary parameters which may show only a limited and partial picture on progress but they are indispensable for transparent development. See also *Heidelberg Sustainability Report* of 2004 1.

¹³⁷ This satisfies the element on policy, law and programme development.

¹³⁸ This satisfies the element related to public participation.

¹³⁹ This satisfies the element related to the establishment of partnerships.

¹⁴⁰ This satisfies the element related to environmental information collection and dissemination.

provision is made or can be made for improvements in the areas of environmental education, environmental infrastructure, and environmental law compliance and enforcement. The CDP is therefore a flexible instrument that cannot become ‘outdated’. As a long-term policy initiated by the local authority the CDP (1) facilitates fulfillment of the local government of Heidelberg’s obligations in terms of the *Staatziel Umweltschutz* and (2) can be adapted should social, ecological or economical change so demand.

4.2 *Namibia*

Article 95(l) of the Constitution of Namibia states that:

(95) The state shall actively promote and maintain the welfare of the people by adopting, *inter alia*, policies aimed at the:

(l) maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future; in particular, the Government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibia territory.

Apart from article 95(l) at least three more principles of state policy may have a direct bearing on the environment and SEC.¹⁴¹ It is provided that the state shall actively promote and maintain the welfare of the people by adopting, *inter alia*, policies that: aim to ensure that every citizen has a right to fair and equitable access to public facilities and services;¹⁴² that aim at consistent planning to raise and maintain an acceptable level of nutrition and standard of living;¹⁴³ and that aim at improvement of public health and the encouragement of the mass of the population through education and other activities to influence government policy.¹⁴⁴

¹⁴¹ This seems to be the case in a number of constitutions that include a list of constitutional directive principles as opposed to socio-economic rights *per se*. The *Constitution of Nepal* for example, separately provides for two different principles of state policy on the environment – one related to the utilisation of natural resources and one related to the maintenance of environmental balance. See the comparative work of Sharma *Human Rights* 141.

¹⁴² Article 95(e). These may arguably include services related to environmental infrastructure. See also Watz *Verfassung Der Republik Namibia* 177.

¹⁴³ Article 95(j). See also Watz *Verfassung Der Republik Namibia* 178.

¹⁴⁴ Article 95(k). See also Watz *Verfassung Der Republik Namibia* 178.

Similar to the position with the *Staatziel Umweltschutz* in the GG of Germany, these principles of state policy are not enforceable by individuals before a court of justice but have an objective binding nature. It imposes open-ended positive and negative obligations on the state. It can therefore happen in the absence of a process dedicated to review of the government's affirmative action, that one or more of the generic activities for the fulfilment of constitutional environmental provisions are overlooked or disregarded. It might accordingly be feasible, also in Namibia, for all generic activities to be captured in a single document to avoid any one of it to be neglected.

Namibia has a national policy which offers an alternative option to the CDP in the Heidelberg case. The national government of Namibia has published a National Development Plan (NDP) once every five years since 1995. The NDP is a national planning framework for development which aims to direct action on the part of government (the executive and legislature) as well as private stakeholders.¹⁴⁵ The NDPs are results-oriented and are based on systematic and strategic identification and performance planning for achieving results at all levels. Each NDP is a target-based instrument with a built-in performance monitoring and reporting mechanism. Each subsequent NDP reviews the progress with implementation of the previous NDP and outlines a number of goals, objectives, targets and strategies for the period ahead. It is therefore also a long-term cyclical policy. The key focus areas of the NDPs relate *inter alia* to equality and social welfare; peace, security and political stability; productive and competitive human resources; infrastructure; the quality of life; optimal and sustainable utilisation of renewable and non-renewable natural resources; environmental sustainability; and regional and international stability and integration.

The generic activities for the fulfilment of the environmental principles of state policy are covered in that the NDP is a policy in terms of or related *inter alia* to the constitutional environmental obligations of government;¹⁴⁶ the approval process of the NDP compels public participation and input¹⁴⁷ and is reliant on the establishment

¹⁴⁵ The National Planning Commission is responsible for the drafting of the NDPs. Once a draft document is on the table it is shared with all stakeholders and subsequently revised for approval by the commissioners of the National Planning Commission and Cabinet.

¹⁴⁶ This satisfies the element on policy, law and programme development.

¹⁴⁷ This satisfies the element related to public participation.

of partnerships (also with the scientific community) at different levels;¹⁴⁸ the whole NDP assessment and reporting process relies on the collection and dissemination of environmental information;¹⁴⁹ and as part of different focus areas provision can be made for improvements in the areas of environmental education, provision of environmental infrastructure and improved environmental law compliance and enforcement. In spite of the fact that some of the generic activities for fulfillment of the constitutional environmental provisions are at this stage absent from the NDP, the NDP generally is a flexible planning instrument with a long life span. As a long-term policy initiated at national government level, the NDP system: (1) shows potential to address all generic activities for fulfillment of the constitutional environmental obligations across Namibia and (2) can be adapted should social, ecological or economical change so demand.

The basic idea giving rise to the NDP appears to be similar to that informing the CDP of Heidelberg. The NDPs thus far have, however, been less clear on targets, and the strategies in place to achieve them are less detailed. The NDPs are developed at national government level, which is more remote from the citizenry than local government. This highlights the particularly important role of public participation at all levels. Furthermore, the Draft NDP3 illuminates a particularly important point in so far as it admits that full implementation of the NDP may depend on sufficient decentralisation of functions and funds. The idea of decentralised long-term planning and implementation of planning instruments receives further attention below.

4.3 South Africa

Section 24 of the *Constitution of the Republic of South Africa*, 1996 unlike the constitutions of Germany and Namibia, establishes an enforceable environmental right.¹⁵⁰ It is argued that in the continued absence of a flagship environmental

¹⁴⁸ This satisfies the element related to the establishment of partnerships.

¹⁴⁹ This satisfies the element related to environmental information collection and dissemination.

¹⁵⁰ Section 24 of the *Constitution of the Republic of South Africa*, 1996 states that:

Everyone has the right:

(a) to an environment that is not harmful to their health or well-being; and

(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:

decision of the courts that addresses the positive obligations of government in terms of section 24, it is not unthinkable for the South African judiciary to turn in future to IL for clarity and direction.¹⁵¹ Section 24(b) is quite clear on the fact that government should take ‘reasonable legislative and other measures’¹⁵² and then on what those measures should aim to achieve.¹⁵³ There is, however, a missing link in that it is not clear how legislation should be framed and what type of mechanisms or issues should be captured in ‘other measures’ to meet the requirements outlined in section 24. This arguably creates a hypothetical rationale for the South African legislature and executive (not only the judiciary) to consider IL in meeting the obligations posed by section 24(b). It is envisaged that all or at least some of the generic activities will be taken into account, and it may be most feasible to capture these in a broad sense in a single regulatory instrument.

Legislative provisions that were established by the South African legislature in response to its obligations in terms of Agenda 21 and LA 21 offer an additional alternative to the local government CDP in Heidelberg and the NDP in Namibia. Chapter 5 of the *Local Government: Municipal Systems Act* 32 of 2000 (the Systems Act) provides for the development of integrated development plans (IDPs) by all local authorities in South Africa. It is provided in the act that each municipality must undertake development-oriented planning. The Systems Act makes explicit reference to the fact that by means of development-oriented planning, local government should contribute to the progressive realisation *inter alia* of the section 24 environmental right. IDPs should be developed every five years. In the main, the IDPs are reminiscent of the CDP of Heidelberg and the NDP in Namibia. However, there are some differences that need to be illuminated. An IDP may be less circular than the CDP and NDP in that a new plan can be developed every five years. It is at the discretion only of a newly elected local government council to adopt the IDP of its

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- (i) prevent pollution and ecological degradation;
 - (ii) promote conservation; and
 - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

¹⁵¹ In fact, the Constitution of South Africa provides in articles 232 and 233 that customary IL is law in South Africa unless inconsistent with the laws of the country and that when interpreting any legislation the courts must prefer any reasonable interpretation of legislation that is consistent with IL over any alternative interpretation that is inconsistent therewith.

¹⁵² Section 24(b).

¹⁵³ Section 24(b)(i)-(iii).

predecessor.¹⁵⁴ An IDP therefore has an envisaged beginning and end although it is circular for the period of its existence. The rather positive deviation from the structures of the CDP and NDP is, however, that every single local authority in South Africa is compelled in terms of enforceable South African law (and not merely policy) to draft and implement an IDP.¹⁵⁵ It is even possible to refer to the legally entrenched decentralisation of integrated development planning. Depending on how the suggested content and structure of the IDP in the Systems Act are interpreted, some of the elements for the fulfillment of environmental rights are not explicitly covered. The elements that feature strongly include public participation, programme development and, to some extent, the making of provision for environmental infrastructure. There is, however, an absent or weak focus on the following activities: the collection and dissemination of environmental information other than reporting on achievements in terms of the IDP; environmental compliance and enforcement; and environmental education. As a five-year policy initiated by all local authorities, the IDP: shows the potential to facilitate, *inter alia*, fulfillment of the section 24(b) environmental obligations across South Africa and can be adapted should social, ecological or economic change during the five-year period. A rather important feature of the IDP system is that it is a legal requirement pertaining to the entire local government structure in South Africa. The main components thereof (albeit not very specific details as far as content is concerned) are prescribed by nationally applicable local government law. The development and implementation of an IDP is therefore not a matter at the discretion of local government – it is a legally enforceable duty directly tied to the constitutional environmental right in the Constitution of South Africa.

5 A legislative design for the long-term planning of the governance of SEC

This paper proposes that the law should not be underestimated as an important building block in the long-term governance of SEC. It is argued that a fusion and intersection of law, sociology and environmental science are required to arrive at generally acceptable solutions and responses to the challenges posed by SEC. ‘The law’ is,

¹⁵⁴ See section 25(2) of the Systems Act.

¹⁵⁵ See section 25 of the Systems Act.

however, a very broad term. A number of issues/phenomena related to ‘the law’ have generally come to the fore thus far, and can be summarised as follows:

- Constitutional law often embraces environmental provisions of a fundamental nature.
- Constitutional environmental provisions in and by themselves are not clear on what exactly governments are compelled to do in order to fulfil the obligations they impose.
- A vast array of IL instruments offers indications and guidelines as to what may be required of governments to fulfil not only the internationally entrenched rights of citizens, but also constitutional provisions of a fundamental nature.
- As far as it specifically pertains to the fulfillment of constitutional environmental provisions, IL and IEL reveal at least seven key elements that give substance to these provisions.
- The elements for fulfillment of environmental rights or fundamental constitutional provisions represent and require motion and affirmative behaviour and can hence be translated to ‘generic activities.’
- In response to different impulses (some of which may be legally induced), government bodies tend to design planning instruments that could be complementary to the substantive content of law.

Based on the above it is proposed that constitutional environmental law (especially the positive obligations imposed by it) be employed by governments as a key direction indicator in the long-term governance of SEC. This legal response is, however, based on the supposition that a constitutional environmental provision indeed exists in a particular country. The proposal may still be widely applicable in as far as contemporary state constitutions generally do include an environmental provision or a variant thereof.¹⁵⁶ The legal response proposed, suggests that the legislative and executive branches of governments deliberately consider the implications and meaning of fundamental environmental provisions contained in constitutional law. At times, clear positive obligations can be derived from the constitutional provisions themselves, but governments usually have to rely on judicial interpretation. In the absence of

¹⁵⁶ This proposal may, however, not necessarily be applicable or apply unswervingly in all domestic contexts when one bears in mind that domestic constitutional law systems operate differently.

judicial interpretation or to complement the decisions of courts, authorities can (and are encouraged to) turn to IL developments for an improved understanding of the positive action required by constitutional environmental provisions generally.

The generic activities that were extracted from IL in this paper may at times be almost as broad as constitutional environmental provisions themselves. Clearly, however, they appear to be dynamic and to elaborate on the type of action that constitutional environmental law may demand of governments. Each of the generic activities carries equal weight, and no one of them should be regarded as more significant than another. Hence, it may be necessary to design a means through which to ensure that all of the generic activities are attended to.

Based on the learning experiences in Germany, Namibia and South Africa, it is proposed that the core meaning of each activity be amalgamated in the long-term planning instruments of governments. The activities can either form part of the design and implementation process or the substantive content of a long-term plan. As far as long-term plans are concerned a number of observations needs to be made:

- To facilitate enduring governance of SEC, a long-term planning instrument should be circular in nature. One may speak of an orbit-like planning design based on the well-known Deming Cycle, where provision is made for an ongoing planning process that consists of baseline reviews, target setting, implementation and monitoring followed by reporting and evaluation.¹⁵⁷ The CDP of Heidelberg and NDP of Namibia serve as examples in this regard.
- Generally, environmental, social and economic factors can be addressed in a long-term planning instrument. To facilitate the fulfillment of constitutional environmental law, a long-term plan should at least cover the generic activities that were distilled above. Accordingly, public participation in environmental decision-making; collection and dissemination of environmental information; environmental law, policy and programme development; improved environmental law compliance and enforcement; provision of environmental infrastructure, environmental

¹⁵⁷ Refer for a similar type of development to ICLEI Local Sustainability www.localsustainability.eu . On the Deming Cycle and quality control in the public sector, see Koehler and Pankowski *Continual Improvement*, amongst others.

education and the establishment of partnerships needs to accompany substantive environmental issues such as water, air, waste and soil management in a long-term planning design. Innumerable additional issues may of course be included, depending on the demands and needs of a particular country.

- Long-term planning instruments should be designed to benefit all people in a country equally. The proposal in this paper is therefore further refined in that it is suggested that long-term planning instruments be designed and implemented by local government as the level of government that operates closest to people. This may also allow for planning related to the unique features and challenges of a particular area. The local government IDP system in South Africa serves as an example in this regard.
- Perhaps the most important observation to be made is that countries should seriously consider legally compelling the design and implementation of long-term planning instruments in terms of enforceable national law. Put differently, long-term planning should not be left to the discretion of authorities or political decision-makers. It may similarly be necessary to legally entrench generic core components that must be included in long-term planning instruments. The Systems Act and IDP system in South Africa serve as examples in this regard.

SEC needs to be regulated or ‘governed’ for the detrimental impacts (although not suggesting that all the impacts of SEC are necessarily bad) thereof to remain manageable over time. The law should be regarded as a key part of this governance endeavor. Constitutional law in particular can create flexible parameters for the governance of SEC – but should not be impervious to scientific knowledge or social demands.

This paper has aimed to show that the long-term governance of SEC ultimately requires not only an intersection of legal, social and natural sciences but also of the fields of IL, constitutional law and planning. It furthermore showed that the challenges posed by SEC, at least from a legal perspective, may demand a fusion of activities at different levels. In the final instance a case was made that those possessing state authority, as but one group among many SEC stakeholders, should take cognizance of the need to take the lead in the preservation of our environment, while acknowledging

the equally important need to welcome all of the other stakeholders into an equal partnership in this important endeavour. The route to follow towards this end would seem already to have been mapped out in international and constitutional environmental law.

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