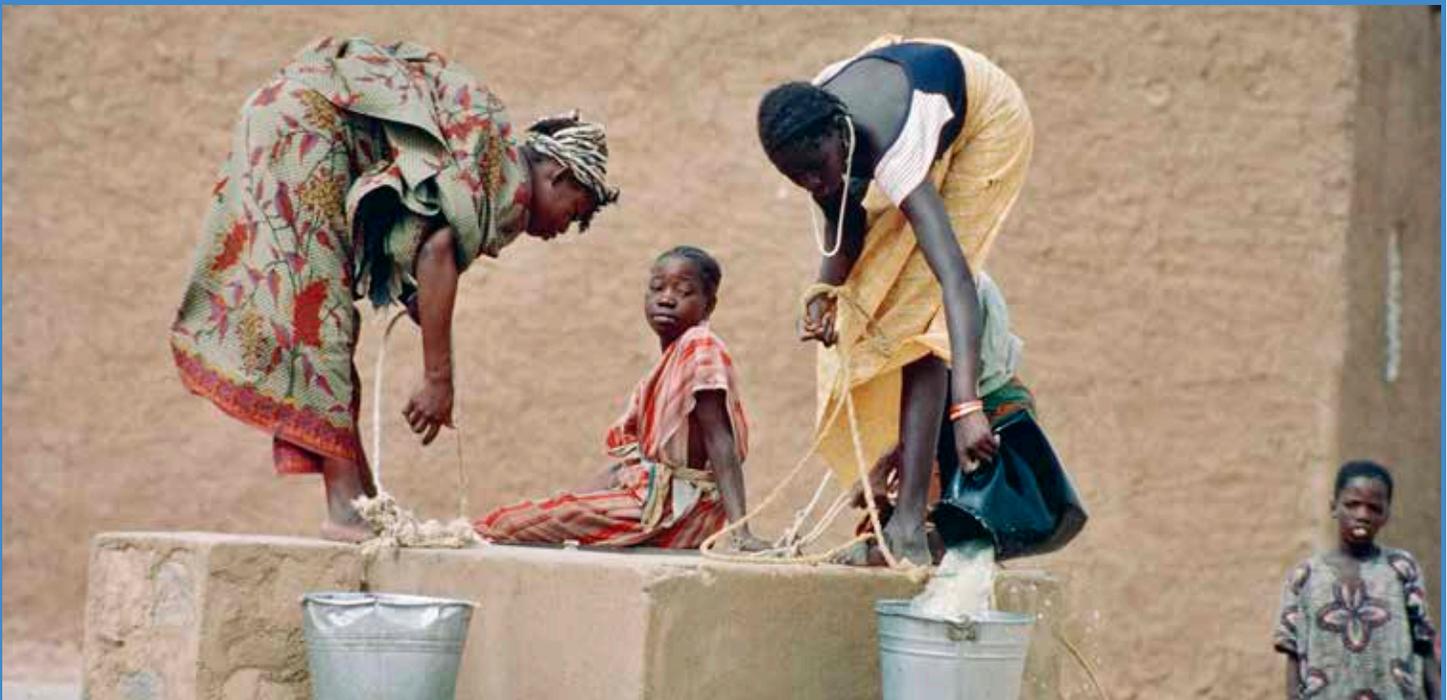


Sustainable Development in the 21st century (SD21)

Review of Implementation of the Rio Principles

Detailed review of implementation of the Rio Principles



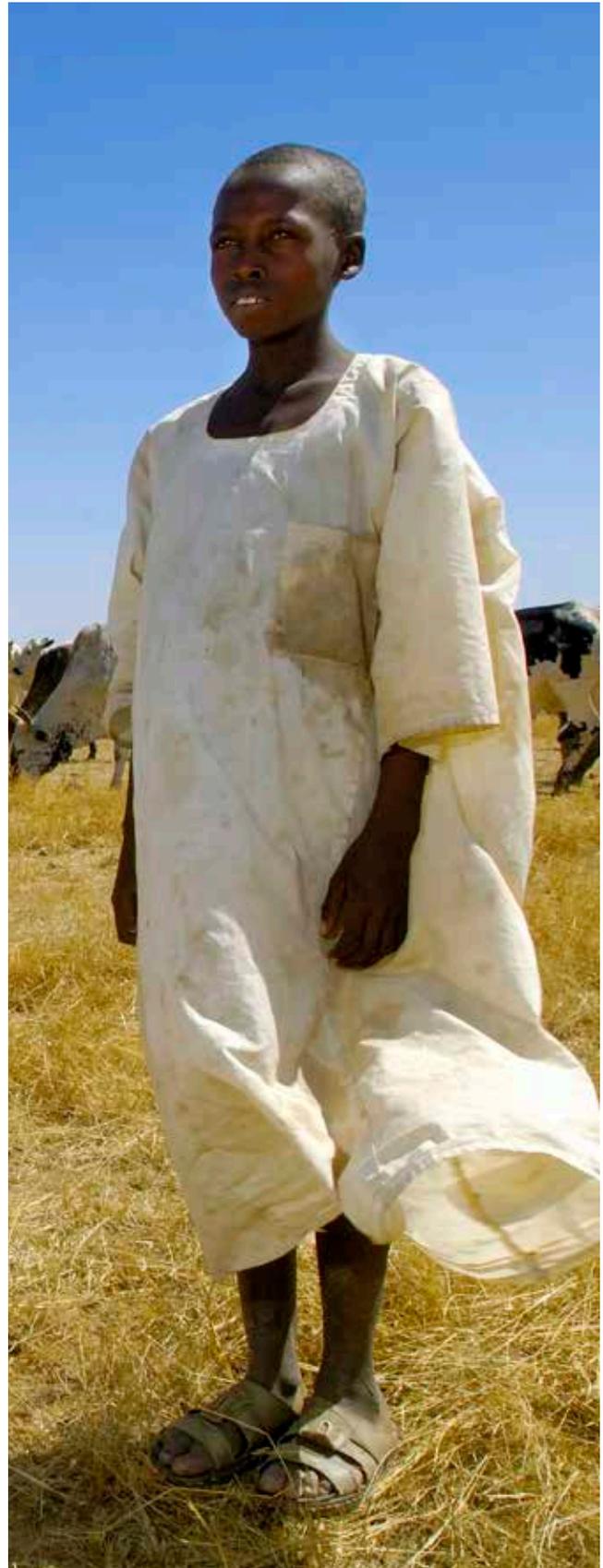
Study prepared by the Stakeholder Forum for a Sustainable Future
December 2011

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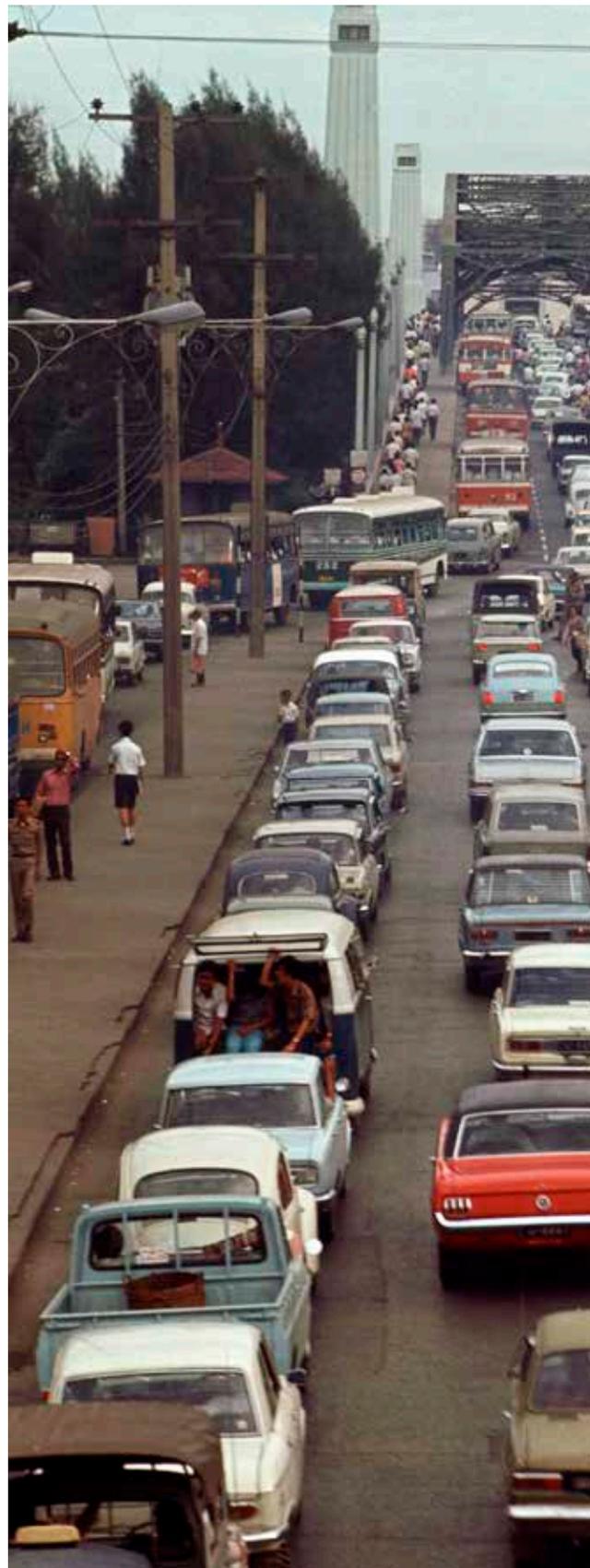
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Introduction

This report is one of three companion reports produced under the first study of the “Sustainable development in the 21st century” (SD21) project, an undertaking of the Division for Sustainable Development of the United Nations Department of Economic and Social Affairs (UN DESA).

The overarching objective of the SD21 project is to construct a coherent vision of sustainable development in the 21st century. The project, funded by the European Commission - Directorate-General for Environment, aims to provide a high quality analytical input to the Rio+20 conference.

The United Nations Conference on Sustainable Development (UNCSD), which will gather UN member states and other stakeholders in Brazil in 2012, is a key occasion to take stock of 20 years of action at all levels to promote sustainable development, and to provide a clear vision and way forward for the international community, national governments, partnerships and other stakeholders in implementing the sustainable development agenda in an integrated manner.

The SD21 project is built around a series of studies that will inform a synthesis report, “Sustainable development in the 21st century” (SD21). The SD21 body of studies is expected to become an important analytical contribution in its own right. Studies under the SD21 project will cover the following topics: assessment of progress since the Earth Summit; emerging issues; long-term sustainable development scenarios; tools for managing sustainable economies; national and international institutions for sustainable development; and sector assessments.

Implementation of Agenda 21 and progress in implementation of the Rio principles

Twenty years after the Rio summit, this first study aims to provide an assessment of the progress and gaps made

in the implementation of some of the Rio outcomes, specifically, Agenda 21 and the Rio Principles.

The study comprises of three outputs:

- Detailed review of progress in implementation of the Rio Principles
- Detailed review of implementation of Agenda 21
- Synthesis report on implementation of Agenda 21 and the Rio Principles.

Implementation of the Rio Principles

The Rio Declaration on Environment and Development, adopted by 178 Member States in 1992 at the Earth Summit, was at the time perceived as a progressive statement by all nations that enshrined the recognition of the indivisibility of the fate of mankind from that of the Earth, and established sustainable development in international law.

The Declaration, a compact set of 27 principles, promoted principles such as the centrality of human beings to the concerns of sustainable development (Principle 1); the primacy of poverty eradication (Principle 5); the importance of the environment for current and future generations and its equal footing with development (Principles 3 and 4); the special consideration given to developing countries (Principle 6); the principle of common but differentiated responsibilities (CBDR, Principle 7). It also enshrined the two critical economic principles of polluter pays (Principle 16) and precautionary approach (Principle 15). It introduced principles relating to participation and the importance of specific groups for sustainable development (Principles 10, 20, 21, 22). Lastly, it requested Member states to put in place adequate legislative instruments to address environmental issues.

A review of the Rio principles was conducted by the UN Division for Sustainable Development for the 5th session of CSD in 1997 (“Rio+5”). Some of the principles have given rise to considerable amount of literature. While the underlying causes for the success of specific principles may be understood by experts in various fields of international law and sustainable development, a short and simple but all-encompassing summary seems to be missing. Yet, understanding why some of the principles have not succeeded in passing the test of inclusion in international and national law, or at least become the basis for accepted normal practices is critical to furthering sustainable development.

This study provides a systematic assessment of the state of implementation of the 27 Rio Principles; based on this individual assessment, it will also provide a general assessment and distil some lessons for further progress.

The reader is invited to access the two other reports produced under this study, namely the detailed review of implementation of Agenda 21 and the synthesis report on implementation of Agenda 21 and the Rio Principles.

Methodology

The Division for Sustainable Development commissioned Stakeholder Forum for a Sustainable Future (SF) to undertake this review to provide an assessment of the progress and gaps made in the implementation of two key Rio outcomes: Agenda 21 and the Principles of the Rio Declaration.

Stakeholder Forum has a strong institutional memory that spans over two decades and has been deeply engaged in the processes that were developed out of the UNCED in 1992 – such as the CBD conferences as well as the UNFCCC negotiations and myriad other conferences both organised by the UN and other stakeholders (NGOs, local authorities, trade unions, youth, etc.).

The terms of reference for the study included:

- A comprehensive review of each of the Chapters of Agenda 21 and the Rio Declaration Principles;
- A synthesis report that offers an overview of the implementation of the above; as well as areas that have been a barrier or challenge to implementation; and
- A table or traffic light system to ‘score’ each of the Chapters and Principles to offer a quick reference to the status of implementation.

The work was carried out between May and November 2011. Stakeholder Forum used both in-house capacity and external consultants with particular policy expertise to undertake the review.

Based on the terms of reference, Stakeholder Forum developed a generic template for the review of each of the individual chapters and principles to streamline the process that was conducted by multiple people; and to ensure consistency in the research and writing approach. The template is outlined in more detail below.

AGENDA 21 AND RIO PRINCIPLES DRAFTING TEMPLATE

Introduction

This section should set the context, why the principle is important, what factors gave rise to it.

Implementation

This section should analyze the status of implementation of the principle globally, including the following:

- A broad and brief analysis of global implementation i.e. how prevalent the principle is in global and national decision-making, policy and law, the main drivers
- Examples of regional and national implementation (specific case studies only, a full-scale analysis of national implementation will not be possible)
- Examples of global, regional and national instruments, including evaluations of efficacy of instruments where possible
- An overview of the key actors and organizations that have influenced progress towards implementation, their past, ongoing and future campaigns

Challenges and Conflicts

This section should focus on some of the challenges to implementation of the Principle more generally, including:

- Disparities in the application of the principle across UN Member States, including an analysis of political, economic, cultural and industrial interests that might influence this
- Conflicting policies and legislation globally e.g. World Bank, IMF, WTO
- Interest groups and actors that are opposed to the implementation of the principle

The Way Forward

This section should provide an analysis of the possible ‘way forward’ for the Principle, based on the author’s own analysis of the ‘state of the debate’ but also referring to views of experts in the field. It should include the following:

- Identification of further steps that could be taken to more fully implement the Principle in question
- Identification of the trade-offs associated with the Principle that must be addressed
- Identification of particular actors (where relevant) whose approach will need to change
- Identification of prevailing social, political, environmental and economic drivers which will influence the likelihood of implementation.

Stakeholder Forum conducted the initial drafting in-house for each of the 39 Agenda 21 Chapters and 27 Rio Principles. This was done by a core team of researchers familiar with the area of work. Once initial drafts had

been completed these were sent to DSD for comment and review and to identify gaps in the reports as well as to emphasise areas of focus and discuss areas that needed particular attention. Once feedback was received Stakeholder Forum engaged expert consultants to take the initial research and compile a more focussed and detailed analysis of particular Chapters and Principles. Stakeholder Forum then played a coordinating and editorial role, receiving updated versions of different chapters and principles, and editing these for content and style before finally submitting them to UN DESA.

The study is based on desk review of the existing literature, including academic (peer-reviewed)

literature, UN decisions and official reports, evaluations and assessments published by international think tanks and policy institutions, and others as relevant. This had its limitations, and these must be acknowledged.

Where possible case studies were drawn upon to illustrate successful implementation or where barriers and challenges to implementation existed. These case studies are intended to be illustrative. While attempt has been made to cover a range of examples and to offer a divergent set of views in the case studies, time and resources did not allow for a full and comprehensive review of every example.



*Human beings are at the
centre of concerns for
sustainable development.
They are entitled to a
healthy and productive
life in harmony with
nature.*

Principle 1

Introduction

The first Principle of the Rio Declaration reflects an anthropocentric view of sustainable development, placing human squarely at the heart of sustainable development considerations.

The phrase 'entitled' alludes to a rights-based approach to development – that humans deserve a decent standard of living and may achieve this through development and resource exploitation, but equally the entitlement to a healthy and productive life must occur in harmony with nature. The latter aspect of the Principle - coupled with the recognition that development must be sustainable - forms the basis of many international laws and agreements, as well as civil society organisations' campaigns and projects. The aspiration that humans should 'live in harmony with nature' has become a cornerstone of the motivations behind sustainable development practices and reverberates through the halls of many national and international institutions and decision-making bodies.

However, some express concern that the focus of the principle on human entitlement detracts from the important task of environmental preservation and conservation. There are movements to shift the emphasis of international environmental law away from such an anthropocentric prism through which decisions are made; and towards a more earth-centric view of how the world operates. This is being born out in countries where nature itself is being granted rights as a way to ensure that humans do live in harmony with nature.

Implementation

Whilst the motivation of the Principle is to ensure a healthy balance between the needs and entitlements of humans and nature, it creates something of a conceptual challenge for those actors who are working towards incorporating sustainable principle into mainstream decision making as well as furthering a development agenda. Principle 1 is built on language that reinforces the primacy of human needs, and thereby implicitly upholds the rights of humans above other species. At the same time, however, the Principle also enforces the understanding that humans must live in harmony, or

rather dynamic equilibrium, with nature. In this regard the Principle is partly ambiguous, and to some extent contradictory, which can make it hard to measure its effectiveness and successful implementation.

Where the centrality of human well-being to sustainable development is upheld and living standards rise accordingly, this can at times have less positive impacts on our living in harmony with nature. On other occasions, the imperative to live in harmony with nature might lead to a compromising of immediate human needs. It is generally more likely to find examples of one aspect of the principle being implemented perhaps at expense of the other, and there are relatively fewer cases of the principle being upheld in its entirety. Notwithstanding the potential contradiction at the heart of the Principle, its overall objectives have been invoked by a range of campaigns and initiatives, and its provisions incorporated into national laws and subsequent international agreements.

Humans at the centre

The recognition of 'humans being at the centre' of decision making has spurred many international efforts to accelerate human development and lift countries out of poverty, or indeed eradicate it altogether. Prominent examples of this in practice include the Millennium Development Goals (MDGs) and the Plan of Implementation from the Johannesburg World Summit for Sustainable Development that reaffirmed and emphasised the social aspects of sustainable development. The United Nations Environment Programme (UNEP) Poverty Environment Initiative (below) illustrates efforts to promote both sides of the principle simultaneously.

Millennium Development Goals (MDGs)

Agreed in 2000 the MDGs place human development and improvement of livelihoods at the top of the international development agenda. In establishing quantifiable commitments to eradicate poverty and improve access to healthcare, amongst many others, the MDGs represent a concerted international effort to address global poverty and its impacts on human wellbeing and dignity. In addition, the MDGs provide a tangible benchmark against which leaders will be assessed and judged Sustainability, in the context of the MDGs, relates to progressing to higher standards of living, and sustaining and maintaining that standard.



World Summit on Sustainable Development

The conference in 2002 reaffirmed the ambition to integrate the Rio Principles into mainstream decision-making and activities, but in shifting the emphasis of sustainable development to the social i.e. human aspect of the principle, it confirmed the anthropocentric world view of humans interacting and living in nature.

United Nations Environment Programme Poverty-Environment Initiative (UNEP PEI)

The UNEP is a joint initiative of two UN programmes: UNEP and UNDP (Development Programme). The PEI was formally launched in 2005 and it aims to mainstream poverty-environment linkages into national planning. As of 2010 the scale of the PEI has increased such that it supports work in 22 countries, and it operates through a global facility supported by four regional as well as UN country team. Chapter 8 of Agenda 21 devised a programme of action of environmental mainstreaming (see the study of implementation of Agenda 21).

Nature/environment at the centre

The notion that humans should strive to live in harmony with nature has become integrated into regular campaign, policy and advocacy parlance. A range of actors and interest groups have recognised that sustainability represents a balanced interaction between human wellbeing and environmental protection, where the two should ideally reinforce one another. Traditional conservation approaches that focus explicitly on the environment have given way to broader approaches that focus on the interaction between the environment, human wellbeing and equity – the increasing prominence of climate change in international development discourse is evidence of this. Notions of planetary boundaries and environmental limits have become more widespread, and advances in ecological foot-printing have enabled a more accurate assessment of global consumption patterns and the distribution of natural resources.

Learning from our ancestors

In explicitly invoking the language of Principle 1 in the first report of the Secretary General on “Harmony with Nature”¹ and by convening an interactive dialogue to discuss ideas for developing an holistic approach to sustainable development², the UN General Assembly has demonstrated a firm commitment to putting an

awareness of human interaction with nature at the heart of the debate about sustainable development. This high-level affirmation of the language of Principle 1 will influence the discussions about how humans perceive themselves in the natural world as well as encourage wider and deeper awareness about the *interconnectedness* between humans and the natural world. Indeed, in pressing government and business leaders to learn from “[t]he ancients [who] saw no division between themselves and the natural world” and who “understood how to live in harmony with the world around them”³ the Secretary General Ban Ki-Moon has emphasized the importance of bridging the divide between the anthropocentric world view and a more holistic world view.

There are many other examples of this worldview pervading policy, advocacy and campaign work. As the Secretary General identifies, in order to truly achieve the aspiration of living in harmony with nature and *as an integrated part of it*, ‘we need a revolution. Revolutionary thinking. Revolutionary action.’⁴ This shift in approach to the way that businesses conduct their practises, politicians legislate and people live their lives will be an integral cornerstone of implementing Principle 1 to good effect.

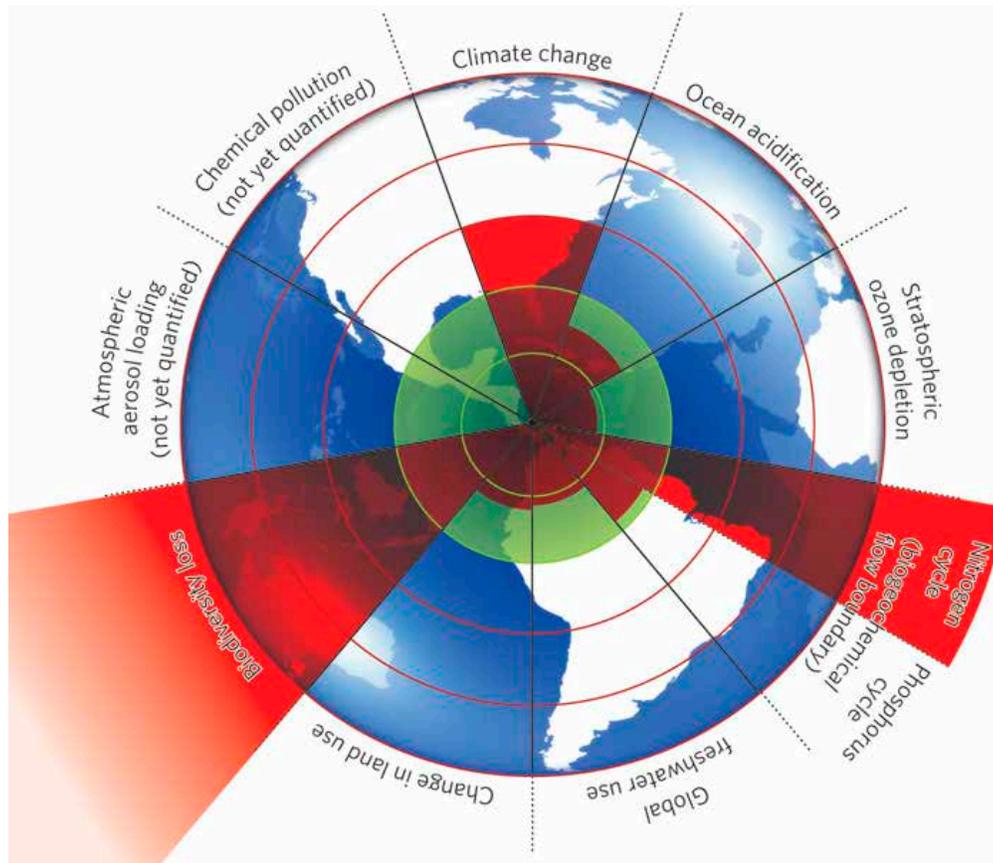
Recognition of limits and planetary boundaries

There is an increasing recognition that human activities or development must take place within environmental limits and resource constraints. Ever more attention is being paid to the physical limits of the earth and how sustainable development must incorporate an understanding and appreciation of this if humans are to live within the means available to them.

Increasingly scientists, NGOs and inter-governmental agencies are responding to this by developing frameworks to integrate this approach into the decision-making process driving human activities and development. Work being done on identifying the planetary boundaries, or global biophysical boundaries, which define the ‘safe planetary operating space’ of humans to live and develop on earth⁵ offers a scientific framework within which the concept of ‘living in harmony’ with nature can be applied in practice by decision-makers. Specific issues are addressed in the context of planetary limits, such as Oxfam’s 2011 flagship campaign *GROW*, which focuses on food justice in a resource constrained world.⁶ In addition, prominent reports have been published that highlight the ways

in which human well being is inextricably linked to the condition of the natural world and how the ability of humans to develop will be significantly hampered if ecosystems change or are degraded. One of the most significant environmental analyses of recent years - the Millennium Ecosystem Assessment - which although its assessment of human impacts is done in relatively unequivocal terms, also frames ecosystems very much in the terms of the benefits derived from them by humans. Ecosystem degradation is not just presented as an evil per-se. It is presented as a problem due to the associated impacts on human wellbeing. Thus, the assessment offers a deeper analysis of the two-way relationship that humans have with nature, and how the balance ought to be struck between viewing nature as something that can be used to serve human needs *as well as* understanding that the integrity of nature must be respected or else ecosystem change will significantly and directly impact on the ways in which people can live their lives.⁷ In addition, the fourth GEO report (2007)⁸ – entitled *environment for development* - clearly links human needs with the environment around them in a way that echoes the emphasis of Principle 1. Similarly to the Millennium Ecosystem Assessment, this analysis strengthens the message behind humans living in harmony with nature and the responsibility that decision-makers have to acknowledge this crucial factor and then act upon it in a way that ensures the intrinsic link between human well-being and preventing ecosystem degradation is respected and central to their work. Finally, there are numerous development NGOs involved in campaigning on climate change and environmental issues, demonstrating a departure from perceptions of tensions between these agendas.

FIGURE 1 The nine planetary boundaries.



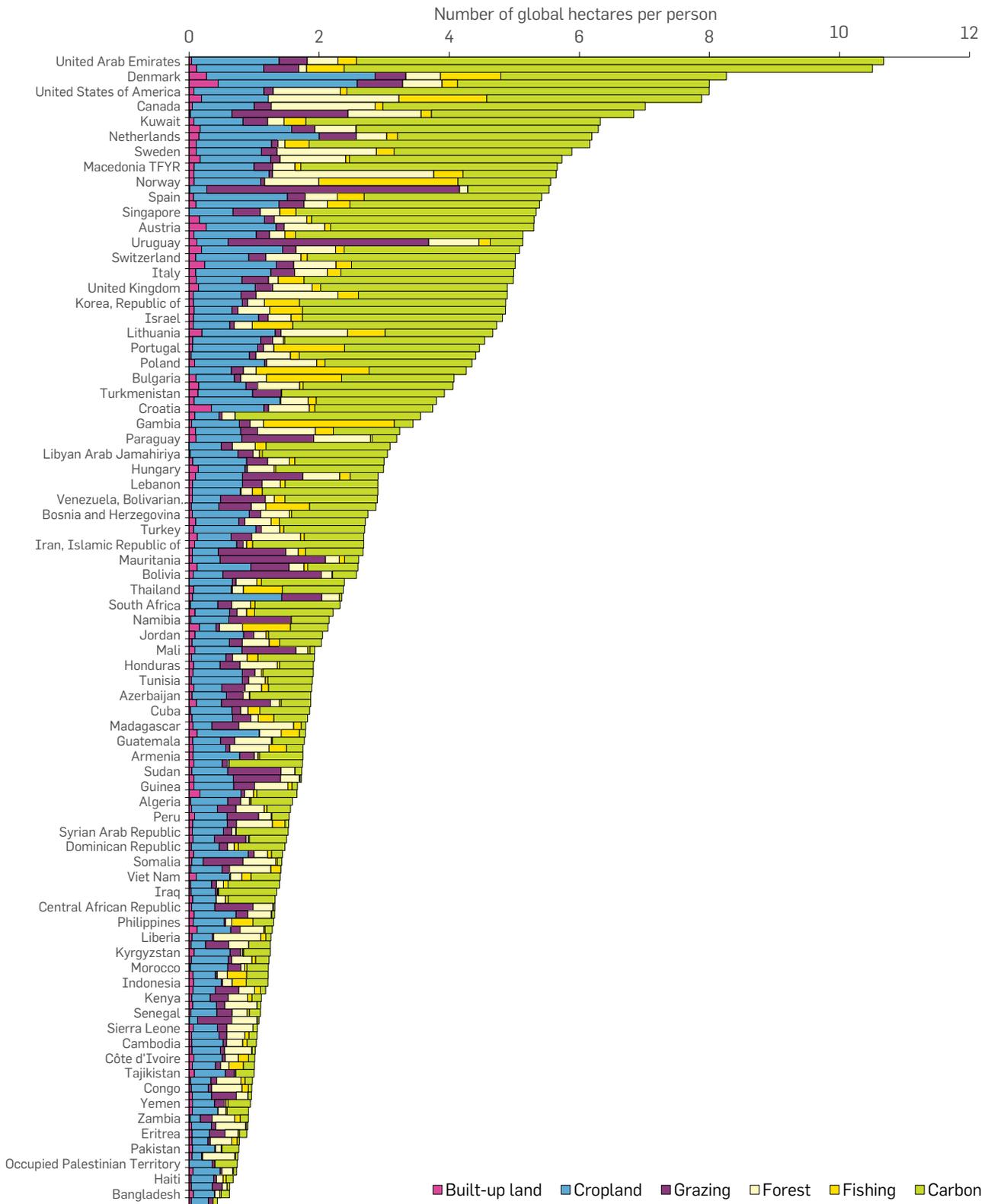
Note: The Journal Nature suggests in a feature that three of the nine boundaries have been transgressed and there are some suggestions that a fourth (the phosphorous cycle) is very close to being breached if it has not already.⁹

Focus on equity

As has been identified above, where there are natural resource constraints and environmental limits, humans must recognise that they need to live within those constraints. In addition, it is critical to assess how those constrained resources are distributed globally. Currently the majority of the world's resources are consumed by a minority of the global population, and per capita resource consumption varies wildly from one country to the next. WWF and BioRegional's work on 'one planet living', combined with increasingly advanced ecological footprint analyses, has provided a compelling illustration of global disparities, whilst also providing a tangible and aspirational goal for achieving an equitable distribution of the world's resources.

It is widely recognised that some environmental change will be inevitable as people develop and in particular as the global poor achieve higher standards of living. However, the challenge remains as to who is consuming what. A significant minority of the global population currently consumes far in excess of its 'entitlement' – just 20% of the global population consumes 80% of the world's resources.

FIGURE 2 Ecological footprint per capita of individual countries



Source: Based on data from the Living Planet Report.

The One Planet Living concept is based on the work that has been done to measure the earth's capacity to sustain life; human and other species. At the heart of the one planet index is the understanding that the earth has a limited capacity to sustain life, and that human activities that use up natural resources must not exceed the capacity the earth has to replenish the resource store and continue to sustain life. Equity is embedded in the One Planet Living concept as it demonstrates how individuals and countries should be consuming their fair share within the natural limits imposed by the resources of one planet.

Ecological debt and over-consumption

Achieving greater equity requires a significant reduction in consumption by industrialised countries as the figures above illustrate. In addition, it is vital that any discussion based on consumption of resources is also integrated with an understanding of equity and how such resources can be fairly shared amongst the world's population. Where this equitable sharing of resources is not achieved and where over-consumption by a few states or individuals, then a situation develops where the planet enters into ecological debt, which underscores the fact that that a significant minority of the global population is not living in harmony with nature

Ecological debt has been defined as the way in which people (particularly in high-consumption based countries) run up huge debts in terms of the amount of natural resources that are exploited, such as burning oil, coal and gas to heat homes and run cars. In addition that which is consumed and the waste that is created is felt worldwide.¹⁰ In 2006 a report was compiled by Global Footprint Network and the New Economics Foundation that highlighted the serious issue of ecological debt by publishing figures that showed "the day of the year when people's demands exceeded the Earth's ability to supply resources and absorb the demands placed upon it."¹¹

Granting nature rights

Part of the process of integrating environmental and developmental objectives more coherently is to grant nature 'rights', in a similar way to granting rights to humans. This provides nature with inalienable rights that can be represented legally and therefore given a fair hearing vis-à-vis social and development objectives. In shifting towards recognising the rights of

nature, countries such as Bolivia and Ecuador can be said to be applying the core elements of principle 1 in practice. This respect for Mother Nature is enshrined in the Preamble to the Ecuadorian Constitution, where it states that the people of Ecuador "[c]elebrate nature, the Pacha Mama (Mother Earth), of which we are a part and which is vital to our existence"¹² followed by articulated rights outlined in Chapter 7.¹³ By way of example for how such constitutional and legal rights can be implemented, a court in Ecuador heard a case that was brought on behalf of the Vicabamba river; and in ruling in favour of the river, it became the first to enforce the rights of nature as under the constitution. Bolivia will also enshrine legal rights for nature by passing legislation that firstly grant the Earth a legal personality; and secondly classify the earth as being of 'public interest. This shift in approach towards valuing nature in the same way that we value human interests exemplifies the way in which the objectives of principle 1 can be borne out in practice at the national level. The Turkish Green party, Yeşiller, through launching the Initiative for an Ecological Constitution (IEC), is building on the momentum created by Ecuador and Bolivia by calling for rights of nature to be enshrined in the country's constitution.

Not only are these rights being manifested through enacted legislation and amending aspects of their constitutional frameworks, they are also emblematic of the growing awareness that in order to live in harmony with nature, people must understand that natural systems are vital to the flourishing of all life on earth; an awareness that, at the civil society level, is being manifested through the formation of various alliances and organisations that are advocating for a recognition of rights for nature at all levels of governance.¹⁴

Challenges

As has been demonstrated above, aligning the two core components of Principle 1 necessitates that the anthropocentric approach to sustainable development be integrated with a deeper understanding of the ways in which humans can rely on the natural world. Form many actors involved in pressing a development agenda - be it activities in the Global South that aim to alleviate poverty, or those activities that seek to enhance human well-being and comfort - it has been important to demonstrate that sustainable development and living in harmony with nature are not mutually exclusive, but in fact mutually reinforcing.

It must be recognised that in many cases the drive towards development has to some extent taken the onus off environmental protection. Firstly, much development has happened at the expense of the environment; and secondly in many cases – predominantly in the Global North - consumption continues to exceed what is reasonable in the context of planetary boundaries and equitable distribution of available resources.

Business and sustainable development

There are many examples of businesses playing an active role in contributing towards the achievement of sustainable development particularly in the last decade. In many cases efforts have been made to incorporate sustainable development into business practices and models, particularly through the development of Corporate Social Responsibility indicators, which monitor and evaluate business practice. However, there is growing concern that the overriding objective of most businesses to maximize profit margins above all other considerations makes it difficult to truly incorporate sustainable practices into their work.

In addition businesses often appeal to the anthropocentric view of Principle 1 by emphasising their role in job and wealth creation, and that this apparent positive contribution to society must not be hindered by environmental legislation that impede job creation in any way. These kinds of arguments were put forward most strongly by industrial lobbyists in the EU who tried to prevent the European Parliament passing legislation to increase the climate change target to 30%, and succeeded when the decision did not fall in favour of raising the target.¹⁵ Businesses also impress upon wider society their value through contributing to economic growth, framing this as the essential and ultimate trajectory to follow in order to maintain progress.

Challenges to monitoring progress by GDP

“It has long been clear that GDP is an inadequate metric to gauge well-being over time particularly in its economic, environmental, and social dimensions, some aspects of which are often referred to as sustainability.”¹⁶

There are significant challenges to incorporating the concepts of *one planet living*, *ecological debt* and *living in harmony* with nature into a social and economic system that measures social progress and prosperity

in monetary terms, such as Gross Domestic Product (GDP). In such a system, a ‘healthy economy’ is measured by its GDP performance and consumption is implicitly encouraged in order to maintain high levels of GDP, which can often be at variance to the objective of protecting the environment. Since UNCED there have been examples where countries have tried to incorporate environmental degradation into measures of GDP, through green accounting for instance. Notably in 2004 China attempted an experiment to replace GDP with a measure of ‘Green GDP’, which resulted in the first accounting report for green GDP being published in 2006, which showed that “the financial loss caused by pollution was 511.8 billion yuan (\$66.3 billion), or 3.05 percent of the nation’s economy.”¹⁷ Consequently, it was deemed unviable (economically and politically) to continue with this accounting practice and in 2007 the scheme was scrapped. This example further reinforces the difficulties that governments face when having to incorporate a measurement of ‘living in harmony with nature’ into traditional GDP accounting methods.

Transgressing planetary boundaries

Nine planetary or biophysical boundaries have been identified by leading scientists as the thresholds that ought not to be crossed if the earth’s systems are to continue in a stable state and support not just human, but all life on earth. Of these, it has been established by leading scientists that three have already been transgressed: climate change, biodiversity and the nitrogen cycle.¹⁸ This is a clear and unequivocal indication that the principle of living in harmony with nature has not been adhered to in a way that keeps humans from living within their means on earth. As a result of over-consumption, pursuing unsustainable development models and driving towards increasing GDP regardless of the environmental impacts, humans have already crossed the threshold of these boundaries, plunged into ecological debt and compromised the ability of future generations to meet their own needs.

The Way Forward

Moving beyond GDP

Re-framing the notion of human prosperity away from the single-focus measurement of GDP

towards an holistic assessment of society's well-being that factors in environmental limits will go some way towards striking a balance between the seemingly two conflicting parts of the principle.

A recent report commissioned in 2008 by President Sarkozy of France, and chaired by Joseph Stiglitz has stated that “[c]hoices between promoting GDP and protecting the environment may be false choices, once environmental degradation is appropriately included in our measurement of economic performance.”¹⁹ When addressing sustainability the report focusses on the importance of changing the measurement system “to shift emphasis from measuring economic production to measuring people’s well-being. And measures of well-being should be put in a context of sustainability.”²⁰ Such an inclusion of not only sustainability, but also citizen’s well-being, into national performance indicators would go some way to overcoming the challenges associated with the seeming disconnect between short-term thinking, which drives economic activities, and long term thinking which will lay the foundation for incorporating not just principle 1, but many of the other principles of the Rio Declaration.

Establishing a framework to stay within the planetary boundaries

As has been established, the ability to stay within the planetary boundaries will have a significant impact on the resilience of populations of all species on earth, not just people, and detailed research is being conducted into the issue of governance of socio-ecological systems with a special emphasis on resilience.²¹ The work being done emphasises the need to be aware of the environmental limits that determine the physical and biological boundaries of the earth’s systems, which will affect the activities that people are able to undertake. An emerging idea is to incorporate an awareness of the planetary boundaries into policy and decision making process at all levels of government. Work is being done by various interest groups and the research of, for example, the Stockholm Resilience Centre will usefully inform this.²²

Establishing a framework to incorporate this thinking will provide a useful mechanism by which activities can

be measured against the likely impact they will have on the boundaries, and it will also contribute to aligning the two aspects of Principle 1.

Proposals are starting to emerge for a Framework Convention on Planetary Boundaries, or a Declaration on Planetary Boundaries that could feed into a broader debate about how humans can develop sustainably and live in harmony with nature.²³

Re-framing business and enterprise

In response to the increasing concern about businesses pursuing a model of exponential growth on a finite planet, there has been a growing movement towards establishing social enterprises²⁴, as an alternative to the status quo. By trading for social and environmental purposes, where profit derived from this practice is reinvested into achieving the overall aims of the enterprise, socially aware business can contribute to developing an holistic approach to achieving development and living within environmental limits.²⁵ In practising in such a way social entrepreneurs are actively trying to address the short-termism that has driven business models by putting sustainability at the core of their work; and significantly by not being “driven by the need to maximise profit for shareholders and owners”²⁶ can contribute to the ‘beyond GDP’ work as mentioned above.

Redefining the way in which people view nature, and their relationship to the surrounding environment, can lead to a wider awareness of how people consider the long-term impacts of their decisions and activities and strengthen the implementation of Principle 1 as well as drive the wider debate about measuring social process and shifting perceptions about humans’ relationship with nature.

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principle 2

Introduction

Principle 2 is inspired by the language of principle 21 of the Stockholm Declaration, demonstrating the sustained commitment to this principle among UN member states.¹

Principle 2 upholds the right of nation States to exploit their own natural resources – a principle that may be invoked in the context of international negotiations to resist multilateral efforts that might constrain that right. Principle 2 balances this emphasis on sovereign rights by also invoking the responsibility of States not to cause damage to the environment in areas beyond their national jurisdiction. In the first instance this applies to activities that might pollute or degrade natural resources that span national boundaries – such as watersheds. But it also has implications for broader transboundary impacts – such as climate change caused by carbon emissions released in countries far removed from the impacts.

Principle 2 throws up a number of challenges – firstly there is a potential incompatibility of natural resource exploitation on a national level with multilateral efforts to protect the environment and conserve global environmental goods and services. Secondly, the significant expansion of transnational corporations (TNCs) has rendered obsolete the assumption that natural resources are invariably controlled by the Nation State. Lastly, though the onus on national sovereignty is balanced by the invocation of transboundary responsibility, it remains ambiguous in many cases as to how Nation States might be held to account for the transboundary impacts of their actions.

By specifically invoking the UN Charter, the Principle provides a foundation upon which the two core components of the principle should be based when implemented. The principle of sovereignty is strongly upheld in the Charter, thereby placing an emphasis on 'sovereign right' in a way that has the potential to overshadow the responsibility States have to ensure they do not cause trans-boundary harm.

Implementation

Invocation of national sovereignty

Since the middle of the twentieth century the issue of state sovereignty over natural resources became ever more prominent, especially in the context of decolonisation.² The right to self-determination of those states that were striving for, or recently gained, independence became inter-linked with national sovereignty. The tension between state ownership and control over those natural resources and the reliance on them by western states who had exploited them to develop their own economies came to the fore with a series of nationalisations of large western operated companies in newly independent states.³

International agreements such as the Declaration on Permanent Sovereignty over natural resources (1962)⁴, the Stockholm Declaration (1972)⁵ and the UN Convention on the Law of the Sea (1982)⁶ would have influenced the decision to invoke the principle of state sovereignty in the context of resource management and trans-boundary pollution in the Rio Declaration.

The principle of national sovereignty is subsequently reiterated in numerous international environmental instruments, including the preamble to, and Article 3 of, the CBD⁷; the preamble to the UNFCCC⁸; the "Principles/Elements" of the Forest Principles⁹, the United Nations Millennium Declaration and the Johannesburg Declaration on Sustainable Development (2002). In addition there are also numerous international treaties relating to armed conflict where it is invoked. The destructive nature of warfare and the correlating transboundary effects necessitate that international frameworks govern these activities.¹⁰

Compensation

Where principle 2 provides a right for states to exploit their natural resources, it must necessarily follow that should they not exploit it they have a right to be compensated accordingly. This is especially relevant where the international community is in favour of a state not engaging in resource exploitative behaviour, where it is felt that an international benefit will be gained as a result. A prominent example where international mechanisms have been established to facilitate this process is the Reducing Emissions from Deforestation and forest degradation (REDD) scheme under the UNFCCC. In this situation the objective of principle 2 is

logically applied so that those countries that effectively have a right to deforest are financially compensated for not engaging in deforestation. The internationally community benefits from this because the forests, as carbon sinks, are preserved.¹¹

An invocation of the *sovereign right* to exploit also applies to the controversy around 'response measures' that fall under the UNFCCC and have been discussed in relation to mitigation targets. Where the REDD scheme provides a mechanism to compensate countries for not engaging in deforestation, it has been argued by States such as Saudi Arabia that, if they are not going to exercise their sovereign right to exploit their natural resource - oil - then they should be compensated. If Principle 2 is followed to its logical conclusion, this argument, logically, stands. The impacts of global policies aiming to reduce carbon emissions will reduce demand for that resource and have a significant impact on those states that have built their economy around such exploitation.

This contentious issue has become highly politicised in the UNFCCC negotiations not least because there are many states that do not accept that an oil-based economy should be compensated for not engaging in an activity that provides the means for other countries to increase carbon emissions.¹²

Sovereignty and international regimes

In addition to the tension that exists within Principle 2 itself, there are also wider tensions between the State sovereignty and international regimes, which goes to the heart of the efficacy of international law. The principle of state sovereignty is invoked to resist perceived, or actual, 'interference' of international frameworks and regimes. This is particularly relevant in the case of climate change where state sovereignty and the pursuance of national interests is used as an argument to trump attempts for establishing multi-lateral agreements that would have national application, and national governments - such as in Australia - reiterate the fact that "[b]eing a Party to the UNFCCC does not undermine Australia's national sovereignty."¹³

Similarly this tension exists in relation to whaling. The International Whaling Commission has, since 1986, imposed a moratorium on whaling for commercial purposes.¹⁴ However, Japan continues to engage in this activity every year arguing that it is for research purposes.¹⁵ It also invokes the principle of national sovereignty and argues that it is strongly associated

with Japanese culture and tradition.¹⁶ In these cases the tension is played out on an international stage with both governments and environmental groups condemning the activity and applying pressure on Japan to cease¹⁷, often resulting in Japan accusing such groups as 'unjustified interference'.¹⁸

Recognising transboundary responsibility

Despite the fact that the 'national sovereignty' element of the principle has been consistently invoked to reiterate the right of a nation State to exploit its own resources, without 'interference' from the international community, there are a number of examples where the transboundary element of the principle has also been upheld.

International case law

The second half of Principle 2 has been invoked in a number of cases at an international level, thus demonstrating its applicability in international Courts, as well as reinforcing the objective of principle 26 which relates to resolving environmental disputes peacefully. The ability of States having a means by which they can challenge an activity or decision that is perceived to go against Principle 2 is fundamental to its successful implementation.

International case law was already developing on this point by the time the Declaration was established in Rio, since the tension between transboundary disputes and national sovereignty were already being played out on an international stage. The evolution of atomic science and the development of nuclear weapons resulted in disputes relating to transboundary harm being catapulted to the attention of politicians and civil society alike. The advent of nuclear weapons testing led to the borders of nation states being put under threat from an activity that was conducted in the jurisdiction of one State but which could have serious negative impacts within the borders of another. The *Legality of the threat or use of nuclear weapons*¹⁹ case brought to the ICJ by Australia and New Zealand (in separate cases) against France sought to invoke principle 2 in relation to nuclear weapons testing. It was successfully invoked and applied in an advisory opinion (the case was not taken further since France had already agreed to not conduct more weapons tests), which confirmed in no uncertain terms that "[t]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment."²⁰

International processes relating to Principle 2

If a State invokes its sovereign right to exploit a resource, such as oil or a river, it must conduct environmental impact assessments (principle 17) as well as consult with any State that might potentially be affected by the procedure of exploitation or the activity that uses the resource (principle 19) prior to proceeding with the project. The international courts recognise that this preparatory work is a crucial component of adhering to Principle 2. This is illustrated by cases such as *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*,²¹ in which Argentina brought a case based on the unilateral decision of Uruguay to allow two pulp mills to be built on the river that flows between both States, in contravention to the Treaty that governed such activities. A substantial part of the claim was centred around the potential pollution that the mills would cause to the river and marine life, and thereby causing damage to an area within the jurisdiction of the claimant state.²² Principle 2 is designed to prevent these situations arising and in conjunction with the precautionary principle (15) must guide the process by which a state conducts its affairs, especially where there is risk of environmental and trans-boundary harm. This approach was affirmed by the International Court of Justice, which in unequivocal language stated that 'preventative rather than compensatory logic' should be applied when determining elements of risk.²³

Challenges

National sovereignty

The invocation of the principle of national sovereignty can have negative implications for the international community. The exploitation of natural resources by one state does not just benefit that state alone, the benefits derived from the environment and ecosystems are often global in nature. Such global benefit must be recognised when establishing governance frameworks to manage these resources. Conversely, the burden of exploitation of those natural resources is shouldered by the international community and as such, global cooperation for the preservation of such resources will be required. Necessarily, therefore, the international community will have an interest in the way in which these resources are managed, highlighting the fact that broader governance of natural resources is required beyond the narrow interests of the nation State if progress is to be made on establishing effective measures to achieve this.

National economic interests

Overall Principle 2 is challenging to implement where a large proportion of national economic interests are tied up in the activity, and where the cessation of the activity will significantly affect the economy and industry workers, the economic interest will override the imperative to prevent trans-boundary environmental harm. For instance, even though studies have shown that stocks of Blue Fin Tuna have declined by 80% in the past four decades, Japan (a country where about 75% of the fish is consumed) protested over proposals to put the species on the ban list of the UN Convention on the International Trade in Endangered Species (CITES). The proposed ban was not successful after Japan and Canada opposed it, arguing that the ban would 'devastate fishing industries'.²⁴

The decline of bluefin tuna as a result of overfishing constituting transboundary damage to the marine ecosystem, is just one such example where the sovereignty of a nation State won out when the two elements of Principle 2 needed to be balanced against one another.

Transboundary impacts

Applicability of Principle 2 in international courts

The above examples demonstrate how the soft law provisions of principle 2 are being borne out in international law and how there is a deepening recognition of the responsibility that one state will have to another, especially with regards to pollution and environmental damage. Certainly where the activity and impact is as well defined and understood as nuclear testing or indeed nuclear warfare, the principle relating to 'damage' in one (or more) jurisdictions resulting from an activity in a different jurisdiction can be applied. However, as the *Pulp Mills* case demonstrates, the ICJ is still (as recently as 2010) grappling with the issue of whether or not it has jurisdiction over matters such as those raised by Argentina. In addition there are other examples of transboundary issues relating to environmental damage such as, for instance, issues pertaining to climate change. In this latter example the principle will be very difficult to implement when the debate about causality and related effects continues.

Identifying responsibility

Identifying responsibility so as to uphold the second part of Principle 2 can often be a challenge. The atmosphere

can be affected by numerous activities that are undertaken in various different states, not least the result of burning fossil fuels and emitting carbon dioxide into the atmosphere. The issues surrounding cause and effect of climate change create serious challenges to providing the opportunity for state or individual actors to bring an action against another State that is causing harm 'beyond their jurisdiction', as it is impossible to attribute the origin of the 'harm' to one particular nation State. Nonetheless, organisations such as WWF-UK have tackled this issue by analysing the legal duty to pay compensation for climate change, and have argued that the "widely-recognised rule of customary international law is the no-harm rule, which essentially holds that no State must harm another" and it suggests that "[t]his rule provides a basis for consultation and negotiation in the case of transboundary environmental disputes."²⁵

Yet the no-harm rule, reflected in principle 2, applies to state-state harm. In the context of climate change the rule will only apply if it can be proved that the activity of one state caused the harm or damage in another state. The significant challenge when it comes to climate change is in proving causality and the application of the no-harm rule would require legal assessment of the scientific evidence and causes of climate change within a given 'damaged' State or States."²⁶

Shared resources and 'other' areas

As a shared resource and necessary component of the make up of the earth that keeps ecosystems in balance, the atmosphere, as well as the marine ecosystems beyond state jurisdictions, are precisely the 'other' areas that principle 2 refers to. Unlike in situations where transboundary damage is felt by one (or more) jurisdictions and the state of that (or those) jurisdiction(s) can take action to try to prevent an activity that is causing damage to its citizens, when an area outside of the direct jurisdiction of one state is threatened there is not a defined 'agent' or state that can bring a case on its behalf. In this situation it becomes a challenge to implement the aspect of principle 2 that relates to damage done in other areas.

The Way Forward

Principle 2 has successfully influenced a number of legal instruments that were established either at or subsequent to Rio in 1992. The language of the Principle

has been adopted and applied in a number of contexts, in particular cases brought before the International Court of Justice which have established that it exists as part of the *corpus* of international environmental law, and both arguable and recognised in the courts. As has been highlighted, however, there is still a significant challenge to the principle being fully implemented. The opportunity now exists to build on the successful examples where the principle has been recognised. This may require strengthening the international institutional regime that will play a role in enforcing the principle, in addition to development of the understanding of the causality of transboundary environmental harm.

International cooperation

Lessons can be learned from efforts to foster international cooperation in other areas, and how, despite potentially infringing on national sovereignty, such efforts have been successful. In relation to Principle 2 and environmental transboundary harm, it is crucial that open and cooperative processes are entered into by States if tension inherent in the principle is to be overcome and the objective of the principle achieved. An instructive process that was established in 2004, which might be drawn on as an analogous example, is the UNESCO project to create an 'International Coalition of Cities against Racism.'²⁷ This ambitious programme intends to unite cities in their efforts to overcome racism by implementing measures at the municipal level, thereby 'circumventing the authority of national governments.'

Programme such as these do challenge the concept of national sovereignty, however they are leading the way in encouraging international cooperation and collaboration through sharing knowledge and examples of successful mechanisms of implementation. By learning from examples such as this, and developing analogous models of international cooperation, NGO, civil society and state actors can work together to strengthen and enhance implementation of Principle 2.

An International Court for the Environment

One significant challenge to the dispute in the *Pulp Mills* case (above) was the issue relating to the use of scientific experts, note above in the challenges section. A proposal for strengthening the international legal framework, especially in relation to environmental

issues, is to establish an International Court for the Environment (ICE). An ICE, according to the proposal of the ICE Coalition would be based on a tribunal structure with similar procedures allowing scientific experts to be called to give evidence in cases.²⁸ The ICE Coalition also proposes that non-state entities have standing, or the ability, to bring cases against state and non-state actors. This has the potential to also overcome the significant challenge with enforcing many of the principles in the Rio Declaration, because within the current institutional framework it is only states that are able to bring a cause of action.

Applying multiple principles

It remains important to recognise that the principles of the Rio Declaration do not exist in isolation to one another, and that many of the principles complement and support each other. This is especially true for principle 2, which would benefit greatly from being applied in conjunction with the Precautionary Principle (Principle 10). In effect, this will result in a better understanding by States that activities undertaken in their jurisdiction must not affect jurisdictions outside of their control, even where there uncertainty about cause and effect of those activities.



*The right to development
must be fulfilled so
as to equitably meet
developmental and
environmental needs
of present and future
generations.*

Principle 3

Introduction

*When the Brundtland Commission published its report *Our Common Future*¹ it presented the concept of sustainable development in a way that expressly reflected the rights of future generations, by stating: ‘Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.’²*

The concept became one of the most successful approaches to sustainable development to be introduced for many years. Notwithstanding the difficulties associated with establishing more precise definitions around this concept of, for instance, ‘needs’, the report helped to shape the international agenda and the international community’s attitude towards economic, social and environmental development.³ This fed directly into UNCED in Rio and was approved as a fundamental pillar of both the Declaration and Agenda 21.

Principle 3 of the Rio Declaration echoes this Brundtland concept, developing it to include equity and expressly identifying that future generations will have ‘environmental’ as well as ‘developmental’ needs. Beyond the physical needs of future generations and the responsibilities that decision-makers have to ensure that those needs are met there is also a moral obligation on states that Principle 3 infers. Underpinning this moral driver is a recognition that

‘[w]e act as we do because we can get away with it: future generations do not vote; they have no political or financial power; they cannot challenge our decisions.’⁴

Without a voice at the table, if Principle 3 is to be successfully implemented, future generations must have their interests represented in some way and nation states have developed some mechanisms by which these voices can be represented. However, it remains a challenge to fully integrate long-term thinking into

decision-making processes, there are proposals and emerging ideas for how to most effectively give a voice to the interests of future generations in a meaningful way, reflective of Principle 3.

Implementation

International legal frameworks

Subsequent to the Brundtland Report and the Rio Declaration there have been notable efforts made by States to incorporate the ‘needs and interests’ of future generations into international legislation; demonstrating some level of political will to consider ‘the right to development’ in light of the overall objective of Principle 3. Often these references are framed in aspirational terms, rather than offering concrete mechanisms for how these rights might be realised in practice. Nonetheless, over the past two decades there have been increasing amounts of attention paid to the issue of intergenerational equity and the relationships between present and future generations. There is a plethora of legislation, both national and international that reaffirms a recognition of the responsibility one generation owes to another, at least in a principled sense.

Prominent examples at the international level include **Article 3** of the **United Nations Framework Convention on Climate Change**, which states that:

‘Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities’⁵

In addition, the United Nations Economic Committee for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (**Aarhus Convention**), which entered into force in 2001, makes two distinct references to the interests of future generations in the Preamble and the overall objective:

***Preamble** ‘Recognising also that every person has the right to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations’*

Objective *In order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each Party shall guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention.*⁶

Whilst the UNFCCC, as an international agreement, has global reach, the Aarhus Convention does not; it applies to a number of EC and non EC States, and to date has 40 signatories and 44 parties.⁷ However, its success as a regional instrument is widely reported and currently there is much attention being paid to mechanisms for extending the reach of this Convention as a means by which Principle 10 can be globally implemented.⁸ In expressly stating in supporting material to the Convention that it is 'a new kind of environmental agreement' and drawing links between environmental rights and human rights, the UNECE acknowledges that an obligation to future generations is owed, echoing Principle 3.⁹

National legal frameworks

The implementation of the principle at the national level is a crucial component of its fulfilment; without the legislative framework being integrated in national law or policy processes the efficacy of the overall objective

is diminished. Such 'institutionalisation' of the rights of future generations will be crucial in embedding long-term decision-making. Some examples of how this has already been achieved are as follow:

Parliamentary commissioners for future generations

A number of countries have established portfolios in State Parliaments whereby the interests of future generations are actively promoted by an individual or department. The idea was first promoted at the international level in a preparatory committee meeting for UNCED in 1992, and submitted by delegates from Malta who made a proposal to institute an 'official Guardian to represent posterity's interests.'¹⁰ This proposal was based upon the premise that 'future generations' cannot represent themselves, and so it would be appropriate to appoint a guardian to speak on their behalf.¹¹ Though this proposal was not successful at being formally endorsed at UNCED, Canada, Hungary, Israel and New Zealand established the legal and political mechanisms for commissioners or similar portfolios for future generations to represent the interests of posterity, as the delegates of Malta had envisaged. In addition, Finland also established a Committee for the Future.¹² Of these, the Hungarian Parliamentary Commissioner appears to be the only department that remains active.

Hungarian Parliamentary Commissioner for Future Generations

The Hungarian Parliamentary Commissioner acts as an ombudsman for future generations and reports to Parliament on matters that relate to the constitutional right to a clean and healthy environment enshrined in the country's constitution,¹³ By enshrining this right, the long-term interests of present and future generations are protected and the Commissioner provides a strong institutional mechanism through which these rights can be enforced.¹⁴

The powers of the Commissioner are derived from Primary Legislation and following an election to the post by the Unicameral Hungarian Parliament, the present Commissioner took office in 2008.¹⁵ Since then, the Office for the Commissioner has been very active in Hungary and as of 2010 it had received over 400 petitions from the public, completing investigations into just under 100 of them.¹⁶

The commissioner is leading the way in implementing Principle 3 and, as will be shown below, it is more than feasible for other countries to follow this leading example especially those that have similarly enshrined environmental rights in their constitutions. In addition, there are also proposals for an International institution that could fulfil a similar role and which would strengthen the implementation of the Principle at the international level (more of which is outlined in the 'way forward' section).

Constitutional rights

In many countries the right to a clean and healthy environment is enshrined in the constitution. Such a constitutional right is a broader example of intergenerational

equity because such a right is not a time-bound law *per se*; and so it implies a duty to protect the environment in perpetuity so that future generations can also enjoy the same right. As many as eight European countries have enshrined this right in their constitutions: Belgium, Czech

Republic, Hungary, Norway, Portugal, Slovenia, Slovakia and Spain – and France includes it in the preamble to the Environment Charter, which is included in its Constitution (see Figure 1).¹⁷ The Virgin Islands also has a constitutional right to protect the environment for future generations (granted by the UK);¹⁸

Outside Europe the South African Constitution uniquely *guarantees* the right to “have the environment protected, for the benefit of present and future generations” through legislation. Article 33 of the 2009 Bolivian Constitution guarantees “people...the right to a healthy, protected and

balanced environment” continuing that “the exercise of such a right should allow individuals and communities of present and future generations, as well as other living beings, to develop regularly and in perpetuity”. The concept of granting a right to develop regularly and in perpetuity strongly supports the objective of Principle 3; and more recently Bolivia has amended its constitution to grant nature rights, which will in effect guarantee a clean an healthy environment in perpetuity provided the rights are acted upon and sufficiently enforced. See section XX for more information on the Bolivian Constitution and granting nature rights.

TABLE 1 European States that have enshrined such environmental or future generations constitutional duties.

Constitutional duties towards future generations	
European State	Constitutional provision
Finland The amended 1999 Constitution, Chapter II, Section 20	“The public authorities shall endeavour to guarantee for everyone the right to a healthy environment and for everyone the possibility to influence the decisions that concern their own living environment”
Germany The amended 1949 Constitution, Chapter I, Article 20a	“the State protects... with responsibility to future generations the natural foundations of life and animals.”
Hungary The amended 1949 Constitution, Chapter XII, Article 70/D	The Constitution directs the State to implement the right to a healthy environment “through the protection of the... natural environment”
Netherlands The amended 1983 Constitution, Chapter I, Article 21	it shall be the concern of the authorities to keep the country habitable and to protect and improve the environment.”
Poland The 1997 Constitution, Chapter II, Article 74(1) and (2)	The Constitution makes it the duty of public authorities to protect the environment, and directs the authorities to “pursue policies ensuring the ecological safety of current and future generations.”
Portugal The 1976 Constitution, as amended, Article 9(e)	The Constitution makes it a fundamental responsibility of the State to “protect and enhance the cultural heritage of the Portuguese people, to protect nature and environment, conserve natural resources and to ensure the proper development of the national territory.”
Slovakia The 1992 Constitution, as amended Chapter 2, Section VI, Article 44(4)	The Constitution directs the State to “provide for an efficient utilization of natural resources, a balanced ecology, an effective protection of the environment.”
Slovenia The 1991 Constitution, as amended, Section III, Article 72	The Constitution, as amended... makes it the duty of the State to “ensure a healthy living environment.”
Spain The 1978 Constitution, Title I, Chapter III, Article 45(2)	The Constitution directs the public authorities to “concern themselves with the rational use of all natural resources for the purpose of protecting and improving the quality of life and protecting and restoring the environment.”

Source: P. Roderick, Taking the Longer View (2010) Table 4, p 21.

The Constitution of Argentina also enshrines a “Brundtland Commission definition” of sustainable development, alluding to the interests and rights of future generations but also whilst attempting to strike a balance between those and the rights of present generations. It provides that: “all residents enjoy the right to a healthy, balanced environment which is fit for human development and by which productive activities satisfy current necessities without compromising those of future generations.”

National policy and legislation on climate change

By its nature climate change legislation is futures-oriented, being based as it is on future projections of climate change and predicted impacts. Climate change is being taken increasingly seriously by a range of countries who are passing comprehensive national legislation. Such legislation also provides legally binding targets that reach beyond short-term political cycles, enshrining a responsibility to act that will be binding on successive Parliaments. The UK was a world leader in enacting its Climate Change Act in 2008.¹⁹ The Act, through providing mechanisms by which national legal instruments set ‘carbon budgets’ to break-down the overall carbon emissions targets, paves the way for establishing means by which the interests of future generations are brought to the fore of legislation. In addition the devolved Parliament of Scotland has a Climate Change Act (2009). In addition to this legislation other countries have introduced carbon taxes to establish market mechanisms to incentivise carbon emissions reductions.

Non-governmental initiatives

Measuring the *impact* of futures policies is difficult. If a policy aspires to incorporate long-term thinking in its drivers for change, then it necessarily follows that the results or impacts of such policies will only be borne out many years after the policy is implemented. However, this should not be a reason to disregard the potential positive impacts that futures policy can have and neither should it distract from the value of incorporating long-term thinking as a means of protecting the interests of future generations.

Efforts have been made by - and continue to emerge from - non-governmental actors who are driven to safeguard the interests of future generations, thereby

supporting and enhancing other government initiatives that are implementing Principle 3. In particular, youth organisations are especially interested in this agenda as those who, arguably, out of present generations have the greatest stake in the future.

Youth organisations and involvement in the political process

Youth Climate Coalitions²⁰ around the world have been established by groups of self-organising and visionary young people to provide a vehicle through which the voices of young people can be channelled and directed both towards their respective governments and the wider public. Nigeria, Canada, Kenya, Australia, the US, the UK, Singapore, China, India are just some of the many countries that have seen youth climate coalitions be established.²¹

In 2010 a pioneering project was established with the UK Department of Energy and Climate Change (DECC) to bring the youth voice to government decision makers. The Youth Advisory Panel members are led by the guiding principle of ‘incorporating intergenerational equity’ into government decision-making and in December 2010, in conjunction with the UNFCCC ‘Young and Future Generations Day’ in Cancun, it launched its inaugural report on energy policy - *Energy: How Fair Is It Anyway?*²²

WWF and the Foundation for Democracy and Sustainable Development

WWF and the Foundation for Democracy and Sustainable Development commissioned a report, in 2010, on ‘taking the longer view’ in the democratic decision making process. This report analysed the various mechanisms and options that exist for embedding the interests or rights of future generations in the constitutional or legal framework of the country that would support the government’s implementation of Principle 3. The paper offers a comprehensive analysis of the various mechanisms that exist world-wide, in addition to a list of recommendations of how these can be achieved.²³

The UK Alliance for Future Generations

This is an alliance of NGOs and individuals who are striving towards establishing effective ways of implementing Principle 3, such as through bringing long-term thinking to the democratic decision-making process. The members of the Alliance for Future Generations have agreed to work “to ensure that

long-termism and the needs of future generations are brought into the heart of UK democracy and policy processes, in order to safeguard the earth and secure intergenerational justice"²⁴.

Intergenerational Foundation (IF) and Germany's Foundation for the Rights of Future Generations (FRFG)

Both the IF and the FRFG have been established to conduct research into issues pertaining to intergenerational justice and the ways in which present policies impact on future generations. The IF notably does not focus on environmental or sustainable development issues, but instead pursues issues relating to tax, housing and pensions (for example). Both are contributing to the wider discussions on how to integrate the interests and rights of future generations into policy and legislation.²⁵

World Future Council (WFC)

By bringing the interests of future generations to the heart of policy making, the WFC is fulfilling a prominent role in advocating for the objectives of Principle 3 being incorporated into state-level decision making.²⁶ A prominent campaign of the WFC is to establish **ombudspersons for future generations**, based on the Hungarian model (outlined above) and there is much work being done to incorporate this idea into the Rio 2012 conference.²⁷

Transparency International

The Transparency International (TI) *Global Corruption Report* incorporates aspects of Principle 3 into its defining corruption as "the abuse of entrusted power for private gain ... It is the power that future generations have vested in all of us, in our stewardship role for the planet."²⁸ The recognition and application of language supporting the rights and interests of future generations by an international non-governmental organisation, such as TI, highlights how the principle is becoming more integrated into the work of not just environmental or sustainable development NGOs, but ones also with a wider scope of work.

Indicators, measurement, assessment and accounting

There is an increasing awareness that establishing assessment and accounting mechanisms can support

efforts to introduce a long-term view into decision-making. These approaches can provide both state and non-state actors with appropriate tools and guidelines that can outline and frame means by which they can implement Principle 3, such as for instance, taking a precautionary approach (i.e. from assessing potential environmental impacts and making decisions on whether particular projects are helpful) or by measuring short-term economic progress alongside other indicators.

Environmental impact assessments

At the national level, Environmental Impact Assessments (EIA) remain a key device for integrating an analysis of the social and environmental costs of economic activities.²⁹ Within the European Union, EIA legislation has been significantly strengthened since Agenda 21, most notably in response to the 1998 UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention). There is also a growing emphasis on the importance of Strategic Environmental Assessments (SEA).³⁰ SEAs include procedures whereby stakeholder consultations are required as part of the assessment of proposed development projects.

Significant progress has been made towards implementing EIAs and SEAs with several governments institutionalising dialogue mechanisms through the creation of National Councils of Sustainable Development and various other stakeholder steering committees.³¹ In the UK for example, the 1999 NSDS saw the establishment of an independent Sustainable Development Commission (SDC) comprised of representatives from academic, scientific, business and NGO backgrounds, performing an official watchdog function, scrutinising the government's progress on implementing its sustainable development strategy.³² In 2005, as a result of a SDC review which concluded that the UK had only made 'patchy' progress in meeting its NSDS goals, the government engaged in a wide process of stakeholder consultation to draft a new NSDS.

Triple bottom line

Triple bottom line accounting has developed to become the foundation for responsible business practices, and a measurement of business performance. Traditional business models adopted the 'bottom line' Whilst the concept had been gaining support since the late 1980s and throughout the 1990s, the terminology was coined

in 1998.³³ With the increasing awareness being given to sustainability in business, and how the concepts and principles of the Brundtland Commission and the Rio Declaration could be applied to sustainable business practice, triple bottom line accounting offered a fresh approach of how bring together the three key issues of economic prosperity, environmental quality, and social justice constitutes progress. At the international legislative level, for example the 'three-pillar model of sustainability' formulated in the Treaty of Amsterdam, adopted by the EU at its Copenhagen Summit in 1997.³⁴

Sustainability reporting frameworks have been established to encourage sustainable business reporting, and to offer guidance on how to successfully conduct the accounting required to meet the triple bottom line. The Global Reporting Initiative (GRI), for example produces a comprehensive framework that is widely used around the world, the main driver of which includes mainstreaming the [process of disclosing aspects of environmental, social and governance performances.³⁵ Through developing Performance Indicators and sustainability reporting guidelines³⁶ the GRI encourages a range of businesses to adopt the triple bottom line approach.

Sustainability indicators

In order to operationalize the principles of sustainable development and the triple bottom line in business practice and public policy, increasingly efforts have been made to establish and implement sustainability indicators.³⁷ The OECD, for example, developed the SPDIR framework for measuring and monitoring the relationship between society and the environment. The core elements of the framework are Driving forces, Pressures, States, Impacts and Responses and it has been adopted by the European Environment Agency.³⁸ Representing a systems analysis view, the model offers a framework for policy makers who offers who are needing to make decisions for progressing the sustainable development agenda.

As the role of indicators becomes increasingly important in implementing sustainable development there are many who are advocating for enhancing the breadth and range of information that the indicators measure. The recently published Sarkozy commissioned report by the Stiglitz-Finoussi-Sen Commission demonstrates that there is a need to design, implement and promote indicators that will support the development of policies at all levels.³⁹ The report focuses broadly on indicators

of social progress, challenging GDP as the primary indicator, but it also highlights the importance of measuring environmental conditions in conjunction with other social and economic indicators and argues that investment is needed to develop these so that they can effectively guide policy-making processes.⁴⁰

Natural capital stocks and accounting

By assessing and quantifying the capital or 'stock' of the natural world it is possible to integrate the role of the environment and ecosystems as service providers into economic assessments of policy decisions. This method of accounting brings together core and fundamental aspects of environmental and economic policies and provides a mechanism for including the economic cost of losing a valuable environmental or ecosystem service.⁴¹ In so doing, the effect of environmental pollution, degradation or ecosystem damage that has hitherto been externalised in business accounting, can be internalised, which can significantly alter the overall cost-benefit-analysis of policies or developments that will negatively impact on the environment.

It has been suggested that Ecosystem Service Valuation Frameworks can be used to measure the 'stock and flow of natural capital for accounting purposes.'⁴² These can guide decision-makers on matters relating to the implications of loss of natural capital or flow, and thereby offer a framework within which the trade-offs that are inherent to policy making processes can be effectively balanced against one another.⁴³ In addition to the development of these frameworks, significant studies have been conducted into the global cost of ecosystem degradation and biodiversity loss coupled with recommendations to policy-makers on how to use the information and incorporate the value of ecosystem services into decision making. In 2010 at the CBD COP-10, the Synthesis Report of The Economics of Ecosystems and Biodiversity (TEEB) was launched.⁴⁴ Building on the TEEB study, the Bank of Natural Capital has been created to provide a valuable communication tool for measuring, monitoring and assessing natural capital and it provides an assessment of the 'current account'.⁴⁵

Other initiatives that argue for natural capital accounting include the European Environment Agency's European Environment state and outlook report.⁴⁶ The EEA has considered the affects that global mega-trends will have on ecosystems services and has offered a deeper understanding of 'human-made systemic risks

and vulnerabilities' that are a significant threat to the security of ecosystems and ecosystem services.⁴⁷ The assessment of the pressures on natural capital, as a result of global demands for resources and the services that ecosystems provide, lays an emphasis on integrated approaches to adopting policy and offers valuable material that can support many of the above mentioned sustainability indicator approaches.⁴⁸

Challenges

Political short-termism

There is a fine balance to be struck between meeting the needs of present generations and ensuring that future generations can meet their own needs, especially in a political paradigm that is driven by short term political cycles, which rely on short-term gains. Bringing the long term interests into a system that is driven by short termism is a challenge unto itself. This is compounded by the fact that unlike the business and economy lobby, which has the ability to speak up for its interests and work on influencing decision-makers in the short term; the interests of the long-term are rather less represented.

There are many examples of business lobbying competes with the long-term interests of future generations. For example, it has been reported that Koch Industries - the USA based corporation - spent a total of \$49.5 million on oil and gas lobbying between January 2006 and December 2010.⁵⁰ Whilst these figures are very high, it has also been reported that in the same period other corporations such as ExxonMobil, Chevron Corporation and Conoco Phillips spent more on lobbying with figures estimated at \$100.3 million, \$63.2 million, and \$52.2 million respectively.⁵¹

This is starkly contrasted with the amount of money that is spent on environmental interests; it has been further been estimated that a record \$169 million was spent by the oil and gas lobby in 2009., which is far greater than the \$22 million estimated to have been spent by environmental interests.⁵² Such figures highlight how much effort is made to ensure that short-term interests of industry are represented over long term interests, and how implementing principle 3 effectively is especially challenging when such short-term agendas are prioritized.

Representing the voice of future generations

It is a challenge to build political will to act in a way that safeguards the interests of future generations due to the fact that future generations cannot vote for their representatives, which makes it less attractive to politicians to make decisions that benefit the longer-term especially if this is in conflict with the interests of the present day electorate who do vote.⁵³ In addition, future generations cannot *challenge* decision makers and have little- if any - way of holding political leaders to account once decisions have been made.

In addition to the obstacles to shifting attitudes, it has also been identified that without 'systematic and institutionalised legislative embedding of sustainable development' there will be a lack of unifying duties across government to achieve sustainable development.⁵⁴ Such an absence of express constitutional rights to a healthy environment or representation of the interests of future generations, will make it more challenging to implement the principle as effectively as in those states where there is such a constitutional expression.⁵⁵

The challenge to incorporating intergenerational equity in practice will certainly require a significant shift in attitudes of not only politicians, but the wider public that will have to accept that they ought to share their interests with future generations.

Accountability

As has been outlined, the Climate Change Act is a world leader in setting legally binding targets for emissions reductions. In the UK, and other jurisdictions⁵⁶ the principle of Parliamentary Sovereignty establishes that one parliament cannot bind a subsequent parliament.⁵⁷ Not only is the Climate Change Act a world first in legislating on carbon emissions, it is also an example where the principle of parliamentary sovereignty is not being followed. As a result of the 2008 UK Parliament enacting the legally binding targets Parliaments through to 2020 and 2050 will be bound. However, there is a serious issue about accountability entwined in such a mechanism: it will be challenging to hold to account those governments who may not take the requisite action to reduce carbon emissions in the leads preceding specific targets (such as the 2020 and 2050 targets). If this inaction results in the emissions target being missed by a successor parliaments, then it is likely that *they* will be held to account rather than previous parliaments.

Conflict with business imperatives

The conflicts between business practices, economic growth and sustainable development are often challenging to reconcile and the trade offs are often at the centre of disagreement between those decision-makers who are protecting the interests of the business community and those who seek to protect the interests of the environment and future generations. Recently the European Parliament voted on whether the EU should adopt a higher emissions target, moving from 20 to 30% by 2020. A 'rebellion' by the UK's Conservative Members of Parliament (MEPs) saw the proposal blocked.⁵⁸ The leader of the Conservative MEPs stated that companies would be unable to compete if the target was set too high and that it would "force large EU emitters to relocate to other countries outside the EU where they will continue to emit at a much lower cost."⁵⁹ This argument, that regulation is not good for business allows the very short-term impacts of policies to take precedence over analyzing the long-term effects that policies will have on future generations. Indeed, the leading economist and author of the influential *Stern Review* (2008) identified that the short-term attitude would have negative long-term consequences economically stating that it was a "missed opportunity and the EU risks falling behind in the economic growth story of the future."⁶⁰

Economic discounting

Governments and economists set discount rates in order to put the costs of paying future liabilities into present day terms. In the context of Principle 3 it is important to consider the ways in which economic analyses are done that determine the true cost of a development or activity, and how the cost is borne out over time, thus impacting on future generations. Consequently, the applications of discount rates affect the manner in which Principle 3 is – and will continue to be – implemented, as a result of which it becomes ever more important to apply principles of intergenerational equity and justice in mainstream decision making (especially, in this context, economic decision making) in order to formulate the appropriate rate of discounting.⁶¹ A compelling argument to support an intergenerationally just approach to such rates is the theory that investment projects that have long-term impacts should be subjected to the same treatment as investments that affect only the near future.⁶²

Economic discounting or restoration economics ⁶³

When weighing up the costs associated with a development or conservation project, the selection of the discount rate will have a significant bearing on the overall outcome of the decision. This is because an amount of money in present day real terms is considered to be worth more than the same amount of money in the future.

It is suggested that the four primary reasons for applying a positive discount rate are:

- positive rates of inflation diminish the purchasing power of the amount of money over time;
- an amount of money can be invested today, earning a positive rate of return;
- there is uncertainty surrounding the ability to obtain the promised future income, i.e. there is the risk that a future benefit (e.g., enhanced fish catches) will never be realised; and
- humans are 'generally impatient' and prefer instant gratification to waiting for long-term benefits.⁶⁴

Therefore when it comes to not logging a forest, or restricting fishing in a particular area to protect the coral, the discount rate used to assess lost economic value has a big impact on decision-making. If it is set too high, it may be deemed unfeasible to forego the immediate economic benefits for future-derived benefits. If, however, the discount rate is set lower, resulting in the trade-offs being less high, the cost-benefit analysis of the project overall could favour conservation. A significant challenge to implementing Principle 3 when economic discounting is set to favour short-term economic interests the process does not take into account other long-term benefits derived, especially those that cannot be measured in terms of market value.

Lack of systematic use of long-term assessments and indicators

Whilst it has been identified that many approaches to developing and implementing sustainability indicators and impact assessments, the concept is yet to be fully translated into mainstream decision-making and integrated into the core drivers of government and business practices.

Criticisms of sustainability indicator approaches

Where businesses do undergo sustainability reporting and publish results it remains questionable how effective they might be at shifting attitudes and broader approaches to the business models. Indeed, often such

reports do little to detract from the single bottom line of profit-chasing activities, which undermines the role of the reports in encouraging company directors to take a holistic approach to their activities. Whilst the triple-bottom line and three pillared approach to sustainable development is gaining support in many sectors it is yet to overcome the dominant driving force of maximising profit for shareholders. Additionally, notwithstanding the fact that natural capital as a concept is becoming increasingly recognised as a significant element of shifting attitudes and approaches to development policies, it remains a somewhat niche procedure that is yet to become common practice.

Criticisms of EIAs and SEAs

Outside Europe in particular there are still major concerns that EIA are falling short of their full potential, with governments lacking the necessary skills, guidance or political will to see them do more than simply 'greenwash' decision making processes.⁶⁵

Despite the likes of EIA and PEI stipulating that widespread stakeholder engagement should be partaken in at all stages of planning and implementation, levels of Major Group involvement in decision making processes remains insufficient in the vast majority of countries.

Such an indication that policies are not being developed in ways that safeguards the interests of future generations offers an indication that even with sustainability indicators, the triple bottom line approach and environmental impact assessments, there remains a pressing need to shift the decision-making framework in such a way that the interests of future generations will be brought into the heart of the process.

Planetary boundaries

At the global level, seeing environmental challenges in terms of planetary or biophysical boundaries that define the conditions that maintain the delicate balance for the earth's ecosystems⁶⁶ is a useful framework for looking at the objectives of Principle 3. The 'safe operating space' that supports biodiversity and intricate ecosystems allowing present societies to thrive should be available for future generations to meet their own needs. If developmental policies do not reflect the need to live within planetary boundaries, then the possibility of crossing each of the planetary thresholds becomes more likely, which

will result in many negative impacts reverberating through ecosystems and echoing through time.⁶⁷

The Way Forward

Ultimately Principle 3 aspires to safeguard the ability of future generations to meet their own needs. For the needs of both present and future generations to be satisfied equitably, long-term thinking has to be incorporated in decision-making at all levels.

Such long-term thinking ought to be applied holistically and consistently throughout government policy and broader business decision-making if the interests of future generations are to be integrated and not over-ridden as inferior interests; whilst at the same time remembering that a delicate balance must be struck in order to satisfy the needs of both present and future people. Sitting above this balancing act and weighing up the trade-offs that needs to be made in public policy and private enterprise is the understanding and awareness that the earth has a limited capacity to support the activities of all generations. If the 'safe operating space' that has sustained life on earth for many generations is to be maintained, then it is crucial that decision-makers and society on the whole acts in a way that does not breach the planetary boundaries that define those safe operating spaces.

Commissioner(s) or Ombudspersons for future generations

The notion of establishing parliamentary or indeed a UN commissioner for future generations is gaining support from a range of sectors and, building on the success and experience of the Hungarian model, could be an effective way of introducing the 'long term' or the rights of future generations into decision-making. An effective and well-coordinated grass-roots campaign to establish ombudspersons for future generations is gathering momentum at all levels and there are increasing amounts of policy work being done to support such proposals in the lead up to the UN Conference on Sustainable Development in Rio 2012.⁶⁸ In light of the objective of Principle 3 it is also pertinent to consider how an ombudsman might have a portfolio or remit

that extends beyond environmental and sustainable development issues, factoring in impacts of wider policy – such as tax, housing and employment policies for instance – on future generations.⁶⁹

Modelled on the Hungarian Parliamentary Commissioner, other National and potentially local level ombudsman would bring the voice of young and future generations to the political agenda as a means to encourage long-term thinking in policy-making. Additionally, there is scope for a role of a UN Commissioner to be established as an outcome of Rio 2012, or potentially an Assistant Secretary General for young and future generations.⁷⁰

Embedding alternative indicators

In order to build long-term considerations into decision-making, indicators of progress must be established that measure not just economic aspects of social well-being but a wide range of aspects of the building blocks of society. It will be necessary to develop tools that measure the long-term impacts of policy decisions so that trade-offs that need to be made can be done in a more informed way that integrates a triple bottom line approach.

The Stiglitz-Sen- Finoussi report offers a critical analysis of the use of GDP in defining and measuring well-being and progress in society. In relation to future generations, it states that “a shift of emphasis from a “production-oriented” measurement system to one focused on the well-being of current and future generations, i.e. toward broader measures of social progress” will be needed. This shift will underpin the effective and successful implementation of principle 3 at both national and international levels.⁷¹

Measuring business success differently

Business quarterly profit margins and short-term (relative to Principle 3) electoral cycles will have to be weighed up against the long term consequences and the impacts that business practices will have on the ability of future generations to meet their own needs. Sustainability reporting across all sectors and as part of a common framework should be mandatory for all businesses, rather than voluntary as is the current system. Such mandatory reporting should also be publically available, in pursuant of a transparent process and according to a common and easily communicable set of standards.

Momentum is gathering behind the proposals for mandatory carbon reporting, especially in the UK, where recent research has challenged previous estimates made by the government on what the costs to large companies and business would be if such rules were introduced.⁷² The research has also demonstrated that mandatory carbon reporting would result in significant benefits to business under a regime that standardised emissions reporting.⁷³

At the State level governments also have a responsibility to demonstrate leadership in shifting emphasis away from GDP as the sole indicator of progress. Notably, for instance, China has blazed a trail in its approach to reducing the emphasis on GDP and economic growth. For the 12th Five Year Development Plan – the 2011 – 2015 period – it has set a 7% annual average for GDP growth target, which is a reduction from the previous 10 or more % that has been enjoyed by the country.⁷⁴ This shift in emphasis and attitude to GDP will not only encourage other governments and business to rethink the emphasis laid on maximising economic growth, as well as resulting in an indirect reduction in emissions for the country.

Much more work is needed to develop mechanisms that will put natural capital accounting tools in mainstream business practices.

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Principle 4

Introduction

The UN Conference on Environment and Development in 1992 was dubbed the 'Rio Earth Summit' partly due to the unprecedented international focus on environmental issues.

Though the Summit also addressed a diverse range of social and economic issues, it was widely recognised that environmental concerns had been neglected and that greater emphasis should be placed on environmental protection in the development process. Principle 4 unequivocally expresses this objective through placing environment squarely at the centre of the development process.

Implementation

National level

In the spirit of the principle, since 1992 the environment and development communities have made significant progress in working together more effectively and recognising the mutually reinforcing benefits of equitable social development and environmental protection.

On a national level there has been a significant increase in the number of laws, policies and institutions dedicated to environmental protection. Most of the most significant developed and developing countries across the world have established Ministries for the Environment, to ensure that the issues raised relating to the environment will be represented at the highest levels of government¹. These portfolios are designed to express the interest of the environment in government proceedings and they form an instrumental part of national environmental governance².

Since 1992 there has been an expansion in the codification of environmental law in national legislation³. Many pieces of national legislation focus specifically on environmental protection. Principle 4 is clearly recognised in the preamble of the Environmental Protection Act of Nepal (1997) which states that *"it is expedient to make legal provisions ... to protect environment with proper use and management of natural resources, taking into consideration that sustainable development could be achieved from the inseparable inter-relationship between the economic development and environment protection"*⁴;

Likewise, the United Kingdom's Environmental Protection Act 1990 was drawn up *"to make provision for the improved control of pollution arising from certain industrial and other processes"*⁵ and Article 4 of the Environmental Protection Law of the People's Republic of China states that *"the plans for environmental protection formulated by the state must be incorporated into the national economic and social development plans; the state shall adopt economic and technological policies and measures favourable for environmental protection so as to coordinate the work of environmental protection with economic construction and social development"*⁶.

A significant development has been the importance to countries of conducting environmental impact assessment (or 'EIAs') as part of the development process. The International Association for Impact Assessment (IAIA) defines an environmental impact assessment as *"the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made."*⁷ Environmental Impact Assessment therefore recognises the preventative and precautionary elements of Principle 4 by requiring assessment prior to the development of a project.

The content of an EIA is a matter for domestic legislation rather than as an internationally recognised standard, but in general domestic legislation does not require adherence to a predetermined environmental outcome. Rather, the environmental effects anticipated by a development have to be justified by the developer before being granted permission to go ahead with the project⁸. EIAs therefore ensure that the prevention of adverse environmental impact is integrated into the planning process⁹. In the United Kingdom, the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 states in section 25 that *"the Secretary of State shall not grant planning permission ... unless he has first taken the environmental information into consideration, and he shall state in his decision that he has done so"*¹⁰. Furthermore, the UK Planning Policy Statement (PSS 9) states as one of its key principles that *"The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests ... If significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused"*.

The policies, rules and institutions established at the national level originated from or have been replicated by those at a regional level. The Convention on Environmental Impact Assessment in a Transboundary Context (or Espoo Convention 1991) sets out the obligations of Parties to carry out an environmental impact assessment at their national level as well as requiring them to notify and consult each other on all major projects likely to have a significant adverse environmental impact across boundaries¹¹. The Espoo Convention therefore places the protection of the environment beyond a sovereign's border at the heart of the planning and development process in a particular European member state.

The Espoo Convention laid down the foundations for the concept of Strategic Environmental Assessments and the European SEA Directive 2001/42/EC¹² the SEA Directive aims at introducing systematic assessment of the environmental effects of strategic land use related plans and programs. It typically applies to regional and local, development, waste and transport plans, within the European Union.

International level

International institutions have developed their work in light of the guidance provided by Principle 4. One of the development priorities for the United Nations Development Programme is to promote clean energy technology in developing countries. Its objectives for doing so support clearly align with Principle 4 of the Rio Declaration: *"modern energy technologies are available that can support win-win development options, addressing both global environmental protection and local development needs."*¹³

The United Nations Poverty-Environment Initiative (PEI) is a joint partnership programme between UNEP and UNDP. The PEI is a *"global UN programme that helps countries to integrate poverty-environment linkages into national and sub-national development planning, from policymaking to budgeting, implementation and monitoring."*¹⁴ This Initiative was formally launched in 2005, and at a UNEP Governing Council Meeting in 2007 was *"significantly scaled up."*¹⁵ Through forming linkages between poverty eradication and environmental protection, the PEI offers a multi-stakeholder process that supports countries in development activities to mitigate adverse impacts on the surrounding environment. The PEI recognises

that there is a need to integrate the contribution of environmental management to improved livelihoods, increased economic security and income opportunities for the poor. This is something that the Initiative argues remains *"largely overlooked in development planning and in the wider debate about development priorities."*

Other initiatives include the White Oak Statement of 22 February 1993, where environmental officials and Ministers from 21 new democracies in Central and Eastern Europe and Russia recognized that environmental factors must be integrated into the fabric of economic decision-making at all levels in support of a programme of sustainable development.¹⁶ In addition to this process, UNEP organises a Ministerial Environment Forum which has made such meetings of environmental ministers globally an international phenomenon.

Sustainable development and environmental protection are recognised by members of the World Trade Organisation. In its introduction to the Trade and the Environment operations under the WTO, it states that *"allowing for the optimal use of the world's resources in accordance with the objective of sustainable development and seeking to protect and preserve the environment are fundamental to the WTO For WTO members, the aims of upholding and safeguarding an open and non-discriminatory multilateral trading system, on the one hand, and acting for the protection of the environment and the promotion of sustainable development, on the other, can and must be mutually supportive."*¹⁷ Ministers attending fourth WTO ministerial conference in Doha in 2001 adopted a statement in which they *"are convinced that the aims of upholding and safeguarding an open and non-discriminatory multilateral trading system, and acting for the protection of the environment and the promotion of sustainable development can and must be mutually supportive."*¹⁸

Some international treaties show that parties recognise the importance of integrating environmental protection and development to ensure sustainability. The Millennium Development Goals were written to encourage development by improving social and economic conditions in the world's poorest countries. They derive from earlier international development targets¹⁹, and were officially established following the Millennium Summit in 2000 when parties adopted the United Nations Millennium Declaration. Paragraph 6 considers the fundamental values essential to international relations in the twenty-first century. These

include respect for nature. In particular *“prudence must be shown in the management of all living species and natural resources, in accordance with the precepts of sustainable development. Only in this way can the immeasurable riches provided to us by nature be preserved and passed on to our descendants.”*²⁰

Challenges

Integration of environmental protection into development objectives

There is often an overriding priority to safeguard the right to development over the need to safeguard the environment. Rather than integrating environmental protection with development priorities, there two are often considered mutually exclusive: that measures to protect the environment can limit development since they prevent exploitation of a country's natural resources and control the rate and methods of development so as to reduce their environmental impact. For example, although WTO members can under WTO rules adopt trade-related measures aimed at protecting the environment²¹ they can only be done so provided a number of conditions are fulfilled to avoid protectionism and preserve the open market²². Similarly the Doha Ministerial Declaration states at paragraph 31 that *“with a view to enhancing the mutual supportiveness of trade and environment, we agree to negotiations, without prejudging their outcome, on ... the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services”*. Because international law suffers from weak enforceability in the absence of political will, it is often the case that environmental obligations are given less importance and considered less binding than laws relating to trade and development.

The apparent 'trade-off' has become politicised, with principles of international law developing alongside the debate between who should be burdened with the obligation to protect the environment and who should be ensured their 'right to development'²³. The preambular text of the United Nations Framework Convention on Climate Change (UNFCCC) illustrates the political battle between developing countries who seek to protect the development interests and who seek to impose upon developed countries (who have historical responsibility for environmental damage) the greater burden of environmental protection. For example the preamble notes that cooperation with the convention must be *“in accordance with [parties'] common but*

differentiated responsibilities and respective capabilities and their social and economic conditions”, (Principle 7 of the Rio Declaration). The preamble also recalls the Parties' *“sovereign right to exploit their own resources pursuant to their own environmental and developmental policies”* (Principle 2) and that *“environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply, and that standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries”*.

Continuing ecosystem degradation

25 so called 'hotspots' around the world contain the sole remaining habitats of 44% of the Earth's plant species and 35% of its vertebrate species, and these habitats face a high risk of elimination²⁴. It is often supposed that, were the present mass extinction of species to proceed virtually unchecked, between one-third and two-thirds of all species would be likely to disappear within the foreseeable future²⁵. Scientific analysis indicates that much of this problem could be countered through protection of the 25 hotspots. However since most of the hotspots are located in emerging or developing countries, their protection is often a trade off with socio-economic and development priorities.

Despite the many conservation and protection efforts listed above, ecosystems continue to be degraded at alarming rates. For example the Millennium Ecosystem Assessment throws doubt on the possibility of achieving the Millennium Development Goal number 7 (to integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources; and to reduce biodiversity loss). The Assessment states that *“it is probably too late to reverse the near-term trends in biodiversity loss... Until critical drivers are mitigated, most declines are likely to continue at the same or increased rates”*²⁶.

Weak institutions and fragmented governance

International institutions such as the UNEP/NDP PEI are limited in their effectiveness and independence. The PEI operates in only 17 countries and relies on government funding for its programmes. The broader environmental governance system at the international level is fragmented. The UNEP competes for time, attention, and resources with more than a dozen other UN bodies that possess environmental responsibilities and interests.

Adding to this fragmentation are the independent secretariats to the numerous conventions. Currently, there exist over 500 multilateral environmental treaties. With entities stretched from Bonn to Montreal, Nairobi to Geneva, focus and effort is dissipated, and responsibility or accountability diluted²⁷.

Weak legislation

The proliferation in environmental legislation at a national and international level²⁸ has not always had the desired impact. At the international level, for example, several parties (most recently Ukraine²⁹) to the Kyoto Protocol³⁰ of the UNFCCC which is aimed at combating climate change and limiting global carbon emissions through country specific targets, will fail to comply with their targets at the end of the next commitment period. There is a general problem of weak enforceability of international environment treaties since compliance is generally a voluntary rather than a mandatory effect. Environmental legislation is often weak at the national level. Much criticism has been levelled at the EIA process, largely because it is thought by many to be a rubber-stamping exercise, rather than being fully integrated into the decision-making process and setting the agenda for the activity or development initiative. 'Paper Parks' exist where many conservation areas are abandoned after establishment due to funding and management deficiencies. The International union for the Conservation of Nature stated that *"it can be fairly stated that all protected areas are under threat in one form or another..."*³¹.

The Way Forward

The window of opportunity

Principle 4 highlights that to achieve sustainable development there must be prevention and precaution against environmental damage, rather than retrospective reparation. The Principle is therefore particularly important for rapidly developing countries who have the opportunity to apply proactive protection measures. The apparent trade off between proactive environmental protection and the limits to the extent and rate of development needs to be reassessed. Two important themes of the Rio 2012 conference may provide an opportunity to promote greener development at a time when emerging economies have a window of opportunity to act with prevention and precaution against irreversible environmental damage.

The Green Economy

If the conflict between environmental protection and development is to be overcome, a major leap forward would be to change indicators of progress and to recognise that the economy does not have to be inextricably linked with development activities that are polluting, but could instead be stimulated through 'green' technology, use of clean alternative policies, and changes in consumer patterns. An important development in environmental and economic legislation has been the increasing focus on policies that 'decouple' the traditional model of unsustainable resource depletion, environmental damage and economic development. Decoupling occurs when the growth rate of an environmental pressure is less than that of its economic driving force (e.g. GDP) over a given period³². It thus has the potential to protect the 'right to development' by ensuring flexibility to meet sovereign objectives and priorities, promoting sustainable development and poverty alleviation, and at the same time minimising environmental damage.

Reformed environmental governance

The development of the world's poorest countries is dependent on international funding and institutions. The strengthening and 'greening' of these institutions can therefore directly influence the policies and projects funded and implemented in the developing world. International governance relating to development and trade is more mature and coherent than the otherwise fragmented international environmental governance system. To ensure that environmental protection is integrated with development and seen as equally important as social and economic development, international environmental governance must be reformed and strengthened, taking an equally dominant place in the international institutional landscape. Improved coherency and consistency amongst environmental treaties and institutions will also serve to strengthen their impact and effectiveness.

All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

Principle 5

Introduction

Principle 5 is a very important component of the Rio Declaration because it unequivocally focuses on the issue of poverty eradication, which supports the interests of developing countries and those whose citizens are in serious situations of poverty.

Eradicating poverty has remained high on the agenda of political leaders globally since the Rio UNCED, and continues to attract significant political attention. Since signing the Rio Declaration many States have implemented policies at the national level which include financial aid, working in partnership with NGOs on the ground, or leading international agreements to eradicate poverty.

Principle 5 clearly recognises that eradicating poverty is 'essential' and that it is a fundamental component to achieving sustainable development. This Principle also brings the issue of equity to the mainstream and has sparked an ongoing debate about the responsibilities that developed countries have to those countries and people all over the world who are living in abject poverty. The focus on decreasing disparities also infers a responsibility on behalf of richer countries to address their own consumption patterns.

“Poverty is not simply about having very low income; it is about multidimensional deprivation – hunger, under nutrition, illiteracy, unsafe drinking water, lack of access to health services, social discrimination, physical insecurity and political exclusion”

Chronic Poverty Research Centre (CPRC)

Implementation

Global instruments and mechanisms to alleviate poverty

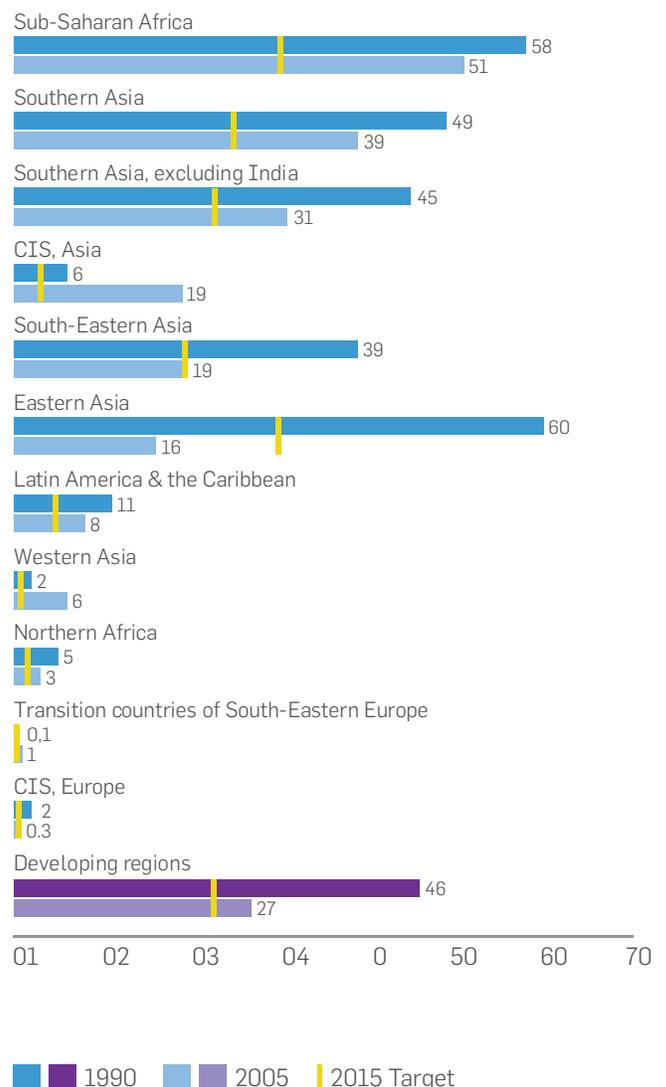
Unlike the precautionary principle, or pollution prevention, goals relating to poverty alleviation are quantifiable and measurable and so act as a useful benchmark against which states can be judged on their abilities to meet the targets. The most recognisable and well-coordinated targets are the Millennium Development Goals (MDGs). These development targets are based on distinct time-frames, and whether or not they will be met will form the basis of the overall measure of success of the objectives.

MDGs

The MDGs have been successful in raising the profile of poverty and development issues around the world.¹ The key Goal in relation to Principle 5 is the first – ‘To eradicate extreme poverty and hunger’, and the UNDP is positive about the world being on track to meet the inherent target of halving the proportion of people living on less than \$1 a day.

The number of people in developing regions living on less than \$1.25 a day dropped from 1.8 billion in 1990 to 1.4 billion in 2005 (see diagram 1), while the poverty rate dropped from 46% to 27%.^{2,3}

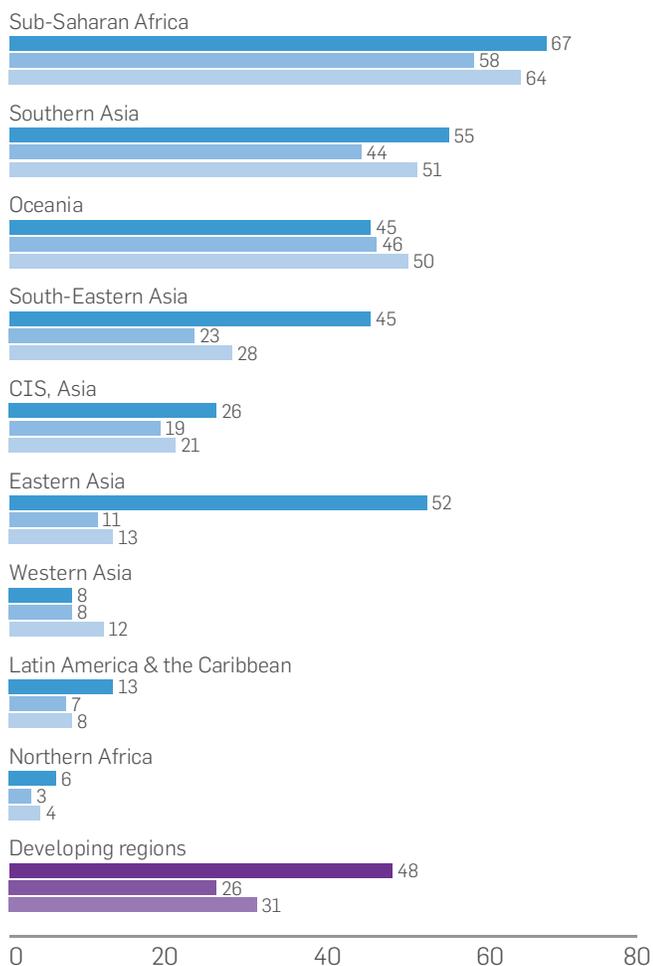
FIGURE 1 Proportion of people living on less than \$1.25 a day, 1990 and 2005. (Percentage)



Source: UNDESA, 2010. The Millennium Development Goals Report.

FIGURE 2 Proportion of the employed people living below \$1.25 a day, 1998, 2008 and 2009 second scenario. (Percentage)

Since the economic crisis, more workers find themselves and their families living in extreme poverty.



*Data for 2009 are based on the ILO's second scenario. Details are available at mdgs.un.org.

■ 1998 ■ 2008 ■ 2009*

Source: UNDESA, 2010. The Millennium Development Goals Report.

The economic and food crises have slowed and even reversed some positive trends, however. For example, labour market conditions deteriorated in many countries, and GDP also declined to a greater extent than unemployment in most regions, resulting in declining labour output which in turn contributes to poorer working conditions (see also Diagram 2). Nevertheless, UNDESA's MDG Report 2010 insists

that, 'the momentum of economic growth in developing countries is strong enough to sustain progress on the poverty reduction target.'⁴

Official Development Aid (ODA) and Foreign Direct Investment (FDI)

Internationally, overall aid flows were reported to have been at an all time high of US\$120 billion in 2009 but in reality this translates to an increase of less than 1% in real terms and is a shortfall of over US\$20 million annually to the Gleneagles G8 agreement of 2005. The share of ODA currently pledged is only 0.31% of donor GNI, well below the UN target of 0.7%. In recent years, a greater share of ODA programmes and projects have focused on capacity development, particularly as privatisation of what were formerly Government services, such as communications and power, has reduced ODA to those areas. In those cases, ODA has been replaced by Foreign Direct Investment or other private investment. Debt reductions and cancellations have also made some progress in the last two decades with the World Bank and IMF cancelling 32 countries' debts.

National instruments

Paris Declaration on Aid Effectiveness

At the 2002 World Summit developing nations were encouraged to adopt Poverty Reduction Strategy Papers (PRSPs) and other national development strategies to improve planning, implementation and monitoring of public actions at the national level. PRSPs are a pre-requisite for debt relief within the IMF and World Bank's Highly Indebted Poor Countries (HIPC) scheme. Many commentators and countries see PRSPs and the MDGs as closely aligned and mutually supportive.⁵ However, ECOSOC's 2008 Annual Ministerial Review notes that while the focus on poverty, participation and a long-term perspective in the PRSPs corresponds to some important aspects of sustainable development, they often do not include resource conservation and environmental protection.⁶

Non-Paris Club bilateral members have delivered close to 40% of their share of HIPC debt relief, but about half of these members have not delivered any relief at all. Given the voluntary nature of participation in the HIPC, it may be a significant challenge to persuade these members to fulfil promises in light of the economic crises.

Local level approaches

There is increasing recognition that communities hold important expertise and ability to manage natural resources more sustainably, and in turn improve their own conditions and potential. The increased number of community based initiatives and discourses - such as Community Based Natural Resource Management (CBNRM), Community Based Conservation (CBC) and Community Based Adaptation (CBA) – is indicative that the focus of development policy has shifted. Central to this shift is the debate on land tenure and resource ownership, featuring prominently in UNCSA activities and beyond.

Challenges

MDGs

In practice, achieving the MDGs has proven to be more of a challenge for political leaders, and the Goals have received significant criticism from civil society. In 2011 it is clear that progress has been made in some areas, but with neglect in others, notable in the poorest of areas;⁷ and that many of the Goals will not be met. This calls into question the ability of States to meet such quantified targets with clear time-frames.

Criticism is widespread and covers unmet commitments, inadequate resources, lack of focus and accountability, insufficient dedication to sustainable development and no clear framework for aspiration.⁸ Progress has been slowed and reversed by the global food and economic crises, but a great many believe that the process and commitments are flawed regardless.

Furthermore, critics note that the Goals are not very holistic, and that they lack a longer-term plan. The first MDG firmly places poverty eradication at the top of the agenda, but its timeline and targets may detract from the underlying drivers of poverty. Missing dimensions include climate change, education quality, human rights, economic growth, infrastructure, good governance and security.⁹

One of the most significant challenges is converting the aspirational Goals into practical processes at the local level, especially where the administrative infrastructure is lacking.

Making growth work for poverty eradication

As well as the arguments against the pursuit of economic growth per se (see Principle 6 discussion), economic growth does not by default lead to poverty eradication. There has been a tendency, especially with the 'Washington Consensus' to assume that the fruits of growth will simply 'trickle down' to all members of society, and in many cases this does not happen without the right interventions from the State.¹⁰

Growth is meaningless from a development perspective if it is not accompanied by an increase in the standard of living for the poor, and there are many multi-faceted and dimensional aspects of poverty, beyond the '\$1/day' approach (see Box 1). Critics suggest that the pursuit of growth driven by increased financialisation, debt-driven consumption and boom-bust macroeconomic policies have contributed directly to growing income inequalities, jobless growth and to the major setbacks to the MDG targets caused by the recent food and economic crises.¹¹ Future discussions face the significant challenge of breaking out of the growth paradigm.

Inequality

As noted above, using GDP as the indicator of poverty alleviation can mask huge inequalities between rich and poor within nations. Substantial increases in inequality have been noted in some countries recently, and unemployment, underemployment and poor working conditions are pervasive in most developing countries. These and other related issues are not adequately recognised in current international development goals, including the MDGs.¹²

Inequality can be bad for sustainable growth as poor people cannot contribute meaningfully to the economy, and it also reduces resilience to other shocks such as climate change. Furthermore, The Spirit Level provides a wealth of evidence to show that inequality is bad for everyone in society. Such arguments aside, some evidence shows that poverty has actually increased between 1995 and 2005 if China's significant growth statistics are removed from the averages¹³.

This has led to arguments for inclusive growth, which takes into account the importance of distribution. In addition to sensible economic arguments as to why growth should be more inclusive, there is also the compelling argument that 'inequality is morally

repugnant' and so it can be seen that an ethical imperative will be influential in the drive to reduce inequality. Additionally, it is understood that 'extreme inequalities weaken political legitimacy and corrode institutions' which hinder the overall ambition of achieving a growth agenda that is inclusive and which will contribute to poverty eradication.¹⁴

Consumption

It should not go unnoticed that a huge amount of attention has been given to alleviating poverty in developing countries, with little emphasis on reducing consumption in developed countries and thereby reducing disparities by distributing resources more fairly. The richest 20% of the world's population consumes over 80% of global output. If we are to achieve a better standard of living for the many billions of people who still live in poverty globally, this will also require some changes in the lifestyles of people in developed countries if this is to take place within ecological limits.

The Way Forward

Beyond the MDGs

A range of options are proposed by government and civil society, from keeping the current targets and extending the deadline, to keeping the current structure and amending some targets while adding some new, to replacing the Goals with an entirely new structure. The MDGs have the political and popular power that they have in part because they are clear and concise¹⁵ - any post-2015 settlement will have to balance the need for clarity and global profile with the desire to adequately reflect the complexity of development, the calls for more national-level, participatory action, and how to redefine GDP-led approaches to ensure that all aspects of development are included. Civil society also agrees that progress will need to be made significantly faster.¹⁶ The associated risk here is that the more ambitious it gets, the higher the chances that it will be construed as too politically difficult.

2015 is not far away. Whether the MDGs are reached, and in what context, the international community needs to be ruthless in assessing their overall value and scrutinising their positive and negative points. There has been much criticism from civil society of the process and the grandstanding positions of developed country leaders, which calls for a shake-up at the

highest level to move forward with bold commitments that are reinforced by transparent, accountable frameworks which stay true to their word.

The preparation for the MDG Summit 2010 was noted for its strong level of civil society participation. This is a positive approach which should be replicated for independent and wider stakeholder engagement. Furthermore, the UN's own website dedicated to the Summit (hosted by the UN NGLS - <http://www.un-ngls.org>) does not shy away from the criticism levelled at the Summit, its approach and outcomes. This in itself is a positive and transparent approach.

This criticism is, however, significant. Civil society commentators have therefore also urged Member States, despite the 'failure' of the Summit, to press ahead with implementing their obligations through their own national and international strategies. For example:

- Amnesty International sets out a 6 point plan for developed nations which includes ensuring their MDG efforts are built into all existing policies, laws and strategies and are consistent with human rights standards such as the International Covenant on Economic, Social and Cultural Rights (ICESCR); setting national targets for real progress beyond the global MDG targets; guaranteeing full and informed participation; strengthening national and international mechanisms for accountability, parliamentary oversight and reporting on MDG implementation to the Human Rights Council.¹⁷

- Beyond 2015 (a coalition campaign for action once the MDG deadline has passed) calls for three 'must haves' in leadership: 1) The UN is the only legitimate and representative global governance structure and must lead the process; 2) The process must not be led by the G20, G8, OECD or any other non-representative global forum; 3) National governments must have primary ownership of, and accountability for the framework and its delivery. Governments should make use of local expertise, but must also be able to request external expertise without sacrificing control of their development strategy, and international institutions must respect and support existing national development frameworks.¹⁸

These are all of course worthy aims but to really stand a chance of implementation they need to be enforced by bold, multilateral leadership.

Tackling inequality

The focus on poverty alleviation in Principle 5 has received significant political attention, whereas tackling inequality and wealth disparity has received less emphasis, both globally and within countries. On a global level, this imbalance needs to be addressed through focusing on targets for developed countries to reduce their levels of consumption to allow developing

countries more ecological space to improve their standards of living. A set of Millennium Consumption Goals would be appropriate in this regard (see Box). On a national level, this necessitates policies that ensure that economic growth directly benefits the poor – including through minimum wage regulations, direct redistribution of wealth through tax credits and benefits, and indirectly through the provision of public services from which they benefit.

Millennium Consumption Goals

A proposal to establish a set of targets for developed nations and individuals to contribute – voluntarily or by regulation – to reducing consumption levels was first tabled by Professor Mohan Munasinghe, a former vice-chair of the IPCC, at the UNCED in New York, 2011. By encouraging richer nations to reduce their carbon emissions, water, energy or wider resource consumption these should complement and support the objectives of the MDGs,¹⁹ ideally beyond the remit and slow pace of multilateral commitments. The Millennium Consumption Goals Initiative (MCGI) was launched to move this idea forward, now pursued by a broad coalition of stakeholders called the MCG Network (MCGN).²⁰

Improving 'Full story' data

Tackling poverty requires an understanding of the 'full story' behind GDP figures and per capita average incomes, which can often mask vast inequalities and also tell us little about access to basic services. The way in which data is represented is crucial so that policy interventions can be targeted in the right area. A number of initiatives and advocates are vocal in addressing this gap, such as gapminder.org. Using tools to get comprehensive picture of poverty levels is crucial.

Indicators and data sets should integrate multiple dimensions of sustainable development, such as the health costs of air pollution, the economic value of watershed protection and biodiversity, and the social value of natural ecosystems. More complex indexes combining a number of variables, such as the UNDP Human Development Index can also be valuable in monitoring trends in wellbeing and identifying unsustainable trends that may provide short-term benefits at the cost of long-term sustainability.

Part of the process of using and communicating data more effectively can also include identifying and singling out 'lagging' States to publicly encourage them to work more effectively towards achieving poverty eradication targets. In the absence of enforcement and compliance mechanisms in relation to global agreements – especially 'soft-law' agreements such as the MDGs, one of the most effective ways of ensuring compliance is

through establishing a robust accountability framework. For example, a consultation in 2010 by Oxfam India on how to encourage states to work towards poverty targets revealed that they responded most pro-actively to being singled out.²¹

Green growth and the green economy

There is a considerable potential for development to take place in a way that is not socially or environmentally harmful but rather benefits those who are seeking to lift themselves out of poverty without causing environmental pollution, transboundary damage (such as climate change impacts) or overexploiting natural resources. This 'leap-frogging' approach to development could be pioneered by developing countries on a massive scale to ensure that they do not become locked into polluting, dirty and potentially socially damaging infrastructures and economies.

UNEP's Green Economy report²² offers some important suggestions to this end, particularly in the field of energy. However, it also focuses a lot on market mechanisms and the price system, which is only part of the equation. Oxfam has found that there are wider policy areas which have been 'shown in the past to translate economic growth into inclusive growth'. These include 1) a redistributive agenda that includes health, education, agricultural services and

a progressive taxation system; 2) macroeconomic prudence meaning sustainable, moderate levels of inflation, deficits, and debt whilst ensuring the protection of the pro-poor elements of public spending; and 3) a policy environment conducive to pro-poor private investment, in particular the domestically owned, labour-intensive private sector, especially SMEs²³.

As the poorest countries are also the most politically fragile and vulnerable to disasters, and the majority of poor people are now in middle-income countries, traditional development aid and humanitarian assistance will have to work better together to achieve both short-term relief and long-term change, and the donor/recipient model may no longer be the right framework for the global actions required to end poverty.²⁴

Leadership

With the failures noted at the MDG Summit as well as in Doha, Nagoya and Copenhagen, a significant level of frustration and discontent with UN Summits and multilateral processes has built up steam. Rio must harness this discontent – in its preparations and in its discussions – to make clear the level of support for achieving and going far beyond the MDGs, and to finally turn this energy into action. Whatever the structure of agreements for reducing poverty post-2015, discussions, targets and commitments should again be time-bound to ensure accountability, and address the following more clearly:

- Inequality and inclusive growth, with new models and targets beyond GDP
- Climate change and environmental degradation (including the appropriateness of donor aid versus financing mechanisms for public goods and climate change, with an appreciation of land tenure and rights)
 - Employment creation and opportunities
 - Human rights and gender equality
 - Monitoring, recording and 'full story' data improvements
 - The redefinition and distribution of 'developing' countries and their vulnerabilities (see Principle 6).



The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries.

Principle

6

Introduction

Principle 6 articulates that priority shall be given to countries that are most vulnerable environmentally as well as economically.

This Principle recognises that action should be taken by developed countries to support the interests of the least developed countries (LDCs), and as such echoes the sentiments of Principles 7, 9 and 11 of the Rio Declaration and illustrates an overarching aspiration of the Rio Declaration, relating to cooperation between States.

There is, however, an underlying tension in the principle that exists between the provision that priority be given to developing countries in special situations, and that action should address the needs and interests of *all countries*. On the one hand the principle aims to overcome the challenges that face developing countries as a matter of priority, and something that many developed states should play a part in; yet on the other the principle potentially provides for national sovereignty and country interests to be prioritised. In its aspirations, the Principle assumes that what is good for sustainable development is good for all nations. In practice, however, state sovereignty remains a dominant influential factor in the direction and development of international relations; something that has the potential to undermine the practice of cooperation between states to improve the situation of developing countries.

There are a number of formal and informal mechanisms in place to provide financial and developmental assistance to LDCs in line with Principle 6. These tend to follow the view that increasing the LDCs' GDP will improve their status. Many institutions, actors and commentators also recognise the danger in developing countries' reduced capacity to mitigate climate change due to a lack of financial and technological ability. Funds and market mechanisms from the World Bank, IMF and UN Conventions specifically address this concern.

As developed countries have played the greatest role in creating most global environmental problems, and have a superior ability to address them, they are expected to take the lead on environmental problems. In addition to moving toward sustainable development on their own, developed countries are expected to provide financial, technological, and other assistance to help developing countries

fulfil their sustainable development responsibilities. In Agenda 21, developed countries reaffirmed their previous commitments to reach the accepted UN target of contributing 0.7% of their annual gross national product to official development assistance (ODA).

Implementation

Defining 'Special Situation'

There has long been international recognition that states must work to support those in critical conditions or more vulnerable to the impacts of natural disasters, resource scarcity, unfairness in the global economic system, and more recently, climate change. The significant growth in international trade of goods and services has bestowed a great advantage upon certain States, and geographical, socio-economic and political situations emphasise the gaps. Furthermore, considerable costs can be incurred by such nations as a result of their vulnerability to natural disasters, extreme weather events and the projected long-term impacts of climate change, the latter particularly unjust when considered that it is developed countries which have greater historical responsibility for greenhouse gas emissions, and can afford the long-term research and development required to address them.

Small island nations and developing nations with significant forest cover and mountain regions are examples of nations which require special priority due to a combination of the factors above, but there is no single definition for 'special situation' or 'special priority', as their nature depends on such a variety of factors. The most significant factors in defining countries' need for special priority, however, tend to centre on their level of economic growth and GDP. The question is whether this type of measurement accurately reflects their level of sustainability in the true sense of the word.

International recognition of 'Special Situation'

There are many examples in international trade agreements and multilateral environmental agreements where these special situations and resultant needs are referred to and attempts are made to develop mechanisms to overcome, or at least safeguard against, the impacts that these can have on a State's development.

There are numerous international conventions that stipulate how support can be given to states in special

situations, and how they may be exempt from or delay their compliance with international standards, reporting procedures or commitments – often through the concept of common but differentiated responsibilities. Some common approaches are the provision of support for technology transfer, financial assistance and capacity

building. Subsequent to the Rio Declaration there has been a developing trend in multilateral environmental agreements to make provision for such support. In many cases, it is also a requirement on member states that are classed as developed that they offer this assistance before they have properly fulfilled their obligation.¹

TABLE 1 References in Multilateral Environmental Agreements (MEAs) to special situations of countries.

UN Framework Convention on Climate Change (UNFCCC), Article 3.2	"specific needs and special circumstances" of developing countries"
UNFCCC, Article 3.4	"policies and measures... should be appropriate for the specific conditions of each part and should be integrated with national development programmes"
Convention on Biological Diversity (CBD), Article 20.5	"[t]he Parties shall take full account of the specific needs and special situation of least developed countries in their actions with regard to funding and transfer of technology."
UN Convention on the Law of the Sea (UNCLOS) - Preamble	"special interests and needs of developing countries"
Convention on Combating Desertification (CCD) Article 3(d), 5(c) and 6(e)	"take into full consideration the special needs and circumstances of affected developing country Parties, particularly the least developed" "pay special attention to the socio- economic factors contributing to desertification processes" "promote and facilitate access...particularly affected developing country Parties, to appropriate technology, knowledge and know-how"
1995 Agreement on Fish Stocks, Part VII	Devoted to the special requirements of developing States in relation to the conservation and management of the fish stocks concerned
1995 Agreement on Fish Stocks, Article 26	Envisages the establishment of special funds to assist developing States in its implementation
1995 Washington Declaration, Paragraph 4	"countries in need of assistance"

Evolution of groups of interests

A number of international and multilateral groupings have evolved to represent special interests and vulnerabilities, including;

G77

Established at the 1964 UN Conference on Trade and Development, The Group of 77 is the largest intergovernmental organisation of developing countries in the UN. It articulates and promotes the collective economic interests and needs of 'the South' and aims to enhance their joint negotiating capacity on all major international economic issues

within the UN system by producing joint declarations, action programmes and agreements on development issues, as well as promoting South-South cooperation for development.

Least Developed Countries (LDCs)

A series of special measures and actions to assist (the 48) LDCs have been initiated since the 1970s, including the Brussels Declaration and the Brussels Programme of Action for the LDCs for the Decade 2001 – 2010, adopted at The Third UN Conference on the Least Developed Countries (LCD-III) in Brussels, 2001. This set the overarching goal to make 'substantial progress' towards halving the proportion of people living in

extreme poverty and suffering from hunger by 2015, with 'significant and steady growth of GDP' as the main requirement for reaching this goal. LDC indicator criteria are set according to low-income, human resource weakness and economic vulnerability, and are reviewed every three years by ECOSOC. Countries may 'graduate' out of the LDC classification to developing country status, but since the category's inception only three countries have graduated. With this in mind, the recent LDC-IV conference in May 2011 adopted a further 10-year programme (the Istanbul Programme of Action (IPoA)) and the Istanbul Declaration. This sets the ambitious overarching goal of halving the number of LDCs by 2020, by overcoming the 'structural challenges' they face. The LDCs' economies rely significantly on natural capital assets such as agriculture, forest resources, biodiversity, tourism, minerals and oil extraction, and they also exhibit a large potential for renewable energies.²

UN Office of the High Representative for Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS)

Established at LDC-III in 2001 on the recommendation of the then Secretary-General of the UN,³ the UN-OHRLLS coordinates and mobilises international support and provides advocacy services for LDCs and the following:

Small Island Developing States (SIDS)

51 SIDS - among which are 12 LDCs - share similar social, economic and environmental challenges such as low resource availability, dependency on international trade, costly public administration, rising populations, and as the UNFCCC makes clear, are some of the most vulnerable countries in the world to climate change. Such factors, in combination with their climatic conditions, island status and the fact that SIDs produce extremely low levels of greenhouse gas emissions, mean that they will suffer disproportionately from the negative impacts of climate change.

Landlocked Developing Countries

SIDS and landlocked developing countries together constitute 60 per cent and 67 per cent, respectively, of the countries considered to have a high or very high economic vulnerability to natural hazards.⁴

Forest Nations

A significant proportion of the major forests which act as vitally important carbon sinks, biodiversity pools and home to indigenous communities are found in developing countries, including LDCs. The UN's Reducing Emissions from Deforestation and Forest

Degradation (REDD) and REDD+ programmes use market/financial incentives to reduce GHG emissions from deforestation and forest degradation in developing countries, following the Bali Action Plan's (COP 13, 2008) statement to do so. Developing countries are assisted in addressing capacity development, governance and technical needs, and the development of guidance and standardised monitoring approaches.

Mountain Nations

An evolving group in the context of UNFCCC.

Funding and assistance

Various multilateral sources of financial, technological and capacity building assistance exist, often in direct support to the groups of interest listed above.

The Global Environment Facility, established in 1991, is an independent financial organisation with 182 member governments in partnership with international institutions, NGOs and the private sector. It is an important and wide-ranging source of international funding for sustainable development and acts as the financial mechanism for the CBD, UNFCCC and UNCCD among others, and provides grants to developing countries and countries with economies in transition for projects on biodiversity, climate change, international waters, land degradation, ozone depletion and persistent organic pollutants. \$9.5 billion worth of funding, supplemented by more than \$42 billion in cofinancing, and \$495 million for small grants to NGO and community organisations, has so far been delivered, giving it the opportunity to call itself 'the largest funder of projects to improve the global environment'.⁵

The Clean Development Mechanism under the Kyoto Protocol provides financial and technical support to developing countries for reducing greenhouse gas emissions, improving energy efficiency and developing renewable energy sources, with credit for the reductions going to the financing country towards meeting its Kyoto obligations. The Clean Development Mechanism

currently does not include projects that prevent deforestation or projects for adapting to the impacts of climate change. New mechanisms to address this shortfall are called for by groups such as the Coalition for Rainforest Nations, and are under discussion as part of the post-2012 arrangements.

Official Development Aid (ODA) and Foreign Direct Investment (FDI) – In recent years, a greater share of ODA programmes and projects have focused on capacity development, particularly as privatisation of what were formerly Government services, such as communications and power, has reduced ODA to those areas. In those cases, ODA has been replaced by Foreign Direct Investment or other private investment. Further discussion follows in 'Challenges'.

IMF and World Bank Initiatives – the IMF and World Bank assess progress toward the Millennium Development Goals (MDGs) through an annual Global Monitoring Report, and focus on debt relief in developing countries through the following initiatives:

Heavily Indebted Poor Countries Initiative (HIPC) – Focuses on debt relief to free up countries' expenditure on public services. The IMF states that pre-HIPC, the 36 eligible countries were, on average, spending slightly more on debt service than on health and education combined, now spending on health, education, and other social services is on average five times the amount of debt-service payments; and debt service paid, on average, has declined by about two percentage points of GDP between 2001 and 2009, with debt burden expected to be reduced by about 80% after the full delivery of debt relief.⁶ This expectation includes provisions made through the:

Multilateral Debt Relief Initiative (MDRI) – provides for 100% relief on eligible debt from three multilateral institutions to a group of low-income countries (currently 34). MDRI relief covers the full stock of debt owed to the IMF at end-2004 that remains outstanding at the time the country qualifies for relief. There is no provision for relief of debt disbursed after January 1, 2005. The G-8 has committed to ensure that the debt forgiveness under the MDRI neither undermines the ability of the three multilateral institutions to continue to provide financial support to low-income countries, nor the institutions overall financial integrity.⁷

Further mechanisms such as the *Catastrophic Risk Insurance Facility (CRIF)* – piloting a scheme for small

States to buy parametric insurance coverage against natural disaster risk – *and the Aid for Trade Initiative* – helping LDCs develop their export capacity.

Further funds are available for climate change adaptation and mitigation, including the Special Climate Change Fund, the Least Developed Countries Fund and the Adaptation Fund (under Kyoto). Funding is also available through other bilateral and multilateral sources, including those of the MEAS outlined in Figure 1.

Projects and programmes relating to climate change impacts, vulnerability and adaptation in SIDS are being implemented within the UNFCCC process and by multilateral financial institutions and bilateral development assistance agencies. National and regional adaptation programmes of action have also been useful, for example:

SIDS - Samoa and the Union of Comoros have produced programmes on dealing with water shortages for social and agricultural needs; the Caribbean Hazard Mitigation Capacity Building Programme of the Caribbean Community and Common Market (CARICOM) is helping Caribbean countries to create national hazard vulnerability reduction policies; the United Insurance Company of Barbados gives financial incentives for homeowners to put preventative measures in place; and the Barbados Programme of Action of the Sustainable Development of SIDS and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of SIDS build on the recommendations of the Brussels PoA and include the transfer of technologies and practices to address climate change, building and enhancing scientific capacities, and enhancing the implementation of global atmospheric observing systems.^{8,9}

REDD and REDD+ – Liberia adopted a new Forest Policy in 2006 and is one of a number of countries with a National Forest Strategy; Congo Basin countries developed a regional approach to monitoring forest cover; in Brazil the Amazon Fund preserves tracts of forest through individual or organisational conservation sponsorships; and Indonesia and Papua New Guinea partnered with Australia's International Forest Carbon Initiative for funding and policy assistance.

WTO and developing countries

Of the 153 members of the WTO, about two-thirds are developing countries. The WTO, therefore, has an

important role to play in ensuring that Principle 6, as well as related Principles on common but differentiated responsibilities, technology transfer and more, are implemented across its work and its members' negotiation rounds and development of trade rules. The WTO recognises that developing countries 'play an increasingly important and active role... because of their numbers, because they are becoming more important in the global economy, and because they increasingly look to trade as a vital tool in their development efforts.'¹⁰ The WTO also recognises that, if it is to fulfil its role in the global community then it must work hard to 'deal with the special needs' of developing countries. The WTO outlines specific areas of work and policy that support this work, with special and differential treatment provisions generally classed in five groups:

- aimed at increasing trade opportunities through market access;
- requiring WTO Members to safeguard the interest of developing countries;
- allowing flexibility to developing countries in rules and disciplines governing trade measures;
- allowing longer transitional periods to developing countries; and
- for technical assistance.

The WTO Secretariat provides technical assistance (mainly training) for developing countries,¹¹ with specific bodies dealing with specific topics such as trade and debt, and technology transfer. The Committee on Trade and Development is the primary body in this area. Reporting to this Committee, the Subcommittee on Least-Developed Countries focuses on LDCs in two key areas; firstly on how to integrate least-developed countries into the multilateral trading system; and secondly on technical cooperation. Crucially, the subcommittee reviews how the special provisions above are being implemented in the WTO agreements.

Challenges

Lack of progress in LDCs

The IMF, European Commission and some statements from UN bodies and programmes are often positive about the state of growth in much of the developing countries of Latin America, Asia and in some of sub-Saharan Africa, and the fact that they are more open and integrated into the global economy.¹² Firstly, this changes the type and level of support that these countries require,

which brings its own set of challenges; and secondly, it highlights the concern that considerations of nations' state of sustainable development are predicated on GDP levels, for which there are many arguments to say that this is not a sustainable model of progress. Despite the realisation during the 1990s¹³ that poverty alleviation concerns more than simply economic growth, and the disconnect between growth as a driver of alleviating poverty and its potentially catastrophic effects for environmental sustainability, it remains the primary indicator for assessing where special priority is required. Developed nations must balance the challenges associated with opposing this established viewpoint with the moral dilemma of allowing developing nations to flourish where they have previously been unable.¹⁴

Lack of progress in official support

United Nations Conference on the Least Developed Countries

However much growth is used as the primary measure of progress, the 2001 Brussels LDC-III proceedings concluded that 'the goals set out at [LDC-II] have not been reached and that LDCs as a whole remain marginalised in the world economy and continue to suffer from extreme poverty'¹⁵. But despite the aims set out as a result, the UN's official review of the implementation of the Brussels PoA, compiled for LDC-IV, notes that the improved economic performance in some LDCs had a limited impact on employment creation and poverty reduction; in many LDCs structural transformation was very limited; and LDCs' vulnerability to external shocks has not been reduced. The UN-OHRLS considers that 'Despite three successive Programmes of Action and notwithstanding the positive developments recorded by LDCs in the recent past, most of these countries are far from meeting the internationally agreed goals, including the MDGs, and still face massive development challenges. Progress in economic growth has made little dent on poverty and social disparities in LDCs. Hunger and malnutrition are widespread with dire consequences for the large vulnerable populations.'¹⁶ Some progress has been seen in growth rates, trade, good governance and health and life expectancy, for example – improvements on the previous decade – but the bottom line is that the specific goals and action of the Brussels Programme of Action have not been fully achieved, and such conclusions do not bode well for the current 'Istanbul PoA' from LDC-IV. It is, therefore, easy to conclude that this forum and process is politically

weak, and there has already been strong criticism from civil society that the Istanbul PoA is indeed weak and lacks clear or worthy mechanisms for mobilising finance for climate change adaptation and agricultural support, for example.¹⁷

ODA and FDI

There has been some increase in ODA in recent years, but much of this has been in the form of debt relief and emergency assistance rather than assistance for investment, technology transfer and capacity-building. Overall, most donors are not on track to meet their commitments to increase ODA to reach the collective goal of 0.7% of donor GNI by 2015, with the amount currently pledged standing at only 0.31%.

FDI flows to LDCs have also increased substantially, but without a visible impact on structural change. The investment-to-GDP ratio target of 25% set in the Brussels Programme of Action was met only partially by a few countries, and FDI flows remained concentrated on extractive industries and in a limited number of middle-income countries.¹⁸

Technology transfer

Access to technology can be vital to nations under exceptional circumstances. For example, reducing GHG emissions will require new technologies for energy efficiency and generation, together with regulatory standards or incentives for the adoption of those technologies. Such standards or incentives can constitute an obstacle to exports from developing countries, and they will also need to improve their own manufacturing capabilities to meet the new, stricter requirements of developed country markets.

Most development assistance projects include some component of technology transfer and capacity-building. However, ODA-funded projects rarely involve industrial production and patented products or processes. The World Bank's International Finance Corporation lends to projects in the private sector, but does so on a commercial basis and its activities would not appear to involve technology transfer more than other bank lending.

One means of transferring technologies and production systems to developing countries relatively easy is through international supply-chain management. MNCs increasingly move production centres and their

associated technology and management systems to developing countries. The argument exists that consumer and public demand in developed countries is increasingly holding MNCs to account for ethical and environmental standards of production and supply, which can bring growth and welfare benefits to developing nations. However, this is itself may be a naive view, and MNC supply chain management often only reaches the primary suppliers of the enterprise concerned. There is obvious and understandable criticism of whether this is a sustainable method of supporting such countries.

The global economic crisis

On a simple level, the financial crises and uncertainty over global markets are likely to continue to reduce the levels of support developed nations are willing to give. And there are also more complex effects proposed. With the greater international openness and integration witnessed in some LDCs, comes greater vulnerability and exposure to the ups and downs of the global economy, highlighted by the impact that volatility in world food and fuel prices has had recently.¹⁹ Effects of the global financial crisis have followed and are likely to continue to intensify this vulnerability. Some commentators, including Oxfam, suggest that the focus on growth alluded to above may be attributed to the financial crises and a resultant aversion to ODA.²⁰

The IMF has developed new loan facilities such as the Poverty Reduction and Growth Trust as a result, especially to address more directly countries' needs for short-term and emergency support. It will also more than double the resources available to low-income countries to up to \$17 billion through 2014. Zero interest will be charged on all concessional lending through 2011 and concessionality will be reviewed every two years thereafter.²¹ Again, these are measures predicated on increasing growth, and there is often little or no mention of wider sustainability motives or environmental resource efficiency.

Criticism of specific funds and programmes

The LDC-IV review of implementation of the Brussels PoA concluded that the HIPC and MDRI have had a positive impact on development in many LDCs, though not all LDCs are eligible, and owing to increased lending and borrowing during the financial crisis, debt distress continues to be a major concern for LDCs. Furthermore, under the HIPC and other debt

relief assistance programmes of the World Bank and IMF, countries have been required since 2000 to prepare Poverty Reduction Strategy Papers (PRSPs) to improve national-level strategies. ECOSOC's 2008 Annual Ministerial Review notes that while the focus on poverty, participation and a long-term perspective in the PRSPs corresponds to some important aspects of sustainable development, they often do not include resource conservation and environmental protection.²² Non-Paris Club bilateral members have delivered close to 40% of their share of HIPC debt relief, but about half of these members have not delivered any relief at all. Given the voluntary nature of participation in the HIPC, it may be a significant challenge to persuade these members to fulfil promises in light of the economic crises discussion above.

Climate change-related funds and programmes

A relative abundance of multilateral and bilateral development assistance and finance programmes have recently developed specific funds for climate- and energy-related activities. While it is considered that such an array provides greater expertise for finance and technology transfer in that area, it is not clear that it offers additional finance per se, and it may complicate the efforts of developing countries to decide their own development priorities and obtain international financial assistance.

Insurance against climate change and natural disaster effects for SIDS and other vulnerable states is often cited as an option with high potential for helping these countries prepare for and mitigate negative impacts. However, the small risk pool and lack of financial mechanisms act as an obstacle to insurance initiatives.²³

The REDD/REDD+ Programmes have received criticism for the lack of long-term, comprehensive strategies to reduce deforestation and degradation; superficial analysis of land tenure and customary rights; and vague analysis and recognition of benefits to communities and their distribution.²⁴

Trade

While trade has been growing and barriers to trade have been reduced through multilateral, regional and bilateral trade agreements, there remain substantial barriers to trade. Barriers in developed countries to

agricultural imports are often cited as a significant restriction on the exports and therefore development opportunities of some developing countries, along with internal export barriers such as low productivity, inadequate transportation and communication infrastructure, unreliable power, and lack of trained and skilled workers. The long drawn-out 'Doha Round' of negotiations is universally lamented.

Changing status of 'Special Situation'

Recently, the meaning of principle 6 can be understood to have altered and shifted as developments on a global scale have distorted the special situation in which vulnerable states find themselves. In 1992 when the Rio Declaration was agreed and Conventions and subsequent Protocols were adopted, mechanisms were built into the process to recognise the different needs of States. The phraseology of developing and developed countries over took the language that had hitherto referred to countries as 'third world'; and a growing awareness of the disparity between the socio-economic circumstances of countries propelled the debate forward in recognising the responsibility that States owed to one another, as part of a global community. Moving on, many commentators and institutions recognise that, even compared to the beginning of this century, the global 'North' and 'South' are not so clearly defined as before.²⁵ Countries and their economies within each grouping have changed for better or worse, global power balances have shifted with globalisation and the greater weight that has given to corporations, citizens and their consumption patterns, and international politics and policy needs to catch up. There is still a divide, but its boundaries are not so clear.

While some countries rise out of the 'South', others may become even more entrenched, due to a range of geographical and socio-economic factors, many of which will compound the impacts and lessen the countries' ability to cope with climate change and the decline in wellbeing and prosperity that will come with it. These include poverty, illiteracy and lack of skills, weak institutions, limited infrastructure, lack of technology and information, low levels of primary education and health care, poor access to resources, low management capabilities and armed conflicts.²⁶

Progress in development objectives in many developing countries since 1992 has helped them to escape or

combat such issues, improving their levels of prosperity. Such improvements have implications for the relevance of Principle 6 to their altered circumstances as the socio-economic situations of many States were dramatically different in 1992 to today. This is

well illustrated by the negotiations that relate to the UNFCCC and subsequent Kyoto Protocol (see Figure 2), and elicits the difficult moral challenge of redefining States' needs, responsibilities and objectives and the potentially unfair disadvantages this in turn may yield.

Case study - The Kyoto Protocol

The Kyoto Protocol differentiates between industrialised and non-industrialised countries by classifying them as either Annex I and non Annex I countries depending on, amongst other things, their socio-economic status at the time of agreement. Over the years some of the latterly classed countries have developed and industrialised at a rapid pace and in recent UNFCCC negotiations, for instance, there have been proposals to reclassify such countries, which have been contentious. China and India are two such rapidly developing countries, resulting in significantly increased carbon emissions. As non-Annex I countries they do not have the same carbon reduction commitment as, for instance, the EU or the US. However, China and India, in 2011, are first and third on the global scale of emissions producers. In 2010 India announced that it had overtaken Russia to be the third highest emitter²⁷; and in 2007 it was announced that China overtook the US as highest emitter.²⁸ In light of this, it has been argued that they too should sign up to 'nationally appropriate reductions' so that they can join the efforts of other industrialised nations to reduce global emissions.

This is a thorny issue and delicate argument to make because there is an increasing recognition of historic responsibility and common but differentiated responsibility (more of which is discussed in relation to Principle 7), both of which affect the activities that States undertake. Countries such as China argue that they have less of an historic responsibility for the carbon emissions in the atmosphere because they have not been burning fossil fuels at the rate of other countries (such as the US) and neither have they been engaging in large scale activities of this kind from the beginning of the industrial revolution. The argument then becomes rather protracted as States disagree about how the Principle of common but differentiated responsibility should be applied and how to move forward in international negotiations.

The Way Forward

Rio +20 should address the issues of redefining special needs and priorities in a new, complex global context; and how to more effectively mobilise support to these States. To address these needs while ensuring that the needs and interests of all countries are attended to, as Principle 6 calls for, a decoupling of natural resource use from economic growth should be further investigated for action. This is increasingly called for and mooted by respected economists and institutions, and UNEP has recently added its name to this list.²⁹

Redefining status and vulnerability

In the context of climate change and other environmental pressures, a more comprehensive assessment of countries' vulnerabilities and the likely socio-economic impacts is crucial, no matter how difficult this might be. Recognising the prevalence and extent of contributing and compounding socio-economic factors as noted above should be taken into account by nation, region and/or continent, and such prevalence has been projected already.³⁰ The recent – and continuing – 'Arab Spring' throws the developed world's responsibilities towards

assistance in socio-economic priority situations into greater light, and will require further consideration in the context of sustainable development as new political regimes and systems are installed.

Of those States that do generally remain vulnerable, of which there are many, their respective vulnerabilities should be assessed and monitored regularly. Criticism of the UN Conferences on the Least Developed Countries and their failures to meet successive targets show that the current system is failing, and this should be addressed as priority in Rio, taking into account not just geographical and environmental situation, but governance and decision-making structures, and appropriate technology transfer, too. Support across these sectors will help the countries of special priority, but it should address the interests and needs of *all* countries, as desired in Principle 6.

All of these challenges and questions have played out extensively in discussions on vulnerability in the context of the UNFCCC. Discussions need to be taken further to recognise that the world has changed, now with a greater number of categories with huge spectra and inequalities within both traditionally developed and developing

nations, all within the context of globalisation and greater influence and governance by TNCs and civil society groups. This may require a more relevant 'hierarchy' of vulnerability to move on from the 'developed-developing' dichotomy and effectively recognise and administer special priority and support for sustainable development. One method of redefining these categories is proposed by the *Greenhouse Development Rights Framework*. This lays out an effort-sharing framework based upon an accounting of national responsibility for, and capacity to deal with, GHG emission levels. It defines and calculates national obligations as fractions of global obligations with respect to a global development threshold, and allows people with incomes and emissions below the threshold to prioritise development. It obliges people with incomes and emissions above the threshold (in both the North & South) to share the global costs of an emergency climate program.³¹

Mobilising resources and capacity

Improving the flow, reliability and quality of resources and capacity – including but not confined to financial aid - will remain an important part of the equation in addressing the needs of the most vulnerable. Considerations should be given to reviewing and improving (and potentially developing new) international market-based mechanisms and incentives for sustainable development to ensure that they provide effective special priority and assistance to developing countries. These should include initiatives on climate change mitigation and adaptation, protecting biodiversity and combating desertification.

Inequality in poverty and in development initiatives so far is still endemic and is one of the major issues to deal with in the future. Oxfam has found that there are "some policy areas which have been shown in the past to translate economic growth into inclusive growth"³². These include 1) a redistributive agenda that includes health, education, and agricultural services and a progressive taxation system; 2) macroeconomic prudence meaning sustainable, moderate levels of inflation, deficits, and debt whilst ensuring the protection of the pro-poor elements of public spending; and 3) a policy environment conducive to pro-poor private investment, and in particular the domestically owned, labour-intensive private sector, especially SMEs³³. The new HDI measures of inequality for health, income and education should help in highlighting areas of inequality not previously

noticed or conspicuous, and bring to light both intra- and inter-country disparities³⁴.

Transfer of technology

Should be provided on a concessional and preferential basis and should include access to current intellectual property practices and legal instruments to allow developing countries to meet international standards and barriers without duress. In the context of climate change and environmental degradation, priorities should include energy generation and efficiency technologies, and wider resource-efficient technologies.

Trade

The Doha round of multilateral trade negotiations needs to be given new impetus and should be concluded (effectively) as a priority, and aid for trade assistance is also an important discussion point.

ODA and FDI

Increased financial resources, particularly ODA, should be mobilised to meet the priority objectives of sustainable development. Assistance should be provided for strengthening administrative, governance, participatory and monitoring capacities of the public sector in developing countries.

Investment in developing countries can not only promote national development in those countries but also protect global public goods and even improve markets for sustainability worldwide. Such initiatives should follow three basic principles in order to maximize their contributions to development goals. First, they should come on top of and support existing development initiatives and national projects or programmes, to avoid duplication and wasted resources. Second, they should not result in promoting unfair competition or simply install short-term supply-chain processes that would impede the development of local green industries. Third, they should be designed to allow for easy phase-out and transition to the countries' own systems and technologies.³⁵

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit to sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

Principle

7

Introduction

According to its preamble, the overarching goal of the Rio Declaration is to establish a “new and equitable global partnership”. Principle 7 reflects and emphasizes this goal and draws on the duty of States to cooperate to this effect, as per chapter IX of the Charter of the United Nations.¹

“Common” suggests that the responsibility to conserve, protect and restore the health and integrity of the Earth’s ecosystem rests on every State. In doing so, all nations should “cooperate in a spirit of global partnership”. The responsibilities however, are said to be “differentiated” in that not all countries should contribute equally. Differentiation for the purposes of Principle 7, is based on the conceptual distinction between ‘developed’ and ‘developing’ countries, in particular their respective environmental impact, financial capacity and technological resources. “Common but differentiated responsibility” (CBDR) therefore charges developed nations, with more responsibility than developing nations because they have generally had a higher impact on the environment through processes of industrialisation, and because they have greater financial and technological capacity to restore the damaged global environment. In this way Principle 7 of the Rio Declaration builds on Principle 6 of the Declaration, which specifies that developing countries are uniquely situated so as to require ‘special priority’.

History and development of the Principle

CBDR has been applied to developed and developing nations in a variety of contexts, and it is an evolving concept. Although the term CBDR is recent, the practice of differentiating responsibilities in multi-lateral agreements is not. Differential demands appear in the Treaty of Versailles (1919) in which the International Labour Organisation (ILO) recognised “*that differences of climates, habitats and customs of economic opportunity and industrial tradition, make strict uniformity in the conditions of labour difficult of immediate attainment*”². The Law of the Sea Convention (1982) is permeated with special privileges for developing³ and fish-dependent⁴

nations. It is in many parts concerned with equity issues and the situations of geographically and economically very different countries and the special interests of developing and land-locked countries are given recognition throughout the Convention. Unlike Principle 7, however, the LOS Convention is more concerned with the sharing of benefits rather than the sharing of burdens (for example, benefit sharing from the deep seabed resources in particular received attention).

The Stockholm Declaration (1972) endorsed “*taking into account the circumstances and particular requirements of developing countries and any costs which may emanate from incorporating environmental safeguards into their development planning and the need for making available to them, upon their request additional technical and financial assistance for this purpose.*”⁵ Since the Stockholm Declaration, several ensuing multilateral environmental agreements began to differentiate between the commitments imposed upon Party members. The 1992 Convention on Biological Diversity does not give much weight to the principle of CBDR as such. The preamble recognises that for developing countries “*economic and social development and poverty eradication are the first and overriding priorities*”. However the operational provisions of the agreement do mirror the objectives of Principle 7 by putting general emphasis on the special situation of developing countries and there is a mechanism by which developing countries are supported by developed countries in their efforts on implementation. In particular, the implementation of the obligations on developing countries is contingent on developed countries providing new and additional financial resources to support these activities, and providing or facilitating technology transfer.

The 1993 Tropical Timber Agreement provides for a possibility to apply differential treatment towards developing countries and ensures that financial and technological support is granted to developing countries. Article 34 states: “*Developing importing members whose interests are adversely affected by measures taken under this Agreement may apply to the Council for appropriate differential and remedial measures...*”⁶. The 1994 United Nations Convention to Combat Desertification (UNCCD) does not apply much attention to differentiating commitments between countries (possibly because it deals with a problem that is most severely felt in developing countries). It is only generally stated that “*the Parties should take into full consideration the special needs and circumstances*

of affected developing country Parties, particularly the least developed among them”⁷. The 2001 Stockholm Convention on Persistent Organic pollutants (POPs) urges its parties to take into account “*the circumstances and particular requirements of developing countries, in particular the least developed among them...*”⁸. The principles of CBDR as set forth in Principle 7 of the Rio Declaration as well as the “*respective capabilities of developed and developing countries*” should also be noted by the parties⁹.

Implementation

The Montreal Protocol

1987 Montreal Protocol is an example of how CBDR has been successfully applied in a treaty. The recognition of different States having different levels of responsibility and a phased approach has been critical to its success. The Montreal Protocol explicitly differentiates between the developed and developing countries through the implementation of a delayed compliance schedule for developing countries in the phasing out of Chlorofluorocarbons (CFC’s). Moreover, the CBDR principle was further strengthened by the 1990 Amendment to the Montreal Protocol when the nations deliberated on the need for technology transfer and financial funding for the implementation of the programme in developing nations. As a result of the Amendment, a Multinational Fund for the Implementation of the Montreal Protocol was created. Significantly, the Montreal Protocol does not provide a definition of a developing country as such since the terms in Article 5 are too contextual to work as a proper definition. The first list of developing countries that the Protocol adopted was based on the list of members in the G77¹⁰.

The United Nations Framework convention on Climate Change

The first unambiguous adoption by a multilateral environmental agreement of “common but differentiated responsibilities” in those words, was the United Nations Framework Convention on Climate Change (UNFCCC). Article 3(1) provides that “[t]he Parties should protect the climate system...on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities”. In accordance with Article 3(1) the Convention has evolved along lines that allocate different responsibilities among different groups of parties.

Under the **Kyoto Protocol to the UNFCCC**, a framework is established within which industrialised countries (Annex I) are under obligation to meet carbon reduction commitments in line with ‘historic responsibility’ and the recognition that those States have contributed over time relatively greater amounts of carbon dioxide than less industrialised countries. There are also general obligations on Annex I States to cooperate towards technology transfer, and to make adequate provision for financial assistance for mitigation and adaptation to developing countries through the Global Environmental Facility (GEF).

Challenges

Fixed categories of ‘differentiation’

The emphasis of the Kyoto Protocol on differentiation of developed and developing countries, as well as the obligation on developed countries to provide funding and technology to developing countries, clearly echoes Principle 7. However, the Protocol does not require any emissions reductions by developing countries, which represents a failure to properly apply the CBDR principle as the principle’s basic premise is that everyone should bear at least some level of responsibility. Furthermore the Kyoto Protocol explicitly lists annexes of named countries, suggesting that the distinction between developed and developing countries is a fixed one. However, in the context of greenhouse gas emissions, the development context is now very different from that when the Kyoto Agreement was signed, with far greater differentiation of economic development and emissions levels between the ‘developing’ countries. Countries such as Brazil, Russia, India, China and South Africa (BRICS), are now affecting the global environment to the same extent as many ‘developed’ countries, and are capable of reducing their impact. Yet they still feel it is unfair of the developed countries to ask them to reduce their environmental footprint because of their right to development.

‘Historic’ and differentiated responsibility

The climate regime has further developed the concept of CBDR by advancing the notion of *historic* and differentiated responsibility. Article 3 of the UNFCCC states that “The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities

and respective capabilities. Accordingly, the developed Party Parties should take the lead in combating climate change and the adverse effects thereof." The UNFCCC preamble also notes that the "largest share of historical and current global emissions of GHG has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs".¹¹ In 2009, the developing countries emphasized the importance of historical responsibility as the basis for a fair and effective outcome to their negotiations. Bolivia, Brazil, China and India noted that the developed countries have a historical responsibility for their disproportionate role in causing climate change and its adverse effects¹².

The notion of CBDR has in the past been used to positive effect, for example in the Montreal Protocol, and has the potential to ensure fairness and equity in sharing responsibility for global environmental concerns. However the problem of 'fixed' categories of differentiation means that large emerging economies can avoid responsibility for their *present and future* adverse impact on the environment, whilst the problem of 'historic' differentiation is that developed countries are loath to accept responsibility for their past adverse impact on the environment. These two developments of the CBDR have led to political stalemate in the Climate Change negotiations and are challenging developments in how Principle 7 is interpreted and applied. It is not clear that the original drafters of Principle 7 intended to support either fixed categories definition differentiation, or to apply responsibility in retrospect.

It is worrying that there may be an assumption that through fixed differentiation between Annex I and Annex II countries, a 'naming and shaming' of responsibility can enforce the provisions of the climate change treaty. In fact the fixed differentiation strengthens the divide because of the artificial categorization of emerging economies as poor, developing countries, despite their increasingly large adverse environmental impacts and therefore increasing responsibility to conserve the environment.

The Way Forward

A Global Partnership

Principle 7 recognizes a global community and the importance of mutual support according to respective

capabilities. The principle recognises the importance of conserving and protecting common goods, whose adverse deterioration affects all countries. Principle 7 calls for a spirit of global partnership, and yet the recent developments of the notion of CBDR tend to emphasize blame and moral responsibility.

One of the reasons why the notion of CBDR has developed in such a contentious manner is the lack of trust dividing the developed and the developing worlds. This trust barrier has developed out of failed past promises by the developed world to support the developing world, both in terms of financial assistance and technology transfers. Bridging this trust gap is essential to creating a great cooperation between countries. Events such as the Rio 2012 Conference are an opportunity for countries to recognise and reaffirm the original intention of Principle 7 to draw together countries in a global partnership and to contribute as best they can to problems that will affect us all.

Equity in a world of limits and resource constraints

In recognising CBDR and historical responsibilities, States will need to go a long way to bring equity to the forefront of multilateral discussions on sustainable development. This reflection must be coupled with the ability to look forward and understand what equity will mean in a world of limits. Such a world of encroaching limits, it is argued, 'is a world in which fundamental questions about equity and fairness are unavoidable. Conversely, a world that attempts to duck these issues is one that is failing to face up to what sustainability will require.'¹³ Major economies need to be willing to accept that there must be a level of compromise; and that if the principle of differentiated responsibilities is applied consistently, it could well involve differentiation within the developing countries.

Reassess 'fixed' categories, and place greater emphasis on current and future responsibility

Fixed lists of countries purporting to reflect economic differentiation do not reflect the reality that economic development is dynamic. Whether it be in the climate regime, or in other environmental negotiations, countries must recognise the paradigm of modern environmental awareness, that emerging and developed economies are having a globally significant (albeit differentiated) impact on the environment. If categories are required,

such as the Annexes to the Kyoto Protocol, there should be flexibility in transferring State Parties between them. There should be thresholds which trigger the change of a country to a new 'category' of development or particular environmental impact, which in turn imposes new obligations and responsibilities to work towards environmental protection and restoration.

Historic responsibility may be a metric that influences the relative responsibility of a State Party. This is true particularly for environmental damage arising several years after the original cause. However whilst the mistakes of the past are valid, they can both distract and take away from the importance of dealing with current mistakes and most critically avoiding future ones. Therefore historic responsibility should be recognised where appropriate, but should not be used to as part of a 'blaming' exercise when Principle 7 instead calls for global cooperation.

Technological and Financial Support

A particularly important aspect of the principle is international assistance, including financial aid and technology transfer. In addition to moving toward sustainable development on their own, principle 7 expects developed countries to provide financial, technological, and other assistance to help developing countries fulfil their sustainable development responsibilities.

To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.

Principle

8

Introduction

Principle 8's view of production and consumption patterns as the major driving forces of environmental degradation had been emerging for some time during the 1970s and 1980s. The post-war years saw the promotion and rapid spread of mass consumer values and habits across the globe, reaching out to both affluent and dispossessed communities.

Initially welcomed as a symbol of social and economic progress, this celebration of consumption and growth became subject to increasing public suspicion over the environmental and social failures of unchecked industrialisation in the late 1970s and 1980s. This was largely due to a series of environmental catastrophes including the Love Canal (1978), Bhopal (1984), Chernobyl (1986) and Exxon Valdez (1989).¹⁴ These events were coupled with growing dismay that growth and consumerism were failing to alleviate poverty and social degradation amongst the communities that most needed support.

In the two decades since the Rio Declaration, consumption of goods and services has continued to rise. This growth has occurred at a steady rate in developed and industrialised countries and has grown swiftly in developing nations, particularly BRIC (Brazil, Russia, India and China) economies. Whilst part of this increase can be attributed to an increasing global human population, much of the rise is as a result of advancing levels of prosperity across a number of nations¹⁵. Rapid levels of economic growth have further stimulated the demand for resources, such as food, fuel, electronic goods, land and increasing areas of space for the disposal of waste. Such demand now requires resources to be sourced from outside national borders and has led to increasing levels of environmental degradation and the further widening of the gaps between industrialised and developed nations – for example, both the Living Planet Indices¹⁶ for tropical and globally poorer nations have plummeted by 60 percent since 1970¹⁷.

The goal of sustainable production should be to achieve absolute decoupling – where the resource impacts of production decline as GDP (or ideally a better measure of prosperity) increases. This will ensure that production

remains within environmental limits. Relative decoupling describes a decline in resource impacts relative to GDP, but does not mean that these impacts decline outright. There are many examples of relative decoupling – for example the energy required to produce a unit of economic output has declined by a third in the last thirty years – but absolute decoupling is rare. For example, improvements in energy intensity registered since 1990 were offset by increases in the scale of economic activity over the same period, and global carbon emissions from energy use have increased by 40% since 1990.¹⁸ The global economy is still based on growth; growth which does not pay dues to environmental resources or social equality. This is squarely at odds with the provisions of Principle 8.

It is estimated that there are now over 1.7 billion members of the 'consumer class',¹⁹ almost half of whom are found within developing countries – predominantly within China and India, who, when combined account for approximately 20 percent (362 million people) of the global total²⁰. In comparison, the smallest consumer class is found within sub-Saharan Africa, comprised of just 34.2 million people. Whilst China and India have a larger consumer class in comparison to Western Europe it must be remembered that on average, the individual level of consumption in China and India remains considerably below the average individual level within Western Europe.

Principle 8 not only addresses the difficult subject of sustainable consumption and production, but also that of demographics. The connection between these subjects was also raised during the 1970s by the development of the 'IPAT' equation:

$$I = P \times A \times T$$

Where: Human Impact (I) on the environment equals the product of Population (P), Affluence (A), and Technology (T).

It could be argued that demographic policies are even more politically sensitive and difficult to address than consumption and production, and therefore should have been afforded their own Principle. However, their intrinsic connection is made clear through IPAT, and projections suggest that significant increases in the global population will have a significant effect on consumption and production. According to current UN projections, the global population could rise to between 8.1 billion and 10.6 billion in 2050.²¹ Some of the fastest population growth will take place in East Asia and Middle, Western and Eastern Africa. With these prospective increases in human population

in developing countries, a significant rise in the consumer class looks significantly probable. Estimates based on population projects suggest that by 2015 the global consumer class will comprise at least 2 billion people²².

Implementation

Consumption and production

International level

Since the Earth Summit, there has been a dearth of results in the area of sustainable consumption and production (SCP). This has been reflected in the clear dilution of the terms and objectives surrounding SCP in internationally agreed language. The ambitious aim to 'eliminate' unsustainable patterns was already contentious in Rio, as exemplified by George Bush Sr.'s statement at the Summit, "*The American way of life is not up for negotiation*". Clear global strategies and policies to eliminate unsustainable behaviour have never been put in place, and in 2002 at the WSSD in Johannesburg the terminology used in the discussions centred around 'encouraging' and 'promoting' sustainable consumption and production – a significant weakening of the wording of Principle 8. The Summit could only agree to discuss a "10-Year Framework of Programmes on SCP" (10YFP) that was supposed to come "in support of regional and national initiatives to accelerate the shift to sustainable consumption and production".²³ The informal process that was put in place to prepare the discussions of the Framework, called the Marrakech Process (see Box), did not achieve its main objective, as the discussions on the 10YFP failed at CSD19.

The Marrakech Process

The Marrakech Process is a global process that aims to support the elaboration of a 10-Year Framework of Programmes (10YFP) on sustainable consumption and production, as called for by the WSSD Johannesburg Plan of Action. The process is a collaboration between UNEP, UN DESA – who act as the lead agencies – national governments, development agencies and civil society. The three goals of the process are to: assist countries in their efforts to green their economies; to help corporations develop greener business models; and to encourage consumers to adopt more sustainable lifestyles.

<http://esa.un.org/marrakechprocess/about.shtml>

National level

At a national level, a range of tools are being used to support SCP. Government purchasing choices can influence whole market development, such as those of food, transportation and energy. Key examples of government-led change include: sustainable procurement; subsidies to encourage greener products and services; tighter efficiency standards for vehicles, appliances and buildings; and eco-labelling.²⁴

Case study – German Ecological Tax Reform

Germany's 1999 Ecological Tax Reform is one example of taxation being used to directly initiate more sustainable production and consumption. The Ecological Tax gradually increased energy taxes without increasing the overall tax burden. Electricity generated from renewable energy sources is exempt from the eco-tax, and energy used for local public transport is exempt to encourage the use of sustainable methods of transportation. The German government also uses a portion of eco-tax revenue to invest in awareness-raising of energy-efficiency amongst homeowners and to provide grants for solar heating, photovoltaic panels biomass energy centres in public buildings including schools.²⁵

However, the wider trend has been that firstly, progress made has been almost exclusively on the production side; and secondly, production-side progress has focused almost exclusively on technology and efficiency, and achieved at best relative decoupling of resource impacts to GDP, not absolute decoupling.

Governments have been reluctant to engage on consumption-side policies; and the private sector, without regulation, does not have incentives to contribute in the elimination of unsustainable consumption and production.

Demographic issues

Access to contraception, women's rights and maternal and child health are the more accepted and recognisably important determinants of demographic change and reproductive behaviour, and to date have been the key means offered for tackling population growth in international fora and national government policy.

At an international level, the 1994 International Conference on Population and Development (ICPD) held in Cairo was

to female health.²⁶ Integrating family planning and women's health services and promoting the rights of women were key issues on the agenda discussed at the conference. The Programme of Action strongly urged Governments to make reproductive health services available to 'all individuals of appropriate ages'.²⁷ All Governments were encouraged to assess the unmet need for good-quality family-planning services and to take steps to meet this need. They were also encouraged to expand the provision of maternal and child health services in the context of primary health care. Some of the points from the Cairo Conference were incorporated into the Millennium Development Goal (MDG) targets.

In response to this call, Government action showed steady increases at a global level since 1994. As of 2001, 92% of all countries supported family planning programmes and contraception either directly through Government-led services (75%) such as hospital, clinics or fieldworkers or indirectly through NGOs and community initiatives (17%). Despite this coverage, demand for family planning services continues to outstrip supply in most regions, particularly in sub-Saharan Africa, where one in four women aged 15 to 49 who are married or in union and have expressed the desire to use contraceptives do not have access to them.²⁸

Challenges and Conflicts

Unsustainable consumption and production

The movement towards sustainable production and consumption is still in its infancy. Initiatives such as sustainable procurement, ecological tax reforms, and regulation to improve energy conservation and energy and resource efficiency, whilst crucial to enabling and achieving sustainable production and consumption, remain ad-hoc, fragmented, and limited to national and regional levels. At the international level, the discussion space on SCP has been occupied mostly by academics and think tanks, with no real traction on policy-making. Alongside a dearth of comprehensive, joined-up national strategies for sustainable consumption and production, a range of other drivers further complicate the implementation of Principle 8.

Globalisation has facilitated the relative decoupling of economic activities from resource impacts and waste generation in developed countries, as increasingly, the majority of energy- and resource-intensive activities take place in developing nations, with cheap production and labour costs. However, when taking into account the life-cycle of products, the intensity of resource use and waste

generation remains unchanged. Globalisation has thus promoted the outsourcing of unsustainable production systems to developing countries, transferring production emissions to outsourced nations' production activities whilst exporting products to developed countries. For example, China - a foremost producer of inexpensive goods - produces and exports a large quantity of goods for the North American market. Clearly, globalisation - and the outsourcing of production - masks a significant dearth in sustainable consumption patterns.

Much of the projected growth of the global population between now and 2050 will take place in emerging economies. A significant rise in the consumer class appears highly likely - estimates based on population projects suggest that by 2015 the global consumer class will comprise of at least 2 billion people²⁹. A growing consumer class in these economies will add to pressures on resources and sinks that are already high because of Northern consumption habits. Already, in 2010 BRIC economies (Brazil, Russia, India and China) accounted for half of global consumption.³⁰ As affluence in BRIC countries increases, the types of good they consume will move from low-value agricultural products to higher end products such as cars, office equipment and other electronic items. Indeed, increasing affluence will have a considerable impact upon levels of consumption and pressure on global ecosystems due to increasing demands for food - particularly animal products, residential water and energy use, private vehicle ownership, travel and waste generation.

Increased production efficiencies are another key challenge for Principle 8. Improvements such as better national and international transportation links and other technological advancements have increased the capacity to exploit an enormous concentration of natural resources with reduced expense. In turn low cost products become available to the market. Consequently production efficiencies can actually uphold the vast levels of consumption that have become commonplace³¹. Again, this is particularly dangerous in the context of a new generation of affluent consumers in emerging economies. Such production efficiencies remain ineffective or even actively compromise sustainability without a step-change in consumer attitudes to the products, and the quantities of those products, that are being consumed.

Commentators note a lack of responsibility in taking action, from both public- and private sides. There is a tendency from those outside government to downplay

the importance of States' roles, and a tendency from governments to push much of the responsibility for action and change on to non-state institutions. Both tendencies are symptomatic of slow progress on these issues.

Population growth and access to contraception and family-planning facilities

As noted at the 1994 International Conference on Population and Development, contraception and family planning facilities are crucial to population management.³² Despite real progress on global access to contraception, demand for family planning services continues to outstrip demand and as of 2002 some 123 million women did not have access to safe and effective means of contraception.³³ Some headline comments from the 2010 progress report on the MDGs show that:

- progress has stalled in reducing the number of teenage pregnancies, putting more young mothers at risk;
- poverty and lack of education perpetuate high adolescent birth rates;
- progress in expanding the use of contraceptives by women has slowed; and
- use of contraception is lowest among the poorest women and those with no education;
- inadequate funding for family planning is a major failure in fulfilling commitments to improving women's reproductive health.³⁴

The Way Forward

Prospects for action on the SCP front seem linked to a shift in political will, that would reflect a shared recognition that the pressures that nations collectively put on the Earth's resources and sinks are growing and may soon overwhelm the capacity of natural ecosystems. As exemplified by the failure of concerted action to reduce global greenhouse gas emissions, the current political environment does not seem ripe for such a shift.

The objectives of SCP policies have not changed over the years – they should be concerned with achieving absolute, not just relative, decoupling; as well as limiting and reducing consumption levels in developed countries where obvious waste is patent, to enable developing nations to reach fair consumption levels while staying within the Earth's limits globally.

The Millennium Consumption Goals Initiative (MCGI) was proposed in 2011 to mirror and respond to the Millennium Development Goals (MDGs), but for the industrialised

countries. The MCGI seeks to aim targets at the most consumptive sectors globally who represent around 20 per cent of humanity and yet consume more than 80 per cent of global resources. They seek to achieve sustainable levels of consumption, encourage endemic behavioural change and eliminate wasteful practices while building resilience against resource extinction, pollution, poverty and climate change.

SCP is recognised by many commentators and actors as a cornerstone of sustainable development. As such, it should not be treated in a silo but incorporated within current discussions on a "green economy". Discussions on the way forward for sustainable production and consumption should acknowledge the barrier that consumption patterns and behaviours in developed countries present to sustainability, and include facilitation for developing economies for implementing SCP activities. Furthermore, there must be greater partnership between national governments and other actors including civil society organisations and NGOs on promoting sustainable production and consumption at a local level.

States should cooperate to strengthen endogenous capacity building for sustainable development by improving scientific understanding through exchanges of scientific and technical knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies including new and innovative technology.

Principle

9

Introduction

Technology and scientific knowledge transfer encompasses a 'broad set of processes' which are 'not just individual technologies, but total systems which include know-how, procedures, goods and services, and equipment as well as organizational and managerial procedures.'

The 1992 United Nations Conference on Environment and Development stated that building a country's capacity:

"...encompasses the country's human, scientific, technological, organizational, institutional, and resource capabilities. A fundamental goal of capacity-building is to enhance the ability to evaluate and address the crucial questions related to policy choices and modes of implementation among development options, based on an understanding of environmental potentials and limits and of needs as perceived by the people of the country concerned"¹.

Implementation

International organisations and agreements

During the negotiations leading to the Montreal Protocol on Substances that Deplete the Ozone Layer, developing countries demanded that technology transfer be a condition of participation in control measures. Technology transfer has subsequently been included in over 80 regional and international agreements, including Agenda 21, the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, the Organisation for Economic Co-operation and Development (OECD) Environmental Strategy, the Convention on Biological Diversity (CBD) and the United Nations Convention to Combat Desertification (CCD).

However, some commentators have argued that in the 20 years since the Rio Summit very little technology has been transferred.² International agreements aim to facilitate the transfer of technology but with the exception of the Montreal Protocol these provisions have been historically unsuccessful;³ lack of attention to local conditions and market incentives are two reasons cited.

The environmental and technology transfer literature offers many suggestions including sensitivity to stakeholder needs, enabling environments and national settings, economic incentives, information-based policies, regulation, capacity-building, intellectual property protection, and financial assistance.

At the WSSD in 2002, it was again emphasised that without the necessary capacity, developing countries will be unable to achieve their sustainable development aspirations and in order to gain such capacity assistance through international cooperation is needed⁴. Since then capacity building has become a core goal of technical assistance provided by the UN system - "instead of being regarded as merely a component or by-product of development programmes and products, capacity building has become a principal and explicit priority of all United Nations activities"⁵.

The UNDP sees capacity development as the core element of its Strategic Plan (2008-2013),⁶ which is manifest in its establishment of the Capacity Development Group as part of its Bureau for Development Policy (BDP)⁷. At the 1992 Earth Summit (UNCED), UNDP launched Capacity 21 as its main instrument for implementing Agenda 21. The programme's aim was to build the capacity of local institutions to integrate economic, social and environmental issues into the development process at the national, provincial and local levels.⁸ The 9-year programme concluded by recommending that the local-national link be an integral part of working towards the sustainability of development interventions, and that the subsequent UNDP programme, Capacity 2015, go beyond environmental initiatives to include governance and poverty aspects. Capacity 2015 uses a variety of global- to local partners and employs different regional approaches, including the siting of 'Capacity Development Advisers' in 6 regional centres.⁹ Although it does focus on a range of sustainability themes and approaches, its overall focus is on the achievement of the Millennium Development Goals (MDGs).

Education and capacity building 'forms the core' of UNESCO's work, and UNESCO is the lead agency in the UN's Decade of Education for Sustainable Development (DESD). UNESCO's wider work includes local and regional work to build capacity for sustainable development in the educational, training and private sectors. Again, these approaches focus primarily on the achievement of the MDGs. In 2008, UNESCO launched

the International Centre for South-South Cooperation in Science, Technology and Innovation (ISTIC), which focuses on capacity-building in biotechnology research.¹⁰

The UN Conference on Trade and Development (UNCTAD) directs a particular focus on 'ensuring that domestic policies and international action are mutually supportive in bringing about sustainable development', through 'intergovernmental consensus building' and providing technical assistance to developing countries.¹¹ UNCTAD provides capacity-building activities to help developing countries with trade and environmental requirements, investment and technology, and contributes towards the mandate of the Commission on Science and Technology (CSTD). Together with UNEP, UNCTAD launched the Capacity Building Task Force on Trade, Environment and Development (CBTF) to strengthen the capacities of developing countries and countries with economies in transition to address issues related to trade, environment and development¹².

UNEP aims to fulfil this mandate by developing environmental capacity in developing countries and countries with economies in transition in three principal ways: facilitating and supporting environmental institution building at regional, sub-regional, national and local levels; developing and testing environmental management instruments in collaboration with governmental and non-governmental partners, UN entities and major groups; and promoting public participation in environmental management and enhancing access to information on environmental matters.¹³ UNEP's activities focus on environmental capacity building.

The United Nations Framework Convention on Climate Change (UNFCCC) addressed the need to assist Parties in their responses to climate change through technology transfer, funding and national communication¹⁴. The UNFCCC sees capacity building as essential for climate change action through strengthening support for enhanced institutions, communication, education, training, and strengthened networks, through the allocation of financial resources toward capacity building¹⁵. Parties have taken decisions to promote the development and transfer of environmentally sound technologies at each session of the COP.

As with many MEAs and their mandates to transfer technology and capacity-building, the UNFCCC and similar mechanisms have been criticised by

commentators and developing nations as rhetorical only, with technology transfer a particular failure in relation to commitments made. However, the World Resources Institute (WRI) has noted that technology transfer is one area in which definitive progress was made in Copenhagen and throughout negotiations in 2010.¹⁶

International organisations also aim to put capacity building at the centre of their activities. USAID has placed the building of human and institutional capacity to address climate change as a fundamental component of their three pillared approach - adaptation, clean energy, and sustainable landscapes¹⁷. The International Development Research Centre (IDRC) aims to 'equip people in developing countries with the tools for change including technologies, new sources of information, and ways to build capacity in attempts to reach the ambitions of UNCED'¹⁸. UNESCO note that capacity building through engineering has shifted its focus from developing specific technological interventions in the 1970s/80s, to systems processes to improve people's technological capabilities, to enable resource-poor people to develop their own technologies over the long term.¹⁹ UNESCO notes the work of Practical Action (founded by E. F. Schumacher), Engineers Without Borders, Engineers Against Poverty, and Engineers for a Sustainable World as good examples of capacity building in engineering and technology.²⁰ The WRI lists several new and existing partnerships as capable of encouraging capacity building and technology transfer for climate change mitigation and adaptation, such as the Major Economies Forum, the Asia-Pacific Partnership on Clean Development and Climate, the Asia Pacific Economic Cooperation, the Energy and Climate Partnership of the Americas, as well as bilateral MOUs.²¹

Furthermore, most development assistance projects include some component of technology transfer and capacity-building. However, ODA-funded projects rarely involve patented industrial products or processes, in large part because ODA-funded projects rarely involve industrial production.²²

National leadership

The focus on ownership in the UN system reflects a growing consensus that sustainable development should be rooted in national leadership and local action. The Poverty Reduction Strategies (PRSs) and, more broadly, the National Strategies for Sustainable Development (NSSDs) are becoming the framework

through which national leadership over development priorities is exercised and implemented, and identify areas of national weakness where capacity and capability building would be fruitful²³. The United Nations Economic Council of Africa (UNECA) conducted a study in 2006 on the state of NSSD implementation in 16 African countries - capacity strengthening featured prominently among the needs expressed, with 60%, 50% and 40% of countries articulating the need for financial, technical and institutional capacities, respectively²⁴. ECOSOC's 2008 Annual Ministerial Review notes that national PRS Papers often do not include provisions for resource conservation and environmental protection.²⁵

Harmonisation of assistance

The 2005 Paris Declaration on aid effectiveness contains five core principles to guide the recipients' development - ownership, alignment, harmonisation, results and mutual accountability²⁶, alongside urging them to make capacity development a key goal of their national development strategies. It is being increasingly recognised that capacity cannot be imported as a turnkey operation but that it must be developed from within, with donors and their experts acting as catalysts, facilitators, and brokers of knowledge and technique²⁷. The Accra Agenda for Action (AAA) in 2008 strengthened the impact of the Paris Declaration and set an agenda for stronger ownership, inclusive partnership and delivering of results, and capacity-building²⁸.

UNFCCC 'Technology Needs Assessments'

Developing countries are encouraged to undertake Technology Needs Assessments (TNAs) for their specific technology needs²⁹. The UNFCCC defines them as "a set of country-driven activities that identify and determine the mitigation and adaptation technology priorities of [developing] Parties... They involve different stakeholders in the consultative process to identify the barriers to technology transfer and measures to address these barriers through sectoral analyses. These activities may address soft and hard technology, such as mitigation and adaptation technologies, identify regulatory options and develop fiscal and financial incentives and capacity building"³⁰. By 2007, some 68 TNAs had been reported including more than 200 project proposals³¹. In 2010 the UNDP and the UNFCCC prepared a TNA Handbook as a response to the request

from the UNFCCC decisions at COP 13 and 14 to facilitate the TNA process for participating countries³². While some anecdotal successes in partnership and capacity building have been noted through TNAs, work is still required to build experience and clarity on lessons learned, develop reliable transfer mechanisms and reduce the risks associated with technologies to make them marketable to the private sector.³³

Challenges and Conflicts

Fragmentation and lack of coherence of capacity-building initiatives

As a result of the lack of a shared definition of what constitutes capacity building support, most support of this kind remains fragmented - designed and managed project by project with little communication between each³⁴. This approach makes it difficult to capture cross-sectoral issues and opportunities and to have the broad view needed to learn lessons across operations. Therefore, this independent project-based capacity building does not allow a country-wide picture of own capacity and main needs to be established, but rather enhances capacity on a short-term, piecemeal basis only.³⁵ The objectives of many capacity building activities thus tend to be ill defined, exacerbating the lack of coherence at the international level³⁶.

For example in its 2002 review of the domestic progress being made towards implementing the commitments of the UNCED, Zambia noted that "international cooperation for capacity building in Zambia has been fragmented and compartmentalised" and that "the impacts of many projects have endangered rather than improved life and the environment... the impacts of many World Bank and multinational development projects will be felt for a long time, and not all future impacts will necessarily be positive."³⁷ The African Capacity Building Foundation (ACBF) studies³⁸, for example, also demonstrated that donor-driven technical assistance programmes tend to be designed and implemented in isolation, without being guided by an explicit national policy framework or strategy³⁹.

Incremental change vs. results

There is a feeling of disconnect between donors and their aims, and what occurs practically in the field. The UNDP has noted a communication failure leading to bottlenecks in the efficiency of capacity building initiatives from both

sides - assistance is often implemented quickly, taking the easiest solution which impedes a more systematic focus on capacity development; and simultaneously the recipient countries are not always clear on their capacity development needs and how to address them⁴⁰. There is growing recognition that capacity development requires more flexible and iterative approaches with greater emphasis given to the way change is supported in the long term, rather than on measuring short-term change in the way the OECD has coined "Obsessive Measurement Disorder".⁴¹ This presents challenges in defining, delivering and measuring capacity building over the long term, often beyond the time of direct intervention.

ODA and country-driven approaches

Capacity building progress is hindered by the issues currently surrounding Overseas Development Assistance (ODA). ECOSOC note that ODA increases in recent years have been in the form of debt relief and emergency assistance rather than assistance for investment, technology transfer and capacity-building.⁴²

Country leadership to create the space for change is critical but context determines what is possible at any given time. On the whole, donor efforts in many countries have produced little to show in terms of sustainable country capacity. Until recently, capacity development was viewed mainly as a technical process, and not enough thought was given to the broader political and social context within which capacity development efforts take place. This led to an overemphasis on what were seen as "right answers", as opposed to approaches that best fit the country circumstances and the needs of the particular situation⁴³.

The Way Forward

In delivering support to a capacity development policy or programme, donors must remain aware of the institutional constraints and ensure that their own approach does not contribute to the problem – this involves not only understanding the country-specific context but also the need to shift towards longer-term, more progressive projects. When working with organisations, reaching agreement on the specific capacity development outcomes to pursue is an obvious but often neglected task⁴⁴. Likewise, capacity building programs will need to introduce more well-defined capacity building objectives. Beyond the need for internal coherence, the overall scope of capacity building support, like support for other

development objectives, needs to match country demand for change in a given sector⁴⁵.

To ensure that improvements through capacity building do indeed come to fruition, outcomes need to be measured. The OECD has recommended, for example, that partners need to engage now in a serious, collective effort to shape a results-based management system that can facilitate and enhance aid-supported capacity development while providing the flexibility to realistically track and adjust to the fundamental change processes needed for long term impact⁴⁶.

Communication and interlinked learning processes are also necessary means to progressing the effectiveness and sustainability of international capacity building. The OECD has proposed the introduction of processes for joint monitoring of aid agency and partner country behaviour in implementing capacity development good practice. This country-level monitoring should be 'linked to well organised, joint learning processes which permit and encourage meaningful change among aid agencies and partner countries alike'. OECD calls on the international community to provide solid support to this end, as well as Southern leadership.⁴⁷

Capacity-building is not just about the needs of the State, but the needs of the people as determined in collaboration with the state. Thus capacity needs assessments must be based on an open and consultative process. A number of capacity development strategies can be used to strengthen citizen-state interfaces and enable institutions to better respond to citizens' needs, as outlined by the UNDP. These include creating interactive planning and policy frameworks that involve and empower grass roots organizations; investing heavily in demand-side capacities to connect diverse populations to state institutions (i.e. private sector alliances against corruption or civil society coalitions in key technical areas, such as procurement); using public-private partnerships to provide affordable access to technologies and therefore directly supporting individual capacities; investing in literacy and other basic education programmes, as well as in the legal empowerment of the poor; and promoting the use and learning of both local and global languages⁴⁸.

Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

Principle 10

Introduction

The core elements of Principle 10 are now widely accepted as ‘three cornerstones’ of a healthy democratic governance system¹ in which the individuals and communities of civil society are able to access information relating to environmental issues at the national and international level; to be comprehensively involved in the decision-making process at all levels; and to receive adequate access to an open and fair justice system that will enable them to hold governments to account.

Principle 10 was the first internationally agreed commitment that recognised the rights of people to hold their governments to account for environmental policies and laws. It calls for means of enabling public participation in environmental decision-making and the ability to challenge such decisions in a court of law, all facilitated by an open exchange of information.

“Information is a public good; the more we are informed about what is happening in our society, the better will our democracies be able to function.”² (Joseph E. Stiglitz, 2008)

This illustrates that the significance of Principle 10 reaches beyond purely environmental issues and relates to the deeper functioning of a thriving, democratic society. It is therefore a crucial Principle for the achievement of sustainable development itself.

There have been many examples in which States and international institutions have worked towards these values and aspirations for a healthy and thriving democracy in the two decades since the Rio Declaration. From international legal instruments to national environmental courts, there are mechanisms and processes through which civil society can engage actively in environmental decision-making, and seek legal redress on environmental matters. There are also many initiatives promoting legal and political reform to further enhance the implementation of Principle 10 ‘on the ground’.

There remains a gap, however, between the aspirations of the Principle and its realisation by State actors. Situations still abound in which individuals and communities are not involved or consulted in the decision-making process, and cannot gain access to fair, timely, affordable justice. There are effective examples where partnerships have been established to build relationships between civil society and governments to enable full participation in the democratic process, but much work remains for this to be widespread and effective across the world.

Implementation

Access to information and participation in decision-making

National level information access

Since Rio, over 80 Governments across the World have enacted laws that provide their citizens with improved access to information on environmental matters, and the vast majority of these have been introduced in the past six or seven years.^{3,4} In countries such as the UK, procedures exist that govern the free release of information so that matters of public interest are transparent and accessible to all, often upon request from civil society groups, NGOs or individuals. There remain, however, many States in which this is not the case and significant barriers to transparency and access to information persist.

At the international level, stakeholder engagement in international negotiating and decision-making fora has significantly increased since 1992, with conferences such as those held under the UNFCCC and CBD attracting the participation and involvement of record numbers of interested parties; from environmental NGOs to farmers unions, gender organisations, research experts and youth groups. Participation of such groups has increased not only at the ‘observer’ level, but as active stakeholders offering submissions and interventions in formal proceedings. These constituencies play an important role in presenting the views of wider civil society to government negotiators and delegates, and present a clear example of the ‘public participation’ aspect of Principle 10 in practice.

International agreements and institutions

Aarhus Convention

The UNECE Convention on Access to Information, Public Participation in Decision-making and Access

to Justice in Environmental Matters (the Aarhus Convention), mirrors the 'three cornerstones' of Principle 10, noted above. It has been celebrated by many international political leaders, including Kofi Annan, who asserted that "Although regional in scope, the significance of the Aarhus Convention is global. It is by far the most impressive elaboration of Principle 10 of the Rio Declaration, which stresses the need for citizens' participation in environmental issues and for access to information on the environment held by public authorities[...] As such it is the most ambitious venture in the area of environmental democracy so far undertaken under the auspices of the United Nations." ⁵

The Aarhus Convention is an excellent example of how a Principle of the Rio Declaration can be implemented

at national and regional level. There are 44 Parties to the Convention and it is open to accession by non-ECE countries, subject to approval of the Meeting of the Parties. In effect, compliance means ensuring at the national level that members of the public have access to information; can participate in decision-making relating to environmental matters; and have access to justice on these issues, providing members of the public the ability to bring cases in national courts and to challenge the government on environmental issues. The Convention offers a valuable model of how the soft-law provisions – or in the WRI's words, 'vague commitments'⁶ - of Principle 10 can be transposed into specific legal obligations.

Case study – bringing a case to the Aarhus Compliance Committee

For Signatories to the Aarhus Convention, it is necessary for civil society to have the opportunity to bring cases where it is considered that the State is not fully implementing or complying with the Convention, through referral to the Convention's Compliance Committee. In 2010, the UK NGO ClientEarth7 took the UK Government to the Aarhus Compliance Committee for non-compliance with the Convention by preventing citizens access to justice due to prohibitive costs.

The Compliance Committee found in favour of ClientEarth on the grounds that the UK is indeed failing its citizens on access to justice. The landmark ruling meant that the UK Government must fundamentally change the way its courts operate if it is to allow citizens the access to environmental justice enshrined in the Convention. It also found that the UK courts are not in line with other EU countries in relation to the costs that face citizens when they decide to uphold their rights, and as a result must alter the cost regime to comply with the Aarhus Convention, and ultimately Principle 10.⁸

This is a pertinent example of how Principle 10 has been implemented through an international Convention, and how the requirements of the Principle, reflected in that Convention, should be transposed into national law.

Convention on Biological Diversity (CBD) and the Cartagena Protocol

The Cartagena Protocol on Biosafety, stemming from the CBD, includes reference to the civil rights outlined in Principle 10 by stating at Article 23: "the Parties shall, in accordance with their respective laws and regulations, consult the public in the decision making process regarding living modified organisms and shall make the results of such decisions available to the public, while respecting confidential information in accordance with article 21."⁹

Nine Major Group sectors in the CSD

Created as a direct outcome of Rio in 1992, the UN Commission on Sustainable Development (CSD) provides a formal procedure for the participation of civil society

in its – and therefore the wider UN's - decision-making process by providing roles and opportunities for input from the nine 'Major Group Sectors' recognised by Agenda 21 to comprise civil society, namely business persons, farmers, students, workers, researchers, activists, indigenous communities, women, and other communities of interest. Through the establishment of "Organising Partners", these nine major groups are able to submit formal reports to the CSD and participate in the Commission's deliberations and regional preparatory meetings.¹⁰

UNEP Guidelines on Principle 10 (Bali Guidelines)

At the UN Global Ministerial meeting in Bali (Environment Forum) in 2010, UNEP adopted its 'Guidelines on Principle 10'. The guidelines cover key areas including freedom of information laws, state of the environment reporting,

emergency planning and response, project planning, and environmental harms; and set out the minimum legal standards for national-level implementation of Principle 10. They also set a mandating for UNEP to support and assist countries with implementation programmes and policies on such work.¹¹ Following the guidelines and implementing associated measures is, however, a voluntary process.

The Partnership for Principle 10

The Partnership for Principle 10 was established during the World Summit on Sustainable Development (WSSD) in 2002 to provide an international platform to 'promote, strengthen and reaffirm' Principle 10.¹² The Partnership comprises governments (Bolivia, Chile, Cameroon, Hungary, Indonesia, Mexico, Uganda, and the Ukraine), international institutions (IUCN, UNEP, and UNDP and the World Bank), and over 20 NGOs, and is led by

an Advisory Committee composed of members of the Ugandan and UK Governments, the World Bank, and civil society groups from Ecuador, Indonesia, South Africa and the UK.¹³ Funding is pledged by individual members along with resources and commitments to action in line with Principle 10, and the network works together to implement solutions to those commitments. The Partnership's core objectives are to:

- (i) improve members' own institutional performance in access to information, participation and justice;
- (ii) help to improve the performance of other partners; and
- (iii) contribute to the collective work of the Partnership.

Examples of clear success delivered through the Partnership are difficult to find. For an example of the types of commitments made and supported through the Partnership, see the case study below.

Case study – Hungary as a 'Partner for Principle 10'

On joining the Partnership for Principle 10, Hungary made a reinforced commitment to honour existing pledges around Principle 10. It stood to gain from the collaborative work and funds of the Partnership's members on the following commitments:

- Expansion of its 'Greenpoint' Network of 29 offices of the Ministry of Environment and Water.
- Training Greenpoint Network staff on the implementation of the Aarhus Convention.
- Improvements to the Ministry of Environment and Water's web portal in order to provide more up-to-date information for the public and support public participation in legislative drafting.
- Allocation of staff time to PP10: In order to make its commitment to PP10 meaningful, a government must assign staff and other resources to manage the commitment and ensure that commitments are honoured. Hungary has committed such staff.
- Putting Aarhus on the agenda of an inter-ministerial committee on environmental programs: Hungary committed to expanding the purview of the committee of the National Environmental Program of Hungary to include attention to Aarhus commitments.

The Access Initiative

Soon after the WSSD, five NGOs collaborated to establish 'The Access Initiative' (TAI), now the largest global network of civil society organisations aiming to accelerate the implementation of access rights around the world. TAI receives funding from foundations, the World Bank, the European Commission and a small number of government ministries. The Initiative's extensive list of 'Partners' (more than 100 civil society organisations from 50 countries) work in national coalitions, mainly in the developing world, and assess their governments' action on Principle 10 elements; advocating for legal, institutional and practice reforms through government engagement and raising public awareness.¹⁴ In 2007 over 35 assessments had been completed in more than 25 countries, with 14 additional assessments underway. TAI was a primary and effective

advocate in establishing UNEP's 'Bali Guidelines' (see above). Successes noted through the TAI's assessment work include:^{15,16}

- Freedom of information acts in Uganda and Indonesia, for example
 - Ukraine's agreement to improve public access to information, participation in decision-making, and access to justice as key principles of environmental governance
 - The National Commission of Water in Mexico providing recommendations to improve access to information about water resources
 - In Cameroon, TAI partner Foundation for Environment and Development (FEDEV) litigated and won, as the main plaintiff, three high court cases with implications allowing the public to sue to protect human life and environment.

Access to justice

As a mechanism to hold governments to account as well as protect the environment from pollution and harmful activities, civil society must have open, fair and affordable access to a legal and judicial system. This 'access to justice' component of Principle 10 is critical in providing civil society the opportunity to challenge, for example, planning decisions in areas of cultural or environmental significance. It also provides NGOs with a forum to challenge processes or decisions in which business and economic interests may compromise the health of the environment.

Despite Principle 10's provision, many States continue to withhold such access. It is also important to recognise that even if appropriate law exists its efficacy relies on its context, dependent on a diverse range of factors including the ability or capacity of persons to bring a legal case; their knowledge of the law; and the availability of appropriate fora to bring a case when issues arise. Without such conditions, "the effect of even the best legal instruments can have differing effects on diverse persons in a given community and context."¹⁷

Case study – Specialised environmental courts and tribunals

There are approximately 350 specialised environmental courts, tribunals or other legal bodies across the world that exist to resolve environmental issues.¹⁸ The Access Initiative and the World Resources Institute have compiled a comprehensive report on these courts and analysed how they are significant to the implementation of both the Aarhus Convention and Principle ^{10,19}

Environmental courts and tribunals go some way to ensuring that citizens have adequate access to justice on environmental matters, by providing a specialised forum where detailed arguments can be heard and considered by expert, independent panels of judges and others with technical knowledge relating to the environmental matter. Environmental courts and tribunals also provide contributions to environmental governance and the protection of the environment around the world.

The report identifies 12 key characteristics of environmental courts and tribunals that ensure that they effectively work towards providing access to justice, including costs, access to scientific and technical expertise, case management and enforcement tools and mechanisms.²⁰

Environmental rights

There is a growing body of lawyers and academics striving to establish legal rights for nature. The motivation driving this thinking is to provide a mechanism to promote justice for the environment in an 'earth-centric' rather than a purely anthropocentric way. For instance, in a legal context the environmental rights movement aspires to establish laws that are consistent with Earth Jurisprudence, a philosophy of law and governance that does not put any one species above another in an effort to maintain integrity of the earth system as a whole. An environmental rights interpretation of Principle 10 would be less anthropocentric, and would lead to access to justice on environmental matters including the provision for a forum for the rights of nature to be heard directly.

In practice, this would involve advocates bringing cases on behalf of nature or a habitat or ecosystem, and the case focusing on the rights of nature directly, rather than from a human perspective. This concept, often referred to as '*Wild Law*' ("wild not because they [are] irrational or out of control, but wild because they

[are] derived from the laws of nature")²¹ brings earth jurisprudence to the heart of the legal system. In 2002 a prominent environmental lawyer published a book on *Wild Law* and developed the concept in detail. Since then many publications and international conferences have attempted to galvanise support for the movement, as well as develop the theory in greater detail.²² It has been demonstrated recently that there already exist a number of practices around the world that follow *Wild Law*, from European Legislation to application in the courts of India.²³

Bolivian Constitution and laws

In 2009 Bolivia amended its constitution to enable the country to enshrine the rights of Mother Earth ('Pachamama') in binding law. In 2011, building on the success of the constitutional amendments, Bolivia is poised to enact new laws that will express a new worldview; a worldview that is based on the principles of harmony, common good, guarantee of the regeneration of Mother Earth, and no commodification of nature. Inherent rights include: 'the right to life and to exist; the right to continue

vital cycles and processes free from human alteration; the right to pure water and clean air; the right to balance; the right not to be polluted; and the right to not have cellular structure modified or genetically altered.²⁴ Once the law comes into force then the rights of Nature will be enforceable in a court of law, granting nature access to justice in accordance with Principle 10; reinforced by the creation of an Ombudsman for Mother Earth.²⁵

In line with this agenda and similar proposals in Ecuador, a growing movement of partnership initiatives on nature's rights and 'earth jurisprudence' has formed, with notable recent examples including the Universal Declaration on the Rights of Mother Earth,²⁶ the World Peoples' Conference on Climate Change in 2010, and the Global Alliance for the Rights of Mother Nature, established in 2010 to connect the various international groups and individuals working on this issue.²⁷

Challenges and Conflicts

As noted above, there are wide-ranging examples of countries promoting access to information and justice on environmental matters. However, even when national legislation has been written and installed, the challenge persists of effective implementation through supporting compliance and enforcement mechanisms. This is a recurring challenge for many of the Rio Principles, and is especially relevant to Principle 10 and access to justice on the whole, for the reasons outlined below.

Costs

Access to justice requires that citizens have the opportunity to challenge a State or corporate decision in a court of law. In many countries it is often prohibitively expensive for members of the public to bring a case, especially in jurisdictions where 'costs follow the event'. (i.e. the losing party must not only pay their own legal fees, but those of the defendant too.) This deterrent is a significant hurdle to the ineffective implementation of Principle 10. Commentators have also noted barriers to challenging governments to uphold the Aarhus Convention, due to a lengthy and complicated process of applying to the Convention's Compliance Committee.

Capacity

The positive examples of Principle 10 implementation noted earlier have required a vast amount of work and infrastructure reforms at State level. This requires

significant capacity in State administrative infrastructure which many States simply do not have. In addition, many of the reforms that would be required to effectively implement Principle 10 rely not just on a thriving democracy, but also a healthy and independent judiciary. Even for States attempting the transition to such administrative structures, this remains a challenge.

Democracy

In the absence of a functioning democracy, Principle 10 is difficult to implement and enforce, especially in States with issues of corruption or dictatorship. In situations where citizens are denied the right to a free and fair vote, it is highly unlikely that they will be provided access to information or open and independent justice systems. It is also unlikely that citizens will be consulted on issues relating to the environment, let alone hold them to account over planning- and industrial decisions.

Weaknesses in law and process

Other sections of this report discuss the reality of environmental legislation wherein environmental protection loses out to economic incentives, and developing countries become vulnerable to the 'race to the bottom'. The section on Principle 17 highlights that one of the flaws in environmental impact assessments (EIA) is that States and corporations can in reality circumvent or not pay due attention to the community consultation aspect of EIAs. Furthermore, the principle of 'free, prior and informed consent' (i.e. that a community has the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or use), a key principle in international law and jurisprudence related to indigenous peoples, faces problems of corruption or of a lack of reliable monitoring and evaluation.²⁸ For example, third-party audits for the Forest Stewardship Council (FSC) in Indonesia suggested that verifiers were unduly lenient in their classification of adequate compliance with FSC voluntary standards, thereby weakening any leverage that communities may have gained from companies' associated obligations to respect their rights and priorities.²⁹

Collectively, these examples highlight the pervasive challenge that in practice, in many parts of the world, decisions with large environmental and social consequences are taken without consultation or

participation of those impacted. In all such cases where State- or industry-led objectives cloud environmental concern, or economic power out-muscles community voices, communities face a huge struggle to secure or practice their rights in line with Principle 10. These dilemmas are amplified in nations without democratic systems for participation or opportunities to hold governments to account.

Furthermore, the WRI's research shows that whilst Freedom of Information laws have been increasingly established in recent years, there is still a lot that needs to be done to improve implementation of these laws, as 'practice lags behind'.³⁰

The Way Forward

The Aarhus Convention

The success of the Aarhus Convention and its internationally recognised status should be used to inform similar regional conventions and accords. To some extent this has already taken place, with potentially important proposals being heard in the Latin American and Caribbean region, a region considered by some experts as ready to galvanise such an agreement.³¹

Although any State may sign the Aarhus Convention, it will be important for different regions to establish relevant rules and frameworks that are culturally sensitive and applicable to regional mechanisms for interpreting and applying the law, as the Southern and Latin American region is doing. Whether new regions sign the Aarhus Convention and apply contextual specifications, or design similar but distinct agreements, their work should be facilitated by the international community through advice and where necessary funding.

While the Aarhus Convention is considered a crucial and effective mechanism for the implementation of Principle 10, recent cases in Europe have shown that there is still much more for States to do to ensure their compliance at the national level, and often capacity for implementation is lacking.³² The UK now must act on the judgement of the Aarhus Compliance Committee or risk humiliation and/or further legal action. In States in which Aarhus compliance – or general State activity providing for information and participation access - is poor, the example of ClientEarth's case should be used as a model for civil society action to improve national governance, and of the importance

of States abiding international law. This may require partnership working and funding from civil society, but the UN and the international community could also encourage, and where appropriate pressure, States to comply in full.

Environmental courts

Establishing environmental courts and tribunals at the national level may help to implement and strengthen Principle 10. Access to Justice on environmental matters is a cornerstone of achieving sustainable development at all levels of decision-making and the development of national environmental courts should assist civil society with holding their governments to account on environmental and sustainable development decisions. In the absence of a broader international Treaty similar to Aarhus, the development of national environmental courts and tribunals can serve as an effective model for supporting the implementation of the principles. Furthermore, the establishment of an International Court for the Environment (ICE) could help to oversee such processes internationally, and provide a means for monitoring and applying consistency across national-level courts.

States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and development context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.

Principle 11

Introduction

Principle 11 of the 1992 Rio Declaration calls for the enactment of national and international legislation that gives effect to principles contained in the Rio Declaration itself. For example, Principle 11 is thought to give indirect endorsement of the Principle of preventative action, or the ‘precautionary approach’ as set out in Principle 15¹. Principle 11 is also a more general requirement of States to enact effective environmental legislation pursuant to their commitments under other areas of international law².

The meaning of Principle 11

Principle 11 reflects a broader objective of the Rio Declaration: to ensure the integrity of the global environment whilst protecting global economic development³. It provides that legislation should be tailored to the specific environmental and developmental context to which it applies and recognises that national and international environmental obligations and standards can restrict economic development and resource exploitation that has historically been enjoyed by developed countries.

Principle 11 recognises the need to have common environmental goals, but using mechanisms that are tailored to the development contexts of developed and developing countries. This extends to timeframes for the implementation of legislation and ultimately places greater urgency on the implementation and effectiveness of developed country actions. The Montreal Protocol, for example, successfully recognises the differing capabilities of developing countries and creates variable timeframes for implementing the Protocol’s provisions in different countries.

Of particular importance to the implementation of Principle 11, is international trade. The Rio conference recognized the contribution that an open, equitable and

non-discriminatory multilateral trading system could make to sustainable development⁴. The World Trade Organisation also recognises that standards applied by some countries may hinder trade with other countries and may prevent small and medium sized enterprises from entering the market⁵. Principle 11 also emphasises that when States seek to enact environmental legislation they should avoid standards that “*may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries*”.

Implementation

International context

Since the 1972 United Nations Conference on the Environment and Development there has been an expansion in the codification of environmental law principles in conventions, decisions of international organisations and national legislation⁶. A 2001 UNEP report estimated that over 300 Multilateral Environmental Agreements (‘MEAs’) relating to the environment have been agreed since the 1972 Conference⁷. Additional legislation has since been developed reflecting existing law or efforts to develop either international or domestic law by encouraging countries to implement certain principles and actions⁸.

Regional and national legislation

There has also been an expansion in the codification of environmental law principles in regional and national legislation⁹. For example Since 1972 the European Union has adopted some 250 pieces of environmental legislation, chiefly concerned with limiting pollution by introducing minimum standards, notably for waste management, water pollution and air pollution¹⁰. In the EU especially, but also abroad, there has been a move towards emphasising the importance of Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs) in development and regeneration proposals. The common principle of both EIA and SEA is to ensure that environmental assessment is made prior to the approval of plans, programmes and projects likely to have significant effects on the environment.

In Australia, for example, current legislation requiring EIA is rooted in 1974 guidelines drafted shortly after the UNCED. In emerging economies such as China, EIA is a mandatory requirement for all proposed

construction projects. The EU has established a mix of mandatory and discretionary procedures to assess environmental impacts¹¹. The EIA Directive (85/337/EEC)¹² was introduced in 1985 and in 2001 was expanded to include assessment of plans and programmes using SEAs¹³. The expansion of the EU EIA Directive followed the EU signature of the 1998 Aarhus Convention on access to environmental information. The amendments ensured that public consultation become a core component of environmental legislation thus reinforcing public participation in decision-making¹⁴. These are positive developments in regional and national level environmental legislation and have assisted with promoting transparency and inclusiveness in environmental decision-making.

Market mechanisms and economic incentives

There has been a complementary focus in more recent years on market-oriented mechanisms in addition to legislation and regulatory rules such as EIA and SEAs. Of particular note are the market based mechanisms pioneered by the EU Emissions Trading System (ETS). Launched in 1995, the ETS works by creating a cap in carbon emissions, and allocating tradable permits allocated to individual companies or organisations who can use or trade permits depending on whether their actual emissions exceed or remain below their allowance. The ETS now operates in 30 countries within the EU, and will expand in January 2012 to include EU and international aviation and in 2013 to include ammonia and aluminum industries. In broad terms, the ETS reflects a change in policy approach to environmental legislation, shifting away from a 'command-and-control' focus on discouraging or sanctioning negative environmental impacts. This is an encouraging trend for those promoting the development of a 'green economy' since it suggests that at least in the case of Japan, China, Germany and South Africa, there is a consensus on the need to prioritise policies that call for the integration of economic and sustainable development policies¹⁵.

Environmental legislation vs. GDP

Since 1972 an important development in environmental and economic legislation has been the increasing focus on policies that 'decouple' the traditional model of unsustainable resource depletion, environmental damage and economic development. Decoupling occurs

when the growth rate of an environmental pressure is less than that of its economic driving force (e.g. GDP) over a given period¹⁶. It thus has the potential to protect the 'right to development' by ensuring flexibility to meet sovereign objectives and priorities, promoting sustainable development and poverty alleviation, and at the same time minimising environmental damage. The OECD has made decoupling a major focus of its environmental directorate¹⁷. It is at the heart of the UNEP Green Economy Initiative, and the UNEP has recently published a Report exploring the implementation of decoupling legislation in Germany, South Africa, China and Japan¹⁸.

Principle 11 also reflects a concern, particularly amongst developing States, that environmental standards set on one country might cause unwarranted social and economic cost to others by hindering exports. The Preamble to the Marrakesh Agreement Establishing the World Trade Organization includes direct references to the objective of sustainable development and to the need to protect and preserve the environment. The 2001 Doha Ministerial declaration reaffirmed the importance of balancing the promotion of international trade with sustainable development and the protection of the environment. In paragraph 32(i) of the Declaration, the WTO's Committee on Trade and Environment (CTE) was instructed to give particular attention to *"the effect of environmental measures on market access, especially in relation to developing countries, in particular the least-developed among them, and those situations in which the elimination or reduction of trade restrictions and distortions would benefit trade, the environment and development"*. More recent analysis from the WTO¹⁹ shows the number of proposed environment-related regulations has steadily increased over the past ten years. The most frequently cited environmental objectives fall under the category of soil and water pollution abatement, energy conservation, plant and forestry conservation, consumer information, protection of plants or territory from pests or diseases.

Challenges and Conflicts

Capacity for implementation

By any measure of diplomatic and legal activity, the field of International Environmental Law has experienced remarkable growth since the 1972 UNCED. However there remain significant challenges

regarding the discrepancy between ratification of international environmental obligations and actual implementation. Environmental protection is a complicated and costly undertaking that must be maintained, revised and renewed on a continuing basis. The financial and skills-based capacity to do so is often lacking in developing countries, coupled with a lack of institutional frameworks, political commitment or longer-term investment. Absent these capacities, ecological conservation cannot succeed no matter how sincerely the government and people of a nation may seek to realise their commitments enshrined in international and national environmental legislation.

Limitations of decoupling

The rapid industrialisation and urbanisation of major emerging economies is a concern where the adverse environmental impacts are not anticipated or prevented by sustainable development policies and environmental legislation. Whilst countries recognise the need for decoupling legislation, the fulfilment of Principle 11 still depends on the effectiveness of those policies. Furthermore the effectiveness of these policies should account for resource consumption externalities, particularly those being exported to the developing world.

Trade-environment conflicts

Despite the aspirations of multilateral agreements such as the Rio Declaration to develop compatible globe-wide domestic trade and environmental legislation, there remains conflict. For example, since 1992 the Dispute Settlement Body of the WTO has dealt with a number of important cases dealing with national environmental legislation that has breached international trade laws that prevent restrictions to market access. In a 1998 case involving an import ban on shrimp and shrimp products applied by the United States to protect turtles during trawler fishing operations, the WTO-Panel concluded²⁰ that the import ban was inconsistent with certain GATT rules. The Panel stressed the importance of reaching cooperative agreements rather than creating restrictive import conditionalities.

The Way Forward

Making trade work for the environment

'Effective' environmental legislation, for the purposes of Principle 11, is legislation that achieves a balance not only with respect to state-level economic development and environmental impact (as in the case of 'decoupling' legislation), but also a balance between national and international environmental and developmental priorities²¹. This remains a significant challenge to fulfilling Principle 11 at an international legislative level and calls for compatibility between international trade and environmental institutions to achieve a coordinated global governance framework.

Reappraising GDP

The case of China's Green GDP shows that economic growth gains are often nullified by environmental impacts. So long as GDP remains an important primary and priority indicator of a country's development, progress in strengthening environmental protection will remain slow. Unless environmental indicators have the same weight as economic ones, the challenge remains.

Enacting effective environmental legislation pursuant to Principle 11 is as much a political problem as it is a technical one. The fulfilment of Principle 11 also requires the cooperation of developed countries legislatures. This is of particular relevance to the enactment of effective international legislation, not only with respect to the environment, but in particular international trade. The negotiation of international law in these areas is often stagnated by political dispute. Finding a way to negotiate around sovereign interests and trade priorities whilst tackling transboundary environmental crises remains the greatest hurdle to fulfilling Principle 11.

States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries to better address the problem of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should as far as possible be based on international consensus.

Principle 12

Introduction

Principle 12 of the Rio Declaration seeks to ensure a sustainable development dimension in the global economic system. It also highlights the importance of international economic law principles for the effective operation of the rules of international trade and environmental law.

The contact and conflict in the field of trade and the environment was a problem recognised by States prior to the 1992 Rio Declaration particularly in regard to the relationship between international free trade rules and international environmental protection laws. For example one of the key issues in a 1991 dispute between the US and Mexico (the *Tuna-Dolphin I*¹ case) was whether one country can effectively tell another what its environmental regulations should be by imposing trading standards on imports. In this case Mexico argued that import restrictions imposed by the US on tuna caught by Mexican fishing vessels – in a manner alleged by the US to be inconsistent with US dolphin conservation laws – were inconsistent with existing trade law at the time (in particular the General Agreement on Tariffs and Trade, or 'GATT'). The adjudicating GATT Panel found against the US, concluding that GATT rules did not allow one country to take trade action for the purpose of attempting to enforce its own domestic laws in another country – otherwise known as 'extra-territoriality'. The Panel's reasoning was that allowing extraterritoriality would create a virtually open-ended route for any country to apply trade restrictions unilaterally – and to do so not just to enforce its own domestic environmental laws, but to also impose its own standards on other countries. In effect, environmental regulations would be both a direct conflict with the objectives of a liberalized international market, and also a barrier to entry into the market (thereby acting as a hindrance on third world economic development).

A second dispute arose out of *Tuna-Dolphin I* case because the US also banned tuna and tuna products from Third World countries that imported tuna from other countries that did not comply with US standards. This was known as the *Tuna-Dolphin II*² case of 1992 between the EC and the US. The GATT overturned this ban as well.

The *Tuna-Dolphin* decisions were an important influence on the negotiation of Principle 12 of the Rio Declaration³: the move to include Principle 12 was led by Mexico and the EC, the plaintiffs in the *Tuna-Dolphin* cases⁴. The language of the Principle reflects the same fears underlying the *Tuna-Dolphin* decisions. Echoing the *Tuna-Dolphin* cases, Principle 12 requires that States should promote an open international economic system and should avoid *trade policy measures for environmental purposes that constitute a disguised restriction on international trade*. In particular there should be global environmental standards, reached by consensus, rather than unilateral measures.

Implementation

Judicial decisions

Principle 12 is important wherever the unilateral use of environmental limitations on trade is found and in this regard the Principle has been directly referred to and relied on in international disputes. Prior to the 1992 negotiations in Rio, the GATT acted as a dispute resolution mechanism for problems regarding trade and the environment. The *Tuna-Dolphin* cases are examples of such use of the GATT. *Post-Rio* dispute settlement occurs *inter alia* under a regime that replaced the GATT in 1994: the World Trade Organisation (WTO) dispute settlement mechanism⁵. In 1997, India, Malaysia, Pakistan and Thailand brought a joint complaint against a ban imposed by the US on importation of certain shrimp and shrimp products (the *Shrimp-Turtle*⁶ case). The protection of sea turtles was at the heart of the ban and it meant that in practice, countries seeking to export shrimp products to the US had to impose on their fishermen requirements comparable to those borne by US shrimpers if they wanted to be certified. Whilst the Appellate Body of the WTO did not find the ban itself to be unlawful, they did recognise the discriminatory manner in which it had been applied to specific countries. The Appellate concluded that the US was at fault because of its failure to negotiate multilaterally before taking unilateral action. In this case the court specifically referred to Principle 12, stating that its conclusions were consistent with the requirement set out in Principle 12 of the Rio Declaration for coordinated and mutually supportive environmental and trade policies amongst states⁷.

Other international courts have also addressed the conflict between national-level policies intended to ensure environmental protection, and international

policies intended to secure international trade liberalisation⁸. Although Principle 12 has not been directly referred to, the international judiciary have had to decide on contentious matters in such a way that indirectly implements the objectives of Principle 12. For example in the 1997 *Case Concerning the Gabčíkovo-Nagymaros Dam*⁹, Judge Christopher Weeramantry referred to the problem at the heart of Principle 12, namely that while “all peoples have the right to initiate development projects and enjoy their benefits, there is likewise a duty to ensure that those projects do not significantly damage the environment”¹⁰. He went on to say that “It is thus the correct formulation of the right to development that that right does not exist in the absolute sense, but is relative always to its tolerance by the environment. The right to development as thus refined is clearly part of modern international law. It is compendiously referred to as sustainable development.”¹¹

The judicial recognition and interpretation of Principle 12 strengthens and reinforces its meaning and clarifies its applicability to States. It has been said that Principle 12 is “[unusually,] expressed in aspirational rather than obligatory terms, suggesting a ... weaker commitment on these economic issues than developed states would have liked to see”¹². But as Judge Weeramantry observed in the *Gabčíkovo-Nagymaros* case, sustainable development “is likely to play a major role in determining important environmental disputes of the future”¹³. As it continues to be applied and interpreted in international law, we may soon see Principle 12 being elevated and strengthened beyond its original soft law status.

The World Trade Organisation

The *Tuna-Dolphin* cases enhanced the significance of the debate over the relationship between international trade and the environment because they came at the same time that States were completing the Uruguay Round of trade agreements under the GATT, which would ultimately lead to the creation of the WTO. The concern over ensuring an optimal balance between trade and environmental law, as emphasized in Principle 12, therefore directly influenced the drafting of the objectives of the WTO.

During the 1994 Uruguay Round trade negotiations in Marrakesh, ministers adopted a decision leading to the formation of the Trade and Environment Committee (CTE) under the WTO. In their agreement the ministers decided that “the avoidance of

protectionist trade measures, and the adherence to effective multilateral disciplines to ensure responsiveness of the multilateral trading system to environmental objectives set forth in Agenda 21 and the Rio Declaration, in particular Principle 12” constituted the terms of reference for the operation of the CTE. Principle 12 therefore acts as an operational guideline for the CTE,¹⁴ whose work programme covers a range of relevant issues from trade and the environment in general, liberalisation and trade barriers, and taxes; to individual sectors such as services and intellectual property, and relations with environmental organisations.

The European Union

The European Union is a free trade area and has its own institutions which have the power to set binding environmental standards on its Member States. In the past 30 years the EU has adopted a substantial and diverse range of environmental measures aimed at improving quality of life as well as the environment. These environmental standards are ‘harmonised’ across Member States and enforced by a supranational authority. Such harmonisation means that countries wishing to join the EU economic zone must meet the environment and trading standards required of all Member States. The 2000 Communication from the Commission (which outlines proposed decisions and actions by the Commission) had as its premise “that there is no inherent contradiction between economic growth and the maintenance of an acceptable level of environmental quality. So measures to integrate environmental and economic policies should simultaneously reduce pollution and improve the functioning of the economy”¹⁵.

Multilateral Environmental Agreements (MEAs)

There are examples of MEAs where a balance has successfully been struck between limiting trade and ensuring environmental protection. A well known example is the 1989 Montreal Protocol on Substances That Deplete the Ozone Layer¹⁶ which requires parties to control both consumption and production of ozone-depleting substances (ODS). A variety of trade restrictions on ODS have been employed, including voluntary industrial agreements, product labelling requirements, import licence requirements (sometimes incorporating a tradable permit system), excise taxes, quantitative restrictions on imports and total or partial

import bans¹⁷. Due to its widespread adoption and implementation it has been hailed as an example of exceptional international cooperation, and has been ratified by 196 states¹⁸.

Another example is the 1975 Convention on International Trade in Endangered Species of Wild Fauna and Flora, (CITES)¹⁹, a multilateral treaty which aimed to ensure that international trade in specimens of wild animals and plants does not threaten the survival of wild species, and accords varying degrees of protection to more than 33,000 species of animals and plants. For many years CITES has been among the conservation agreements with the largest membership, currently with 175 Parties²⁰.

Challenges and Conflicts

The importance of trade law for Third World development makes it a dominant force in international law. Its effect can be to weaken the autonomy of nations to define unilateral environmental and social policies. A key concern for the implementation of Principle 12 is that amongst trading nations a competitive advantage can be reached through reducing environmental and social standards. There is a risk of a “race to the bottom” in order to attract international trade.

Furthermore, by not being able to limit imports based on environmental standards, countries have little trade leverage to promote better environmental practices. Only if a specific MEA, such as CITES, is in place are import restrictions permissible.

The provision in Principle 12 to rely on multilateral agreements reached by consensus burdens countries with the need to invest significant periods of time and political capital into international trade agreements. Bilateral or unilateral measures would be far quicker and potentially better tailored to the specific concerns of the Parties involved. Reaching multilateral agreement by consensus is particularly difficult where issues of trade and development are involved. Whilst the Rio Declaration itself is a successful example of agreement by consensus²¹ there have been few subsequent examples of MEAs achieved with the same political agreement – the Climate Change negotiations being the most recent example of political stalemate in negotiating an MEA text on an environmentally urgent matter. The Doha Round of WTO trade negotiations is another relevant process which continues to receive significant criticism for its lack of progress.

Thus while Principle 12 more or less successfully achieves the prohibition of unilateral trade measures, particularly if they are discriminatory or result in extra-territoriality, there remain sufficient hurdles to achieving a cooperative, ‘green’ international economy. Principle 12 has been less successful in ensuring that the environmental measures that it discourages or removes at the unilateral level, are otherwise secured through a multilateral process. Beyond environmental measures, the ongoing interpretation and implementation of Principle 12 requires a wider and deeper appreciation of the compatibility of economic growth and trade with sustainable development. Other than the increasing international debate over such subjects as the green economy and ‘prosperity without growth’,²² this dilemma continues to pervade debate and agreement over sustainable development, and poses a clear barrier to the success of Principle 12.

The Way Forward

The fulfilment of Principle 12 will be achieved principally through the continued judicial interpretation and application of the Principle coupled with agreement, implementation, coordination and strengthening of current international law. To a large extent these discussions will overlap with those regarding reformed international environmental governance. For example, a major reform proposal would be to set up a World Environmental Organization (WEO) to counterbalance the World Trade Organization (WTO) in the manner that national environmental protection agencies balance departments of finance and commerce. Another approach is to establish an International Court for the Environment (ICE) dedicated to the interpretation, application and enforcement of MEA principles and articles (see Section on Principle 19 for further discussion on ICE).

To address the concerns over the compatibility of growth and trade with sustainable development, the way forward on Principle 12 must be taken in the context of the way forward on Principle 8. Furthermore, multilateral – or even bilateral - consensus must be reached in WTO negotiations on issues critical for sustainable consumption and production, such as trade-related aspects of intellectual property rights (TRIPS) and public procurement (especially for States that have ratified the Government Procurement Agreement (GPA)).

Finally, reference should also be made to the suggestions of Sections on transboundary environmental governance relating to Principles 18 and 19.

States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage.

States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

Principle 13

Introduction

Since 1992 there have been numerous cases of severe environmental damage affecting individual, transboundary and global territory, with serious consequences for ecosystem services and human health. Such situations raise questions of responsibility for environmental harm. Specifically, who should pay for the costs of restoration of the damaged environment ('clean-up') and for compensation to victims; and what should be acceptable levels and standards for clean-up and compensation.

The purpose of liability is: preventive, in that it acts as an incentive economic instrument and encourages compliance with environmental obligations; corrective, in that it may prescribe restoration of the degraded or polluted environment; absorptive, in that it seeks to internalise environmental and other social costs into production activity; punitive, in that it imposes sanctions against wrongful conduct; and compensatory, in that it can force polluters to pay for repairs and/or compensation to persons, states or organisations¹.

Implementation

Numerous multilateral agreements have been developed around the issue of liability and compensation for environmental damage. They are briefly outlined here:

1. State liability (Liability of a state under rules of international law):

1982 United Nations Convention on the Law of the Sea (UNCLOS)² (Articles 139 (the Area) and 235) in force since 16th November 1994.

Article 139 states that damage caused by the failure of a State Party or international organisation to carry out its responsibilities under the Act (preservation of the common heritage of mankind) shall entail liability.

2005 Liability Arising from Environmental Emergencies in the Antarctic³ (Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty) - not in force.

Article 16 of the Protocol provides for the Parties to "elaborate rules and procedures relating to liability for damage arising from activities taking place in the Antarctic Treaty area and covered by this Protocol". Annex VI deals with "environmental emergencies related to scientific research programmes, tourism and all other governmental and non-governmental activities in the Antarctic Treaty area for which advance notice is required under Article VII(5) of the Antarctic Treaty". The operators of such activities will be required to undertake reasonable preventative measures and to establish contingency plans for responses to incidents with potential adverse impacts on the Antarctic environment. In case of environmental emergencies, operators will be required to take prompt and effective response action; if they don't they will be liable for its cost.

2. Civil liability (liability of a person under rules of national law adopted pursuant to international treaty obligations):

1992 IMO Convention on Civil Liability for Oil Pollution Damage⁴ (replaced the 1969 Convention) in force since 30th May 1996.

The Convention was adopted "to ensure that adequate compensation is available to persons who suffer oil pollution damage resulting from maritime casualties involving oil-carrying ships."

1999 Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal⁵. Not in force.

The Protocol provides a comprehensive regime for liability and adequate and prompt compensation for damage resulting from the transboundary movement of hazardous wastes and other wastes and their disposal including illegal traffic in those wastes. Liability under the Protocol's strict liability regime must be covered by insurance, bond or other financial guarantees. In addition to this strict liability regime, the Protocol imposes objective fault liability on any person that caused the damage by non-compliance with the Convention or by negligence⁶.

1993 Council of Europe Lugano Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment.
Not in force

The Lugano Convention provides for a strict liability regime with respect to dangerous activities causing environmental and traditional damage⁷. The Convention is also aimed at ensuring adequate compensation for the costs of preventative measures and damage resulting from activities dangerous to the environment, and providing for means of prevention and reinstatement⁸ Damage awards for environmental impairment must actually be used for reinstatement or restoration of the environment. Although the Convention is not directly binding,⁹ once it becomes effective¹⁰ Parties will be required to transpose it to national law, and any other country is free to adopt a national law implementing its provisions. The Convention explicitly covers cross-border environmental damage in Art 3(a).¹¹

2001 IMO International Convention on Civil Liability for Bunker Oil Pollution Damage¹².
In force since 21 November 2008.

The Convention provides for international rules and procedures for determining questions of liability and providing adequate, prompt and effective compensation in cases of damage caused by pollution resulting from the escape or discharge of bunker oil from ships.

2003 UNECE Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters¹³.
Not in force.

The Protocol provides for a comprehensive regime for civil liability and for adequate and prompt compensation for damage caused by the transboundary effects of industrial accidents on transboundary waters.

2010 Protocol to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea of 1996 (HNS Convention).
Replaced the 2002 Protocol. Not in force.

The 2010 HNS Convention covers any damage caused by HNS in the territory or territorial sea of a State Party

to the Convention. It also covers pollution damage in the exclusive economic zone, or equivalent area, of a State Party and damage (other than pollution damage) caused by HNS carried on board ships registered in, or entitled to fly, the flag of a State Party outside the territory or territorial sea of any State. The costs of preventive measures, i.e. measures to prevent or minimize damage, are also covered wherever taken. The registered owner of the ship in question is strictly liable to pay compensation following an incident involving HNS.

3. Administrative liability

2004 EU Directive on Environmental Liability with regard to the prevention and remedying of environmental damage.
In force since 30 April 2004. Transposition 30 April 2007.

The objectives of the Directive include the application of the “polluter pays” principle, and it establishes a common framework for liability with a view to preventing and remedying damage to animals, plants, natural habitats and water resources, and damage affecting the land. The liability scheme applies to certain specified occupational activities and to other activities in cases where the operator is at fault or negligent. The public authorities are also responsible for ensuring that the operators responsible take or finance the necessary preventive or remedial measures themselves.

2010 Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety.
Not in force.

The Supplementary Protocol provides for international rules and procedures on liability and redress for damage to biodiversity resulting from living modified organisms (LMOs)¹⁴. It was hailed as an important step towards the implementation of Principle 13 of the Rio Declaration on liability and compensation for environmental damage.¹⁵

Case study – BP Deepwater Horizon explosion, 2010

The 2010 'Deepwater Horizon' explosion and oil spill was declared by President Obama as 'the worst environmental disaster in U.S. history'.¹⁶ Levels of public and institutional anger at the events and subsequent actions were high and facilitated by unprecedented media coverage. Liability was assumed and high levels of compensation and clean-up costs paid out, but the process and underlying framework for liability has received strong criticism for the deficiencies and complications of current liability structures, damages limits, and ineffective regulatory efforts.¹⁷

BP announced it would take full responsibility for managing the oil spill and clean-up, committing to paying 'legitimate' claims for damage. However, the determination of liability for the accident was complicated as BP only owns a 65% stake in the oil well,¹⁸ with stakes and leasing contracts on various components of the well, its operating components and safety procedures held by various other contractors, firms and oil companies.

The Obama administration created the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling to address the spill, replacing the regulator at the time. Throughout 2010 the Commission issued reports criticising the Administration's handling of the spill and in 2011, the Commission's final report detailed a series of proposed reforms, including revamping the agencies that regulate deepwater drilling.¹⁹ Various other reports and investigations have criticised the over-complicated legal framework, and BP and the other firms involved for failing to take responsibility for the accident; and have recommended that stronger safety regulations might have reduced the likelihood or impact of the accident.

Currently in the US, liability of oil companies for accidentally-generated damages is capped at 75 million dollars. Once this has been reached, victims (companies and individuals) can apply to a reserve fund supported by a tax on oil companies, however the total cost here cannot exceed one billion dollars. A number of senators believe these limits to be too low and have proposed a bill to significantly raise them, the former to a significantly higher level of 10 billion dollars. Should such legislation be passed this would significantly raise future potential levels of compensation. Furthermore, experts note that had the spill had been generated by a medium-sized or even large firm, rather than the giant BP, consequences could have been far worse for an inability to pay compensation.²⁰

Compensation and fines paid by BP and the related companies

In June 2010, upon request by the US administration, BP agreed to create a 20 billion dollar claims fund, the Gulf Coast Claims Facility (GCCF), which will be established over a number of years. By February 2011, 492,765 compensation claims had been filed with the GCCF, which had already settled 169,553 claims for a total of 3.8 billion dollars (on top of 127,000 claims previously settled by BP itself for a total of 400 million dollars). BP had also announced in October 2010 that it had spent over 11.2 billion dollars on repairing the damages caused by the oil spill, and around 1.1 billion dollars in compensation to the different States affected by the spill. No claims to the GCCF have been denied to date.²¹

In December 2010, the US Government announced that it was suing BP and the other companies involved in the accident, to establish their civil liability. Between April and November 2010, BP and the other responsible parties (Transocean, MOEX and Andarko) were issued with eight bills by the US Government for a total of 606.4 million dollars to cover the costs of response operations.²²

Challenges and Conflicts

Developing law around the concept of liability for environmental damage is highly complex. Despite the array of legislation, as illustrated above, relatively few claims are made for environmental injuries because these cases are difficult to win. This is because they involve a number of technical hurdles; for example, problems of latency periods, abridged evidence of exposure and probabilistic evidence of causation²³ and the fact that historic environmental malpractice was often conducted in accordance with the effective legislation at the time²⁴. These complexities mean that despite the range of legislative tools to deal with

compensation for environmental damage, it can often be very difficult to attribute or prove causation or liability. The provisions in legal instruments themselves are often too vague or contain exemptions that prevent successful cases being brought.

The concept and process of assigning liability and appropriate definitions for environmental, social and economic damage is a critical and significant challenge in itself; even before appropriate levels of clean-up and compensation are set. The extent to which ecosystem services are degraded, the threshold at which degradation becomes unacceptable, and an economic valuation of the public goods degraded are all major challenges which

experts argue have never been addressed appropriately. An examination of the challenges of valuing ecosystem services and internalising environmental costs can be found in the section on Principle 16. These conceptual challenges are made more difficult by the process of assigning liability – often the complex environmental and industrial systems and processes underlying a disaster, for example, make it hard to assign responsibility; and States face a challenge in confronting “big business” due to their economic power and a lack of transparency in accounting and reporting procedures.

Whilst the modern understanding of State sovereignty is not at odds with the prevention of transboundary harm²⁵, international law lacks the maturity to be able to sanction States in violation of their duties as members of a global community: many of the examples of liability legislation are not in force and have not been in force for many years. This means that in the absence of domestic implementing legislation, States or individuals (in the case of civil and administrative liability regimes) are not bound by the provisions of the agreement.

A combination of these challenges means that international law has not fully encompassed the provisions of Principle 13, and nor have States acted in an ‘expeditious and more determined manner’ to challenge this. As an example of slow progress, 18 years on from Rio the 2010 Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety was praised for being a ‘unique contribution to Principle 13 implementation’ since it offers the ‘first internationally agreed definition of environmental damage’.²⁶

The Way Forward

In order to deal with the wide, complex types of environmental harm, civil liability rules should be clear and sufficiently predictable so that parties are able to adjust their behaviour accordingly and the desired results are achieved in all categories of cases²⁷. Definitions of harm should take into account the full extent of potentially degraded ecosystem services, over the short- and long term. This must include such impacts as land use change and availability, human health effects and economic prejudice, for example, as well as the direct impacts on the climate and immediate ecosystems and habitats. Consideration must be paid to transboundary and global impacts, and taken within the context of Principles 15, 16, 17, 18 and 19, particularly.

The environmental liability and compensation regime is fragmented and poorly effective.

An environmental regulatory framework is needed which is designed to effectively coordinate legislation, ensure its entry into force and its compliance with provisions of the global community.

National law could be enabled to allow for transboundary access to justice and public interest litigation in environmental cases, and the opening of national courts for use by foreign plaintiffs seeking redress against corporations. The US courts’ use of the Alien Tort Claims Act²⁸ is an example of such a process.

While an effective liability and compensation regime is called for by Principle 13, it is important to recognise that preventative measures are more important than punitive. Whilst Principle 13 encourages States to focus on punishing environmental crimes, the prevention of such crimes must be paramount. Assigning greater, clearer liability for potential environmental (and wider) damage should act as a deterrent, but this needs to be reinforced by strong, clear regulation at the national level, backed up by international law. As discussed in the section on Principle 19, an International Court for the Environment (ICE) could assess, apply and enforce liability in an independent, universal manner.

States should effectively cooperate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe environmental degradation or are found to be harmful to human health.

Principle 14

Introduction

The objective of Principle 14 is to prevent the dumping of hazardous substances and the relocation of hazardous operations in- and to developing (though potentially developed) nations. The Principle was re-emphasised in paragraph 22 of the Plan of Implementation approved at the World Summit on Sustainable Development (Johannesburg Summit) in 2002, which stressed the urgency of developing sustainable production and consumption patterns that will “prevent and minimize waste and maximize reuse, recycling and use of environmentally friendly alternative materials.”

Incentives such as reduced labour- and operational costs, and weaker regulation or enforcement, encourage the relocation of industrial production to the developing world and encourage – or even permit – activities which degrade the environment and harm human health. This includes the exporting of waste (e.g. chemical and electrical) for disposal, and the dumping of hazardous substances in production activities.

Implementation

Multilateral agreements

Several multilateral agreements exist to regulate and prohibit the transfer of hazardous substances and activities, with the examples below the most pertinent.

The Basel Convention

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (the Basel Convention),¹ is a self-explanatory international treaty with a specific focus on preventing the transfer of hazardous waste from developed to less developed countries (LDCs). The Convention entered into force in May 1992, currently has 172 signatory Parties, and is the most comprehensive global environmental agreement

on hazardous and other wastes.² Notably, the US signed but is yet to ratify the Convention.

The Convention's Annex III classifies hazardous waste under explosive, flammable, toxic, or corrosive categories. Waste will also fall under the scope of the Convention if it is defined or considered as hazardous under the laws of the exporting- or importing State, or of those affected by its transit.

Echoing the objective of Principle 14, the Basel Convention requires States to take “all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes”³. It also imposes an obligation on States to manage their own production of hazardous substances “in an environmentally sound manner” and ensure that such substances are “not under any circumstances...transferred to the States of import or transit.”⁴ Stringent requirements are also prescribed for notice, consent and tracking movement of wastes across national boundaries. Article 4 paragraphs 1(a) and (b) state that Parties to the Basel Convention exercise the right to prohibit the import of hazardous wastes; and Article 4, paragraph 1(b) also states that Parties shall prohibit the export of hazardous wastes to Parties which have prohibited such import.

The Convention continues to be updated, for example in 2004 when, in cooperation with the International Labour Organisation and the International Maritime Organisation (IMO), the Parties affirmed that dismantling ships and dumping their hazardous and harmful components would constitute an illegal practice under the Convention.

Bamako Convention on the Ban of the Import Into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa

'The Bamako Convention' was negotiated by the Organisation of African Unity (now the African Union) in 1991, and came into force in 1998. It was considered necessary due to the failure of the Basel Convention to prevent the illegal entry of hazardous substances into Africa, following a number of cases. Parties – 23 African nations -agree to enact legislation identifying and categorising hazardous wastes not already listed in the Convention (Art. 3); enforce bans on imports and dumping of hazardous wastes at sea and internal waters

(Art. 4); establish monitoring and regulatory authorities on transboundary movement of hazardous wastes (Arts. 5, 6, 7, 8 and 9); and share information and ideas (Art. 13).⁵

The POPs Convention

The Stockholm Convention on Persistent Organic Pollutants (POPs) entered into force in 2004 to protect human health and the environment from chemicals that persist in the environment for long periods; become widely distributed geographically; accumulate in human and wildlife body tissue;⁶ and have adverse effects on human health or the environment. The preamble to the Convention recalls the “pertinent provisions of the Rio Declaration”, and is of particular relevance to Principle 14 as huge stockpiles of pesticides containing POPs exist in developing countries such as Africa, having been dumped by multinational corporations (MNCs).⁷ The Convention contributes towards the implementation of Principle 14 by seeking to eliminate or restrict production and use of POPs and mandating that stockpiles be managed and disposed of in a safe, efficient, and environmentally sound manner.

EU regulation

A number of experts and commentators consider that the EU has an international influence on hazardous waste management policy and practice, and in some instances report the direct ‘copying’ of EU legislation or aspects of it into developing nation legislation.⁸

Not without its own problems, hazardous waste in the EU-27 (plus Croatia, Norway and Switzerland) increased by 15% between 1997 and 2006; reported illegal shipments increased between 2001 and 2005, equivalent to 0.2% of notified waste; and in 2003, two thirds of illegal shipments were related to hazardous or problematic waste mainly within the EU.⁹

In general, the EU takes a supply-side approach to reducing the production of hazardous waste, and placing the burden of disposal responsibility on producers. Examples of EU Directives reported to have had positive effects on waste prevention and health include the:

- Waste Electrical and Electronic Equipment (WEEE) Directive;
- Restriction of Hazardous Substances (RoHS) Directive;
- End of Life Vehicles (ELV) Directive; and
- Eco-design Directive.

For example, research suggests that restrictions on hazardous substances in the WEEE and ELV Directives have reduced health risks, and that the RoHS Directive has helped to prevent up to 89,800 tonnes of lead, 4,300 tonnes of cadmium, 537 tonnes of hexavalent chromium and 22 tonnes of mercury from entering the WEEE waste stream.¹⁰ However, research also suggests that the WEEE, ELV and Eco-Design Directives are leading to improvements in recycling and re-use but not necessarily prevention, so more work is required.¹¹

Increasingly, the EU’s supply-side legislation appears to be taken as a model or inspiration for legislation in wider nations, for example:

China’s 2009 Regulation for the Administration of the Discovery and Disposal of WEEE products created a state-managed fund for the recycling/recovery/safe disposal of WEEE. Manufacturers and importers of WEEE must contribute to the fund, and manufacturers are called on to design their products to facilitate reuse/recycling. China also has its own RoHS legislation, which obliges producers to label EEE products that include hazardous substances. Given the timing and the approaches of this Chinese legislation, experts have assumed that the EU WEEE/RoHS Directives played a certain role in its design.¹²

India recently presented a draft for a new law on WEEE (formerly covered under general hazardous waste law) aiming for all Indian recyclers to be registered and authorized by law to ensure safe operations. The draft also covers the reduction of the use of hazardous substances, reportedly with similar scope to EU WEEE/RoHS (e.g. it includes EU categories 8 and 9 on medical devices and monitoring and control instruments; although further clarity is required), and manufacturers and importers will need to provide detailed written documentation on compliance.¹³

The US is generally considered to fall behind other countries’ standards on hazardous waste, favouring market approaches over regulation. For example, there is currently no federal electronics recycling program or law, although as of October 2009 there were laws in 19 states, with rules pending in a further 14.¹⁴ The majority of states that have enacted legislation have used the producer-responsibility model, similar to the framework established by the EU WEEE Directive.^{15,16} A recent proposal, introduced in the House of Representatives in June 2011, has

been the 'Responsible Electronic Recycling Act'¹⁷. The Act would create a new category of restricted electronic waste and prevent US companies from exporting and dumping dangerous electrical waste in developing countries.

NGO pressure, public awareness and corporate action

Public education is important to promoting consumer awareness and incentivising sustainable consumption and production and sustainable waste management. Public and NGO pressure can also increase accountability and transparency of corporations' waste management, and corporate investment in innovation on the production and recycling of hazardous substances can in itself provide economic advantages for companies and States. For example:

Pressure campaigns have forced companies to change their habits on hazardous waste — the 2011 Greenpeace 'Detox' campaign, which publicised the discharge of toxic substances into river basins surrounding Chinese factories for sportswear production, resulted in the commitments of major global sportswear brands to remove all hazardous chemicals from their entire supply chains and product life-cycles (e.g. Nike by 2020)¹⁸

In 2010 the Bulgarian company Nadin Jse created 150 jobs by opening a specialist facility for recycling old electric appliances and equipment, the largest and most modern of its kind in Eastern Europe.¹⁹

Challenges and Conflicts

Despite such abundant international and regional legislation, the dumping of hazardous substances in developing States persists, including through industrial and manufacturing processes; and in the exporting and disposal of waste.

By their very nature, illegal hazardous waste shipments are difficult to track reliably, and data is severely lacking. Furthermore, anecdotal evidence suggests that hazardous waste and activities, notably WEEE and ship dismantling, are often processed in developing nations under conditions that are both environmentally unsound and hazardous to workers.²⁰ Box 1 lists some examples to highlight the variety of activities and locations in which such challenges take place.

Box 1: Examples of poor, or illegal, waste disposal

In 2002, ten years on from the Rio Declaration, a river water sample from the Lianjian river near a Chinese "recycling village" revealed lead levels 2400 times higher than WHO Drinking Water Guidelines,²¹ with lead levels in sediment samples 212 times higher than that which would be treated as hazardous waste had it been dredged from the Rhine in the Netherlands.²²

In 2004 70% of electronic waste collected at recycling units in New Delhi (India) were exported or dumped by developed countries.²³

In 2006 high levels of toxic wastewater were dumped in and around Abidjan, Ivory Coast by the Probo Koala ship, chartered by an international oil trader in the Netherlands. The incident was responsible for 8 deaths, with over 85,000 local residents seeking medical attention.²⁴

In 2008 it was estimated that approximately 80% of electronic waste directed to recycling in the US is not recycled in the US but sent by container ship to countries such as China.²⁵ The US is not bound by the Basel Convention as it is yet to ratify the agreement.

In late-2010 the UK Environment Agency sent eleven people and four companies, in an organised ring, to court to face charges of illegal export of electrical waste to developing nations. Charges are faced under the Transfrontier Shipment of Waste Regulations 2007, and the European Waste Shipment Regulations 2006.²⁶

Despite legislative action such as the UK Environment agency example above, significant challenges are faced in enforcing current legislation, particularly in developing nations. Developed nations' monitoring and enforcement of legislation over illegal shipments is clearly lacking; as is developing nations' of its imports. The international community could do more to prevent the shipment of hazardous waste, its processing in developing nations, and the practices of polluting MNCs in developing nations. Existing legislation seems sufficient in quantity and coverage, but is not reinforced by action.

The GATT/WTO framework is designed to work alongside multilateral agreements and international legislation, and it allows countries to restrict imports if they pose a danger to human, animal or plant health. Implicitly, this concerns dangers posed to the importing country and should in theory allow a developing country to ban the import of hazardous substances. However, such bans are

often poorly enforced, imports may be disguised, or the economic and political advantages to developing nations of importing waste is considered to outweigh health and environmental considerations.

The GATT/WTO also places restrictions on the import of goods produced by slave or prison labour, but does not extend this principle to goods produced in hazardous environmental conditions.

Box 2: EU waste shipment inspections

The EU is noted above as a positive model for wider international policy and practice. However, even positive, developed regions still face significant challenges in legislative enforcement, as shown by weaknesses in the EU's inspection regime for waste shipment exports.

The EU Waste Shipment Regulation presents many challenges for the Member States and implementation in some cases is poor, resulting in illegal waste creating health and environmental problems in areas such as West Africa and China. A 2009 report by the Institute for European Environmental Policy notes that in most Member States a number of authorities (environmental inspectorates, Customs, police, etc.) are involved in inspections at national, regional and local level, which creates cooperation barriers. Furthermore, the capacity of inspectorates responsible for the Regulation varies, with a number indicating that capacity is well below requirements. Processes for inspection vary by location, and some show poor levels of activity.²⁷

The Way Forward

Strengthening and enforcing existing international law

The international environmental law framework is saturated with legislation. There is little need to introduce further black letter law. However, existing law must be strengthened and enforced. A starting point should be to ensure that all Parties to the existing Conventions ratify their provisions. As a major example, the US must implement domestic legislation in order to ratify the Basel Convention. The EU, as an apparent standard bearer in this field, should continue to encourage enforcement measures undertaken by Member States.

Due to the particular deficiency in shipping data and difficulties in enforcing import-export rules, better application and enforcement of law should be focused in this area. The results of a recent consultation on the

future of the EU's Waste Shipment Regulation could be used to inform this debate.²⁸ One suggested approach is to develop a method of making a clear distinction between new and second-hand goods, which would assist in facilitating the control and monitoring of volumes of illegal shipments.²⁹

Strengthening and enforcing national-level law

The development of national law, coupled with strong enforcement and ambitious standards in developed countries, is also key to implementing Principle 14.

Empowering developing countries

It will be crucial to empower and build local capacity in developing countries, particularly in Africa, to strengthen their import legislation and enforcement, above all. New laws and Conventions are not required, but these States must be able to prevent the import of illegal hazardous waste should it arrive from developed nations. Principle 14 was introduced by the African nations at the Rio conference, and they were the primary barrier to developed nation attempts to weaken the provisions of the Basel Convention. Multilateral discussions must ensure the continued empowerment and leadership of Africa.

Although the EU has provided and influenced examples of good practice, experts have expressed concerns that the EU has limited potential (if any) to influence economic cycles, but that it could attempt to influence developing nation policy in other ways, such as promoting voluntary producer schemes, or banning certain materials from going to landfill (whilst taking the complexity of material flows and end-markets into account). Some experts also feel that standards or practices developed internationally at the UN level, rather than by the EU, may be a more effective driver.³⁰

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Principle 15

Introduction

*Principle 15, or “the Precautionary Principle”, has been included in almost all recent treaties and policy documents relating to the protection and preservation of the environment, and it is widely accepted that ‘the Precautionary Principle has become intrinsic to international environmental policy’.*²

The Precautionary Principle is well incorporated in UN discourse, as well as national and local policies relating to environmental protection and sustainable development. It is intended to be a key component of environmental decision-making practice at all levels. The approach found its way into international discussions and statute books in the mid 1980s, somewhat later than the ‘preventative approach’, which has been apparent in environmental treaties since the 1930s.³ The principle can also be seen to have existed in domestic law prior to the Rio conference, for example in Germany where the principle of *Vorsorgeprinzip* encouraged policy makers to take a precautionary approach when enacting legislation relating to clean air.⁴ Another German proposal, to the 1987 International North Sea Ministerial Conference, to recognise such an approach or principle, is now often regarded as the introduction of the concept to the international stage.⁵

Crucially, the principle places the burden of proof on decision makers such that responsibility falls on the decision-maker to show that a decision will not result in harm to the environment. Prior to this the approach had been for those objecting to a decision to show how damage would be caused by the activity or process in question. This marks a significant shift in the public policy approach to environmental decision-making and has paved the way for the development of understanding and qualifying the reasons for environmental protection.

Implementation

Conventions and instruments

One of the first international treaties to refer to ‘precautionary measures’ is the Vienna Convention for the Protection of the Ozone Layer (1985)⁶. This was soon

followed by the Montreal Protocol (1987) where State Parties explicitly agree to ‘protect the ozone layer by taking precautionary measures to control equitably total global emissions of substances that deplete it.’⁷

Other prominent examples of the Precautionary Principle in international law include the UNFCCC, the CBD, the UN Conference on straddling fish stocks and high migratory fish stocks, the Maastricht Treaty on European Union, the Ministerial Declaration on the Protection of the Black Sea (Black Sea Declaration), the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Baltic Sea Convention), the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR), the Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (Bamako Convention).⁸

Stemming directly from the UNCED in 1992, both the CBD and the UNFCCC directly refer to or echo the language of Principle 15:

- The CBD Preamble states:

“Where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be a reason for postponing measures to avoid or minimize such a threat.”

- The UNFCCC, at Article 3(3) provides that:

*“[t]he parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse affects. Where there are threats of serious or irreversible damage, lack of full scientific research shall not be used as a reason for postponing such measures, taking into account the policies and measures to deal with climate change should be cost effective so as to ensure global benefits at the lowest possible cost...”*⁹

More recently, the 2000 **Cartagena Protocol on Biosafety** directly applies Principle 15 by affirming:

*“In accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms...”*⁹

Regional and National Implementation

Box 1: Examples of implementation of the precautionary principle from developing world regions

Examples from Latin America¹⁰

- In Ecuador, the precautionary principle is incorporated in law on the conservation and sustainable development of the Galapagos Islands (Ley Especial para la Provincia de Galapagos (2002)), as well as proposed legislation on invasive alien species.
- In Argentina, precaution is incorporated as a principle of general environmental law (Ley General del ambiente Ley Nacional), as guidance to the application and interpretation of the law.
- In 2001 Peru developed a National Strategy for Biological Diversity and supporting regulations for implementing the Forest and Wildlife Law (also of 2001), incorporating the precautionary principle as a guiding principle.
- In Costa Rica, the precautionary principle is incorporated into the 1998 biodiversity law (Ley de Biodiversidad, Article ¹¹(2)), and has been relied on in a case relating to sea turtle conservation in the Constitutional Court.¹¹

Examples from Asia

- The Pakistan Supreme Court has recognised and upheld the precautionary principle, viewing it as an integral component of sustainable development.¹²
- The Supreme Court of India has held that the precautionary principle 'is a norm of customary international and national law'.¹³
- Malaysia's National Biodiversity Policy (1998) makes explicit reference to the CBD and other principles however there is no explicit reference to the precautionary principle.

Examples from Africa

- Mozambique has environmental legislation (1997) stating that 'environmental management activities should be undertaken so as to avoid significant or irreversible negative environmental impacts, independently of the existence of scientific certainty concerning the occurrence of these impacts' (Article 4).¹⁴ Mozambique also has a law on forest and wildlife activities (1999) that also adopts "prevention and prudence" measures.¹⁵
- Cameroon has general environmental law (1996) that incorporates the precautionary principle as a guiding principle for management of the environment and natural resources.¹⁶
- South Africa's National Environmental Management Act (1998) provides that sustainable development includes the consideration that, *inter alia*, "a risk averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions" (Article 4(a)(vii)).

Case law

Box 1 provides a number of examples to illustrate how Principle 15 – or specifically the precautionary principle – has been incorporated into various national laws and agreements. They offer a demonstration of the importance that States place on the precautionary approach and serve as a useful basis upon which the principle can expand and develop into other areas of international relations and national processes. One such mechanism of invoking the principle is through States bringing cases in international fora for it to be applied, or otherwise, in judgements; examples of which, follow.

International Tribunal for the Law of the Sea

This international Tribunal was presented with arguments from Australia and New Zealand requesting that the Tribunal order 'that the Parties act consistently with the precautionary principle in fishing for Southern Bluefin

*Tuna pending a final settlement of the dispute*¹⁷ In the Order that was handed down, the Tribunal declared that parties should 'act with prudence and caution to ensure that effective conservation measures are taken to prevent serious harm to the stock of southern bluefin tuna'¹⁸.

The World Trade Organisation (WTO) Appellate Body

The WTO Appellate Body was established in 1995 to hear appeals in disputes brought by WTO Members, and has heard the Principle argued in such disputes. Disputes such as these are a critical factor in the implementation of Principle 15 for they serve to define the extent and relevance of 'precaution', and are often criticised for failing to uphold the principle adequately. For example:

In the *Beef Hormones Case* the European Commission argued that it was justified in refusing to import beef produced in the United States and Canada that contained

artificial hormones, relying on the precautionary principle because (it argued) the effects on human health of such hormones were uncertain. To support this argument the EC stated that the precautionary principle was 'a general customary rule of international law or at least a general principle of law.' In response, the United States denied that the principle was not one of 'customary international law', but rather an 'approach' that was flexible in its application according to context.¹⁹ The Appellate Body agreed with the US, although it recognised that the subject of the weight of the Principle in international law was a matter of continuous debate.

The US, subsequently joined by Canada and Argentina, brought a dispute against the European Union's regulatory regime for agricultural biotechnology, arguing that it violated WTO rules.²⁰ The EU argued that under the UN's Cartagena Protocol on Biosafety its regime followed the precautionary principle with respect to genetically engineered (GE) crops. The Appellate Body held that - notwithstanding the fact that at the time over 130 States were signatories to the ratified Protocol, including the EU - since the US was not a signatory the EU could not rely on a 'Protocol-based defence.' This outcome was widely criticised by many interest groups for not paying due attention to the precautionary principle.²¹

National courts

Sri Lanka

In 2001 Sri Lanka implemented an outright ban on GE crops, however in the face of threats to impose restrictions on Sri Lankan tea imports from the US, the ban was lifted.²² In similar fashion to the example above, the US has continued to threaten WTO action against those countries over GE crop policies, indicating that the precautionary principle in relation to the uncertainty surrounding genetic engineering does not have strong application when involved in trade disputes.²³

Indian Supreme Court

In the Supreme Court of India a case was brought concerning pollution caused by tanneries. Among other measures, the court ordered that an authority be established by the Government under the Environment Protection Act to deal with such cases of pollution. The case, *Vellore Citizens' Welfare Forum v. Union of India* (1996), gave the Supreme Court the opportunity to discuss the precautionary principle, which it did by

stating that the Honourable Judges were 'of the view' that the principle is 'an essential feature of sustainable development' and elaborated on this point by offering three essential components of the principle in the context of municipal law:²⁴

(i) Environmental measures - by the State Government and the statutory authorities - must anticipate, prevent and attack the causes of environmental degradation.

(ii) Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

(iii) The "Onus of proof is on the actor or the developer/ industrialist to show that his action is environmentally benign."

More recent developments in the courts have further cemented the principle in Indian law and in the Narmada case the court explained that: "*When there is a state of uncertainty due to the lack of data or material about the extent of damage or pollution likely to be caused, then, in order to maintain the ecology balance, the burden of proof that said balance will be maintained must necessarily be on the industry or the unit which is likely to cause pollution.*"



Case study – civil society and the precautionary principle

The Wingspread Conference

In 1998 a conference convened academics, scientists, lawyers and policy makers to define the Precautionary Principle in relation to public health and environmental issues.²⁵ This conference sought to not only establish an agreed definition of the Principle, but also to raise awareness of the inadequacies of environmental and other policies that did not reflect the principle. The conference reiterated the need to shift policy making away from the traditional 'clean up and control' towards a more proactive approach to preventing damage occurring, taking due precaution even in the face of scientific uncertainty. Furthermore, the conference recognised that the policies of the time (and arguably the same is true today), such as cost benefit analyses and risk assessments 'gave the benefit of the doubt' to those new technologies and products which could later prove to be environmentally harmful and damaging, stating:²⁶

"We believe existing environmental regulations and other decisions, particularly those based on risk assessment, have failed to protect adequately human health and the environment - the larger system of which humans are but a part."

Continuing:

"Therefore, it is necessary to implement the Precautionary Principle: When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof."

Challenges and Conflicts

'The overriding challenge for the international community lies in how to attain truly precautionary environmental policies;²⁷ including developing and enhancing clear multilateral, regional and national approaches as well as specific instruments and measures which will foster precautionary policies.²⁸ Significant contention still surrounds the definition and interpretation of the principle and its lack of guidance on implementation, hampering its effectiveness at the national level.²⁹ It is often unclear to States and wider actors how much precaution should be taken, and even why or when precaution should be taken. Furthermore, by stating that the precautionary approach shall be widely applied by States 'according to their capabilities', the wording of Principle 15 opens further, significant ambiguity over the extent to which States

are obliged to undertake the approach. Such wording can potentially allow States to evade responsibility by claiming a lack of capability, or at best may provide further reason for dispute. The precautionary approach relies on the proponent of the activity proving that harm will not occur,³⁰ which in itself implies a level of trust that all action to prevent harm has been undertaken and has also been accounted for in reporting the proof.

Debate over the impetus, necessity and extent of the precautionary principle is often framed in terms of 'regulating risk.'³¹ The result of such risk analysis can determine the different approaches that States take to applying the principle. The WTO examples above highlight the different ways in which Europe and the United States address the principle such that, broadly, 'Europe accepts the Precautionary Principle and the United States does not.'³² However, interpretation is never so clear cut as this and a clear challenge exists to attain universal understanding of the principle, let alone application. There is no universal, accepted interpretation of the principle, and it is still criticised for a lack of coherent guidelines for implementation. Such uncertainty opens the door to ambiguity which can lead to differing – and often weak – approaches to adoption and implementation.³³

The debate has also been dominated by developed country voices, although many developing countries have raised concerns over the principle, including the potential for its application to hinder their development agendas or access to markets.³⁴ It is important for widespread international implementation of the principle to give developing countries a strong voice in related debate, especially because, as the IUCN has reported, "Precaution raises significant equity issues in biodiversity conservation and NRM. The livelihood and socio-economic impacts of the principle can be negative, particularly for those dependent on utilisation of biological resources to support livelihoods."³⁵

The precautionary principle adds another layer to the dilemma of favouring economic development over the environment – if certainty of environmental damage is not provided, the risk that countries take in not pursuing a given development activity can justifiably be considered even greater than when it is. Therefore, the question of fairness in requiring a country to take that risk is made even more difficult. This is not to provide an excuse for relinquishing responsibility over precaution, but it presents a significant challenge to countries' faith in the process.

Finally, whilst it has been noted that at the multilateral level the Precautionary Principle is prevalent in biodiversity agreements and those relating to the marine and fish environment, there is very little development of the principle in forestry and timber policy and agreements.³⁶

It may also be noted that the precautionary principle tends to reflect a very different approach from the recent trend towards valuing public goods and ecosystem services. The latter approach aims to extend cost-benefit analysis, i.e. to determine if the benefits and costs to the environment of a given development can be 'valued' for direct comparison with the economic benefits of the development. By contrast, the precautionary principle is based on risks considerations. If economic valuation methods are to be brought to the fore in environmental decision-making, the precautionary principle must remain an integral approach to ensure that the 'priceless' values of the environment are not lost.

The Way Forward

Critics of the current application of the precautionary approach suggest that it needs to be refined if its motivations and goals are to be realised. The philosophical and ethical debate surrounding decisions to act in a precautionary manner can be considered incongruous with an international negotiating arena that relies on scientific arguments to inform decision-making. A shift in emphasis is required for States to commit to a decision or agreement when the science is uncertain. However, in developing the Principle

further there are a number of approaches that suggest that the ethical debate should be brought to the forefront of decision-making regarding the precautionary principle, and that decision-makers and political leaders should pay attention to such debates when determining progress on activities that may require a precautionary approach.³⁷

Improving the effectiveness of the Principle will require a careful balancing of political and values-based approaches to decisions between, for example, conserving biodiversity and pursuing economic growth.

Developing a coherent interpretation

It will be necessary to develop a definitive, universal interpretation of the principle and perhaps even guidelines for implementation so that States can adopt the approach in a coherent, accountable manner. There is a growing body of jurisprudence, developed through case law and academic thinking around the world, however this continues to be fragmented. A streamlined and internationally recognised approach would significantly benefit the interpretation of Principle 15.

Future agreements on the precautionary principle should also remove the ambiguity of States' 'capabilities', and in cases where developing nations clearly lack capability, or face development dilemmas which pose questions of equity (as discussed above), developed nations and the international community should accept a burden of responsibility to assist in their undertakings.



National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

Principle 16

Introduction

The situation where production of goods and delivery of services is based on a one-directional linear model that follows the “cradle to grave” pattern inevitably results in polluting activity. The creation of ‘waste’ and pollution is something that Principle 16 is seeking to tackle through offering both a preventative measure (internalization of costs) and a process or framework to address negative consequences (polluter pays). The “polluter pays” principle embedded in Principle 16 provides a general rule for attributing the costs of pollution or the costs of measures aiming to reduce pollution.

The notion of internalisation of environmental costs was already “mainstream” by the time of the Rio Summit, following on from the debates in the 1970s and 1980s relating to *market versus command and control*¹ ideas about environmental policies.

Even though the issue of the internalization of environmental costs in price systems faced by producers and consumers and broader questions relating to the links between the environment and the global economy have been discussed for a long time, they have been increasingly discussed and institutionalised since 1992. The recognition that failure to account for the ‘market value’ of the environment not only contributes to destroying natural ecosystems but also has strong distributional implications has also progressed. In 2005 the Millennium Ecosystem Assessment (MA) asserted that, ‘as a rule, poor people are made not just worse off, but disproportionately worse off when ecosystems are degraded’.²

Status of Implementation

UN-led activity and Conventions

Many MEAs recommend or stipulate the use of economic instruments, and UN bodies and secretariats are increasingly undertaking research in this area. Examples include:

- The REDD & REDD+ (Reducing Emissions from Deforestation and Degradation) Programmes compensate landowners and indigenous communities for maintaining and replanting forested land;

- The CBD’s Article 11 urges member states to use economic instruments to meet the Convention’s goals and includes a work programme on incentive measures;

- The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) has adopted an Economic Incentives and Trade Policy with economic incentives for conservation;

- The RAMSAR Convention has adopted a decision to encourage the use of economic incentive measures for the sustainable use of wetlands.

The use of economic instruments to (partially) internalize environmental costs in production and consumption systems has increased significantly since Rio in 1992, building on instruments that had been put in place nationally in the early 1990s. Instruments discussed and implemented include price-based instruments such as emission charges, user fees and product charges; financial instruments such as green funds, loans, bonds and deposit refund schemes; fiscal instruments such as taxes, tariffs, subsidies and research and development; marketable permits and quotas; and measures to improve the market for goods and services such as eco-labelling, ratings and standards. For some goods or “bads” such as greenhouse gases emissions, dedicated markets have been set up.

OECD and the European Environmental Association (EEA) host a database of national, regional and international instruments, within which they use the following categories:³

- Environmentally Related Taxes, Fees and Charges
- Tradable permits systems
- Deposit-Refund Systems
- Environmentally Motivated Subsidies
- Voluntary Approaches.

Specific examples of popular instruments follow below.

Environmental taxes

In the immediate run up to UNCED the Scandinavian States for example introduced carbon taxes as a

means of internalising the costs of the pollution from carbon emissions. Finland was the first country to institute such a financial mechanism soon followed by Sweden.⁴ Great Britain introduced a climate change levy in 2001⁵ and Australia recently succeeded in legislating on carbon taxes, although not without significant opposition shown in both the lower and upper houses.⁶

Case study – Vietnam environmental tax laws

In 2010 Vietnam passed its first law on environmental taxation, and expects to implement it as of 1 January 2012. The law introduces new taxes on gasoline, coal, plastic bags, pesticides and other products, and is expected to generate between US\$ 757 million to US\$ 3 billion. Studies have found that while the burden of the tax, applied primarily to fossil fuels, could cause some efficiency and competitiveness losses, the budget-neutral use of increased tax revenues to raise spending on anti-poverty programmes can offset most of the losses of poor households.⁷

Tradable permit systems

The largest markets for environmental goods and services are 'cap and trade' emissions markets.⁸ Initial systems for petrol and power plant emissions succeeded in making reductions more acceptable to industry, and reducing emissions faster than previously prescribed regulation, at lower cost.⁹

Both as part of commitments to the Kyoto protocol and independent of the process, nations and regions have implemented their own cap and trade systems. These include the EU's GHG Emissions Trading Scheme (EU ETS); the New South Wales Greenhouse Gas Reduction Scheme in Australia and a new system introduced in Japan. Other cap and trade systems exist for pollutants other than GHGs, for example the NOx Budget Trading Program encompassing 20 states of the East coast of the US.

The Clean Development Mechanism (CDM), developed under the Kyoto Protocol, was the first global market for environmental services established by multilateral agreement.

Payments for Ecosystem Services

Payment for Environmental (or Ecosystem) Services (PES) programmes provide incentive payments to landowners

or developers for actively managing an ecosystem or for beneficial activities such as reforestation; or for not performing certain activities (e.g. 'slash and burn' agriculture). There has been a steady increase in the number of PES schemes, particularly in Latin America and Asia.¹⁰ In 2010 39 fully operational biodiversity markets have been created, with another 25 in development stage. Together they protected 86,000 hectares with an annual market size of 1.8 to 2.9 billion.¹¹

Case study – Costa Rica PES

Costa Rica's Payments for Environmental Services scheme, 'Proyecto Pago por Servicios Ambientales' is run by the government and transfers funds to farmers entering into formal, 5-year contracts. To fulfil their contracts, individual farmers undertake reforestation, forest preservation, or agroforestry activities.

In return for the additional income to farmers, the programme helps to implement - from the ground level up - Costa Rica's Forest Law, Environmental Law, and Biodiversity Law. Direct and indirect positive effects are noted, including carbon off setting, improved community environmental education in areas such as waste management, and household income increases.

Other global institutional activity

The World Bank has undertaken work on economic instruments relating to groundwater management, wind power and waste management. It is responsible for 10 global and national-level carbon funds; the 'Partnership for Market Readiness', which builds capacity in the use of economic instruments for GHG reduction; invests in 11 PES projects on national and regional levels;¹² and is currently working on 'green accounting', providing resources for two key indicators: wealth estimates and adjusted net savings.¹³ It has recently launched a Global Partnership for Wealth Accounting and the Valuation of Ecosystem Services (WAVES).¹⁴ The World Resources Institute asserts that 'the evidence has never been stronger that protecting the environment is not only compatible with the World Bank's development objectives, but is in fact essential to achieving them'.¹⁵

The Global Environmental Facility (GEF) has invested in a number of PES programmes in collaboration with UN organisations, the World Bank, the International Fund for Agricultural Development, and with the Inter-American Development Bank on the 'Earth Fund'. The Earth Fund is currently setting up five funds across Latin America

that will be used to fund a PES approach to watershed management and biodiversity conservation.¹⁶

Polluter pays principle

It is often noted that over the last 40 years private industry and business that has engaged in activities that create pollution and degrade the environment have 'privatised the gains and socialised the losses or burdens'.¹⁷ The polluter pays principle seeks to reduce the burden on the tax payer of cleaning up pollution that was created in the wake of activities that delivered profit to companies and shareholders. By creating a financial mechanism that reflects the costs goods and services production, the polluter pays principle ought to incentivise activities that do not create pollution. When the cost benefit analyses of activities are undertaken, without the mechanism to internalise the costs of environmental degradation and damage caused by pollution as well as the costs of cleaning up the pollution, it is more economically viable to pursue a course that is polluting.

Polluter pays and waste management

There is a plethora of legislation relating to the disposal and management of waste. The EU continues to issue Directives on Waste matters and these are transposed directly into legislation by Member States.¹⁸

There is substantial difference between the approach adopted by the EU and those of other countries and regions. The former has pursued the route of adopting the "cradle to grave" approach, manifested through e.g. the WEEE directive, which restricts the use of hazardous substances in electrical and electronic equipment (Directive 2002/95/EC)¹⁹ and the RoHS (restriction in the use of hazardous substances).²⁰ Other countries have elected to pursue the approach of 'scrapping waste' and developing global scrap markets.²¹

The different approaches offer different interpretations of Principle 16, which do not necessarily complement one another very well. The restriction of use of hazardous waste and other substances related to electronic equipment aims to reduce the amount of waste created by providing manufacturers with string incentives to internalize the costs of waste in their production systems. The alternative approach has been to develop market approaches to 'deal with the waste' once it has been produced, which does not support the implementation of the principle that 'the polluter

should bear the costs of the pollution.' Under the global scrapping scheme and such markets the costs of the waste remain externalised and so the clean-up of the waste is done by market mechanisms rather than by the polluter itself.

Challenges

Internalising environmental costs in practice

Although much activity and progress has been achieved since 1992, the debate over the use of economic instruments to conserve and enhance environmental services, and how to value public goods, is still relatively contentious.

Whilst waste management frameworks have been applied to varying degrees of success, they still mostly operate under a paradigm that focuses on cleaning up rather than not creating pollution in the first place.

Internalisation of environmental and social costs of unsustainable activities can help to remove or reduce complex policy negotiation, regulation and enforcement processes from environmental management.²² However, the true economic and social benefits of environmental services are generally not valued by existing markets, and incentives to protect the environment through such means are often insufficient. For example, developing nation landowners are taken to have little economic incentive to protect their forest or wetland ecosystems,²³ and there are many contentions surrounding land tenure and land rights, Free Prior and Informed Consent (FPIC), and the role local communities actually play in these methods of natural resource management.²⁴

While PES programmes are likely to increase compliance with environmental laws, they may also inadvertently create perverse incentives, including rewarding bad actors. The parties that are most likely to be rewarded are the parties that are more likely to take part in harmful activities, rather than those already conducting sound environmental practice. Furthermore, if policies are location-specific, industries are able to move their bad practices elsewhere.²⁵

In the wider sense, GDP as the prevailing global measure of development does not truly account for the natural environment and its ecosystem services. Costs of environmental damage are not truly internalised and the depletion of natural capital stocks can be treated as

income.²⁶ As a rule, poor people are made disproportionately worse off when ecosystems are degraded²⁷

There are many difficult issues in the design of economic instruments. Considerable debate is raised over appropriate tax bases and levels, the treatment of traded goods, the possible role of complementary policies (such as research, development, and deployment policies), treatment of forestry and other non-energy emissions, the balance between carbon and other taxes in the government's budget, use of new revenues, and whether the distributional effects should affect policy design.

More generally, policy makers need to understand the pros and cons of using fiscal instruments over regulatory approaches, cap-and-trade systems, or project-by-project funding.

Challenges to the polluter pays approach

The Clean Development Mechanism (CDM)²⁸ and the Reducing Emissions from forest Deforestation and Degradation (REDD)²⁹ programme are two examples where the polluter pays approach has been challenged. Both fall under the UN Framework Convention on Climate Change. The CDM was established to provide market mechanisms that allowed one State to invest in programmes or initiatives that reduce carbon emissions (a form of pollution) globally by 'paying someone else to not pollute.' However, under this framework the paying entity is still engaging in activities that do cause pollution, and Principle 16 is somewhat perverted. A similar case can be made for the REDD approach, whereby one party is paying another to not exploit a resource (forest) in order to maintain carbon sinks which will absorb carbon pollution from elsewhere. However, as with CDM, the payer is not cleaning up its own (carbon) pollution.

Other barriers

Human Resources

To select, design and implement an economic instrument requires a significant level of human resources. Technicians, economists, auditors, financial and scientific specialists are necessary to determine baselines, gather information for monitoring, analyse and make adjustments to policies. In-country experimentation with an economic instrument is not uncommon, often

requiring significant design and policy adjustments,³⁰ but many countries lack the resources necessary to implement effective instruments due to low levels of education attainment, lack of investment in scientific research and university education.³¹

Institutional capacity

Monitoring and enforcement are key to the success of many economic instruments, making strong administration, free from corruption, necessary.³² A competent policy-making apparatus and, for some instruments, a functioning tax system is also necessary. Some economic instruments may require the creation of new institutions such as habitat banks or trading infrastructure. Markets require a clear definition of property rights and strong legislation that will support contract making.³³ Many countries do not have a strong, functioning legal system and are unable to enforce sanctions³⁴.

Information and Scientific Knowledge

Before implementing an economic instrument it is vital to gather information on variables that will be monitored. For example, emission levels at an installation, air pollution levels, level of fish stocks, or state of a habitat. Information is also required on the economic conditions and the effects a particular instrument will have,³⁵ and a strong scientific understanding of the ecosystem is needed for monitoring and ensuring targets are being met.³⁶ This information is often lacking and not easily accessible, creating design difficulties.³⁷ A research and academic community is an important factor that is underdeveloped in many countries.

Political support

Governments are unlikely to implement economic instruments if they feel that they will lose political support. Businesses are often unwillingly and strongly against any attempt to internalise environmental costs. Other economic instruments, such as water user fees or energy taxes, may have social justice implications as low income families are more severely affected³⁸.

The Way Forward

In the discussion on how to accelerate progress towards sustainable development, the suitability of economic instruments should be a crucial thread. If support for such instruments is to be maintained and

pursued, significant improvements in baseline research, capacity building, implementation and monitoring are all required. National and regional state participation will remain central to this debate, but non-state actors must be better engaged and accommodated, too.³⁹

Political support and funding

It is necessary to increase public awareness of environmental issues and involve communities in discussions surrounding the introduction of a particular economic instrument. Opposition to economic instruments is strong from those with vested interests, however public support has been shown to successfully demand the introduction of economic instruments.⁴⁰ It is important to study the long-term effects of using economic instruments on both the environment and society to ensure that local communities or those acting in sustainable activities in the first place, are not marginalised.

Trade

Further shifts in the role of trade in international environmental resources – especially energy-related resources – would require carefully crafted incentives to align international markets simultaneously towards environmental and resource goals.⁴¹ This will require the engagement and commitment of international economic institutions, as well as governments – areas in which multilateral processes have been criticised as weak, since 1992. WTO trade rules could help ensure that trade is a ‘transmitter’ of good practices.⁴² New rules or understandings may be required to increase flexibility while at the same time disciplining the use of green subsidies.

Cradle to cradle

The practices that hitherto drove the cradle to grave mentality and approach were very centred around the economic viability of cleaning up pollution and waste. However, Principle 16 offers a framework by which the concept of ‘cradle to cradle’ can be strengthened and implemented at all levels.⁴³ Internalising the costs of creating pollution can incentivise cradle to cradle attitudes and behaviour and help redefine the paradigm that producers of goods and services operate.



Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

Principle 17

Introduction

Environmental Impact Assessments (EIA) refer to both a decision-making process and a document that provides a systematic, accountable evaluation of the potential environmental and socioeconomic impacts of a proposed development, activity or action, and its practical alternatives. It requires a number of steps to be taken by the authority or developer in question: ‘screening’ to determine whether an EIA is needed; ‘scoping’ to identify impacts and issues to be considered; impact analysis and assessment; consideration of alternatives and mitigation measures; consultation with the public and stakeholders; reporting and monitoring; and auditing.

EIAs should be designed to cover all activities with the potential to cause environmental damage in local circumstances, including the direct and indirect effects on human beings, fauna, flora, soil, water, air, the climate, landscapes, material assets and cultural heritage, as well as the interaction between these various elements.¹ With such a range of multidisciplinary considerations, and due to the range of different international- and national-level legislative prescriptions for EIA, there is no universally applicable EIA model, though 14 evaluation criteria have been noted (legal basis; coverage; consideration of alternatives; screening; scoping; EIA report preparation; EIA report review; decision-making; impact monitoring; mitigation; consultation and participation; system monitoring; costs and benefits; and strategic environmental assessment).²

The aims and objectives of EIAs are twofold. The immediate aim is to inform the process of decision-making; the ultimate, long-term aim is to promote sustainable development by ensuring that development proposals do not undermine critical resource and ecological functions or the well being, lifestyle and livelihood of the communities and peoples who depend on them.³

The wording of the Principle clearly focuses on national level implementation, and raises questions over levels of ‘competence’ [regarding national authorities]. It also raises the problem of inconsistency or ambiguity over the term ‘significant adverse impact’ (see the discussion on Principle 19 for further discussion on this point).

Status of Implementation

A distinction can be noted between the requirement for EIA by national and regional legislation, and for qualification for development aid and assistance. This provides one fundamental difference between EIAs in developed- and developing nations, along with a number of wider political, organisational and financial considerations.

EIA legislation

A legislative framework is a first step in establishing a culture of incorporating environmental concerns into development, and it is well established that legislation is the essential pre-cursor to an effective EIA system in developed- and developing nations.⁴ EIA is practised in over 100 countries and legislation exists in 55 developing countries.

A number of MEAs stipulate the need for, or components of, EIAs. For example:

- The Convention on Biological Diversity requests Parties to incorporate and follow guidelines on biodiversity considerations in EIA legislation, and provides a database of case studies and experiences⁵
- The Ramsar Convention on Wetlands requests that Parties use EIA when a project, activity or policy has the potential to impact on wetlands⁶
- The Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal requires the use of EIA
- The Convention on Environmental Impact Assessment in a Transboundary Context (Espoo convention – see Section XX on Principle 19 for further details), requires the use of EIA for projects with potential transboundary impacts.

Regional- and national- level legislation is variable and often non-existent. Specific examples are presented throughout this Section.

EIAs for development aid and assistance

EIA in developing countries tends to be very different from EIA in the developed world as many EIAs are undertaken due to stipulation by development assistance agencies on a project-by-project basis, rather than due to legislation or popular demand.⁷ As a result – though other factors are notable (see following discussion) – in general, EIA has been introduced later and is less firmly embedded in developing nations.⁸

Many aid agencies and development banks, including the OECD and the World Bank, require or recommend an EIA to be undertaken before loans are granted or project work commences.^{9,10} Various international development agreements recognise the importance of EIAs.

Training and capacity-building

The technical and often locally-relevant nature of EIAs means that building local capacity in operation and monitoring is crucial, particularly in developing countries. EIA processes are often undertaken by external consultants, however implementation costs will inevitably prohibit such an approach in many cases. A range of networks, fora and organisations provide guidance and information tools to assist potential EIA authorities, for example:

- The International Association for Impact Assessment (IAIA), considered the international authority on EIAs. It provides training and networking for 'advancing innovation, development, and communication of best practice in impact assessment'. The IAIA has more than 1600 members and represents more than 120 countries, including industry, academia and government planners and administrators. It has helped to establish, for example, the Southern African Institute for Environmental Assessment, which promotes and provides professional support services for EIA¹¹

- The United Nations University, RMIT University, and UNEP jointly host an open, multi-lingual online educational resource with guidance, best practice examples and an encyclopaedic Wiki¹²

- The World Bank-funded Capacity Development and Linkages for Environmental Assessment in Africa (CLEAA) organises consultations on the status and challenges of EIA capacity building in Africa, and has helped establish sub-regional assessment networks. CLEAA has developed an 'Environmental Assessment and Management Capacity Building Strategy' (EA&MCBS) for Africa, with a vision by 2015 for African countries to 'have the capacity for, and commitment to, employing EIA and management tools in the promotion of sustainable development'¹³

- The GEF runs training workshops in areas such as Small-Island Developing States, and other NGOs and internationally-funded organisations support general and specific EIA capacity building, such as IUCN's National Impact Assessment Programme, and the Mediterranean Environment Protection Technical Assistance Program (METAP) in North Africa

- The Environmental Impact Assessment Review is a peer-reviewed interdisciplinary journal aimed at practitioners, policy-makers and academics. Its articles assess EIA activities and progress.

Strategic Environmental Assessments (SEAs)

The SEA approach is intended to go beyond the scope of EIAs to include assessments of plans, programmes and policies over the longer-term. SEAs are currently operated in 25 countries including the United States, Canada and United Kingdom; by a number of aid agencies and development banks such as the World Bank and Asian Development Bank; and UN bodies such as UNDP and UNEP when implementing projects and considering loans.



Case study – The EC ‘SEA Directive’

The European Union (EU) has shown leadership on EIAs prior to and since Rio, including implementing the European Union Directive on Environmental Impact Assessments (85/337/EEC) (the ‘EIA Directive’), first introduced in 1985. In 2001 the EC took the extra step of implementing the Strategic Environmental Assessment Directive (‘SEA Directive’ 2001/42/EC).¹⁴ Transposed into Member State legislation since 2004, the SEA Directive requires that Member States integrate environmental considerations into a range of plans and programmes¹⁵ before their development. A key component of the SEA is that States must consult their own public and environmental authorities in the scoping and drafting of an environmental report, and also any Member States potentially affected by transboundary impacts. An assessment of reasonable alternative proposals, long-term monitoring and any necessary remedial action of actions undertaken are also required, which takes the SEAs beyond the scope of EIAs.

The EU’s ‘Group of EIA/SEA National Experts’ convenes environmental experts from national administrations (mainly environmental ministry officials) and meets twice annually. Its aim shows a positive approach to capacity building within the EU by providing Member States with advice and expertise on EIA/SEA coordination and cooperation, the implementation of the Directives, and the preparation of legislative proposals and policy initiatives.¹⁶

While SEAs are supposed to take the coverage of EIAs up another level (spatially, temporally and strategically), or at least apply a similar process to a different set of activities (i.e. policies and programmes, as opposed to projects), the approach has been criticised for replacing or removing the effective implementation of EIAs. The EU’s SEA Directive provides for national-level implementation, however in developing nations SEAs tend to be undertaken not due to legislation but under the guidance of development assistance agencies, and are often considered a donor-imposed way to bypass project-level assessments by focusing on broader, sector-wide issues. Such criticism goes to the extent that the SEA process undermines the creation of legal legislation and enforcement of EIAs at the national level.

See also the discussion of Principle 19 for discussion of the UNECE Convention on Environmental Impact Assessment in a Transboundary Context (the Espoo Convention).

EIA in the developing world

Some key commentators chart the improvement in awareness, operation and institutionalisation of EIA in developing nations, as shown by the examples below.

Asia

The World Bank notes that the EIA approach was established in the East and South-East Asia in the early 1980s, and gives a positive account of general implementation in relation to its aid programmes. In a 2006 report on the region it concludes that EIA has contributed to pollution prevention and control

in numerous projects, and that overall the region has a relatively well established EIA system, including the legal and administrative framework. Systems in Hong Kong SAR, China, and Vietnam also include SEAs, which is considered by the World Bank to be a positive approach.¹⁷

The Chinese State Environmental Protection Administration recently passed a regulation to allow greater public participation in EIAs, making them more open to public participation through opinion surveys, consultations, seminars, debates, and hearings.¹⁸

Africa

A UNECA desk- and interview review of institutional and regulatory frameworks in Africa showed that 18 of 23 countries have either enabling legislation and/or specific legislation/regulations in place for EIA, ten of which with explicit formal provisions for public participation.¹⁹ It also showed that there has been a steady increase in the application of EIA to development projects, attributed to the enactment of EIA legislation, the establishment of institutions, increases in the level of economic activity and a general increase in awareness of EIA requirements. EIA practitioner networks are increasingly formed at national, sub-regional, regional and international level, and the number of EIA consultants has also increased steadily.²⁰

Despite such positive reviews, there is clearly significant work to be undertaken. Commentators note that the coverage of EIA systems in developing nations is ‘markedly patchy’ in relation both to projects covered and to impacts assessed, and that performance ‘generally falls far behind that of EIA in developed countries’.²¹ EIA

systems are often seen to be in place only nominally to assist grant- and development assistance programmes, with little public demand or consultation.

Challenges

Criticism of the EIA process

Regardless of location and situation, the EIA process itself is open to – and receives – significant criticism. With no universal method of application, EIAs are not bound to include minimum spatial or temporal scope, nor a full account of environmental or social benefits, costs or value. Many reviews suggest that in practice, almost all EIAs address only direct, on-site impacts,²² fail to take into account social impacts,²³ and that the overly-complex procedure leaves local communities unsure of the impacts.²⁴ Many critics agree that the substantive content of the EIA procedure is far from uniform nor settled at an international level.²⁵

Even a thorough, well-informed EIA does not guarantee sufficient weight in development decisions, particularly in developing countries where poverty reduction or economic growth are more likely to take precedence. As such, EIAs are often criticised for being little more than a 'box ticking' exercise, severely limited in scope, with no impact on development decisions. Specific challenges to implementation follow below.

Political will

Although many countries have strong EIA legislation, implementation is weak. In practice, screening – applied to make a decision on the requirement for an EIA – in developing countries is weak because environmental agencies have little power. EIAs are often only undertaken due to the insistence of overseas development agencies, for aid requirements.²⁶

In some countries, exemptions to the process may be made to allow certain activities or projects by small- and medium-sized businesses, or for publically-funded projects.²⁷ EIAs are also seen as 'rubber stamping' and only implemented after project commencement.²⁸ Such disregard for the EIA procedure can result in significant environmental damage.²⁹

In developing nations particularly, EIAs are often considered to be a costly, timely 'anti-development' procedure. Often the authority responsible for EIA

implementation may have little political power, or even be affiliated with, and therefore pro-, the development in question.³⁰ The strength necessary to push for a project to undergo an EIA may not exist, or even if an EIA report is completed, approval may be outside the control of the environmental authority.³¹ The consideration of alternatives in developing nation EIAs is frequently weak.³²

Capacity

To conduct an EIA, at the very least baseline environmental information and understanding is required alongside specific local knowledge. In many countries, such data and competent research centres are lacking.³³ In addition, trained professionals, technicians and scientists are needed to conduct and monitor the EIA. Many countries lack these human resources due to shortfalls in education and science funding.

In many countries, governments and companies routinely commission consultants to prepare EIAs, resulting in assessments which may contain technical data on the project's environmental impact but only limited reference to a project's likely impact on the communities, their livelihoods, their access to water and food.³⁴ Corruption and disregard for the process is still rife. For example:

In the Amazon regions of Ecuador and Peru project-specific EIAs ('Environmental Impact Studies') are required prior to oil and gas exploration or exploitation projects, but oil companies contract private firms to conduct the studies, a system that clearly lacks independent analysis. Moreover, there are typically no comprehensive analyses of the long-term, cumulative impacts of multiple oil and gas projects across the region, such as SEAs might provide;³⁵

In India civil society protests against EIA procedures have recently led to State reviews finding corruption in public bodies providing EIAs for private companies, and the banning of a private company for submitting identical data for five EIAs on different mining projects.³⁶ Ultimately, this provides a good example of proactive State behaviour to investigate and take action against corruption, but this is a huge challenge to undertake on a large scale, and such capacity for monitoring approaches and impartiality is often severely lacking.

Furthermore, many EIAs produced by aid agencies, even with the best intentions, have focused on the impact analysis side of EIAs but are weak on the

alternative proposals component. The main reason for this is that, in general, the agencies' entry point into the project planning process (particularly if the borrower is from the private sector) tends to come after the borrower's own identification process, when decisions on needs and siting have already been made, completely ignoring the crucial requirement for independent analysis of location.³⁷

Public participation

Deficiencies in information disclosure, transparency and public participation are significant challenges to EIA implementation. Although community consultation is a key aspect of EIAs, in reality States and corporations can and do easily circumvent or not pay it due attention, and there are many cases of non-compliance by States and private companies. Many countries may find it politically or culturally unfamiliar to release information on environmental impacts, and to involve the local population in consultation;³⁸ some provide inadequate fora with late notice and poor representation;³⁹ and others simply do not share information at all. Even when clear and open consultation is provided, the public may lack the knowledge and skills to evaluate reports effectively, without prior or forthcoming information and education to empower them.

Other sections of this report review the concept of 'free, prior and informed consent' (FPIC) and the deficiencies in its application. EIA has been noted by commentators to usurp the value of FPIC by attempting to incorporate it into EIA consultation processes; to blur the boundaries between public consultation and title rights; or to replace FPIC entirely. Given the poor coverage of EIA public consultation this only adds to the challenges faced by indigenous communities and their rights to uphold their FPIC.

East and South-East Asia

The World Bank recognises the limited scope and function of the Region's EIA system, and makes the case that many of its problems can only be addressed by national government policies and strategies. Improvements are needed in areas such as strengthening legal systems, EIA scheduling, public participation and information disclosure.⁴¹

Case study – The EC 'SEA Directive'

The European Union (EU) has shown leadership on EIAs prior to and since Rio, including implementing the European Union Directive on Environmental Impact Assessments (85/337/EEC) (the 'EIA Directive'), first introduced in 1985. In 2001 the EC took the extra step of implementing the Strategic Environmental Assessment Directive ('SEA Directive' 2001/42/EC).¹⁴ Transposed into Member State legislation since 2004, the SEA Directive requires that Member States integrate environmental considerations into a range of plans and programmes¹⁵ before their development. A key component of the SEA is that States must consult their own public and environmental authorities in the scoping and drafting of an environmental report, and also any Member States potentially affected by transboundary impacts. An assessment of reasonable alternative proposals, long-term monitoring and any necessary remedial action of actions undertaken are also required, which takes the SEAs beyond the scope of EIAs.

The EU's 'Group of EIA/SEA National Experts' convenes environmental experts from national administrations (mainly environmental ministry officials) and meets twice annually. Its aim shows a positive approach to capacity building within the EU by providing Member States with advice and expertise on EIA/SEA coordination and cooperation, the implementation of the Directives, and the preparation of legislative proposals and policy initiatives.¹⁶

Africa

While the EIA process has been known to influence decisions in some African countries, experiences in most others have shown that EIA does not significantly influence decisions.⁴² Resource provision and training still fall short of national and local requirements, making capacity constraints - in terms of human, material and financial - the biggest challenge to effective EIA implementation in Africa.⁴³

Low public awareness of environmental concerns, and limited expertise, experience and coherent legal frameworks and guidelines have compromised quality, as has the quality of consultants' reports. Public participation is, in most cases, inadequate due to a host of factors, including time, money, literacy, language, public presentation, education, cultural differences, gender, physical remoteness and political/ institutional culture of decision-making.⁴⁴

The Way Forward

Although EIA – when implemented thoroughly and correctly – is a complex process, often highly dependent on national or local circumstances, the training and capacity building networks noted above provide sound information and opportunities to assist States with EIA implementation. However, they lack the support and weight that national legislation should provide for effective enforcement. National legislation, policy and practice needs to be significantly improved, which requires many developing States to overcome barriers of political will. Assistance to these States is also crucial to build much-needed capacity to ensure firstly that local skills are available and that consultation is taken seriously, and to ensure that the EIA process is not led by the agendas of aid agencies or private companies, but by the governments themselves.

Alongside this, EIA improvements need to align with overall environmental management systems and be delivered in tandem with wider improvements to sustainability practice and legislation, so that EIAs do not exist as a stand-alone ‘rubber-stamping’ procedure. This could include awareness and participation raising across government departments; improved data systems; and general action against institutional corruption. Some experts call for the introduction or improvement of SEAs in developing nations, but these should not replace EIAs or allow project-level assessments to be overlooked. They should only ever be an additional mechanism to ensure that multiple, EIA-approved projects and policies do not pose cumulative environmental threats.

In countries of developed or rapidly developing economies, where plans and activities may be likely to exert the greatest

pressures on the environment, EIA systems should be implemented as a priority. The World Bank is one of many agencies and commentators which call for international assistance on those countries that are ‘ready and able to establish EIA/SEA systems, but do not currently possess the human or financial resources to set up the systems independently’.⁴⁵ International capacity building processes and training needs to be well-versed in developing country- and local situations and needs.

Experts in the field call for the following improvements:

Multilateral level

- Training and capacity building in EIA
- Diffusion of EIA experience (through greater research, collaboration and data-sharing)
- Clarification of donor policy, and increased assistance (for example, through supporting organisations and networks such as CLEAA)
- Increased political will.

National level

- Development and strengthening of institutional, legislative and regulatory frameworks for EIA – or indeed SEA - within the framework of a sustainable development policy
- Training and capacity building programmes based on experience and lessons learned
- EIA administrators should develop strategies for public participation, which need to be strengthened by the full backing of national governments, including monitoring and evaluation to ensure wide scope and openness.



States shall immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Every effort shall be made by the international community to help States so afflicted.

Principle 18

Introduction

Earthquakes, tsunamis, hurricanes and severe drought are just some examples of natural disasters which can bring direct and indirect devastation and destruction to people and the environment. ‘Other emergencies’ include nuclear fallout, chemical and oil spills and other industrial accidents. Negative impacts can be severe and widespread within the country of origin and beyond, both spatially and temporally, however Principle 18 makes specific reference to sudden harmful effects, only.

It stands to reason that States will benefit from notification of impending disasters. Good notification may require firstly, sophisticated technology for early detection; and secondly, early, detailed communication from neighbouring States or the international community, through appropriate channels. The first requires financial and technical capability, the second, transparency and trust. Regardless of technical and financial capacity, the first of Principle 18’s two components was the intention to ensure that States provide such notification as early as possible.

The second component of Principle 18 aims to ensure that external States do their utmost to mobilise support to those States affected, and assist with the relief effort. As such, and in conjunction with Principle 19, Principle 18 emphasises the important role that cooperation plays

in achieving sustainable development and furthering the aims of the Rio Declaration as a whole.

It should be noted that by incorporating capacity building measures in relief work, there exists the potential to strengthen States’ resilience to future shocks, through, for example, flood defence infrastructure or technology investment for prediction and detection. However, Principle 18 does not make explicit reference to such mitigation assistance. Furthermore, Principle 18 does not implore States to commit to avoid activities which may enhance the future possibility of natural or ‘other’ disasters.

Implementation

Part 1: Notification - The ‘duty to inform’

When the Principle was negotiated and agreed in Rio, the internet was not such a prolific communication tool and information sharing was less expedient as it is today. Without such widespread media and communication there was arguably a greater need for States to proactively communicate disasters and emergencies. However, this does not reduce the level of obligation on States to provide detailed intelligence on potential or impending disasters. The notification of emergencies is crucial if States are to be given time to react and mitigate negative impacts. This is often classed as the ‘duty to inform’, which commentators have classed as ‘probably the least controversial principle of general international environmental law.’¹ Table 1 below shows examples of international conventions that refer to the responsibility of States to notify others when disasters have occurred. The discussion on Principle 19 investigates the methods by which States notify neighbours of potential transboundary impacts of disasters and wider emergencies.



<p>Article 5(1)(c), International Convention on Oil Pollution Preparedness, Responses and Cooperation</p>	<p><i>...without delay, inform all States whose interests are affected or likely to be affected by such oil pollution incident [a discharge or probable discharge of oil]</i></p>
<p>Article 14 (2), Basel Convention on the Control of the Transboundary Movement of Hazardous Wastes</p>	<p><i>The Parties shall consider the establishment of a revolving fund to assist on an interim basis in case of emergency situations to minimize damage from accidents arising from transboundary movements of hazardous wastes and other wastes or during the disposal of those wastes.</i></p>
<p>Article 16 (1)(j), Basel Convention</p>	<p><i>[The secretariat shall] co-operate with Parties and with relevant and competent international organizations and agencies in the provision of experts and equipment for the purpose of rapid assistance to States in the event of an emergency situation</i></p>
<p>Article 14(e) Convention on Biological Diversity</p>	<p><i>Promote national arrangements for emergency responses to activities or events, whether caused naturally or otherwise, which present a grave and imminent danger to biological diversity and encourage international cooperation to supplement such national efforts and, where appropriate and agreed by the States or regional economic integration organizations concerned, to establish joint contingency plans.</i></p>
<p>Article 14(c), Convention on Biological Diversity</p>	<p><i>Promote, on the basis of reciprocity, notification, exchange of information and consultation on activities under their jurisdiction or control which are likely to significantly affect adversely the biological diversity of other States or areas beyond the limits of national jurisdiction, by encouraging the conclusion of bilateral, regional or multilateral arrangements, as appropriate</i></p>
<p>Part XII, article 198, UN Convention of the Law Of the Sea (UNCLOS)</p>	<p><i>When a State becomes aware of cases in which the marine environment is in imminent danger of being damaged or has been damaged by pollution, it shall immediately notify other States it deems likely to be affected by such damage, as well as the competent international organizations.</i></p>
<p>Part XII, article 199 (UNCLOS)</p>	<p><i>In the cases referred to in article 198, States in the area affected, in accordance with their capabilities, and the competent international organizations shall cooperate, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. To this end, States shall jointly develop and promote contingency plans for responding to pollution incidents in the marine environment.</i></p>
<p>Article 8, Protocol to the London Dumping Convention (1996)</p>	<p><i>A contracting party may issue a permit for certain exceptional cases, in emergencies posing an unacceptable threat to human health, safety, or the marine environment and admitting no other feasible solution. Before doing so the Contracting Party shall consult any other country or countries that are likely to be affected.</i></p>
<p>The Conventions on Early Notification of a Nuclear Accident and on Assistance in the Case of a Nuclear Accident or Radiological Emergency</p>	<p>Both have increased the number of Parties to the Convention since adoption in 1986 (to 76 and 72 respectively)</p>

Case study – Information reporting during the Fukushima nuclear disaster

News of the 2011 'Fukushima disaster' hit the world almost instantly, with regular updates, via online and wider media. This in itself provided rapid and widespread alert to the situation, however the Japanese authorities were still under obligation to provide accurate safety information. It can be argued that such widespread media coverage can distort reporting of accurate information, however reports still indicate that official figures and estimates of radiation leaks may have been far lower than acknowledged at the time.² Even in such a well-developed nation this highlights the potential difficulties in measuring, communicating and accessing critical information. On a positive note, the Japan Atomic Industrial Forum (JAIF) continues to provide daily updates on the situation in Fukushima and offers detailed insight into the status of the clean-up operation.

Part 2: International assistance

Prior to, and since the UNCED the world has borne witness to a range of natural and other disasters: industrial accidents, oceanic oil spills, droughts and famines, earthquakes and tropical storms. The UN coordinates a great deal of the international response to such disasters through various bodies and programmes; and an increasing number of NGOs have been established to provide humanitarian relief. Both sets have benefitted from the support and contribution of States and regions, helping those States to fulfil their obligations under Principle 18. However, while UN- and NGO-led work and missions have delivered great support to many disaster-afflicted States, they have also faced criticism from the international community and experts.

UN and international/regional bodies

The Joint UNEP/OCHA Environment Unit (JEU)

A number of UN bodies provide relief support in emergencies and disasters. Programmes and sub-programmes are myriad and location- or even industry-specific.

As the overarching initiative acting as the UN's mechanism to 'mobilise and coordinate emergency assistance to countries affected by environmental emergencies and natural disasters with significant environmental impact', UNEP and the Office for the Coordination of Humanitarian Affairs (OCHA) established their Joint Environment Unit (JEU) in 1994.³ An international – and independent – group of experts and technical advisers, the Advisory Group on Environmental Emergencies (AGEE), reviews the JEU's work.⁴ Among other roles, the JEU and AGEE provide operational guidelines for 'recipient' and 'donor' States,⁵ and coordinate a network of 'National Focal Points' of senior government officers for communication during emergency response.

In 2007, the AGEE concluded that the existing system of international emergency relief, while containing many positive elements, contained 'many *ad hoc* routines and lacked a clear and structured set-up...including the lack of a functioning international notification system'.⁶ As a result, the AGEE developed a 5-year strategic plan named the *Rosersberg Initiative*, which currently claims the following achievements in improving international environmental disaster relief:

- Raised awareness of environmental aspects of emergencies among political decision makers and humanitarian actors;
- A strengthened system for environmental emergency response through international collaboration;
- A more robust response system with better geographical distribution;
- A stronger cadre of well trained and prepared first responders, with a guaranteed stand-by capacity of hardware such as mobile detection and laboratory equipment.⁷

NATO & the European Union

The EU's Community Civil Protection Mechanism aims to ensure the protection of people and the environment affected by natural disasters, within which sits the Monitoring and Information Centre (MIC) to ensure communication between Member States and responding to global disasters. NATO's Euro-Atlantic Disaster Response and Coordination Centre (EADRCC) performs a similar role to the EU's MIC but focuses on emergencies within NATO partner countries. Both have their own early warning systems, inventories of national capabilities, and information and communication networks during crisis. A 2006 NATO Parliamentary Assembly inquiry into the coordination of these two bodies noted a number of inefficiencies. In the event of a disaster, many Member States would have to choose which organisation to use, without

a structured division of labour or framework for cooperation between the two. The report highlighted strong institutional rivalry and concluded that there is 'literally no institutional dialogue between NATO and the European Commission, and other EU institutions are very reluctant to allow any such contacts in the near future. The current situation, in which both institutions develop their own mechanisms independently from each other and with only minimum coordination, is clearly not satisfactory.'⁸

A 2009 inquiry by the UK House of Lords' European Union Committee heard that communication between the EU and NATO bodies had improved. However, the Committee concluded that still more is required to improve communication and cooperation and avoid duplication of work and expenditure, by overturning political reluctance to ensure a much closer working relationship.⁹

Administering States' voluntary donations

One method of States providing the support called for in Principle 18 is through international bodies and organisations which administer their voluntary contributions (often alongside corporate and wider donations).

- *The Provention Consortium* - a global coalition of governments, international NGOs, academic institutions, the private sector and civil society organisations organised by the World Bank. The Consortium aims to reduce the impact of disasters in developing countries by forging partnerships, demonstrating innovative management approaches, and sharing knowledge and resources with policy makers

- *The Sphere Project* - established in 1997 by a group of NGOs and the International Federation of Red Cross and Red Crescent Societies (IFRC) to develop a set of universal minimum standards for humanitarian agencies for action and accountability, through *The Sphere Handbook*. The Project notes that poor adoption of these standards has been exacerbated over the past decade due to increasing numbers of new humanitarian agencies. Dilution of response efficacy is attributed to the fact that many organisations do not come from the same 'humanitarian tradition' as Sphere's proponents, such as the military or private contractors, or that they lack operational experience and capacity – with some religious organisations or local citizens' groups cited. Despite this, Sphere notes that its standards have been used with 'great effectiveness and success in

numerous contexts'. Similar initiatives to improve the quality and accountability of humanitarian response include HAP-International, ALNAP, and the Enhanced Learning and Research for Humanitarian Assistance (ELRHA) initiative.

- *The World Food Programme (WFP)* - benefits from the contributions of over 60 governments.¹⁰ The WFP should provide better, appropriate expertise and support than individual State missions, through practical means and funding programmes such as its Immediate Response Account, which enables afflicted-State 'Country Directors' to borrow up to US\$500,000 for the initial 3 months of a post-disaster operation.

Box 1 – Saudi Arabian contributions to the WFP

In 2008, the Kingdom of Saudi Arabia gave the World Food Programme a contribution of US\$500 million. Of this total, US\$76 million was used to establish an 'Innovations Fund' with the aim of improving responsiveness, building sustainable markets for small-holder farmers, enhancing WFP's toolkits and mitigating the continued consequence of price volatility. As of 14 March 2011, approximately US\$36 million remains in the Innovations Fund.¹¹

International principles for support

International agreements and principles for providing support to afflicted States include:

- *Hyogo Framework for Action 2005–2015*¹²

Adopted by 168 UN Member States in 2005 at the World Disaster Reduction Conference (just after the Indian Ocean Tsunami), the Hyogo Framework has the objective of 'building the resilience of nations and communities to disasters'. It aims to build a proactive approach to emergency response by setting out strategies for States and humanitarian agencies to 'incorporate disaster risk reduction in the implementation of emergency response...and integrate it into sustainable development'. In line with the Framework, the World Bank established the Global Facility for Disaster Reduction and Recovery (GFDRR), a long-term partnership with other donors. On the notification side, its Priority Action 2 is to 'identify, assess and monitor disaster risks and enhance early warning'

• *Principles and Good Practice of Humanitarian Donorship 2003*¹³

Endorsed by the Stockholm conference of donor countries, UN agencies, NGOs and the International Red

Cross and Red Crescent Movement, and signed by the European Commission and 16 States. There are now 37 members of the Good Humanitarian Donorship group contributing through this forum. GHD-SHARE is one GHD initiative aimed towards strengthening partnership.

Case studies - International disaster support

Chernobyl nuclear disaster The ongoing assistance provided by the international community to the 3 States - Belarus, Ukraine and Russia - affected by the Chernobyl disaster, and the collaborative work of those 3 States, provide interesting temporal perspectives on support efforts.

UNEP describes the fifteen years following the accident, from 1986 to 2001, as the 'Emergency Phase' (followed by Recovery Phase and Management Phase), asserting in 2002 that demands made by the communities involved have scarcely diminished.¹⁴ UNEP notes that 'enormous' efforts have been made by the governments of the directly affected States to address the effects of the accident, and that these efforts have been 'supplemented to a significant degree' by assistance from wider States and voluntary sources. However, this support has declined in recent years. The collaborative approach to assistance is deemed a 'unique experiment' in international collaboration involving governments and international organisations as well as doctors, scientists and wider civil society, with the potential to provide wider lessons on good practice. However, UNEP asserts that 'the international effort can only be effective if it supports, amplifies and acts as a lever for change in the far larger efforts made by local and national government agencies and the voluntary sector in the 3 countries'.¹⁵

Twenty five years on from the disaster, in 2011, the international community convened in Kiev to discuss and continue support and financial assistance to the area.¹⁷ Financial support is still pledged through the European Bank for Reconstruction and Development (ERBD)-administered Chernobyl Shelter Fund. As of end-2010, the Fund has received €990 million from 29 countries, the EU (at large), and ERBD shareholders.¹⁷

Haiti earthquake

The 2010 earthquake in Haiti had its epicentre close to a densely populated capital city (Port-au-Prince). UNEP/OCHA conclude that humanitarian actors were 'neither methodologically nor conceptually equipped to respond' and the 'social structures, coping mechanisms and inappropriateness of many practices in urban contexts were not analysed properly in the immediate response'.¹⁸ Reports a year later showed that as a consequence of lead humanitarian agencies failing to mainstream cross-cutting issues in their immediate response, the environment was still a low priority in Haiti.¹⁹ Conclusions also show that generally, densely populated urban areas are still alien to many humanitarians, and many international organisations' preparedness measures were not prepared for such a situation and impacts.²⁰

Challenges

In the face of increasing frequency and intensity of disasters, with drivers such as climate change and urbanisation, the international response system will need to be increasingly well-prepared to provide assistance in more multifaceted and complex situations.^{21,22} It follows that greater effort will need to be invested by the international community to help States afflicted. Furthermore, technological monitoring and global communications advances notwithstanding, there are still challenges in the ways in which emergencies are communicated between States, especially from- and to States, regions and communities not so globally-connected.

Coordination of relief efforts

The vast array of humanitarian and emergency relief organisations and Programmes still need to coordinate their roles effectively. Experts consider that efficient coordination is lacking, and that humanitarian and environmental sides need to be better aligned to ensure efficiency during missions and the long-term improvement and development of ecosystems post-missions. IFRC criticises UN Member States for a lack of action to address the 'baronial' system that allows donor and UN agencies to work independently of agreed preparedness or response strategies, or operational plans. IFRC also notes that the UN lacks support to initiate a truly effective leadership development programme; and that the 'expanding multiplicity of information and data channels through social networking' is a compounding

challenge to coordination.²³ A working paper prepared for the UN itself (JEU) concludes that, 'the environment is not being consistently and effectively mainstreamed' in humanitarian response due to UNEP's poor standing in the arena, but that the JEU has limited resources to improve this situation, while critics suggest that it is too small and personality driven to do so.²⁴

Along with inefficiencies in coordination and delivery between international bodies such as the example of the EU and NATO noted earlier, NGOs express concern over the UN-centric approach to disaster relief. A strong NGO consensus considers that competition with the UN for funding and (local) human resources is a barrier to effective humanitarian support, along with the UN's 'politicisation' and a general inequality in its working relationship with NGOs. For example, coordination structures are seen to be UN-dominated, even though NGOs are considered to have the implementing capacity. These challenges stand in the way of an increased awareness of the inter-dependence between UN agencies and international NGOs, and the sense of a continuing power struggle amongst UN agencies makes clear and practical outcomes difficult.²⁵ The legitimacy of the UN to take a leading role in coordination has to be earned and, in many recent crises, this has simply not been the case.²⁶

Selectivity of aid

The selectivity of emergency aid has meant that crises in politically strategic areas have received greater and quicker responses than those elsewhere. For example, within weeks of the fall of Saddam Hussein in Iraq (2003), US \$1.7 billion in relief had been raised to help the Iraqi population of 25 million, while less than half that had been pledged for the 40 million people experiencing starvation in Africa.²⁷ Furthermore, 'quick fix', highly visible emergency responses that capture media attention tend to be funded and reported rather than long-term projects; and rigid administrative procedures of donors and humanitarian organisations deliver standardised, supply-driven approaches rather than nuanced approaches driven by the demands of recipients, failing to consider cultural, gender and social concerns.^{28,29,30} For example, despite the Afghan government requesting funds from the international community for national reconstruction and long-term development, money was donated for food aid. In such ways, the international response can overwhelm local capacities and undermine the local economy.³¹

Further challenges

In addition, or along with, the issues described above, The IFRC notes the following further examples of deficiencies in the disaster relief system:³²

- *Effective engagement with the vulnerable* – as humanitarian actors become more professional, they become seemingly less-inclined to engage with vulnerable and crisis-affected populations
- *Developing local and national capacities* – 'receives little support in practice'
- *Quality and accountability* – for the most part, efforts to improve quality, accountability and learning in response remain isolated, and further complicated by the 'exponential increase of humanitarian actors'
- *Access and protection* – The inability to ensure safe access for humanitarian organisations to affected populations, for example in Afghanistan, Colombia, Democratic Republic of the Congo, Occupied Palestinian Territory, Somalia and Sudan. The international community's uneven record of mobilising the military for humanitarian operations exacerbates this challenge
- Donor governments show a lack of interest in incorporating risk reduction, prevention and preparedness in their disaster relief efforts. Such a focus could reduce the future costs of relief efforts.³³

The Way Forward

It is critical to the successful implementation of Principle 18 that States continue to work with multi-lateral organisations and agencies in their response operations, as the experience and expertise of these agencies are better able to coordinate effective response. However, while the IFRC states that the past decade has witnessed significant attempts to reform the humanitarian capacity of the international community, it is one of a number of actors and experts who call for far wider and incisive reforms.³⁴ Greater coordination of efforts, funding and operations is required, in the following areas:

- Coordination between the UN and wider international and regional representative bodies, the NGO community, and individual State agencies needs to be improved to reduce the inefficiencies and duplication of work that has been reported;

- All humanitarian work should conform to the standards of the Sphere Project, or other internationally-recognised standards, to ensure consistency, context-specific effectiveness, and accountability;

- International financial and operational support must be delivered without bias towards politically-strategic, media-friendly, or short-term situations. The UN, or an experienced body such as the IFRC, should act as an independent mediator of the international response to disasters, to ensure impartiality;

- The environment needs to be better integrated into existing humanitarian systems of disaster relief, including but not restricted to UN operations. In 2011, UNEP's General Council adopted a decision to 'Strengthen international cooperation on the environmental aspects of emergency response and preparedness', aiming to prepare a baseline document this year to assess gaps and opportunities within the roles, responsibilities and divisions of labour between key international organisations.³⁵ The decision and any resultant progress of this report should be monitored closely and influenced as a key aspect for any Principle 18-related discussions in Rio+20 and its preparatory process;

- The mobilisation of international community's military operations for humanitarian purposes, should be improved to provide better access and protection during humanitarian missions. IFRC asserts that there is ample room for improvement in this field;³⁶

- Greater investment needs to be made to build capacity nationally and locally. Not to do so would be to undermine the responsibilities of sovereign States. Furthermore, such investment could provide practical benefits because the international community will not have the capacity to assist in light of the increasing number of crises around the world;^{37,38}

- Along the same lines, greater emphasis should be given to Disaster Risk Reduction (DRR) during disaster relief support, in order to reduce future risks to recipient States and costs to donor States. Experts note that in 'a financially strapped world, DRR is recognised as a cost-effective alternative to the ever-mounting costs of emergencies'.³⁹ Research should focus on reducing risks from emerging and new types of crisis-drivers, such as climate change and urbanisation.⁴⁰

States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.

Principle 19

Introduction

If a given State is planning to implement or take part in any activity which may cause detrimental environmental effects beyond its borders, it is obliged to cooperate with neighbouring States (and potentially wider) in this planning. Transboundary issues include land (including subterranean), waterway, marine and atmospheric boundaries. Cooperation comprises the duties to assess, consult and inform. States must not only be given notice or warning of potential activities and their adverse effects, but be consulted on the suitability of the activity prior to implementation. Consultation implies at least an opportunity to review and discuss a planned activity that may potentially cause damage.¹

This is a vital and well-established tool of international cooperation, widely acknowledged as a customary principle of international law and guiding principle of international relations.^{2,3}

Principle 19 is very closely linked to Principles 2 (by investigating issues beyond national sovereignty); 15 (incorporating the precautionary approach to preventing environmental damage); 17 (incorporating environmental impact assessments into decisions); and 18 (by applying similar notification and assistance procedures to neighbouring States). Principle 19 builds on these Principles by introducing the crucial requirement of consultation – particularly relevant when adverse environmental effects are likely to be the result of planned activities.

The definitions of ‘timely notification’, ‘relevant information’, ‘significant adverse effects’ and ‘early

stage’ (for consultation) are crucial to successful implementation of Principle 19. However, such definitions are not always available or clear and, are open to wide interpretation and a variety of geographic and thematic contexts. Most, if not all, MEAs apply similar terminology, and international courts and tribunals have shed some light on their interpretation. However, clearer guidelines and universal applications are still required to achieve wider, reliable implementation.

Implementation

If a risk of adverse environmental harm is identified, fulfilling the obligation to consult potentially affected states should be pursued by States as a matter of priority. Failure to do so can and has resulted in international arbitration.

International laws and treaties

Principle 2 of the Rio Declaration states that nations have the ‘sovereign right to exploit their own resources pursuant to their own environmental and developmental policies’, but that activities do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. The act of boundary-crossing precipitates international rules and action for remediation or punishment, but this should be avoided by Principle 19’s requirement for early consultation between, and early notification to, States.

Since the Rio Declaration, the processes of notification and consultation have become increasingly entrenched in international processes, and are widely accepted in a range of fora. Specific obligations exist within national and regional legislation, and virtually every MEA has provisions requiring cooperation in generating and exchanging relevant information in cases of transboundary and global environmental concerns.⁴ The acting nation is not necessarily obliged to conform to the interests of affected nations, but should take their concerns into account. In some cases, simple notification and consultation has not been deemed sufficient and acting countries may be required to obtain the ‘prior informed consent’ of other governments.⁵ Such variations and the lack of clarity over levels of notification and consultation drive the necessity for international arbitration.

Case law

The requirements to prevent, notify and compensate for potential and actual transboundary effects were well-established in international law long before Principle 19 was tabled. The concept of a duty to consult has been applied by the international courts since at least 1938⁶ and has steadily been reaffirmed in international case law throughout the twentieth century.

A range of case-by-case tribunals have been constituted prior to, and since, the UNCED, without the ability to apply or learn from a universal process or clearly defined parameters. Many cases have only been effected subsequent to transboundary damage, thereby providing little or no reprieve for the environmental damage caused, nor adherence to Principle 19 or its predecessors.

Trail Smelter Case, United States v Canada (1938 and 1941)⁷

Widely noted for setting a precedent in international environmental law and consultation, this case concerned transboundary air pollution caused by a Canadian smelter releasing sulphur dioxide into American (US) atmosphere. In 1927 the US proposed referral to the US-Canada International Joint Commission,⁸ and following review (and further US complaints), a bilateral Convention was signed by the two States to settle further disputes. The International Joint Commission concluded that: "no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another."^{9,10}

Pulp Mills Case, Argentina v Uruguay (2010)

Uruguay unilaterally decided to commission two pulping mills on the river Uruguay, which flows into the territory of Argentina, without consulting Argentina. The relationship between the two States in respect of the River is governed by 1975 Statute of the River Uruguay; and this was the first dispute of its kind between the two States.

Argentina brought a case to the International Court of Justice claiming that Uruguay had breached its obligations under the Status both in terms of procedure and substance. The former related to the lack of consultation undertaken and the latter in relation to the potential environmentally polluting impacts the pulp mill would have on the river.

The ICJ found in favour of Argentina with respect to the procedural point – and determined that Uruguay has failed to pass on information to the Commission for the River Uruguay (CARU), and thus did not follow procedure. On the latter claim, the ICJ determined that there was insufficient evidence to support the claim.¹¹

The Sethusamudram ship channel project, India v Sri Lanka (ongoing)

The Indian government has proposed to dredge the 'Sethusamudram channel', a stretch of water between India and Sri Lanka, in order to open up a passage for ships between its east and west coasts, thereby avoiding the extra 30 hours taken by the current route around Sri Lanka.¹²

The proposed site "is located in a globally significant marine ecosystem"¹³ - the Gulf of Mannar Biosphere Reserve – which contains at least 117 species of coral and 5 species of turtle.¹⁴ In response to the potential for significant ecological damage to be caused by the dredging, in 2007 the Supreme Court ordered dredging to cease and instructed the Indian government to install an expert panel to review and assess the environmental impacts of the dredging programme.

In February 2010 the Supreme Court ordered that a "full and comprehensive" Environmental Impact Assessment be completed to assess the feasibility of an alternative route. The full impact assessment was published in February 2011¹⁵ and a decision on the suitability of dredging the channel is pending.¹⁶

This case demonstrates where the application of Principle 19 is especially important. One country was seeking to further its own aims in a way that had the potential to negatively impact on another as well as cause serious harm to global commons.

UNECE Espoo Convention and EU Strategic Environmental Assessments

Though criticised, environmental impact assessments (EIA) are one method of attaining information on potential transboundary effects and could be used as a basis for notifying other States of potential action and impacts (see the discussion on Principle 17 for further details).

The UNECE Convention on Environmental Impact Assessment (EIA) in a Transboundary Context (the Espoo Convention) uses the terminology of Principle 19 by obliging States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries. It was adopted in 1991, prior to the UNCED, and entered into force in 1997. Following the Convention's First Amendment in 2001, accession upon approval by UN Member States that are not members of the UNECE will be allowed, though this is still not in force.¹⁷

The European Union (EU) has also shown positive leadership on EIAs prior to and since Rio, and in 2001 took the extra step of implementing the Strategic Environmental Assessment Directive ('SEA Directive' 2001/42/EC).¹⁸ Transposed into Member State legislation since 2004, the SEA Directive requires that States must consult their own public and environmental authorities in the scoping and drafting of an environmental report; as well as any Member States potentially affected by transboundary impacts. An assessment of reasonable alternative proposals, long-term monitoring and any necessary remedial action of actions undertaken are also required.

Although open to criticism, such institutions are critical for building confidence over the long term and for providing a mechanism for discussing and resolving potential transboundary disputes.

Trade

The duty to consult is well established in WTO law and laid out in the 1994 General Agreement on

Tariffs and Trade (GATT), which set out the general purpose rules for consultation.¹⁹

Procedures of consultation and notification are particularly applicable in international trade in hazardous wastes and dangerous chemicals, where exporting countries are required to receive the consent of importing countries. Some commentators, however, feel that even this procedure of "prior informed consent" is not sufficient to prevent the environmental harm which may be caused by some traded products (for example, through the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes).²⁰

Water

Of the many transboundary issues, the greatest attention is paid to water, in light of its critical nature as a resource and human right, and its increasing potential as a reason for conflict. Dealing specifically with transboundary water pollution, the UN Watercourses Convention establishes that States must,

*“at the request of any of them, consult with a view to arriving at mutually agreeable measures and methods to prevent, reduce and control pollution of an international watercourse, such as: (a) setting joint water quality objectives and criteria; (b) establishing techniques and practices to address pollution from point and non-point sources; (c) establishing lists of substances the introduction of which into the waters of an international watercourse is to be prohibited, limited, investigated or monitored”.*²¹

UN-Water asserts that multilateral treaties on transboundary water issues have been influential in avoiding conflict, as the last 50 years have seen only 37 acute disputes involving violence, compared to the signing of 150 treaties.²² UN-Water states that 'nations value these agreements because they make international relations over water more stable and predictable'.²³

As action on water is taken to a greater extent than other transboundary issues, it should be used as a model process.

Case study – Transboundary water issues working with EIAs

The five States bordering the Caspian Sea – Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan – are not all parties and signatories to the Espoo Convention. Despite this, they have acknowledged the potential for transboundary impacts on the Caspian Sea, and taken consultative action.

In 2003, with the support of UNEP, UNECE, and the European Bank for Reconstruction and Development (EBRD), the five States developed practical, step-by-step procedures for implementing EIAs in a transboundary context. These sub-regional guidelines address compliance, notification, public consultations, monitoring and response. The presence of an internationally funded project – Caspian Environment Programme (CEP) – was reportedly a major factor in ensuring the sustainability of the guidelines (e.g. through utilising the CEP website and providing a framework for multistakeholder consultations), as was consultation and coordination with the Espoo Convention's Secretariat.²⁴

The process produced a range of tools and lessons for wider applicability, including:

- Guidelines for countries developing transboundary projects
- Guidelines for affected countries
- Guidelines for project developers
- A web page on CEP website for Espoo projects; and - A Summary of tools for public consultation.²⁵

Challenges and Conflicts

Clarity of terminology and risk

A lack of clarity over the prescriptions of the Principle, and therefore the degree of risk that necessitates notification and consultation, poses a key challenge to implementation. Instances where “a sense of imminent crisis is missing create uncertainty as to when the duty to inform of environmental risk actually arises,”²⁶ and make it difficult to determine when ‘significant transboundary environmental effects’ may occur. The level of damage that constitutes ‘significant’ is not stipulated in the Principle, and is open to wide interpretation across MEAs and in national, regional and international policy and actions. Abstract interpretation of the Principle means that disputes often arise after transboundary effects are felt, and international legal action only tackles instances of a certain severity.²⁷

A lack of a common approach and standards

Despite the problems noted above, efforts to devise global governance structures have increased and improved levels of cooperation and management of transboundary challenges. However, a common deficiency remains the lack of appropriate disincentives and penalties to deter violations.²⁸ Global or regional cooperation and agreement needs to be underpinned by attributable, common environmental standards and regulations; information and expertise sharing; and public involvement.²⁹ Furthermore, it is not clear which international organisations or processes are responsible for setting standards and monitoring practice. The terminology of Principle 19 is applied widely but without clarity or consistency and mechanisms such as MEAs could work better together. For example, the Convention on Biological Diversity does not specifically address transboundary water pollution, even though that problem represents a critical issue for biodiversity.³⁰

An effect of the general lack of clarity over these issues is that significant discrepancies exist between States’ own interpretation of the Principle, and their ability and/or political will to follow it. Different socio-economic conditions, traditions, organisational structures and working practices in different countries lead to inconsistencies and problems in multilateral processes. For example, a study by the UN-ESCWA found that in that region (and beyond), most attempts to manage the transboundary environment are severely impeded by political limitations, a lack of serious cooperation, inadequate financial resources, inefficient national environmental legislation, inadequate enforcement of existing regulations, and recurrent political volatility and insecurity. Furthermore, dispute resolution mechanisms in the region, including joint committees, regional commissions and international agencies, despite offering substantial support to member states in negotiations, fall short of playing a decisive and conclusive role.³¹

In the case of trade, hazardous materials and products moved knowingly across borders are arguably more easily defined, monitored and regulated than hazardous materials moved by natural process (e.g. pollution through waterways). The fact that there is still dispute over such ‘packaged’ transboundary processes highlights the difficulties in the field at large.

Lack of a common tribunal approach

No independent international body exists to adjudicate over the proceedings of transboundary impact consultations. Currently, specialist Tribunals are constituted on a case-by-case basis, stipulated by MEAS or by regional agreements. In most cases these Tribunals will be relevant only to the particular case and States involved in the dispute or negotiations.

This process potentially has its locally-relevant benefits, but leads to inefficiency and variable standards, globally. With such a local or regional approach it is difficult to establish universal precedents to apply in wider cases, unless the case goes to the ICJ. Unlike national legal systems that establish a precedent for future interpretation, the international application of – in this case – the Rio Declaration does not. Therefore the Principle and its application can be interpreted ambiguously and in fragmented fashion; and few universal lessons can be learned and applied. Without the interpretation of the courts States are, in a sense, at liberty to continue acting without having to consider how the Principle should be applied in their circumstances.

Similarly, there is no international requirement for SEAs to be undertaken as part of project proposals, in the way that

they are through the EU's SEA Directive. Even so, a lack of clarity in the Espoo Convention means that the requirements placed on States in EIAs are still often unclear.³²

Retroactive approach to negotiations

The framework of environmental governance often focuses on compensation and penalty for transboundary damage *caused*, rather than the *prevention* of damage in the first place. The case law examples above serve as examples of States undertaking activity or development first, and entering into negotiations later; and only at the insistence of affected (or potentially affected) neighbours. This retroactive approach is at variance with the notification and consultation objectives of the Principle, and with sustainable development itself. It is still common practice.

Water

Even though transboundary water issues are high on the international agenda, experts still consider that international watercourse agreements need to be more concrete, setting out measures to enforce treaties and incorporating detailed conflict resolution mechanisms.³³ Integrated water resources management (IWRM), called for in Agenda 21 to improve transboundary water governance, is also 'largely unrecognised in the terminology of international water resources law and diplomacy'.³⁴

Case study – Water and wider transboundary issues in the ESCWA Region

Due to its critical nature and associated potential conflicts, regional transboundary environmental policy and cooperation in the ESCWA Region has focused primarily on water. Beyond this, there has been insufficient exploration of wider transboundary management on issues including marine environments and coastal zones, air pollution, and land degradation. There exists a 'glaring absence of legally binding agreements or effective laws on the management and protection of trans-national environmental resources', and where cross-national agreements exist, they 'tend to remain partial, inequitable, and lack adequate means of monitoring and enforcement'.³⁵

The enhanced focus on water issues means that 'several piecemeal agreements do exist, and these have applied the principles of international law to water-sharing principles of cooperation, inclusive participation and mutual gain'. Even so, most international bodies of water in the ESCWA region are not regulated by comprehensive international agreements.³⁶

The Way Forward

In order to improve the frequency and efficacy of notification and consultation between States, improved integration of national and international legal approaches and processes is crucial. Strengthening the institutional framework that supports the role of consultation in mitigating transboundary harm could significantly enhance the ways in which States engage in the process in good faith and prior to engaging in the

disputed activities. Central to this is providing clear and accountable definitions and standards relating to the duties to consult and notify.

An International Court for the Environment³⁷ (or tribunal) would offer an independent and informed forum in which disputes between States could be heard. Resulting declarations and decisions could then set precedents applicable to wider States and disputes (including civil society and the private sector),

and for clear, universal application. This would include clear definitions and parameters over ambiguous terminology such as 'significant', 'early', and 'in good faith'. Such an institution and process could improve transparency over transboundary issues and better protect environmental and social wellbeing through evidence-based judgments.

More generally, capacity building should be enhanced to improve the understanding of transboundary issues and the mutual co-benefits for States in early consultation and notification. This could be allied to a programme for data collection to set international environmental standards, and identify and assess the implications of the existing framework of national and regional policies and approaches.



Women play a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

Principle 20

Introduction

Women have long played an integral role in environmental management through use of natural resources and traditional roles in society¹. Social and economic inequities are especially hard on women and children as they form the majority of the world's poor. The UN estimates that approximately 70% of the 1.3 billion people living on less than one dollar a day are women, and these figures are rising with current food, fuel and financial crises.²

In the lead up to the UNCED, the Women's Environment and Development Organisation (WEDO) convened over 1500 women from around the world to raise awareness and campaign for women and gender to be included in the official discussions³. Their movement, 'Women's Action Agenda 21', focused on all areas of sustainable development including governance, environment, militarism, global economy, poverty, land rights and food security, women's rights, reproductive health, science and technology, and education. Its lobbying helped to achieve an array of references to women throughout the official conference agreements, including an entire Agenda 21 chapter devoted to gender (Chapter 24), and this dedicated Rio Principle⁴.

A progression can be witnessed of the focus on gender issues in this debate, alongside or in place of women's issues. Gender issues imply concern for both men and women, and their interrelationships and (in) equalities. Nevertheless, specific attention to women's needs and contributions is still required in order to address persistent gender gaps, unequal policies and discrimination that have, and still, disadvantaged women and distorted development across societies.⁵

State of Implementation

After the UNCED's progress in establishing the role of women in discussions, debate has shifted from narrowly looking at women in development (WID) and women and development (WAD), through which economic development was seen as a way of empowering women; to gender and development (GAD), which analyses the roles and responsibilities assigned to both women and men, the social relations and interactions between them, and the opportunities offered to each. The GAD approach, rather than focusing solely on women and women's projects, provides a framework and an obligation to re-examine all social, political and economic structures and development policies from the perspective of gender relations⁶. Commentators consider this an important shift as gender had previously been perceived in a reductionist manner, restricting the subject to women's issues when the power differentials and social relations between women and men should be a more important focus⁷. The goal can be seen to be no longer just incorporating women (who are often involved in work yet continue to be left out of most of its benefits), but of empowering women to transform unequal relations⁸.

The broader concept of gender gained full recognition at the 1995 UN Fourth World Conference on Women⁹. From this emerged the Beijing Declaration and the Beijing Platform for Action, both of which focused on removing obstacles to the participation of women in public and private lives through a full and equal share of economic, social, cultural and political decision-making¹⁰. Women's Action Agenda 21 has continued to be a major advocate of these aims in discussions with international institutions, governments, the private sector and civil society. The group's report *Women's Action Agenda for a Healthy and Peaceful Planet 2015* aims to "[build on the] diverse experience of 1000s of women striving to bring the Rio agreements to life".¹¹

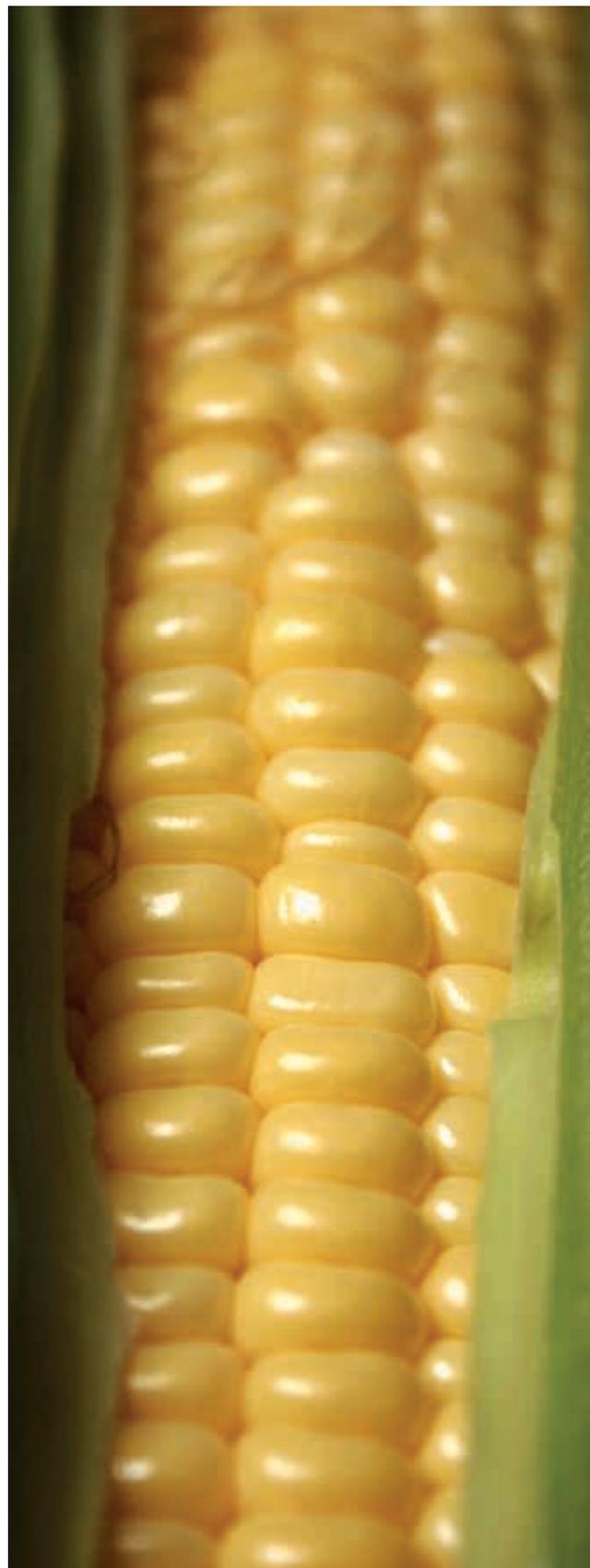
Despite growing recognition and elevation of the debate - and increasingly high-profile action groups and proponents - societal gender inequality persists, and in many countries women's skills and contributions remain unrecognised and undervalued.¹²

UN institutional focus

UNDP's work towards gender equality focuses primarily on the achievement of the MDGs, supporting national partners by 'identifying and responding to the gender equality dimensions of its four inter-related Focus Areas: poverty reduction, democratic governance, crisis prevention and recovery and environment and sustainable development'. Attention is also paid to identifying and removing internal barriers to women's advancement into senior management, including women from developing countries; and in working with other UN agencies, including through the 'up-scaling of innovative models developed and tested by the United Nations Development Fund for Women (UNIFEM).¹³

UNEP recognises gender as a cross-cutting priority in its programme of work, and promotes women's participation in all environmental protection and development activities. In 2005, UNEP's Governing Council adopted Decision 23/11 on Gender Equity in the Field of the Environment.¹⁴

The FAO is looking at ways in which increased attention to energy and gender linkages can help countries promote sustainable agricultural production and rural development, and work towards the MDG targets¹⁵ In 2010, the UN consolidated the previous four UN divisions concerned with women's and gender issues to create 'UN Women', which became operational in January 2011.¹⁶ This move came in response to calls that without the focus of a single agency it had been difficult to deal with gender justice effectively and efficiently.¹⁷ The main roles of UN Women are to help inter-governmental groups such as the Commission on the Status of Women to develop policies, global standards and norms on gender equality; to provide technical and financial support to Member States to implement these standards; and to enable Member States to hold the UN system to account on its commitments on gender equality, including regular monitoring of system-wide progress.¹⁸



Box 1. International Affirmations of Women's Rights in Environment and Development (post-1992)¹⁹

1993	The World Conference on Human Rights in Vienna clearly acknowledges that women's rights are human rights and that human rights of women are an inalienable part of universal human rights ²⁰
1994	The International Conference on Population and Development in Cairo takes major steps forward on women's and girls' rights to control their lives and obtain equal status with men, including in the areas of reproduction and family planning. The Programme of Action affirms that women's empowerment, autonomy, equality and equity are important ends in themselves as well as essential for sustainable development. It also defines reproductive rights and applies principles to population policies and programmes. It also calls on Governments to make sexual and reproductive health care available to all (women, men and adolescents) by 2015 ²¹
1995	<p>The World Summit for Social Development in Copenhagen called for the eradication of poverty and the promotion of social justice and women's rights²²</p> <p>The UN Fourth World Conference on Women, Beijing, and the affiliated NGO Forum in Huairou, provided the opportunity to consolidate and pursue previous decisions through the Beijing Platform for Action. This provides a 'road map' with standards for action by governments, the UN, civil society, and where appropriate the private sector, for achieving gender equality in key areas including poverty, education and training, health, institutional mechanisms, human rights, decision-making, and the environment. Section K, on women and the environment, asserts that "women have an essential role to play in the development of sustainable and ecologically sound consumption and production patterns and approaches to natural resource management"²³</p>
2000	<p>Beijing+5: Beijing and Beyond convenes in New York and recognises several emerging critical issues for women and girls, including work-related rights, gender-based violence, reproductive and sexual rights, education and social security, and access to productive resources.²⁴</p> <p>The Millennium Declaration, signed by all 189 UN Member States, promises "to promote gender equality and the empowerment of women as effective ways to combat poverty, hunger and disease, and to stimulate development that is truly sustainable".²⁵ Goal 3 on Gender Equality and Goal 5 on Maternal Health both deal directly with the empowerment of women; Goal 2 on Universal Education incorporates the access issues and rights of girls; and Goal 6 on Combating HIV/AIDS focuses on the issues of mother to child transmission²⁶. The Declaration also makes clear that gender equality is a condition for the achievement of all the MDGs.</p> <p>Security Council resolution 1325 (2000), on women, peace and security, recognises the impact of war on women. It recommends improving women's protection during conflicts, and women's leadership in peace-building and reconstruction.²⁷</p>
2001	The UN General Assembly special session on HIV/AIDS in New York adopts targets to promote girls' and women's empowerment as fundamental elements in the reduction of the vulnerability of women and girls to HIV/AIDS ²⁸
2002	The World Summit on Sustainable Development in Johannesburg issues the Johannesburg Declaration and Plan of Action. It confirms the need for gender analysis, gender specific data and gender mainstreaming in all sustainable development efforts, and the recognition of women's land rights. The Declaration states: "We are committed to ensuring that women's empowerment, emancipation and gender equality are integrated in all the activities encompassed within Agenda 21, the MDGs and the Plan of Implementation of the Summit" and calls for "the enhancement of women's participation in all ways and at all levels relating to sustainable agriculture and food security, and recognises the role of women in conserving and using biodiversity in a sustainable way" ²⁹
2003	The eleventh session of the UNCSD decides that "gender equality will be a cross-cutting issue in all forthcoming work up until 2015" ³⁰

UNDP still regards the Beijing Platform for action as a relevant guideline for development programming and women's empowerment, which is 'exceptionally clear, straightforward and actionable'. UNDP also asserts that the Millennium Declaration and MDGs 'confirmed the salience' of the Beijing agenda, taking forward its provisions into national action towards the targets.³¹ However, the UN's 2010 review of action makes the state of progress painfully clear:

“Gender equality and the empowerment of women are at the heart of the MDGs and are preconditions for overcoming poverty, hunger and disease. But progress has been sluggish on all fronts—from education to access to political decision-making.”

National- and regional- level action

Box 2: African institutional mechanisms supporting the Beijing Platform for Action

UNECA describes progress across all African countries in monitoring the implementation of the Beijing Platform for Action (BPFA) and the African Platform for Action, through establishing institutional mechanisms for the advancement of women including ministries, commissions, divisions, departments, councils and forums. These structures have reportedly been strengthened in many countries, with gender focal points in all ministries, and portfolio committees on gender in legislative bodies. These have been supported in 'the absolute majority' of countries by gender policies integrated into national development plans. Civil society organisations have also strengthened monitoring by forming gender networks, coalitions, forums and lobby groups.³²

However, significant challenges to effective implementation, coordination and accountability of such plans and policies are posed by a lack of capacity. Most national mechanisms lack capacity to monitor and evaluate gender equality performance in all sectors of the economy; they are poorly resourced (in terms of staff, skills and budget); lack coordination and political power across wider ministries and institutions; and are further hindered by a lack of political will.³³

Access to technology

In India and other developing nations, access to radios and television has promoted women's community engagement and education. Women in these communities are being introduced to the use of computers and the internet for livelihood enhancement

activities. Cell phones have penetrated many rural areas and are helping women farmers to do business without 'middle men', improving their income.³⁴

Agriculture

In many developing countries, women's ability to benefit from improved agricultural management, and to enter related fields such as horticulture, fisheries, and forestry, is still relatively very low, due in part to patriarchal attitudes and social conditioning. There are few women agriculture officers or extension workers, and due to socio-cultural reasons male agriculture officers and extension workers are often not trained, expected or willing to talk to the women farmers who contribute the most in agriculture.³⁵

Challenges and Conflicts

Generally, while the international scene has seemingly recognised women's essential contribution to economic development, in practice their activities are still deemed informal and without measurable economic significance³⁶. In the context of environmental management and development, IIED found that:

*“Women are still at the lowest end of the social hierarchy in spite of their enormous contribution both in the agriculture and forestry sectors yet they continue to subsidise development mainly through productive activities which are perceived as ‘free’.”*³⁷

Women's participation and the wider issue of gender equality are still seen as discrete, independent aspects of sustainable development, rather than being fully integrated into policies and programmes. In part this can be attributed to deeply entrenched discriminatory social structures and attitudes prevalent in most societies towards gender roles, which the various attempts to raise discussion and implement gender-sensitive policies based on social context have failed to eradicate³⁸. Both mitigation and adaptation policies prefer technological and scientific measures rather than “soft” policies that address these kinds of attitudes and the social differences that cause gendered discrimination³⁹.

Addressing prevailing discriminatory attitudes in an overarching way is a significant challenge in itself which can often only be addressed in local contexts. The overall, international policy responses to date have also posed challenges in the way they have attempted

to address the issue. A number of these challenges are presented as examples below.

Narrow focus – women’s issues over gender issues

There is a plethora of criticism of the many attempts to mainstream gender into international policy making. It is found that gender discussions are still largely considered to concern women only, rather than the vital societal dynamic between women and men, and the perceptions and inequalities inherent to this dynamic⁴⁰. While awareness of these gender dimensions is growing fast in GAD circles and among women’s rights activists, in mainstream policies they still tend to be overlooked⁴¹.

For example, various studies have shown that gender aspects have generally been neglected in international climate policy,⁴² including the absence of a gender perspective in the UNFCCC and other initiatives, despite the IPCC making clear that climate change affects people differently across gender lines⁴³. A 2006 FAO report also found that gender aspects had generally been neglected in international climate policy with only a few signs beginning to show at COP sessions that gender was being tangentially broached⁴⁴.

Narrow focus - women as victims

A challenge exists to turn debate around from a focus on women as victims, to empowering women as part of the solution. To take the example of climate change, inequalities in crucial areas such as access to basic health services, including reproductive health services, intensifies the widely accepted notion that women’s close connection with the environment and natural resources increases their vulnerability to the consequences of climate change. The realisation of this is incredibly important in empowering women and ensuring gender equity, and poses a challenge in itself, but focusing on this vulnerability too much can be detrimental. Women often have untapped skills, coping strategies and knowledge that could be used to minimise the impacts of climate change, land degradation and environmental mismanagement⁴⁵. As Oxfam and Practical Action state:

“When gendered issues are mentioned at all in discussions of climate change, it is usually with reference to women’s gendered vulnerability. But there is a tendency to present women as victims rather than as agents capable of contributing to solutions,

and to make broad generalisations that lump together all women in the global South”⁴⁶.

Land rights and inequality of reforms

There is still a lack of acceptance that women themselves are actors in the process of change, reflected in many formal land rights systems and reform processes⁴⁷. A lack of equal property-, inheritance-, and trade-related International Property Rights (IPRs) are a major cause of women’s impoverishment and social insecurity, and actually threaten to turn women’s local knowledge against them.^{48,49}

For example, land reform in a development context is usually implemented to make more equitable the share of land resources, and to ensure legal rights are established and upheld, including for women. However, without a local gendered context, some cases have seen women’s customary rights eroded as formal rights are extended in ways that misunderstand women’s roles. Examples include:

- An analysis of credit schemes in five African countries found that women received less than 10 per cent of the amount of credit awarded to male smallholders;⁵⁰
- In Brazil, women are often supposedly guaranteed equal rights to land distributed through agrarian reform that passes the land rights to the head of the household (usually women). However, as few women are actually formally registered as the head of the household, and instead just as dependents, the women do not receive the tenure security they need;⁵¹
- In India, women provide 75 per cent of labour for transplanting and weeding rice, yet fewer than 10 per cent actually own land. During rainfall shortages, more girls die than boys, and the nutrition of girls suffers more during periods of a shortage of food and rising food prices;⁵²

As discussed in other section of this report, there is a real danger that indigenous knowledge will be extracted, patented and sold for the benefit of industry and research institutions; this can further undermine women’s autonomy and their access to- and control over vital resources⁵³.

Governance and the UN process

A number of reviews and assessments have identified a range of factors that limit and constrain the achievement

of multilaterally-agreed priorities and commitments for gender equality, including various limitations in national capacity for the advancement of women.⁵⁴ Furthermore, women's participation in governance structures at local, national and international levels remains 'woefully low'.⁵⁵ A 2006 evaluation of gender mainstreaming in UNDP found that its own ability was clearly lacking:

*"While there are many committed individuals and some "islands of success", the organization lacks a systematic approach to gender mainstreaming. UNDP has not adopted clearly defined gender mainstreaming goals, nor dedicated the resources needed to set and achieve them. There has been a lack of leadership and commitment at the highest levels and of capacity at all levels. The implications of the evaluation are that UNDP should reconsider its approach, if gender mainstreaming is to produce tangible and lasting results."*⁵⁶

The Way Forward

To recognise and mainstream women's role in environmental management and development, and achieve women's full participation in society, international sustainable development policy and its associated debate must move beyond solely women's issues and towards gender equality. Without such a progression the local and gendered context will not be fully understood and ineffective policies will persist. Policy responses should not be simply imposed from above and left as gestures, but based on the needs, aspirations, knowledge and capabilities of individuals, empowering them as crucial partners in practical efforts⁵⁷.

In their position paper for Rio +20, the Women Rio+20 Steering Committee have called for policy and legislative changes that:

- secure women's property rights, land tenure, and control over natural resources;
- promote women's access to services and technologies needed for water, energy, agricultural production, family care, household management and business enterprises;
- provide safe health care facilities, including for sexual and reproductive health;
- enable women - and men - to combine their jobs with childcare;
- support investments in women's economic empowerment; and
- promote women's participation in government and business leadership.⁵⁸

To begin to achieve these aims, calls for strengthened global partnerships in international development should be complemented by a renewed commitment to existing gender-related frameworks, including the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) and the Beijing Platform for Action⁵⁹. As natural resource managers, women must be involved in efforts of anticipating adverse environmental impacts and in environmental conservation more officially⁶⁰. Further specific calls from experts include requirements for the WTO to undertake a gender and social impact assessment of existing and new international IPR regimes and instruments; and the inclusion of gender-disaggregated data and reports on women's health risks related to the environment in monitoring the implementation of Agenda 21.⁶¹

Rio +20 provides a great opportunity to empower the new UN Women to advocate these aims and ensure gender equality plays a central, integral role in sustainable development. Funding and support from wider UN bodies should be prioritised to establish this body in negotiations and decisions to reflect the importance of the agenda.

*The creativity, ideals
and courage of the youth
of the world should be
mobilized to forge a global
partnership in order
to achieve sustainable
development and ensure a
better future for all.*

Principle 21

Introduction

The UN General Assembly defines 'youth' as persons of 15 to 24 years of age. This definition overlaps with that of 'children' by the Convention on the Rights of the Child as all persons between 0 and 18 years of age. However it is indeed a culturally relative definition and there are many examples where the age of youth is extended beyond 24.

In 1992 a small group of young people and children fundraised to attend the Rio conference and addressed delegates with the admission: 'coming up here today I have no hidden agenda, I am fighting for my future.'¹ This was the beginning of a movement of young people attending and participating in international conferences and negotiations, the importance of which was recognised in Principle 21 and laid the foundations for a powerful 'mobilisation' of youth across the Globe to attend such conferences.

However, participation in such conferences is only one aspect of the way in which young people can be mobilized to ensure sustainable development; participation of young people in the national decision making processes relating to the sustainability agenda is also vital and this is reflected in Chapter 25 of Agenda 21, which states that the "involvement of today's youth in environment and development decision-making and in the implementation of programmes is critical to the long-term success of Agenda 21".

Forging a global partnership between and amongst the youth over the past two decades has been particularly successful as a result of the development of technologies and online communications, which has facilitated networking and relationship building; this has largely been driven by self-organising groups of young people who are better connected than generations previously, as well as the advent of better connected travel possibilities and globalization more broadly. Beyond the specific sustainable development agenda it is important to consider both the role of young people in wider society and the

role of different sectors in supporting young people, for instance through education – both formal and informal – as well as the involvement that youth civil society organisations and charities have had in developing the capacity of young people, and other mentoring schemes that are led and run by a variety of sectors.

Both principles 3 and 21 emphasise the responsibilities that decision-makers have to those young and future generations whom they represent. In a democratic system of governance where elected representatives make decisions on behalf of their constituents, it is crucial that the unspoken voices of future generations and too often unheard voices of young people are included through the many channels that have been forged over the years by the self-mobilisation of young people, thereby upholding one of the central tenets of sustainable development, that of intergenerational equity.

Implementation

Principle 21 rather ambiguously calls for the youth to be mobilized, but it does not define who ought to do the mobilizing nor does it outline how such support might be deployed in order to fulfil the objective of the principle on the whole. It is implied, however, that support could be shown by a variety of different actors: the international community, such as through international youth engagement programmes and facilitating global networking; national governments through funding national youth initiatives as well as supporting education on sustainable development; civil society organisations and youth clubs that play a role in capacity building and working with the youth community to run their own initiatives; the scientific community to build on and enhance the knowledge base of youth; and finally the self-organisation and self-mobilisation of young people themselves.

Many international processes and Convention fora have over the years developed dedicated processes for engaging the youth and providing a means of participation. For example, there are currently official Youth Constituencies in the UN Framework Convention on Climate Change (UNFCCC), the Convention on Biodiversity (CBD), and the Commission for Sustainable Development; the CBD also provides an accessible website on the Convention and its related work for children and young people, including the 'Youth Symposium for Biodiversity';² UNICEF

is working with young people from indigenous communities who are keen to take leadership on sustainable development;³ and there was strong youth engagement in the follow-up processes to Rio building into the 'Rio plus Twenties' campaign that is focussed on the generation that will be in their twenties during Rio in 2012.⁴ Much of the organisation of these groups is performed through focal points who work with the secretariats of the particular process or agency in conjunction with the youth group. Much of the work is organised through an array of online resources such as the Youth Climate website and wider social networking.⁵

At the international level, various instruments have been agreed to facilitate the way in which the rights of young people are integrated and public participation of youth in the processes is secured.⁶ Such instruments not only serve to deliver the objectives outlined in the agreements or Conventions, but also demonstrate at an international level the importance of recognizing and implementing the rights of young people and offers useful precedents when considering how to strengthen the implementation on Principle 21.

International instruments that recognise the rights and importance of including youth in decision-making process include:

- the **UN Convention on the Rights of the Child**, which stipulates that “when adults are making decisions that affect children, children have the right to say what they think should happen and have their opinions taken into account”;

- the **UN Economic Commission for Europe (UNECE) Aarhus Convention** on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, which stresses that citizens and NGOs promoting environmental protection have the right to participate in decision-making processes, which is extended to youth;

- the **UN World Programme on Action for Youth**, as well as UN General Assembly Resolutions 52/83, 54/120, 56/117, 58/133, 59/148, 60/2, 62/126, 64/130, which call for more youth representation in official government delegations;

- **Article 25 of the International Covenant on Civil and Political Rights**, which guarantees the right to take part in the conduct of public affairs.

An effective example of integrating the youth into decision-making at the national level is that of the UK Youth Panel. In 2010 the Youth Advisory Panel was formed to act as a direct route of communication between UK youth organisations and the Department of Energy and Climate Change (DECC), with more than 500 young people taking part in its first online survey to decide on what to include in the panel's discussions. The panel is comprised of 15 young people who represent 15 organisations which have been invited to sit on this panel based on their engagement on climate and energy issues. The purpose of this panel has been to engage with the organisations they represent and take their messages to DECC to be integrated into national and foreign policy; while also dispersing information on what the DECC is doing for their respective organisations and a wider group of youth through outreach in schools, clubs and faith organizations.⁷

Wider support to youth movements

At the regional level, youth groups need to be supported and represented at various regional organisations, consortia and groups, and made a major part of international policy processes and negotiations. Although this is now taking place under their own initiatives, more support needs to be lent to those nations who cannot send their youth to such places without external support.

Above all, the youth need to be mobilised as part of a movement, and to be part of this they have to understand that they do not need to be in a specific place, rather they can work towards sustainable development goals from where they are. An example of such a movement is Power Shift, an event which has taken place around the world over the last 5 years to bring together young people and youth organisations from across a country to 'share the skills and knowledge they need to be effective and innovative, and engaging community leaders on climate change.'⁸ It includes skills-shares, workshops, speakers and training. Power Shift events have been held in India, the UK, America, Canada and Australia and have been successful in mobilising more than 25,000 young people across these countries. Other examples of successful movements include Road to Rio+20 and the British Council's International Climate Change Champions.

Case study - The Tajik Climate Network

A good example of support to a youth coalition from an international NGO is that of Christian Aid to the Youth Ecological Centre (YEC) in Tajikistan. With Christian Aid's help the YEC have initiated the Tajik Climate Network (TajCN), a coalition of NGOs working to raise community awareness of the threat of climate change, elaborate common positions on adaptation and sustainable development, and engage in international climate change talks. Through this Network national conferences have been arranged over the past two years, attended by community and government representatives, and public and international organisations. The movement is reported to have built greater consensus amongst participants around climate change issues, and given Tajik youth and NGOs an opportunity to provide input to the national adaptation strategies⁹.

Education programmes

Many schools and universities run programmes that teach young students about the functioning of the UN and related international organisations. The model United Nations offers young people the chance to understand the mechanisms and functions of the international system through practising as young delegates and imitating the international negotiating process, and has been successfully implemented globally. Political support for the next generation of leadership in sustainable development is also supported by NGOs and wider organisations such as the International Institute for Sustainable Development in Canada, Forum for the Future with its scholarship programme in the UK, and the Commonwealth with its Environmentally Sustainable Development Programme.

UN Decade of Education for Sustainable Development

2004-2014 is the UN Decade for Education for Sustainable Development. Education's response to unsustainable development has been substantial, arising from Rio's call to 're-orientate education systems toward sustainable development'¹⁰. Education has taken a lead in linking the three pillars of sustainable development: environment,

society and economy, across curricula, campus and communities; developing the emerging pedagogy and practice of Education for Sustainable Development (ESD) to the extent that European consensus exists around the moral imperative for education to forge a sustainable future and of the competencies required for both learners¹¹ and teachers while globally, ESD practice transmits across vertical and horizontal linkages, crossing geographical borders¹², and in the UK spanning all phases of formal and informal learning.¹³

North – South partnership

In recent years, youth organisations from the global 'north' have worked in partnership with those from the 'south' to find funding to enable youth delegates to attend the meetings where they otherwise might not have. There are also positive examples of governments supporting the youth constituencies and in 2009, for the COP 15, the Danish government offered a substantial amount of money to YOUNGO to finance projects that enabled young people from the global south to attend the COP and share in capacity building (see case study below). Additionally, youth climate coalitions (such as from Australia and the UK) raised money to support young people from the Pacific Islands and Kenya to attend COPs 15 and 16, respectively.¹⁴

Case study – YOUNGO's successful intervention on Article 6 of the UNFCCC

In June 2010 at the Bonn intersessional, the Youth Constituency offered a submission to the UNFCCC on the specific issue of Article 6.¹⁵ By the Cancun COP 16 in December that year the Youth Constituency had successfully worked together to coordinate a coherent and successful advocacy project to 'strengthen Article 6' as part of the mid-term review of the amended New Delhi Work Programme. At the Cancun COP 16, and the [thirty-third] meeting of the Subsidiary Body for Implementation (SBI) a Draft Decision was made by the Parties relating to 'progress in, and ways to enhance, the implementation of the New Delhi Work Programme on Article 6 of the Convention.'¹⁶ This enhancement of the implementation of the programme was the core element of the advocacy work that YOUNGO had undertaken, and furthermore, the language relating to education was also considerably strengthened. It is a testament not only to the success of the project, but to signifying how important an issue it is to enhance the abilities of young people to participate in the decision-making process.

United Nations Youth Representatives

The UN has a well established programme that brings together young leaders who are determined to play a role in shaping their own future. Following on from various successful international agreements that recognised the role and importance of youth - such as the 1965 Declaration on the Promotion among Youth of the Ideals of Peace, Mutual Respect and Understanding between Peoples¹⁷ and the UN General Assembly's observation of the Year of Youth in 1985 which focussed on *Participation, Development and Peace* - the United Nations strengthened its commitment to young people by 'directing the international community's response to the challenges to youth into the next millennium.' In 1995 – the anniversary of International Youth Year – the international strategy was adopted that aimed to promote the role of young people in the international and intergovernmental processes. The World Programme of Action for Youth to the Year 2000 and Beyond calls on Member States to:

“Include Youth Representatives in their national delegations to the General Assembly and other relevant United Nations meetings, thus enhancing and strengthening the channels of communication through the discussion of youth related issues, with a view to find solutions to the problems confronting youth in the contemporary world.”

The programme has been running successfully since then and has enhanced the ways in which young people are not only mobilised, but also can actively participate in the decision-making processes that are shaping their future.

Challenges and Conflicts

A significant challenge to implementing this Principle is the ambiguity in the text regarding the mobilization of the youth. It does not define *who* can play a role in mobilizing the youth and nor does it outline *how* the youth ought to be mobilized in order to fulfill the desired objective. Furthermore, the 'global partnership' is not expressly defined: it begs the question 'who' is a part of the partnership? Is it just youth forming partnerships between themselves or is there a role for other sectors to play in supporting the formation of these partnerships through mentoring and the like? Despite some of the initiatives that have been outlined above, by not defining key elements of the Principle with respect to both the objective *and*

the way in which the objective can be achieved, the core vision is undermined.

The youth are able to play an important role in holding national governments to account by coalescing to expose decision-making incongruous with sustainable development, through formal procedures and by active protest. In many countries sufficient funds or support for youth to play such roles are missing at the national level. Cultural and social barriers exist to youth having their voices heard, including a lack of formal procedures or a lack of protection in protests, and in many countries criminal responsibility is set at an unacceptably low age. A lack of impetus or capacity in national education systems to teach sustainable development issues also presents a major failing in raising awareness, ability and empowerment of the youth. Such institutional and cultural frameworks present clear ideological barriers to the concept of governments 'mobilising' youth.

The Way Forward

The global youth need to be engaged in sustainable development processes at all levels: engagement can be through education for sustainable development, by giving them more access to information to make better choices, making the voices of young people more prominent in national decision-making, supporting and providing institutional space for projects done by youth and supporting the NGOs working with the youth both nationally and internationally. Experts consider that global partnerships will help in establishing effective networking for active participation, enhancing youth capacity to deal with issues hampering sustainable development, increasing public awareness and understanding of sustainable development issues, increasing youth representation in various policy fora, enhancing the sharing of knowledge and expertise regionally and internationally, promoting environmental ethics amongst the youth; allowing the youth to work in close partnership with active regional stakeholders and helping regional integration towards sustainable development¹⁸.

Care must be taken to ensure that relationships already built between young people and governments are appropriately passed on. This will require support from both sides – youth organisations and governments alike, with mediation provided by the UN. National governments should commit to fully engaging with their youth and supporting youth activities at the local,

national and international level. In addition effort should be made by National Governments to foster collaborative relationships between their youth constituencies and their policy makers and negotiators. In countries and regions where such relationships have not been established, formal institutional processes or partnerships with youth groups should be encouraged and installed. Many countries still require a shift away from surface-level engagement towards actively involving young people in a much deeper and collaborative manner. Possible methods for such support are set out below.

Government funding, platforms and support

In order to take these steps forward, governments could follow the examples of the Danish Government who funded the important projects of the youth for the Copenhagen COP15 conference. The UK Youth Panel is another successful example to help countries set up Youth Advisory Panels with their Governments¹⁹. Support from governments need not be constrained to direct funding. Alternatives could include logistical support to the youth groups such as contributing meeting space or equipment so that the youth can continue with their work in a supported, but not restricted, manner.

The 'Bandung Declaration', from the Tunza International Conference for Children and Youth held in Bandung, Indonesia in September 2011, could be utilised as a key vehicle to pursue the implementation of Principle 21.²⁰

Additionally, learning from the difficulties faced when funding at times is unexpectedly withdrawn from various youth initiatives and activities, it will be important to establish stable funds so that the youth can plan and prepare for their activities. For instance, establishing a 'youth fund' to support the work and efforts of the 'creative' youth, administered by a combination of government officials and elected representatives of the youth constituencies at the national level, would go a long way to supporting implementation of Principle 21 at a range of levels and in a diverse mix of disciplines.

It is also pertinent to consider the role of wider civil society organisations and NGOs, who can play an important role in furthering the aims of Principle 21. Many NGOs support the training and capacity building of young people and youth organisations, and this is to be commended. However, in order to increase the role that civil society organisations play in this implementation, they could still benefit significantly from funding and

support from national governments or international institutions for youth capacity building programmes. A powerful partnership could be established between governments and wider civil society, potentially building important foundations for collaborative work to 'mobilise' action.

Consultation and education

There will also need to be a development and potential change in attitudes towards including young people as relevant stakeholders in the engagement processes undertaken by governments, including consultation processes. Young people must be consulted upon matters that concern them and affect their future, but current consultation processes can be alienating and designed in a way that renders them almost inaccessible to young people. Here, youth organisations, NGOs and – crucially, for a wider, more representative catchment – schools should be encouraged by national governments to play a role in facilitating the consultation processes that involve young people, and to help make them accessible and relevant. Education systems could also increase levels of awareness and the ability for action on sustainable development, generally, empowering the youth to increase participation by their own means. Education for, and on, sustainable development – and building capacity for this in national education systems – should be a crucial item for discussion in Rio +20.

The youth community has demonstrated its excellent grasp of social networking, online media and new modes of communication that have enabled them to organise and coordinate from all over the globe. This knowledge and ability can be harnessed to involve them in consultation processes, and to improve their education. It must be recognised, however, that whilst this will be suitable for many developed nations, young people in developing nations may not have ready access to internet and appropriate communication tools. In this respect, it is important to devise consultation processes that are inclusive and not solely reliant on internet technology.

The UNCSD in Rio will be held two years before the end of the UN Decade of Education for Sustainable Development in 2014 and a review of the support and implementation of the DESD could be linked in with the expiration of the Millennium Development Goals in 2015. The UNCSD in 2012 could therefore establish a mandate for such an educational review to take place in particular in relation to the youth and capacity building to promote Principle 21 further.

Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

Principle 22

Introduction

Over 370 million indigenous people live in approximately 90 different countries,¹ occupying 20 percent of the earth's territory.² There are thought to be around 5000 different indigenous cultures that contribute extensively to the world's cultural diversity and language, as well as the practice and preservation of traditional knowledge and skills.³ Indigenous peoples often share important spiritual, cultural, social and economic ties with the lands and environment they have inhabited for generations. In this regard, maintaining access to these lands and preserving the natural ecosystems and resources associated with them is of the utmost importance in these communities.⁴

Indigenous people have sustainably used and conserved a huge diversity of plants, animals and ecosystems for thousands of years⁵, and strong correlations have been shown to exist between areas inhabited by indigenous people and high levels of biodiversity.⁶

Although globalisation has had some positives for indigenous groups, presenting opportunities to network with similar communities around the world, raise awareness, fundraise, and alert the international community during times of crisis, it also poses a threat to these groups and their traditional way of life. Multinational companies and governments increasingly attempt to exploit the lands of indigenous people and their natural resources for their own benefit, and traditional cultural techniques and knowledge are frequently stolen and commodified for the mass market.⁷ Recognising these threats to their communities, and following extensive advocacy by the indigenous movement, the Working Group on Indigenous Populations was established by the UN in 1982 with the aim of reviewing the human rights of indigenous communities⁸. This was followed by the 1989 International Labour Organisation (ILO) Convention No.169 Concerning Indigenous and Tribal Peoples

in Independent Countries, a legally binding treaty specifically dealing with indigenous rights.⁹ However, it was not until the Earth Summit in 1992 that the importance of indigenous peoples' role in environmental management and sustainable development was properly recognised by the UN. Not only does Principle 22 of the Rio Declaration acknowledge this important link, Chapter 26 of Agenda 21 also provides significant detail on how to strengthen the role of indigenous communities in sustainable development.¹⁰ A number of multilateral bodies and mechanisms have since been installed to implement these objectives; however their effectiveness is neither clear nor universal.

State of Implementation

At the 1992 Earth Summit, when the Commission for Sustainable Development (CSD) was formed, Indigenous People were established as one of the nine Major Groups of civil society representatives that should be involved in sustainable development decision-making. Consequently, indigenous people have gained increasing recognition at the international level and their participation and 'voice' in decision-making processes has been enhanced considerably. With this increased involvement and recognition significant progress has been made in incorporating Principle 22 into a range of national and international legislation and policy. Both the Convention on Biological Diversity and the Forest Principles that came out of Rio in 1992 incorporated the rights of indigenous populations into their text.¹¹

Convention on Biological Diversity (CBD)

The CBD process, which was opened for signature at the 1992 Earth Summit, recognises the importance of indigenous people, with Paragraph (j) of Article 8 of the Convention stating that each contracting party should, "subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity".¹²

With the CBD one of the most widely adopted international conventions, with 193 parties as of July 2011¹³, indigenous groups have found it to be an effective forum through which to participate and gain recognition of their rights.¹⁴ Since coming into force in 1993 significant steps have been taken to implement Principle 22 into various instruments under the Convention, in

addition to implementing the provisions set out in Article 8(j). At COP-3 in 1996 The International Indigenous Forum on Biodiversity (IIFB) was formed to act as an official expert advisory body to the CBD, on indigenous rights.¹⁵ A Voluntary Fund has also been set up to facilitate participation of indigenous groups in meetings under the convention¹⁶, and at COP-10 a Traditional Knowledge Information Portal was developed to raise awareness and improve access to traditional knowledge and indigenous practices related to conservation and the sustainable use of biodiversity.¹⁷ Another significant step was the development of the Akwé: Kon guidelines at COP-7 in 2004, which provide a collaborative framework and guidance for the conduct of cultural, environmental and social impact assessments regarding developments on lands inhabited by or used by indigenous communities. However, this is currently a voluntary set of guidelines so Parties to the Convention are not obliged to incorporate them into national policy, but are merely 'encouraged' to.¹⁸ Principle 22 is also incorporated into the texts of the two Protocols under the CBD, the 2000 Cartagena Protocol on Biosafety¹⁹ and the 2010 Nagoya Protocol on Access and Benefit Sharing²⁰.

ICPD, Cairo Program of Action

At the 1994 International Conference on Population and Development in Cairo, 179 countries adopted a 20-year Programme of Action which, as well as recognising that reproductive rights, gender equality and women's empowerment are crucial for implementing successful population and development programmes, also recognized the importance of indigenous peoples. Chapter six of the Programme of Action states that "The cultures of indigenous people need to be respected. Indigenous people should be able to manage their lands, and the natural resources and ecosystems upon which they depend should be protected and restored."²¹

The Convention to Combat Desertification

The Convention to Combat Desertification, adopted in 1994, incorporates Principle 22 into its Articles on information collection, analysis and exchange, and also research and development. Article 16(g) notes the benefits and importance of "exchang[ing] information on local and traditional knowledge, ensuring adequate protection for it and providing appropriate return from the benefits derived from it..." when assessing the effects of drought and desertification. Likewise Article 17(c) states that research activities in the field of

combating desertification and drought should "protect, integrate, enhance and validate traditional and local knowledge, know-how and practices..." However both these paragraphs are "subject to national legislation and/or policy", which does weaken their implementation.

WSSD and the Kimberley Declaration

Just prior to the World Summit on Sustainable Development (WSSD) in 2002, indigenous groups assembled at the International Indigenous Peoples' Summit on Sustainable Development in Kimberley, South Africa where they adopted two key documents – the Kimberley Declaration and the Indigenous Peoples Plan of Implementation on Sustainable Development. Both documents are viewed as cornerstones in the work of indigenous groups on sustainable development. The Kimberley Declaration reaffirms many of the issues raised at the 1992 Earth Summit, including Principle 22 – "The national, regional and international acceptance and recognition of Indigenous Peoples is central to the achievement of human and environmental sustainability". The declaration also acknowledges a lack of political will in implementing commitments made to indigenous peoples in 1992, notably Agenda 21.²²

The Kimberley Declaration played a key part in a significant breakthrough at WSSD. In paragraph 25 of the Johannesburg Declaration on Sustainable Development the following sentence was included: "We reaffirm the vital role of indigenous peoples in sustainable development." This was the first time that the UN had used the term "indigenous peoples" with an "s", and thereby recognized them as peoples and not just individuals²³. This admission set a major precedent as it facilitated the use of the term in subsequent UN documents, including the UN Declaration on the Rights of Indigenous Peoples (see below). The Johannesburg Plan of Implementation also incorporated and reiterated Principle 22 by acknowledging the importance of traditional knowledge and practices in a variety of sustainable development issues, including biodiversity, health and agriculture, while also reaffirming commitments to enhance the effective participation of indigenous groups in decision making processes.²⁴

UN Declaration on the Rights of Indigenous Peoples

The Declaration on the Rights of Indigenous Peoples (UNDRIP) was finally adopted by the UN

General Assembly in 2007 after the Working Group on Indigenous Populations began preparing the first draft in 1985. In its preamble the declaration recognises that “respect for indigenous knowledge, cultures and traditional practices contributes to sustainable and equitable development and proper management of the environment”.²⁵ The declaration itself creates no new rights, but does provide a comprehensive and important standard for promoting indigenous rights in member states²⁶, particularly the right to self-determination (i.e. to remain distinct and pursue one’s own vision of development); the right to free, prior informed consent on projects affecting indigenous peoples and their land; and the right to participate in relevant decision-making processes. Principle 22 is broadly incorporated throughout the declaration with 17 of the 45 articles dealing with the protection and promotion of indigenous culture.²⁷

Initially, States were reluctant to adopt the declaration, with the USA, Canada, New Zealand and Australia all voting against it. However, by the end of 2010 all four of these states had officially endorsed it. There are still several countries, including Russia and Bangladesh, that abstained from voting and are yet to begin any reconsideration process²⁸. Furthermore, although it is an important global instrument, this declaration, like others, is not legally binding and as such member states are under no obligation to incorporate it into national law. However, some countries, such as Bolivia, have begun to do so (see below).²⁹

UNFCCC

At COP16 the Cancun Agreement acknowledged the value of traditional and indigenous knowledge in enhancing climate change adaptation and affirmed the importance of effective participation of indigenous groups and other stakeholders in climate change decisions. Furthermore, with regard to reducing emissions from deforestation and forest degradation, the Agreement referenced UNDRIP and recognised the need to respect the rights and knowledge of indigenous peoples³⁰. This was somewhat of a minor breakthrough as it marked a shift from regarding indigenous peoples as vulnerable groups, to recognising them as rights-holders.³¹

International mechanisms

As well as the some of the mechanisms created under the Conventions above, such as the CBD Voluntary Fund,

a number of other mechanisms have been introduced to enhance understanding and promotion of the importance of indigenous knowledge, practices and engagement around sustainable development issues. Examples of the mechanisms relevant to the implementation of Principle 22 are detailed below.

Permanent Forum on Indigenous Issues (UNPFII)

In 1993 the World Conference on Human Rights in Vienna recommended the formation of a Permanent Forum on Indigenous Issues to enhance the involvement of indigenous groups in UN decision-making. In 2002 the UNPFII was established by the Economic and Social Council (ECOSOC) with the mandate to “discuss indigenous issues within the mandate of the Council relating to economic and social development, culture, the environment, education, health and human rights.” The Forum consists of sixteen independent experts, half of whom are nominated by governments and the other half by indigenous organisations representing different socio-cultural regions of the world. As well as providing expert advice and recommendations to ECOSOC, the Forum also raises awareness and promotes the integration of relevant activities in the UN, and disseminates information on indigenous issues.³²

The Special Rapporteur Mechanism on the situation of human rights and fundamental freedoms of indigenous people

To further develop the rights of indigenous peoples the UN Commission on Human Rights decided to appoint, in 2001, a Special Rapporteur to promote good practices, including new laws and agreements, between indigenous peoples and states, and report on indigenous rights situations in selected countries.³³

Expert Mechanism on the Rights of Indigenous Peoples (EMRIP)

EMRIP was established in 2007 by the Human Rights Council. It acts as a subsidiary body to the Council, providing thematic advice, research and recommendations on indigenous peoples’ rights. EMRIP consists of five independent experts, appointed by the Council and is currently working on a study on the rights of indigenous peoples to participate in decision-making, expected to be completed in 2011.³⁴ The UN Voluntary Fund for Indigenous Populations provides financial

assistance to enable indigenous people to attend meetings of EMRIP, as well as the UNPFII.³⁵

State of implementation at the national and regional levels

European Union (EU)

In 1998 a Development Council Resolution laid the groundwork for a comprehensive EU policy on support to indigenous peoples.³⁶ The 2005 European Consensus on Development, a Joint statement by the Council, Member States, the European Parliament and the European Commission commits the EU to “apply a strengthened approach to mainstreaming specific cross-cutting issues, including indigenous peoples, to integrate their concerns at all levels of cooperation, ensuring their full participation and free, prior and informed consent.” The EU also supports individual indigenous peoples’ representatives to attend relevant UN activities through the European Instrument for Democracy and Human Rights.³⁷

African Union

The African Convention on the Conservation of Nature and Natural Resources adopted by the African Union asks that traditional rights of local communities are respected and requires “that access to indigenous knowledge and its use be subject to the prior informed consent of the concerned communities and to specific regulations recognising their rights to, and appropriate economic value of, such knowledge.”³⁸ A landmark ruling in Kenya in 2010 by the African Commission on Human and People’s Rights saw the Endorois community allowed to return to the lands around Lake Bogoria following eviction by the government in the 1970s, as the Commission ruled that the lake was the centre of their culture and religion.³⁹

Denmark

In 2004 a revised version of Denmark’s ‘Strategy for Danish Support to Indigenous Peoples’ was produced with the aim of integrating concern for indigenous peoples at all levels of Denmark’s foreign policy and development cooperation, and raising indigenous issues through policy dialogue with partner countries.

Philippines

In 1997 the Indigenous Peoples’ Rights Act (IPRA) was adopted in the Philippines which recognises indigenous peoples’ rights to ancestral land, self-governance and empowerment, cultural integrity and social justice. In relation to Principle 22 the Act gives

indigenous peoples the right to participate in decision-making processes and have mandatory representation in policy-making bodies, as well as protecting indigenous knowledge, community intellectual rights, and the right to science and technology.⁴⁰

Local examples

The Arctic Climate Impact Assessment is an example of utilising indigenous traditional knowledge in environmental assessment. Researchers studying the effects of climate change have been working with indigenous people to learn from their observations and perspectives about the influences of climate change and weather events on the arctic environment.⁴¹

In Australia, the national alliance of Indigenous Land Councils across Northern Australia works closely together with the Australian Indigenous Traditional Owners and communities on a national Dugong and Marine Turtle Management project. The project involves communities across the north coast of Australia and the Torres Strait, and combines Indigenous knowledge and traditional management practices with ‘western science’ to develop sustainable, community-driven management plans for dugong and sea turtle protection and management.⁴²

Challenges and Conflicts

Over the past two decades indigenous peoples have experienced increasing recognition at the international and national level. The values of traditional indigenous knowledge and practices, as well the importance of indigenous rights in sustainable development have been recognised in many global and national policies, and there are countless examples of best-practice where Principle 22 of the Rio Declaration has been incorporated. However, there are also countless examples where this has not been the case. Many decisions taken at the international level fail to be implemented at the national and local level, and indigenous voices are often not heard still, despite the significant progress that has been made.⁴³

There is often a lack of political will to bridge this implementation gap, and unfortunately in many countries there remains inherent discrimination against indigenous peoples at all levels.⁴⁴ Indigenous lands are often rich in natural resources, and all too often countries seek to exploit these while completely ignoring the rights and interests of the people that have inhabited these lands for

generations. Indigenous peoples are particularly vocal at the international level about this exploitation with regard to mining activities. As stated by the Indigenous Peoples Major Group at CSD18, “corporations and some States have continued to justify the expansion of mining and mining exploration and the denial of indigenous rights under the needs of ‘national development’”. These types of activities and an obvious neglect for indigenous peoples are still happening despite improved recognition within policy frameworks and the establishment of instruments such as the UNDRIP.⁴⁵

Despite the fact that there is a multitude of different international and regional instruments and policy frameworks that have incorporated new legislation on indigenous peoples in recent years, indigenous peoples themselves are often unaware of the rights and opportunities available to them. Only a small minority of indigenous people are engaged with the UN system, and so developments at the international level are not necessarily translated back to communities on the ground. This lack of awareness also extends to national governments who do not place a high priority on indigenous issues, and may go some way to explaining the implementation gap.⁴⁶

Additionally, many of the instruments above are not legally-binding, and so if States do not place a high priority on indigenous issues without any obligation under international law to do so, the application of Principle 22 is unlikely to occur. For example the application of indigenous knowledge in environmental assessments as recommended by the UNCBD and Akwé: Kon Guidelines has so far been very limited, as these guidelines are only voluntary. Likewise the UNDRIP is frequently disregarded as it is not legally-binding, allowing States to ignore the rights of indigenous peoples, and most likely not face any consequences.⁴⁷

Despite much rhetorical progress, indigenous peoples remain marginalised in several international political processes. Indigenous peoples are still only admitted as observers to UNFCCC and UNCCD negotiations, for example, thereby greatly reducing the level of input and recognition they can achieve during decision-making processes. Although indigenous peoples’ organisations were given constituency status by the UNFCCC in 2001, they are still waiting for the approval of an Ad Hoc Working Group on Indigenous Peoples and Climate Change which would allow active participation in negotiations similar to the UNCBD.⁴⁸

Intellectual property rights

With regards to the traditional knowledge of indigenous peoples, intellectual property laws often fail to recognise the ‘ownership’ of intellectual property rights (IPRs), or the traditional laws and systems of indigenous communities to protect them. As opposed to international IP standards and laws based on private ownership, indigenous knowledge systems are often based on communal ownership, or simply do not explicitly protect IPRs. On the whole, indigenous traditional knowledge and folklore usually do not meet the criteria of novelty and originality generally required for protection under IPR legal systems. Under such opposing systems, rights and traditional knowledge are wrongly presumed to be in the public domain or are frequently taken or awarded to the wrong people, with recognition not attributed to the indigenous communities which have developed it.⁴⁹ The prevailing legal system is exploited by MNCs with incomparable economic and legal power to the indigenous communities. Many pharmaceutical companies, for instance, patent traditional medicines without giving due recognition to the indigenous communities that discovered them. Evidence has suggested that of some 130 plant-derived prescription drugs, over 70% came to the attention of pharmaceutical companies after being discovered in traditional systems of medicine.⁵⁰ Governments have the duty to uphold indigenous IPR, but they also have incentives to attract investment – a situation which all too often creates an imbalance in favour of economic investment. If companies and States are to utilise the traditional knowledge of indigenous peoples, as set out in Principle 22, these groups must be recognised, protected and where necessary compensated appropriately.

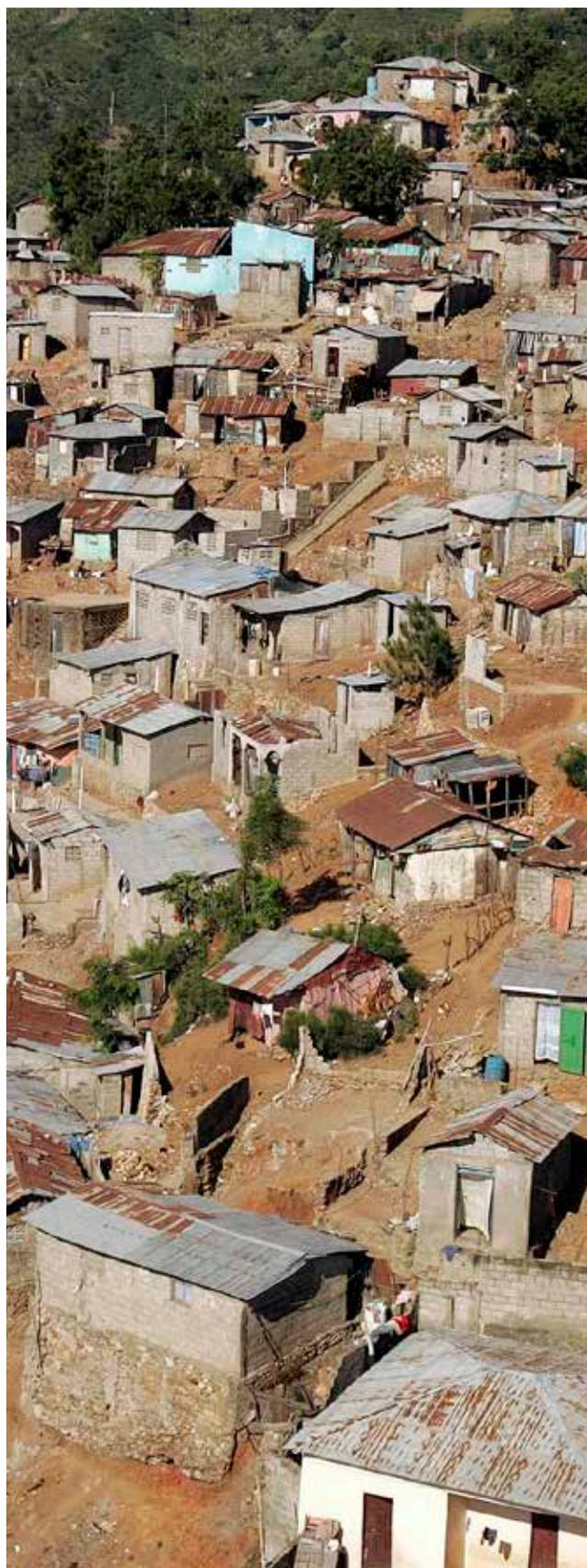
The Way Forward

The involvement of indigenous peoples in decision-making must be improved at all levels. Globally the UNCCD and UNCBD processes should be used as best-practice examples on how to enable active participation of indigenous peoples, however many of the provisions set out in these processes still require mandatory status and enforced follow-through. At the national and local level the situation is even worse, with many countries still refusing to recognise indigenous peoples and their rights. The UN Declaration on the Rights of Indigenous Peoples does represent significant progress but more countries must be persuaded to incorporate this into national law, as Bolivia has done.

In order to persuade States to incorporate Principle 22, policy frameworks must be strengthened and made legally-binding where possible. Capacity development must also be improved with better funding mechanisms put in place to facilitate indigenous peoples' involvement in decision-making. Enhanced technical and financial capacity would also provide less-developed countries with the means to implement strategies for protecting the cultural and human rights of indigenous peoples.

Traditional knowledge must be better protected and indigenous peoples given greater control over disclosure and use of this knowledge, as well as appropriate benefits if this knowledge is applied outside of their community. Indigenous peoples have emphasised that such protection must ensure that their heritage is safeguarded for the use of future generations, and that it is not misappropriated or commercialised “without the free, prior and informed consent of the custodians of the culture, knowledge and biodiversity.”⁵¹ Arguments have been made for a new legal regime specifically designed to enable indigenous peoples to protect and benefit from their cultural expressions and traditional knowledge, and that support should be given to develop systems and standards that allow them to fully negotiate terms in relation to the commercial use of their cultural expressions and materials. The UNCBD is currently developing a *sui generis* system for the protection of traditional knowledge, innovations and practices of indigenous and local communities, and provide an important legal instrument for indigenous peoples.⁵² Progress should be tracked and its application made available to wider policy- and legal contexts. At the very least, the appreciation of indigenous peoples' systems of law and protection for IPRs should be better integrated into international IPR regimes through the WTO and the World Intellectual Property Organization (WIPO).

General awareness of the laws regarding indigenous peoples must be raised both within States and indigenous communities, and communication mechanisms must be enhanced so that violations against indigenous peoples are reported and dealt with appropriately.



*The environment and
natural resources of
people under oppression,
domination and occupation
shall be protected.*

Principle 23

Introduction

One of the overarching principles of the United Nations is that of preserving the right to self-determination.¹ To further achieve this within the context of the Rio Declaration, Principle 23 in particular aims to protect the rights of people under oppression, domination and occupation, with regard to their environment and natural resources, and thus reaffirm their fundamental rights in international law.

As well as being regarded as one of the critical factors in influencing conflict,² natural resources are also a valuable asset in fuelling wars, in addition to being a key resource over which nations seek to obtain control.³ Moreover, within many wars the use of environmentally harmful materials often leads to the destruction of natural habitats and areas of significant biodiversity, as well as impacting on human health.⁴ Given this context, protecting the rights of citizens to the environmental and natural resources of their communities is fundamentally and vitally important, and Principle 23 at least offers this some political recognition.

Implementation

As the oppression, domination and occupation of people is generally the result of war and armed conflict, there is significant overlap between Principles 23 and 24, which addresses protection of the environment during times of conflict. Principle 23 does deal more with the environmental rights of people caught up in the consequences of conflict however, and so in comparison is more specific in that regard.

International implementation

Principle 23 has been reaffirmed in a number of resolutions adopted by the UN General Assembly, notably 48/46, 48/47 and 49/40, recognising the importance of environmental protection in an ever-evolving and conflict-ridden world.^{5,6} Resolution 49/40 “reiterates that any administering Power that deprives the colonial

peoples of Non-Self-Governing Territories of the exercise of their legitimate rights over their natural resources... violates the solemn obligations it has assumed under the Charter of the United Nations.”⁷

There is some consensus that Principle 23 is already applied under certain international humanitarian law, as part of The Hague and Geneva Conventions, for example. Section 3 of the Fourth Geneva Convention addresses the rights of people in occupied territories, with Article 53 specifically prohibiting the destruction of personal, collective and State-owned property, unless absolutely necessary in a military context. As natural resources can be considered civilian property, unjustified destruction of them in occupied territories can be deemed a violation of Article 53.⁸ Protocols I and II of the Geneva Conventions further elaborate on the rights of civilians during international and non-international armed conflicts. Article 55 of Protocol I, for instance, prohibits damage to the environment which would thereby prejudice the health or survival of civilians⁹, while Articles 54 and 14 of Protocol I and II respectively prohibit the destruction or removal of resources ‘indispensable for survival’, such as crops, livestock and water supplies.¹⁰ There is significant weakness here however, with the ‘damage’ to the environment needing to be “widespread, long-term, and severe” in order to be recognised by the Convention. In addition, the Protocols under the Geneva Conventions are not recognised by several States, notably those involved in conflict and occupation - such as Israel - therefore reducing their effectiveness.¹¹

General human rights law has also indirectly applied Principle 23 to some extent, in the same way as international humanitarian law. Whereas the latter only applies in times of war or conflict, human rights law does not, and there is much debate over whether or not it can be applied in conflict situations.¹² However regardless of this debate, and as Principle 23 does not directly refer to war or armed conflict, it is important to give a brief overview of where the principle has been implemented in international human rights law. Both UN General Assembly Resolutions 1803 and 3005 declare that “the right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised”.^{13,14} The International Covenant on Economic, Social and Cultural Rights states in Article 1 that “in no case may a people be deprived of its own means of subsistence.”¹⁵ As so many people are reliant on the environment and natural resources for subsistence this could be applied in the context of

Principle 23 to those under oppression or occupation. Likewise the UN Declaration on the Rights of Indigenous Peoples (discussed in the section on Principle 22) refers to the importance of environmental protection and could feasibly be applied in the context of indigenous populations under oppression, domination or occupation.

At a regional level, The Inter-American Human Rights System and The African Charter on Human and Peoples' Rights both refer to the rights of people to a "healthy" or "satisfactory" environment.¹⁶

National implementation

At the national level it is difficult to assess the implementation of Principle 23. Most countries have significantly strengthened their environmental protection laws since the 1972 Stockholm Declaration and 1992 Rio Declaration; however there is very little mention of whether or not these laws are relevant in the context of occupation and oppression. Many countries simply stipulate that Principle 23 is not relevant to them as they are not involved in oppression, occupation or domination. Canada, for example, says it is not applicable in a Canadian context.¹⁷ Many countries do, however, refer to the importance of environmental protection during conflict in their military manuals, although this is more relevant to Principle 24 of the Rio Declaration. It is therefore important to look at current occupied territories, in the Middle East for example, to assess whether Principle 23 is being implemented at this level. The UN General Assembly has produced hundreds of resolutions specifically addressing the situation in Israeli-occupied territories, many of which identify the need for environmental protection in occupied areas – Resolution 50/129 "reaffirms the inalienable right of the Palestinian people and the population of the occupied Syrian Golan to their natural and all other economic resources, and regards any infringement thereupon as illegal."¹⁸

Other laws have also been passed during the course of the Israel-Palestine conflict (which has been deemed an occupation since 1967 by the UN Security Council), to enhance environmental protection within the occupied territories. As part of the 1995 Oslo Interim Agreement a new Palestinian National Authority was created and joint governance rules established to enhance the rights of Palestinians in occupied territories. Appendix I, Article 12 recognises the need to protect the environment and to utilise natural resources on a sustainable basis and states that the Palestinian side shall assume

responsibilities for environmental protection in the West Bank and Gaza Strip. Additional articles focus on the protection and transfer of rights of water, agriculture, forests and nature reserves.¹⁹ Following the Interim Agreement the new National Authority established a Ministry of Environmental Affairs (subsequently renamed the Environmental Quality Authority in 2002) to oversee all environmental protection within the occupied Palestinian territories. However, continued institutional changes and the ongoing conflict and Israeli-imposed restrictions have significantly disrupted the Palestinian Authority's ability to implement environmental protection strategies.^{20, 21}

The legal situation regarding environmental protection during occupations can be very different. During the 2003 invasion of Iraq and subsequent occupation, which officially lasted from May 2003 until June 2004 (when an Iraqi Interim Government replaced the Coalition Provisional Authority),²² a UN Security Council Resolution obliged the US and UK to protect the rights of Iraqi people to control their own natural resources.²³ As part of the Coalition's efforts to ensure environmental protection it aimed to establish effective environmental institutions to be governed by the Iraqis. However, these efforts were undermined by continuing lawlessness and violent resistance which for years inhibited capacity-building of environmental institutions.²⁴

Challenges and Conflicts

The implementation of Principle 23 is very difficult to assess due in some part to the ambiguity of its wording. Occupation and oppression can mean very different things in a legal context, with the former generally associated with war and armed conflict. In times of war, the applicability of law is very different as international humanitarian law is applied, as discussed above. However, the application of this law is very open to interpretation, and may or may not apply to the environmental protection of people under occupation. It is clear that, under humanitarian law, an occupying power has a right to protect and promote the rights of civilians under its occupation, but because there is a lack of clarity in relation to environmental rights - as well as other priorities during times of conflict - protection of the environment, and enforcement of legislation relevant to this protection, are often neglected.

In terms of applying relevant legislation, many gaps and loopholes exist. Firstly, as mentioned earlier,

Additional Protocol I of the Geneva Convention which includes an article on the prohibition of environmental damage during armed conflict, defines this 'damage' using a three-tier definition: damage must be 'long-term, widespread and severe'. These classifications are very ambiguous in scope, making application of the law extremely difficult.²⁵ Furthermore, each tier sets a very high threshold for the constitution of damage, but for a violation to occur all three conditions must be proven, the occurrence of which experts agree is nearly impossible.²⁶

Secondly, humanitarian law dictates that the environment should be protected because it is civilian property. However, environmental 'goods' such as forests, rivers, marshland etc. can easily be incorporated into military objectives, thus invalidating their protection under this law.²⁷

Finally, as environmental 'goods' are civilian property, any indirect damage caused by armed conflict and military occupation is collateral damage, which is only legally permissible if not excessive in relation to the military advantage gained. Assessing the environmental impacts associated with collateral damage is extremely difficult, as impacts can be long-term in nature, their scope can be vast, and unrecorded environmental problems may have been present before the military impact. The proportionality of this environmental damage compared to the military activity that caused it has to be determined, but there is too much ambiguity here for an accurate assessment and legal enforcement.²⁸ These gaps have a significant bearing on the application of Principle 23, despite only indirectly relating to environmental protection in occupied territories.

Beyond and outside times of warfare and conflict, the concepts of 'domination and oppression' are difficult to define and in practice are difficult to manage, particularly with respect to environmental protection as environmental damage can be less tangible than human upheaval and harm. This presents a further set of challenges beyond – albeit similar and linked to – those described above. Domination and oppression could quite easily be applied to define indigenous communities displaced or not afforded rights by States or MNCs using or mining natural resources in their communities – practices which clearly damage the environment. In this respect, Principle 23 faces the same challenges to implementation as Principle 22, such as fairness and intellectual property rights (see the previous chapter for a full discussion).

As cited earlier, some countries choose to ignore the Principle by taking the position that it does not apply to them. However, all nations exploit natural resources, at home or abroad, and taken in the context of the discussion above on the oppression of indigenous communities, such a position should no longer be tenable. Furthermore, despite gaining widespread recognition and re-affirmation across a number of General Assembly Resolutions, there are currently no legal proceedings planned or on-going whereby Principle 23 has been cited. The evidence suggests that there are several instances whereby the environment and natural resources of people under oppression, domination and occupation are being depleted and degraded but ultimately there is no satisfactory legal framework in place which allows individual citizens or communities to uphold the Principle, either through domestic legal proceedings or at an international level against other countries.

The Way Forward

Overall, the legislation relevant to Principle 23 is largely indirect and surrounded in ambiguities. Even before addressing these ambiguities, the gaps in legislation discussed above must be addressed in order to strengthen implementation and enforcement of this law. The issue of proportionality, for instance, could be addressed by analysing typical examples of environmental damage during military occupations and developing a set of criteria for determining whether this damage is proportional to the military advantages gained. This would be extremely difficult to carry out, but it would at least provide an international standard with which to assess excessive environmental damage during occupations.²⁹ With regards to the current specifications of the Geneva Convention that environmental damage must be 'long-term, widespread and severe' to warrant prohibition, these classifications must be clearly defined, if not relaxed. UNEP and a collection of experts participating in a joint ICRC/UNEP meeting in 2009 recommend as a starting point in developing these definitions, the precedents set by the 1976 ENMOD Convention:

- "Widespread" encompasses an area on the scale of several hundred square kilometres;
- "Long-term" is a period of months, or approximately a season; and
- "Severe" involves serious or significant disruption or harm to human life, natural economic resources or other assets.

Even these provisions, however, can be interpreted ambiguously.

Secondly, there must be greater clarity regarding whether or not these humanitarian and human rights laws are applicable to the environmental protection of people under occupation, domination and oppression. Too often, they are simply open to interpretation, which greatly weakens the ability to implement them in this context. Ideally, Principle 23 should be directly cited or replicated in legislation, similar to other Rio Principles, in order to clarify its relevance.

The focus of research and policy has predominantly been on the direct environmental effects of intense conflict preceding and during occupation, but often neglects the ongoing, and frequently indirect, effects caused by occupation practices. For instance, in the occupied Palestinian territories Israeli blockades led to delays in transporting materials for a new sewage-treatment plant, leading to sewage-related contamination and degradation of a salt marsh ecosystem in the Gaza Strip³⁰. The environment and natural resources must be afforded greater weight in any interventions or disputes (or discussions pertaining to interventions and disputes) concerning occupied or oppressed areas, recognising the crucial role which ecosystem services play in local communities' opportunities and wellbeing. Increased emphasis on this area should be included in all multilateral discussions, and must include those nations considering themselves exempt from application of the Principle. Alternatively, an independent adjudicator such as an International Court for the Environment (see Section on Principle 19 for discussion) could ensure appropriate protection for the environment in such cases.

This discussion should also be taken in the context of the way forward on Principle 22, to better protect indigenous communities from oppression and domination by States or MNCs for environmental resource use. In turn, implementation of both of these Principles could benefit from increased engagement with indigenous communities, for their knowledge and understanding of their environments and resources.

Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.

Principle 24

Introduction

The destructive nature of war on many aspects of society is long-term and far-reaching in consequence, including direct and physical impacts on the environment. Principle 24 serves to mitigate detrimental and potentially irreversible damage to the natural environment and its ecosystems and habitats in areas of armed conflict.

Principle 24 offers a direction for States to 'respect' international law providing protection for the environment. In doing so the Principle offers an enhanced emphasis on the responsibility that States hold on the impacts of conflict, and offers an expectation of cooperation in developing future law. It does not, however, stipulate any particular activity or dedication to this extent.

There is some overlap between this Principle and that of Principle 2, which relates to the responsibility States have to ensure that activities in their jurisdictions do not damage the environment in other States, with such activities necessarily including warfare; and with Principle 23, regarding the protection of the environment and natural resources of people under oppression (see Sections on Principles 2 and 23 for more information).

Implementation

As Principle 24 acknowledges, warfare is clearly inherently destructive of sustainable development. However, the Principle only calls for respect of environmental law. It should not be missed that armed conflict is likely to have long-lasting and negative impacts on people and economies, too. As a result, it is vital that laws at both the international and national levels are enacted to protect against harm and damage to civil society as well as the environment. To limit the negative impacts of warfare on all aspects of sustainable development, international humanitarian law has been implemented to attempt to control its means and methods deployed during armed conflict.¹

Whilst international humanitarian law has existed for over a century, it was not until the 1977 Additional

Protocol I to the Geneva Conventions of 1949 that the 'environment' was explicitly referred to. The specific articles that do are Articles 35 (3), 55 and 56²:

- Article 35 (3) – Basic rules: "It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment."

- Article 55 (1) – Protection of the natural environment: Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population."

- Article 56 (1) - "Works or installations containing dangerous forces, namely dams, dykes and nuclear electrical generating stations, shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population."

Notably, Articles 55 and 56 include anthropocentric considerations for protection of human populations, and with regards to strategic activity relating to man-made infrastructure.

Principle 24 therefore builds on an increasing awareness in international law of the need to protect sustainable development and the environment during times of warfare. Since Rio in 1992, a number of international conventions and legal instruments have built on this tradition, as shown in Box 1.

Box 1. Examples of international, regional and national agreements pursuant to Principle 24

International-level agreements

International Criminal Court Statute

The Rome Statute of the International Criminal Court provides an internationally recognised standard that States must adhere to with respect to the impacts of warfare activities on the environment, enforceable in a court of law. Pursuant to Article 8(2)(b)(iv) of the 1998 Statute, “[i]ntentionally launching an attack in the knowledge that such attack will cause...widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated” constitutes a war crime in international armed conflicts.³ Other specific provisions include the prohibition to destroy agricultural land and drinking water installations in order to inflict harm on the civilian population.⁴

The Rome Statute provides clear recognition that, *in effect*, non-compliance with Principle 24 constitutes a war crime, and is an example of how a soft law Rio Principle can be developed into internationally recognised hard law, complete with the requisite enforcement procedures and mechanisms that should (in theory) result in implementation of the legislation.

The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (1993); and the Convention for the Protection of Cultural Property in the Event of Armed Conflict, second Protocol (1999), are examples of Conventions which develop and enhance the objective of Principle 24.

Regional-level agreements

African Convention on the Conservation of Nature and Natural Resources

Article XV of the 2003 African Convention on the Conservation of Nature and Natural Resources provides: ‘The Parties shall...take every practical measure, during periods of armed conflict, to protect the environment against harm.’⁵ It further states that Parties shall “undertake to restore and rehabilitate areas damaged in the course of armed conflicts.”⁶

Military Handbooks

Many countries use military handbooks to offer guidance and rules on the conduct and actions of their military forces. Examples of countries with handbooks which make explicit reference to due care for the environment and respect for relevant international law include Australia⁷, Côte d’Ivoire⁸, Republic of Korea, the UK and Northern Ireland, and the USA.

Support with implementation

The International Committee of the Red Cross (ICRC)

The ICRC supports the multilateral process by promoting and facilitating adequate implementation of international laws. Its expertise in this area is well-recognised, especially through its involvement in the UN Decade of International Law,⁹ and has helped States to strengthen existing law and declarations pertaining to the protection of the environment in situations of armed conflict, including Principle 24. Notable supportive documents and statements include:

- **Guidelines on the Protection of the Environment in Times of Armed Conflict**

(5) International environmental agreements and relevant rules of customary law may continue to be applicable in times of armed conflict to the extent that they are not inconsistent with the applicable law of armed conflict. Obligations concerning the protection of the environment that are binding on States not party to an armed conflict (e.g. neighbouring States) and that relate to areas beyond the limits of national jurisdiction (e.g. the high seas) are

not affected by the existence of the armed conflict to the extent that those obligations are not inconsistent with the applicable law of armed conflict.

(11) Care shall be taken in warfare to protect and preserve the natural environment

- **Sam Remo Manual on International Law Applicable to Armed Conflict at Sea**

(35) Due regard shall also be given to the protection and preservation of the marine environment [of the exclusive economic zone and the continental shelf]. (44) Methods and means of warfare should be employed with due regard for the natural environment taking into account the relevant rules of international law.

Challenges

By its very nature, war is destructive of the environment and of progress towards sustainable development. Notwithstanding the efforts that States have made to pay respect or due regard to Principle 24, there remain clear challenges to the full, practical implementation of these rules. National implementation or transposition of law

directly related to Principle 24 is difficult to ascertain, and binding commitments to protect the environment during warfare are not prescriptive, even when present. The ICC has jurisdiction over war crimes and crimes against humanity, and avenues are being explored to enhance its function with regards to war and environmental protection. However, currently the ICC Statute stipulates that it must be proven that States possess an 'intention' to launch an attack 'in the knowledge of' environmental damage potentially caused.¹⁰ This presents significant challenges to ascertaining the extent and proof of 'intention' and 'knowledge', opening enforcement procedures to wide interpretation and weakness.

Furthermore, only States may bring cases to the International Court of Justice (ICJ). This presents another challenge to prosecution as geopolitical factors and influence may deter a State from bringing a case against another.¹¹

The Way Forward

Experts are divided over whether the environment and natural resources will become an increasing source of and reason for conflict, or whether the degradation of natural resources may actually foster ongoing cooperation between States. What is clear, however, is that whether or not the environment is a factor in the *causes* or *effects* of conflict, its protection *during* conflict should be enhanced by clearer guidelines for responsibility, and facilitated by a more accessible prosecution process in the international courts.

A Fifth crime against peace

A proposal recently made to the UN to overcome the difficulty of proving States' intention to cause environmental damage (as noted in 'Challenges') is for the "*extensive destruction, damage to or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished*" to be recognised with or without prior intention as a war crime, or a fifth crime against peace, justiciable in the ICC. This would constitute a crime of strict liability in which the 'intention' of a State would not need to be proven, potentially providing a stronger deterrent to environmentally harmful activities in warfare.

An International Court for the Environment

To address the limitations faced by non-state actors wishing to bring a case in an international court, the proposal and widely-supported campaign to establish an International Court for the Environment (ICE) should be considered (see other sections in this report for more details on the ICE).¹² An ICE would provide a forum by which States or non-state actors could be held to account at the international level for activities non-compliant with Principle 24 and related international legal instruments.



*Peace, development and
environmental protection
are interdependent and
indivisible.*

Principle 25

Introduction

The signing of the Rio Declaration by 178 countries indicated that the wider international community officially recognised the relationships between peace, development and environmental protection. The interconnectedness of these three issues has been increasingly recognised and discussed in recent years, but the world has seen very little in terms of policies, laws and initiatives to ensure their interdependence. Discussion is mostly rhetorical or academic, often under the theme of ‘environmental security’.¹

Politically at least, Principle 25 provides important recognition to the threat posed by environmental challenges - such as climate change - to economic and social development as well as national security; and in turn the role that environmental protection can play in promoting peace and development. Although Principle 25 may be symbolic in its nature, it is a vital recognition that laid the groundwork for sensible discussion and debates that are not held back by any scientific uncertainties, nor prevented from taking place due to ideological differences. Principle 25 is also a good example of applying a nexus lens to public policy approach.

Although this section seeks to analyse the implementation of Principle 25, it is impossible to directly attribute the progression in discourse among economists and national security experts to the adoption of the Rio Declaration. Nevertheless, it is clear that environmental protection has risen on the international agenda as an issue of vital importance to peace and development, if not always partnered with associated, discernible action.

Status of Implementation

Sustainable development and peace

Barnett defines peace as the “the absence of both direct violence and structural violence”², basing his perception

of structural violence on Sen’s (1999) investigation of the freedoms required for development – structural violence develops from the unjust provision of socioeconomic opportunities and political freedoms, protective security and transparency guarantees³.

Peace is a necessary condition and element for sustainable development, required to resolve underlying global environmental and social issues^{4,5} and sustainable development is regularly noted as a prerequisite for peace.⁶ Such interrelationships have not escaped international attention, and Principle 25 goes some way to strengthen this inter-relationship:

“Sustainable development is a compelling moral and humanitarian issue, but it is also a security imperative. Poverty, environmental degradation and despair are destroyers of people, of societies, of nations. This unholy trinity can destabilise countries, even entire regions.”

Colin Powell, U.S. Secretary of State, 1999

1987: Setting the agenda for ‘Environment and Security’

Whilst *Our Common Future* (‘the Brundtland Report’) is best recognised for its definition of ‘sustainable development’, it also called for a wider, more comprehensive understanding of security, in order to include volatility caused, to some degree, by environmental factors. It states:

“The whole notion of security as traditionally understood – in terms of political and military threats to national sovereignty – must be expanded to include the growing impacts of environmental stress – locally, nationally, regionally, and globally.”⁷

The report warned of both the implications that environmental factors have on security – in terms of violent conflict, migration and economic disorder; and the implications that security has upon the environment. It also emphasised the role natural resources play in upholding violent conflicts and the relationship between ecosystem security and human well-being,⁸ recognising that environmental stress can be “an important part of the web of causality associated with any conflict and can in some cases be catalytic.”⁹

In spite of such counsel, these issues were not provided with adequate attention in subsequent studies in the

early 1990s on the relationship between environmental factors and conflict. This has been attributed to the lack of developing-country participation in such research.¹⁰ More recently though, there has been a resurgence in international research and discussions on the interdependencies outlined in Principle 25, which suggest that the Brundtland Report's broadened definition of security may begin to gain a footing in the realm of policy making.

The relationship between the environment and conflict (as opposed to peace)

In recent decades, at least eighteen violent conflicts have been fuelled by natural resource exploitation. Furthermore, studies indicate that across the last sixty years, approximately 40 per cent of national-level conflicts can be associated with natural resources (both their scarcity and abundance)¹¹. Conflicts in Darfur concerned control over limited natural resources such as water and fertile land; and civil wars in Sierra Leone and Sudan have concerned high-value natural resources such as diamonds and oil. Whilst the exploitation of natural resources and related environmental issues are seldom the sole reason for violent conflicts, they are often factors in all stages of the conflict cycle, from outbreak and perpetuation, to undermining prospects for peace.¹²

In addition to being a potential cause of conflict, the natural environment can sustain a great deal of damage as a result of conflict; as demonstrated by the defoliants used in South-east Asia. Such damage can lead to human health risks, and can threaten livelihoods and security.

Furthermore, even in peacetime, the channelling of scarce capital, labour and natural resources into the military resources and away from sustainable development, contributes to further insecurity. This issue was highlighted in the Brundtland Report, which stated:

*'Arms competition and armed conflict ... may stimulate an ethos that is antagonistic towards cooperation among nations whose ecological and economic interdependence requires them to overcome national or ideological antipathies.'*¹³

Environmental management for peacebuilding

The increasing attention paid to the relationship between the environment and security has facilitated in breaking down the perception that environmental issues

are solely the responsibility of those affluent individuals encouraging the protection of 'charismatic wildlife'¹⁴. Today, experts and policy makers are increasingly citing ecosystem services and natural resources as essential to human wellbeing, and recognising that they can become an important part in peacebuilding efforts through employment creation and economic development.¹⁵

A host of commentators and researchers have suggested that conflict can be driven by natural resource degradation, scarcity and by competitive control of areas where resources are abundant, with particular emphasis on water resources. There are increasing levels of support among conflict-prevention and post-conflict practitioners that natural resource management can be a crucial instrument in facilitating the prevention or termination of conflict, and in forging peace in a post-conflict setting.¹⁶

Recognition of the links between climate change, peace and development

The relationship between climate change, economic development and conflict is probably the most obvious manifestation of international discussion on the interdependency and indivisibility of peace, development and environmental protection. In 2004, Sir David King, a former U.K. Science Adviser, stated that climate change is a greater threat to the global population than terrorism¹⁷ and in recent years, the Nobel Committee has helped bring attention to the issue of environmental security by awarding peace prizes to Al Gore and the International Panel on Climate Change (2007)¹⁸, and to the Kenyan environmental and political activist, Wangari Maathai (2004)¹⁹.

Furthermore, in 2011, the UN Security Council expressed its concern that possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security²⁰, affirming the UN Secretary-General, Ban ki Moon's, 2007 statement:

'The majority of the United Nations' work still focuses on preventing and ending conflict, but the danger posed by war to all of humanity and to our planet is at least matched by the climate crisis and global warming... [the effects of climate change are] likely to become a major driver of war and conflict.'

Beyond intergovernmental organisations, the inherent link(s) between climate change and economic

development shot up the international agenda with Lord Stern's report to the UK Government Treasury.²¹ His report was critical in moving the debate forward from recognition of interdependencies to providing a thorough analysis of the consequences on the global economy if nation states fail to implement environmental protection measures in response to climate change (see the sections on Principles 8 and 12 for further discussion).

Despite the apparent slow progress of the UNFCCC climate negotiations and the strong possibility that the Kyoto Protocol will expire without a successor, it is clear that a vast amount of time, energy and resources have been invested in the analysis of how peace, development and environmental protection are interdependent and indivisible. Although no direct references have been made to the Rio Declaration, participating States and intergovernmental organisations have stood by their recognition of Principle 25 through conducting research and analysis,²² holding subsequent debates and passing additional statements and declarations reaffirming the Principle.²³ However, it cannot be clearly concluded that action has been taken in the form of policy or legislation.²⁴

Key global initiatives, actors and organisations

Examples of key international work and collaborations include:

- UNDP's 1994 *Human Development Report* was dedicated to human security, declaring environmental security as one of seven components that ought to represent a new global security concept²⁵
- It is now frequently used by Canada, Japan, and a broad range of UN organisations as a framework; and
- Small Island States frequently cite this to demonstrate the dangers to security caused by sea-level rise as a result of climate change.²⁶
- UNEP's Post-Conflict and Disaster Management Branch (PCDMC) conducts environmental assessments in crisis-affected countries and strengthens national environmental management capacity through institution building, promoting regional cooperation, technical legal assistance, environmental information management and integrating environmental measures into reconstruction programmes. UNEP also established an Expert Advisory Group on Environment, Conflict and Peacebuilding²⁷ in

February 2008, comprised of NGOs, academics and think tanks, with combined experience in more than 30 conflict-affected countries. UNEP has recommended a stronger integration of environmental issues into the work of the UN Peacebuilding Commission

- The Environment and Security Initiative (ENVSEC)²⁸ is a collaboration between six international organisations – the Organisation for Security and Co-operation in Europe (OSCE), the Regional Environment Centre for Central and Eastern Europe (REC), the UNDP, the UNECE, UNEP and NATO. It assists governments and communities with projects and capacity building among and within countries in four regions: Central Asia, Eastern Europe, Southern Caucasus, and South-Eastern Europe.

- The International Crisis Group (ICG) is an international NGO founded in 1995 to prevent and resolve conflict. It is recognised as the leading independent source of analysis and advice to governments and intergovernmental bodies such as the UN, European Union and World Bank. Climate Change and Conflict is one of ICG's key issues

- The Institute for Environmental Security (IES) is an international non-profit NGO established in 2002 to increase political attention to environmental security as a means to safeguard peace and sustainable development. It hosts research, news, education and collaboration, and carries out Environmental Security Assessments (ESAs) in vulnerable areas

- Friends of the Earth Middle East's 'Good Water Makes Good Neighbours Middle East Initiative', launched in 2001, aims to encourage Israelis, Palestinians and Jordanians to work together to preserve their shared water resources²⁹

- The UN-sponsored University for Peace includes 'Environmental Security and Peace' as one of its eight graduate programs, and hosts a number of papers and publications on related topics.

Challenges and Conflicts

It can be argued that the term 'sustainable development' itself encapsulates the indivisibility of peace, development and environmental protection, and therefore that making distinct references to all three creates further silos. However, references to sustainable development in policy and legislation do

not make this level of understanding clear. Progress on the implementation of Principle 25 therefore faces the same conceptual and political challenges as any, if not all, of the Rio Principles – of perception, understanding, and an unwillingness to tackle environmental, social and economic problems.

Despite advances in raising the international agenda of the interdependencies noted by Principle 25, there is clearly a dearth in policies and legislation which address these explicit connections with action. Even though 'environmental security' is now a well-recognised and researched concept, key to UN and wider international institutional work, only a few peacekeeping missions have been clearly mandated to help the host country better manage its natural resources.³⁰

While UNEP's PCDMC is seen by some commentators to lead the way on post-conflict environmental management capacity-building, its progress, along with other institutional peacekeeping efforts, is considered modest, small-scale, and remain to be fully tried and tested. However, as the afore-mentioned recognition rises, the PCDMC and wider bodies noted earlier may step up their progress by increasing the integration of natural resource management into their peacemaking missions. Bilateral aid agencies are also pursuing practical steps similar to those of the PCDMC.

With regards to climate change in particular, reframing the debate from an environmental concern to an investment opportunity and national security issue has helped to engage wider sectors and drive the agenda of Principle 25. However, debate and multilateral progress has been hindered in the same way as has action to mitigate and adapt to climate change itself, by issues such as 'green fatigue', the 'Climategate' emails, and the growth of the Tea Party movement, for example. Despite more widespread recognition and discussion afforded to the interplay of climate change, peace and development, progress is yet to be made on a fair, ambitious and legally binding environmental protection treaty from the UNFCCC.

The Way Forward

The interdependency and indivisibility of peace, development and environmental protection can be better articulated, and needs to be underpinned by accountable research. However, the discussion need not stray too far from the overall goals and progress towards sustainable development, as discussed in previous sections. It may

well be the case that greater action taken to advance sustainable development in general may be a more effective way of securing these three inherent goals. As put by the late Hon. Professor Wangari Maathai:

“It is evident that many wars are fought over resources which are now becoming increasingly scarce. If we conserved our resources better, fighting over them would not then occur...so, protecting the global environment is directly related to securing peace... those of us who understand the complex concept of the environment have the burden to act. We must not tire, we must not give up, we must persist.”

Beyond the general advancement of sustainable development, specific attention to Principle 25's aims can be focused on improvements to peacebuilding and assistance to post-conflict areas, to better incorporate environmental protection measures into interventions and conflict prevention. In this respect, UNEP asserts that integrating the environment and natural resources into peacebuilding is no longer an option, it is a security imperative. UNEP's recommendations to the UN Peacebuilding Commission and the wider international community include:

- **Further develop UN capacities for early warning and early action:** The UN system needs to strengthen its capacity to deliver early warning and early action in countries that are vulnerable to conflicts over natural resources and environmental issues. At the same time, the effective governance of natural resources and the environment should be viewed as an investment in conflict prevention.

- **Improve oversight and protection of natural resources during conflicts:** The international community needs to increase oversight of “high-value” resources in international trade in order to minimize the potential for these resources to finance conflict. International sanctions should be the primary instrument dedicated to stopping the trade in conflict resources and the UN should require Member States to act against sanctions violators. At the same time, new legal instruments are required to protect natural resources and environmental services during violent conflict.

- **Address natural resources and the environment as part of integrated peacebuilding strategies:** In many cases it is years into a peacebuilding intervention before the management of natural resources and their

role in fuelling conflict, receives sufficient attention. It is therefore critical that parties to a peace mediation process are given sufficient technical information and training to make informed decisions on the sustainable use of natural resources. A failure to respond to the environmental and natural resource needs of the population can complicate the task of fostering peace and even contribute to conflict relapse. Peacekeeping operations need to be aligned with national efforts to improve natural resource and environmental governance.

- **Carefully harness natural resources for economic recovery:** Good management of natural resources can help strengthen the post-war economy and contribute to economic recovery. The international community should be prepared to help national authorities manage the extraction process and revenues in ways that do not increase risk of further conflict, or are unsustainable in the longer term. This must go hand in hand with ensuring accountability, transparency, and environmental sustainability in their management.

- **Capitalise on the potential for environmental cooperation to contribute to peacebuilding:** Every state needs to use and protect vital natural resources such as forests, water, fertile land, energy and biodiversity. Environmental issues can thus serve as an effective platform or catalyst for enhancing dialogue, building confidence, exploiting shared interests and broadening cooperation between divided groups, as well as between states.

A fifth crime against peace

A proposal to establish a fifth crime against peace under the Statute of Rome and Justiciable in the International Criminal Court (ICC) has been tabled in the United Nations General Assembly. Ecocide is defined as:

“the extensive destruction, damage to or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished”³¹ “

Recently a ‘mock trial’ was held in the Supreme Court of England and Wales where prominent criminal barristers and their legal teams brought a case of ‘ecocide’ and played out how the crime would be applied in practice. The two practices under scrutiny were the Athabasca Tar Sands and the Gulf of Mexico Deep Water Horizon oil spill of 2010.³²

Ecocide brings together the links between environment, development and peace. Proponents of ecocide argue that acts that lead to environmental degradation in the pursuit of development (the Tar Sands and Oil Spill being two cases on point) lay the foundations for conflict. Therefore, they argue, if such activities are determined to be criminal, then they ought to cease and not only reduce environmental degradation but reduce the likelihood of conflicts that would otherwise ensue. In addition, the investment that would otherwise have flown into the unsustainable and harmful practices would be mobilised to flow into sustainable alternatives thus promoting development of alternative industries such as the renewable energy industry.



*States shall resolve all
their environmental
disputes peacefully and
by appropriate means
in accordance with the
Charter of the UN.*

Principle 26

Introduction

Environmental problems are frequently transboundary, meaning that they do not respect national borders. Thus, efforts by the international community to address transboundary problems have required unprecedented levels of cooperation between States, and the building of new international institutions¹. Although the precise roles of the environment in peace, conflict, destabilisation and human insecurity are still debated in relation to other security and conflict variables, environmental factors are increasingly recognised as underlying causes of instability, conflict and unrest².

Although the Charter of the UN, which requires Member States to ensure that they do not engage in aggressive warfare or occupation³, does not specifically mention the environment or sustainable development, the Preamble states that the UN is determined to “promote social progress and better standards of life in larger freedom”, while Chapter 1 declares that one of the basic purposes of the UN is “to achieve international cooperation in solving international problems of an economic, social, cultural and humanitarian character, and in promoting and encouraging respect for human rights and fundamental freedoms for all without distinction as to race, sex, language or religion”⁴.

State of Implementation

Peaceful resolution

It is increasingly recognised that the environment has been and will increasingly continue to be a significant component in the causes and exacerbation of inter-state conflict over the coming decades unless progress is made in understanding and reducing these risks, both through environmental means and through ensuring peaceful resolution of any wider disputes. Margaret Beckett, a former UK foreign secretary, addressed the UN Security Council in April 2007 with the following

statement relating to the effects that climate change will have on conflict:

“Our responsibility in this Council is to maintain peace and security including the prevention of conflict. An unstable climate will exacerbate some of the core drivers of conflict such as migratory pressures and competition for resources. The recent Stern Report speaks of a potential economic disruption on the scale of the two World Wars and of the Great Depression. That alone will inevitably have an impact on all of our security, developed and developing countries alike”⁵.

Within and beyond the effects of climate change, experience shows us that conflict can be driven by natural resource degradation and scarcity, and by competition for control where resources are abundant⁶. Over the last two decades there has been a dramatic increase in the volume of decisions on environmental issues as a result of global and local awareness of the link between damage to the environment and the potential for conflict⁷. In the majority of situations where the environment is a direct cause of an inter-state dispute, the countries involved have successfully come together and resolved the dispute peacefully and in accordance with the Charter of the UN. As UNEP has recognised, “some of the world’s greatest potential tensions over water resources, for example - including those in the Indus River System and Nile Basin - have been addressed through cooperation rather than violent conflict. Integrating environmental management and natural resources into peacebuilding is no longer an option - it is a security imperative”⁸.

Case study – The Indus Waters Treaty

When Pakistan gained independence in 1947, its border with India was placed directly through the centre of the Indus River Basin, exacerbating what became an international dispute over the basin's water resources. The border left India as the water-rich upstream country and Pakistan as the water-short downstream country. For 13 years, Pakistan and India negotiated various settlements and agreements on the use and ownership of the water resources, specifically over irrigation and hydropower, none of which came to a satisfactory conclusion. The World Bank began to mediate discussions in 1952 and in 1960 India and Pakistan both signed the Indus Waters Treaty. This was seen at the time as a remarkable achievement as it brought an end to a long-standing dispute between the two countries. It is considered a relevant example of a successful settlement of a major international river basin conflict, which at one point - in 1948 - could have ended in violence. With the Treaty came the establishment of the Permanent Indus Commission which tends to depoliticise disagreements. As a result, the resolution of disputes – mainly over shares – has become smoother, more efficient and far less likely to be incorporated in a wider political or ideological confrontation. Limiting any quarrel to purely technical dimensions was one of the major objectives of the treaty⁹.

Case study – The Nile Basin Initiative

The Nile Basin drains a land area approximately the size of one tenth of Africa encompassing ten countries – Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda – and is home to more than 300 million people. In 1998, recognising that cooperative development holds the greatest prospects of bringing mutual benefits to the region, all Nile Basin countries, except Eritrea, joined in a dialogue to create a regional partnership to facilitate the common pursuit of sustainable development and management of Nile resources. In an historic step, they jointly established an inclusive transitional mechanism for cooperation until a permanent cooperative framework is established. The transitional mechanism was officially launched in February 1999 in Dar es Salaam by the Nile-COM. In May 1999, the overall process was officially named the Nile Basin Initiative (NBI). The NBI provides a forum for the countries of the Nile to move forward in a cooperative process and build a solid foundation of trust and confidence¹⁰. However, progress achieved through the NBI in water resources allocation has been slow or negligible, rarely - if at all - going further than technical discussion.

Case study – The Mekong River Commission

In 1995, Cambodia, Lao PDR, Thailand and Vietnam established the Mekong River Commission (MRC), signing The Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, and agreeing on joint management of their shared water resources and development of the economic potential of the river¹¹. In 2000, they enlisted the help of the World Bank and created the Mekong River Water Utilisation Project to develop rules, procedures and capacity for jointly managing the water resources and water quality of the Mekong River and its tributaries¹². The project established mechanisms to promote and improve coordinated and sustainable water management in the Basin including reasonable and equitable water utilisation by the countries and protection of environmental aquatic life and ecological balance¹³. The main challenges for water resources management in the Mekong River Basin were to a) achieve equitable sharing of the water resources, b) coordinate water resources development to avoid harmful transboundary impacts, and c) achieve socially and environmentally sustainable water resources management¹⁴.

Case study – Uruguay River Pulp Mills

In 2005, Uruguay authorised the construction of a massive pulp mill on the banks of the Uruguay River, which forms the international border between Uruguay and Argentina, without Argentina's consent. In accordance with the Charter of the UN, Argentina took the case to the International Court of Justice (ICJ) on two accounts: firstly, that Uruguay had breached a substantive treaty obligation to coordinate with Argentina through a bilateral river management agency, and secondly, to monitor and prevent pollution of the water and riverbed¹⁵. In 2010, the ICJ ruled in Uruguay's favour. The Court ruled firstly that Uruguay was obligated by treaty to notify and consult with Argentina before authorising and allowing construction on the pulp mills; and that Uruguay did breach this obligation (see the section on Principle 19 for a discussion on obligations to notify and consult with neighbouring States). However, the Court found that its declaration of Uruguay's breach was in itself a sufficient remedy for Argentina's claim.¹⁶ Secondly, the ICJ found that after 8 months of operation little environmental pollution was found in the Uruguay River by independent assessors,¹⁷ and no breach was found¹⁸.

Recognition in legislation and institutions

Progress is also being made in the recognition of environmental disputes and potentials for disputes within international legislation and institutions. The ICJ, being the main dispute settlement body of the UN Charter is, for some, widely accepted as playing a role in environmental matters¹⁹. In 1993, the ICJ created the Chamber of Environmental Matters to play a more proactive role in environmental disputes²⁰. This Chamber is seen as a possible means of reinvigorating the ICJ²¹. At the end of the aforementioned case between Uruguay and Argentina, it was noted that the ICJ had recognised that conducting environmental impact assessments was becoming a duty under international law²² (see the section on Principle 17 for further discussion). In 2001, the International Law Commission established Draft Articles on the Prevention of Transboundary Environmental Harm, and in 2006 the UN Peacebuilding Commission was set up, which provides an important chance to address environmental risks in a more consistent and coherent way. As stated by the former Assistant Secretary-General for Peacebuilding Support, Carolyn McAskie, in 2007, “where resource exploitation has driven war, or served to impede peace, improving governance capacity to control natural resources is a critical element of peacebuilding”²³.

Furthermore, on the 17th April 2007, the Security Council held a historic event in which it first debated the relationship between energy, security and the climate. The British called for this discussion during their Presidency as they wanted to address the security implications of a changing climate, including through its impact on potential drivers of conflict such as access to energy, water, food and other scarce resources; population movements; and border disputes²⁴.

Challenges and Conflicts

Non-peaceful environmental disputes

The Institute for Environmental Security asserts that although the precise roles of the environment in peace, conflict, destabilization and human insecurity are still debated in relation to other security and conflict variables, it seems that environmental factors are increasingly an underlying cause of instability, conflict and unrest.²⁵ In some recent cases, States have been unable to resolve their disputes peacefully and in accord with the Charter of the UN.

The Institute for Environmental Security has found that while it might not have been the primary driver in all cases, the unequal distribution of land has certainly played an important role in all violent conflicts in the African Great Lakes region in the recent past. In August 1998, for example, an insurgency backed by Rwanda and Uganda invaded the Kivu provinces in the east of the Democratic Republic of Congo and a war broke out. It is noted that while one of the reasons for these foreign backed forces was political²⁶, another important reason was to gain control over the DR Congolese valuable mineral resources, and access to renewable natural resources²⁷. As a result of this war, which lasted until 2003, an estimated 4 million people died²⁸.

In January 2011, fighting began between West Papua in Indonesia and its neighbouring Papua New Guinea (PNG). PNG forces have begun to violently clear refugee camps from the border area and destroy villages inhabited by West Papua refugees. Refugee spokespeople have alluded that local business interests are playing a significant role in the eviction, assertions confirmed by local security sources. Most refugee camps targeted are surrounded by extremely valuable timber resources, and it is deemed that logging interests are playing a significant role²⁹.

Issues with dispute settlement bodies

The UN Charter and its component bodies, whilst constituting the central focus of international discussions, is not seen by all Members as the panacea for dispute settlement. For many in the Group of 77 (G77), the Security Council in particular is seen as an “exclusive bastion of power” employed by the Council’s permanent five Member States. Only one of the five permanent Members, China, is a developing country whilst the other four – France, Russia, UK and the US – have little in common with the developing world. Therefore, many in the G77 believe that it is better for developing countries if environmental issues are dealt with in other, more equitable, bodies³⁰.

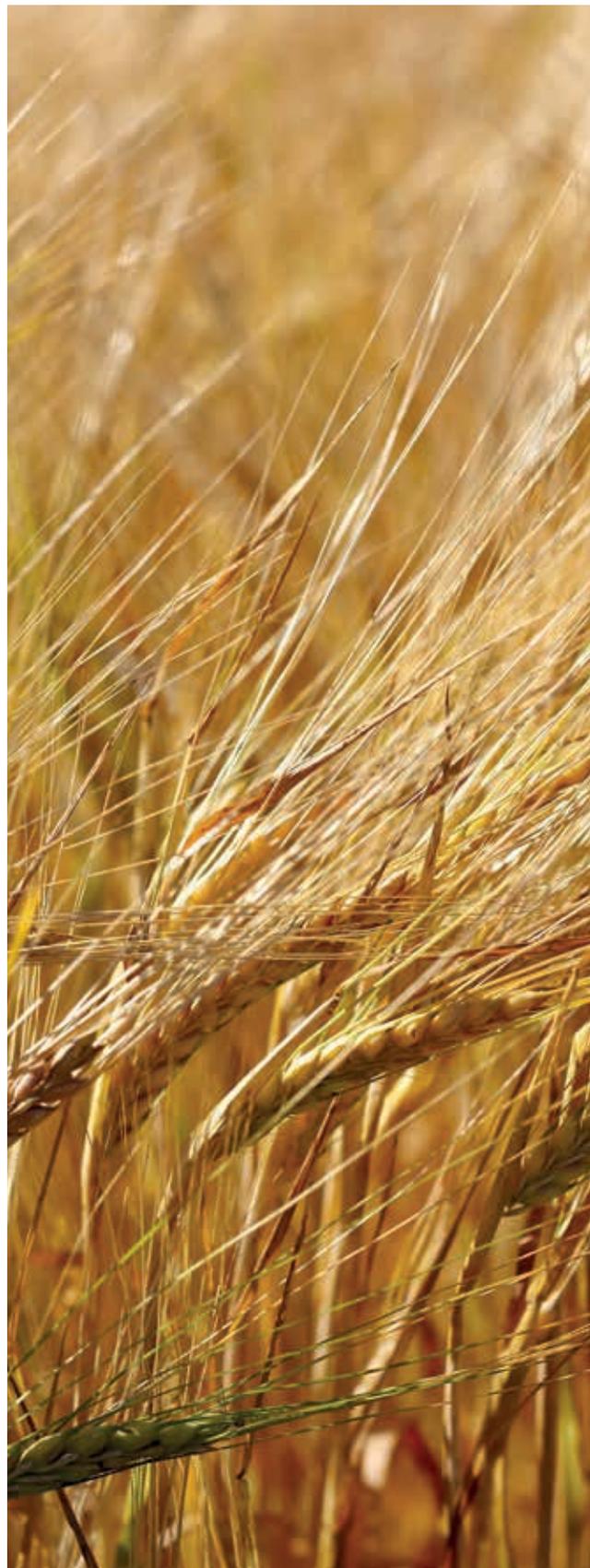
Furthermore, there is no international court which offers a specialised environmental chamber with judges knowledgeable in matters of environmental science and supported by independent scientific advisors³¹. Even the members in the relatively new Chamber of Environmental Matters in the ICJ are not required to hold any particular expertise on environmental matters, thus

many doubt whether the Court will function effectively³². It is claimed that based purely on the small number of environmental cases adjudicated by International Courts, it can be concluded that existing Courts do not satisfactorily consider environmental issues³³. As there is no court dedicated directly to environmental issues, cases not connected with the Law of The Sea, trade negotiations, human rights violations or specific criminal behaviour that Parties might find no forum available for adjudication of the case³⁴.

The Way Forward

Over recent years some experts have suggested that the focus should be not on the installation of new arms of existing bodies such as the Security Council or the ICJ, but that on climate change and energy issues the primary focus in the coming months and years should be the ongoing talks taking place under UNFCCC. These talks are at a critical stage with negotiators seeking to reach an agreement on a global framework for post-2012. The UNFCCC process is considered to offer an unprecedented opportunity to set rules which could directly affect the pace and severity with which environmental issues could pose security risks in the coming decades³⁵.

As an independent adjudicator of inter-state environmental disputes, an International Court for the Environment (ICE) could provide a peaceful means to settle disputes and/or discussions, and would help to clarify existing treaties and other international environmental obligations³⁶.



States and people shall cooperate in good faith and in a spirit of partnership in the fulfilment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

Principle 27

Introduction

Principle 27 refers to the necessity of partnership for achieving the goals of the Rio Declaration; some States will be unable to deliver on the Principles alone so will need broader support. Similar sentiments are captured in Chapter 2 of Agenda 21 which refers to the centrality of international cooperation, and in Goal 8 of the Millennium Development Goals (MDGs) which states the need to ‘develop a global partnership for development.’¹

Partnership and cooperation in these contexts often refers directly to financing, including the need to pay attention to the amount of Official Development Assistance (ODA) developing countries receive and the reconsideration of their debts. But partnership can also refer to the need for the international trading system to consider the inclusion and needs of developing countries; assistance in the creation of developing countries' domestic policies in order to maximise the benefits of the proposed trade system and a diversification of their commodity sectors; providing access to affordable healthcare and drugs through cooperation with the pharmaceutical industry; and making new technologies available to developing countries through cooperation with the private sector.

The importance of cooperation, partnership and international law for sustainable development was emphasised in the Rio Declaration not just because of the inability of some States to deliver without it, but also because of a growing understanding of the global dimensions of many environmental problems. Common pool resources such as the atmosphere and the oceans are outside the territorial jurisdiction of any State, therefore international cooperation and policy coordination by the various users of a common resource are necessary. Transboundary spillover of pollution from one country to another leads to 'super externalities'.² These too could only be managed through international coordination and partnership.

Furthermore, the principles of good faith and partnership may be said to embody the spirit of sustainable development itself, providing as it should for equality of all people and the environment, in current and future generations.

Implementation

The state of partnerships and cooperation, financial or otherwise, is extremely variable. Their importance has continued to be championed at the highest levels of the United Nations. As emphasised by the then-UN Secretary-General, Kofi Annan, in 2001:

*‘Partnerships among major groups have become more common since UNCED [United Nations Conference on Environment and Development], including productive relationships between NGOs and business. Such partnerships now involve dozens of multinational companies and NGOs, focusing on both social and environmental objectives. These partnerships are changing strategies and practices in both the business and NGO sectors, with important implications for future sustainable development efforts and broader coalition and partnership building’.*³

In December 2001, General Assembly Resolution 56/226 similarly encouraged 'global commitment and partnerships, especially between Governments of the North and the South, on the one hand, and between Governments and major groups on the other'.⁴ This commitment was elaborated in Decision 2001/PC/3, which stated that governments and major groups should 'exchange and publicly announce the specific commitments they have made for the next phase of work in the field of sustainable development. In the case of major groups, commitments and targets are expected to emerge from national, regional and international consultations of major group organisations. A record of the commitments announced and shared would be made and released as part of the Summit outcome'.⁵

This section will outline some of the financial and other mechanisms for partnership that have evolved since the Rio Declaration. The first paragraph addresses partnerships in the form of traditional principal-agent relationships in which the principal (donor) holds authority and the latter is the subject of support. Subsequent paragraphs outline other partnership or related activities that support the implementation of Principle 27.

Aid for Trade and ODA

International partnership and the recognition of the trade needs of developing countries has been shown through aid-for-trade schemes and the Generalised System of Preferences⁶ such as the EU Everything But Arms (EBA) initiative adopted in 2001⁷ and the US African Growth Opportunities Act (AGOA) adopted in 2000.⁸ These both offer duty- and quota-free access to a wide range of developing country produce, and enabled 81% of developing country exports (excluding arms and oil) to enter developed countries in this way in 2008 – a small increase from 78% in 1998⁹. However, this figure has been somewhat static since 1996, and only goes some way to meeting calls for a rate of 97% by 2015¹⁰. Overall aid-for-trade commitments increased 35% in real terms in 2008 but there are worries that the benefits are concentrated in only a few countries¹¹.

Globally, aid flows were reported to have been at an all-time high of US\$120 billion in 2009 but this actually translated into an increase of less than 1% in real terms and is a shortfall of over US\$20 million annually to the Gleneagles G8 agreement of 2005. The share of ODA currently pledged is only 0.31% of donor GNI, well below the UN target of 0.7%. This target has only been reached and exceeded in 5 donor countries¹². The Paris Declaration on aid effectiveness was adopted in 2005 and contains five core principles based on previous experience of what works and what does not work in development and that enable aid recipients to forge their own National Development Plans. The five principles are ownership, alignment, harmonisation, results and mutual accountability. The Accra Agenda for Action (AAA) in 2008 aimed to strengthen and deepen the impact of the Paris Declaration and set an agenda for stronger ownership, inclusive partnership and delivering of results, and capacity building¹³. Importantly, these initiatives deal with the issue of conditionalities through encouraging developing country ownership and alignment such that any conditionality should be based on the domestically produced National Development Plan¹⁴.

Debt relief

Many efforts have been made over the last two decades to overcome the restrictions that international debt, described by some as a 'new form of slavery'¹⁵, pose to the development of developing countries. 32 countries have had their debt to the World Bank, IMF and African Development Bank cancelled through the Multilateral

Debt Relief Initiative (MDRI), resulting in those countries saving between US\$600 million – US\$1 billion. In ideal cases this saving has been reinvested into public services such as healthcare and education. However, there are still many countries that have not benefitted from this initiative, and they continue to pay off billions in debt each year.¹⁶ See the sections on Principles 5 & 6 for further discussion.

Type II Partnerships

One of the most significant means of pursuing partnership and cooperation to achieve the aims of the Rio Declaration was via the creation of 'Type II Partnerships' at the Johannesburg WSSD in 2002. In contrast to the principal-agent dynamic of aid relationships, Type II Partnerships represented a shift towards more collaborative and mutually beneficial partnership relationships in which parties join resources for common good. Type II Partnerships provide space for the inclusion of private and civil society actors in sustainable development processes and actions. They were created with the implementation of the MDGs in mind but also incorporate many issues relevant to both Agenda 21 and the Rio Declaration, particularly as a means of instigating sub-national activity. More than 220 partnerships were identified before the start of the WSSD, and approximately 60 additional partnerships were announced during the Summit.¹⁷ As of mid-September 2002, the funding for partnerships was estimated at U.S. \$235 million and has grown substantially since.¹⁸

One example of a Type II Partnership is SLoCaT (the Partnership on Sustainable, Low Carbon Transport). SLoCaT is a partnership of over 50 organisations (including NGOs, banks and multilateral agencies) which work together to improve and share knowledge and provide capacity-building on low carbon transport including at regional and local levels. The partnership also supports national governments in building strategies for sustainable transport.¹⁹

Type II Partnerships have received some criticism over their lack of accountability and the possibility of some nations using them as an opportunity to deflect attention from a lack of progress on Type I outcomes and state-led activity,²⁰ but others argue that they represent a favourable, multi-stakeholder approach to environmental governance.²¹

Assistance and training for partnership/cooperation

Partnership and cooperation is also an important means of ensuring all countries can contribute to international law-making in the field of sustainable development. On this basis, many MEAs and soft law meetings help provide funding to delegates from developing countries to attend negotiations. This has provided for more balanced participation, but inequalities persist as wealthy countries are able to send large delegations and cover all negotiations, while developing countries still cannot afford to do so.

The UNEP Division of Environmental Law and Conventions (DELIC) is one agency that provides training, capacity-building and legal assistance to developing countries and others who need it.²² Since 2004, UNEP, in collaboration with the University of Eastern Finland (UEF), has organised annual training courses on MEAs. The two-week high profile courses bring together past, current and future negotiators to transfer experiences in international environmental law-making and diplomacy.²³ The United Nations Institute for Training and Research (UNITAR) has an International Law Programme with training and distance learning for Member States on international environmental law; a Local Development Programme to build sustainable development capacity in local actors (initiated as a result of the Johannesburg WSSD); and a Public Finance and Trade Programme for Member States and other stakeholders, among other areas.²⁴ In addition to training courses, several UN agencies and NGOs have developed and distributed guides and other published materials to support learning and capacity of policy makers. For more detailed discussion on the efficacy of capacity building for sustainable development, see the section on Principle 9.

Challenges and Conflicts

Accountability

Currently the sheer number and range of partnerships – over 300 have been agreed and registered with the UNCSD (the overseeing UN body) since the Johannesburg Summit,²⁵ including public policy networks, environmental management schemes and NGO-business partnerships to name a few – makes them difficult to define, still more to monitor.²⁶ Whilst monitoring and accountability mechanisms

are supposedly key criteria for Type II Partnerships, their multi-stakeholder approach negates traditional accountability methods such as central authority and oversight. As non-legal entities, Type II Partnerships are not required to provide annual reports and financial statements, and whilst UNCSD-registered partnerships are expected to report regularly on their performance, in practice this does not occur consistently. Furthermore, some have argued that Type II Partnerships deflect attention from the slow progress of Type I outcomes and nation-state activities. Concerns over governance and oversight of Type II Partnerships have been expressed by a range of bodies including the World Bank Operations Evaluation Department, the International Development Research Centre, and IISD.²⁷

Financing

Financing remains a challenge on a number of fronts. Aid is one means of financing sustainable development in developing countries and one of the main ways in which partnership is expressed. However, serious challenges persist concerning aid efficiency. Differing developing and developed country agendas is at the base of the discourse around aid efficiency, which although not addressed in Agenda 21, greatly affected the implementation of some Chapters' - and of the Rio Declaration's - most important activities. As accounts of ineffective development aid rose in the 1990s, ODA decreased. Furthermore, the GEF has been challenged at the organisational core²⁸ as the G77 demand greater decision-making power, while donor countries insist on increasingly strict oversight mechanisms. Resolving this dichotomy between open governance and tighter oversight remains a major challenge left unaddressed at UNCED and a barrier to effective partnership.

The Paris Declaration on Aid Effectiveness and the Accra Agenda for Action have tried to address this challenge, involving both donor countries and aid recipients in the establishment of efficiency targets for all stakeholders. Progress towards the Paris and Accra agreements has been slow, due to obstacles including ambiguity in terms such as "ownership"; broad goals and limited time; and the voluntary nature of participation in evaluation (more developing nations were evaluated compared to donor countries).²⁹ However, amongst the implementation challenges, the agreements have proven to remain highly relevant for the improvement of development cooperation and partnership.³⁰

Another challenge is the source of other forms of partnership financing. Type II Partnerships were supposed to catalyse non-governmental participation in, and additional funding of, sustainable development projects around the world and particularly at a sub-national level. However, current indications are that little funding is coming from new sources and that the majority of funding still comes from governments. The private sector contributes as little as 1% of partnership funding.³¹

National austerity

At the time of writing, the global financial and economic crisis continues to present serious challenges to progress made on sustainable development and anti-poverty targets identified in the Rio Declaration and the MDGs. As noted in the recent *MDG Gap Task Force Report*, support from donors is falling short of agreed targets, and this shortfall is partly driven by national austerity programmes.³² The European Commission has similarly noted the challenge that the prevailing air of austerity presents for financial commitments to international processes including the MDGs, and that support for financing development is politically complex as domestic austerity takes hold.³³

Lack of enforcement

The development of international law on sustainable development, a key element of Principle 27, is complicated by the nature of existing international law on sustainability and environmental issues. Most sustainable development and environmental treaties are 'soft law' norms. This means that in contrast to legally binding 'hard law' instruments, they are non-binding and therefore difficult to institutionalise and enforce. MEAs that conform to the Vienna Convention on the Law of Treaties are considered hard law, while others are soft. Both approaches can be useful in different ways, but the lack of enforcement is problematic. Soft law agreements can be important for influencing international and national policy, but there is no guarantee that decisions will be pursued. Even when it comes to hard law, the consequences of not complying with international environmental legislation are few. There is a lack of legal redress at the international level which means even where international law on sustainable development is created, it is difficult to enforce.³⁴

Negotiation burden

The proliferation of international agreements, including MEAs, has also caused challenges for partnership in that the number of meeting days necessary to participate in these processes has increased considerably. The intense negotiation schedule is a burden particularly for developing countries with limited financial and human capacity to cover all the meetings. Some have described the result as negotiation fatigue. Partnership is naturally compromised, as is the representativeness of related international law if developing countries are unable to or limited in participation.³⁵

The Way Forward

The partnership cited in Principle 27 can refer to a range of activities and processes, including financing, debt relief and partnership types including Type II arrangements. Principle 27 also refers to the importance of developing international sustainable development law. This section will briefly outline some of the main routes forward in these areas but will not be a comprehensive analysis of areas for progress.

Financing and debt relief are among the main routes for partnership activity in sustainable development. Whilst aid flows were at an all-time high in 2009, sustainable development financing still lacks accountability.³⁶ Future agreements concerning such financing should be centred around measureable and time-bound targets, as one of the biggest challenges in implementing future targets has been and will be ensuring that finance committed is truly delivered to developing countries. Of the \$31.8 million pledged to international environmental funds (i.e. the GEF, UN-REDD, MDG Achievement Fund for the Environment), only 41% is actually deposited into the respective fund. And once under control of the fund only 16% of the amount deposited is distributed to developing countries for environmental development projects.³⁷ Accountability around sustainable development financing only increases in importance as domestic austerity threatens to jeopardise the commitments of individual countries.

Because the significant majority of ODA is controlled by individual nations through bilateral assistance, the transparency of measuring and reporting on sustainable development finance delivery is of particular importance to ensure effectiveness. Future measurements and reports should engage all stakeholders through peer review mechanisms, regional reviews, independent cross-country

evaluations, and multilateral assessments. Partnership arrangements come into play here: developed and developing countries should collaborate on sustainable development targets and they should join efforts to hold one another accountable to the progress of their work.

Type II Partnerships also need renewed attention. Whilst it might not be possible to change the legal status of these partnerships, more detailed guidance that provide clear frameworks for governance and management of Type II Partnerships could help strengthen both performance and outcomes. Increased transparency and openness over the progress of Type II Partnerships, and a reinvigorated focus on Type I outcomes are necessary for moving forward and proving the effectiveness of these partnership methods.³⁸

International law on sustainable development could also be improved through increased clarity, monitoring and enforcement mechanisms. One means of achieving increased clarity is the clustering of MEAs to increase efficiency and effectiveness. This is already occurring on some issues, for instance in 2009 UNEP founded the Multilateral Environmental Agreements Information and Knowledge Management Initiative (MEA IKM) which provides information directly from the MEA websites and databases for easy overview and comparison in one single location.³⁹ Improving national reporting on MEAs would also support clarity and monitoring of international law for sustainable development. Presently, reporting places a considerable burden on national governments as it requires the preparation of multiple comprehensive reports. The provision of a common reporting template could be an important first step in reducing this burden. Finally, enforcement itself will need to be strengthened if international law is to have teeth. Obligations under international environmental law can be addressed through several international courts and tribunals that exist today, but it is argued that this could be done better through the establishment of an International Environmental Court (ICE). This proposal has been discussed for some years as a means to improve compliance with MEAs and deliver access to justice for non-state actors. An ICE would provide a mechanism for enforcement and ensure that States adhere to international environmental obligations in the context of sustainable development.⁴⁰

The core of Principle 27 calls for ways of working which should be implicit to the processes of international negotiations and sustainable development – ‘good faith’ and ‘a spirit of partnership’. Since 1992, progress has been made on environmental, social and economic fronts, and

many developing countries have increasingly been able to improve their own chances for prosperity and sustainable development; however, the general pace of progress, and the deficiencies and stalls seen in many crucial multilateral processes, strongly question the notion that action has truly been taken in good faith and a spirit of partnership. Challenges and examples noted throughout this report on each of the Principles show that huge strides have yet to be taken, and in the prevailing economic crisis of the time any ‘good faith’ is likely to be further tested. Weak, non-committal outcomes from major opportunities for partnership working such as Copenhagen, with its backdrop of slow progress against Kyoto commitments, climate scepticism and MEA fatigue; backwards steps on reaching the MDGs; a prevailing aversion to realising a green economy in favour of the pursuit of economic growth, with developed countries showing little real progress on sustainable consumption and production patterns; and the long drawn-out Doha Rounds of the WTO, are all striking examples where good faith and partnership working have been eschewed for individual goals.

Rio+20 needs to harness good faith and a spirit of partnership to achieve the ambition of Principle 27, the wider Rio Declaration, and sustainable development itself.

Endnotes

Principle 1:

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- 2 The dialogue addressed: (a) ways to promote a holistic approach to sustainable development in harmony with nature, and (b) sharing national experiences on criteria and indicators to measure sustainable development in harmony with nature. See the website for more details on the two day dialogue event: <http://www.un.org/en/ga/president/65/initiatives/HarmonywithNature.html>
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- 4 Ibid.
- 5 See the Stockholm Resilience Centre and the Research for Governance of Social-Ecological Systems at: <http://www.stockholmresilience.org/research/researchnews/tippingtowardstheunknown.5.7cf9c5aa121e17bab42800021543.html>
- 6 For more information on the Oxfam GROW campaign, see: http://www.oxfam.org.uk/get_involved/system/?intcmp=hp_column-1-2_system-join_110711
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- 14 See for instance the Alliance for the Rights of Mother Earth: Positive News (7th December 2010) "Alliance to Promote Rights for Nature" in Positive News, see: <http://positivenews.org.uk/2010/archive/2543/alliance-to-promote-rights-of-nature/>
- 15 See for instance this report on the activities and outcome, The Guardian (5 July 2011) EU votes against reducing carbon emissions by 30%, available: <http://www.guardian.co.uk/environment/2011/jul/05/tory-meps-reject-carbon-cut-law>
- 16 Ibid. p. 8.
- 17 Sun Xiaohua (2007) "Call for return to green accounting" China Daily, 19 Apr 2007, available: http://en.wikipedia.org/wiki/Green_gross_domestic_product#cite_note-1

- 18 The 9 Planetary Boundaries are: were climate change, stratospheric ozone, land use change, freshwater use, biological diversity, ocean acidification, nitrogen and phosphorus inputs to the biosphere and oceans, aerosol loading and chemical pollution. See: <http://www.stockholmresilience.org/research/researchnews/tippingtowardstheunknown.5.7cf9c5aa121e17bab42800021543.html>
- 19 Ibid. p.1.
- 20 Joseph E. Stiglitz (2008) p. 12.
- 21 The Stockholm Resilience Centre brings a transdisciplinary analysis of how the ability to deal with change and continue to develop is affected by the planetary boundaries. For more a detailed review of its work see: <http://www.stockholmresilience.org/research.4.aaaa46911a3127427980004901.html>
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- 23 See for instance the report commissioned by WWF and to be published in Autumn 2011: http://www.wwf.org.uk/wwf_articles.cfm?unewsid=5098
- 24 See for instance the Social Enterprise Coalition, <http://www.socialenterprise.org.uk/>
- 25 For more information see "About social enterprise", <http://www.socialenterprise.org.uk/pages/about-social-enterprise.html>
- 26 Ibid.

Principle 2:

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- 5 <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503>
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- 7 "Reaffirming that States have sovereign rights over their own biological resources" see: <http://www.cbd.int/doc/legal/cbd-en.pdf>
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- 9 Non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests, see: <http://www.un.org/documents/ga/conf151/aconf15126-3annex3.htm>
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- au/government/international/global-action-facts-and-fiction/cc-action.aspx
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 - 16 Banyan (17 February 2011) The Politics of Whaling: A Glacial Turn, The Economist, available: http://www.economist.com/blogs/banyan/2011/02/politics_whaling
 - 17 Nick Squires (20 November 2007) Greens and governments condemn whale hunt, The Telegraph (Sydney), available: <http://www.telegraph.co.uk/earth/earthnews/3315193/Greens-and-governments-condemn-whale-hunt.html>
 - 18 BBC (16 February 2011) Japan halts whale hunt after chase by protesters, BBC News Asia and Pacific, available at: <http://www.bbc.co.uk/news/world-asia-pacific-12477398>
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 - 21 Pulp Mills on the River Uruguay (Argentina V Uruguay) 2010, see: <http://www.icj-cij.org/docket/index.php?case=135>
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Principle 3:

- 1 Report of the World Commission on Environment and Development (1987) UN DOC A/42/427(1987) <http://worldinbalance.net/pdf/1987-brundtland.pdf>
- 2 Ibid. Section 3 'Sustainable Development', paragraph 27, p. 24.
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- 6 UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus 25 June 1998) 38 ILM 517 (1999) (entered into force 30 October 2001) (Aarhus Convention) <http://www.unece.org/env/pp/documents/cep43e.pdf>
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- 11 The idea is developed in Christopher Stone's (2010) "Should We Establish Guardians for Future Generations?" Should Trees have Standing, revised edition.
- 12 For a full analysis of the roles and efficacy of the role of the Commissioners for Future Generations, see P Roderick (December 2010) Taking the Longer View: UK Governance Options for a Finite Planet (Report for the Foundation for Democracy and Sustainable Development and WWW-F UK London), pp 5 – 6 and www.fdsd.org/2010/12/taking-thelonger-view
- 13 See the Parliamentary Commissioner's information website on "the Right to a Clean and Healthy Environment", see: <http://jno.hu/en/?&menu=healthy1>
- 14 Ibid.
- 15 For more details on the legislation that governs the role of the Commissioner see K Schneeberger (2011) "Hungarian Parliamentary Commissioner for Future Generations and the legislature" in Intergenerational equity: implementing the principle in mainstream decision-making, p 23, see: <http://www.lawtext.com/pdfs/sampleArticles/ELMSCHNEEBERGER20to29.pdf>
- 16 For a more detailed outline of the Parliamentary Commissioner's role see e.g P. Rodderick (2010) Taking the Longer View, pp. 5 and 22-24.
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- 19 UK Climate Change Act (2008) sets legally binding targets for 2020 and 2050 – an example of bringing the needs of future generations to the forefront of decision-making. See the UK Committee on Climate Change's website for more information, <http://www.theccc.org.uk/about-the-ccc/climate-change-act>
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- 21 See the central website for many of the youth climate coalitions for more information: <http://youthclimate.org/>
- 22 See the UK DECC Youth Advisory Panel website for more information on its projects and the report: http://www.decc.gov.uk/en/content/cms/about/youth_panel/youth_panel.aspx
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- 24 See information on an event recently held by the Alliance in conjunction with the Schumacher Institute: <http://www.convergeproject.org/node/122>
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- 69 K Schneeberger (2011) A Parliamentary Ombudsman for future generations? Intergenerational Foundation available: <http://www.if.org.uk/archives/944/a-parliamentary-ombudsman-for-future-generations>
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Principle 4:

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- 25 UK Environmental Law Association, Bolivia enacts rights for nature, see: <http://www.ukela.org/rte.asp?id=122>
- 26 Universal Declaration on the Rights of Mother Earth, see: <http://www.ukela.org/content/page/1846/Declaration%20Mother%20Earth%20Rights%20English.pdf>
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- 2 Ibid. at page 249.
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- 13 SEA Directive 2001/42/EC available at: Directive 2001/42/EC of the European Parliament and of the Council.
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- 15 See the Summary Report, page 40, available at: <http://www.unep.org/resourcepanel/Portals/24102/PDFs/DecouplingENGSummary.pdf>
- 16 OECD 2002 "Indicators to Measure Decoupling of Environmental Pressure from Economic Growth" <http://www.oecd.org/dataoecd/0/52/1933638.pdf>

- 17 http://www.oecd.org/department/0,3355,en_2649_33713_1_1_1_1_1,00.html

- 18 UNEP 2011, "Decoupling natural resource use and environmental impacts from economic growth".

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- 20 WTO: Report of the Panel on the United States – Import Prohibition of Certain Shrimp and Shrimp Products, 15 May 1998, 37 ILM 832 (857)(1998).

- 21 This balance is reflected in Principle 12 of the Rio Declaration which requires states to 'cooperate to promote a supportive and open international economic system' and that 'trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade'. A more detailed discussion of international trade and environmental legislation is covered in the next chapter.

Principle 12:

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- 7 In Paragraph 3.85 the Appellate Body stated that " ...that the protection and conservation of highly migratory species of sea turtles demands concerted and cooperative efforts on the part of the many countries whose waters are traversed in the course of recurrent sea turtle migrations. [The Appellate Body] noted that the need for such efforts have been recognised in the WTO itself and in a significant number of other international instruments and declarations, such as Principle 12 of the Rio Declaration on Environment and Development". WTO Panel Report in Shrimp-Turtle (2001) WT/DS58/R. Available at: http://www.wto.org/english/tratop_e/dispu_e/58rw_e.pdf
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- 14 For more information see: http://www.wto.org/english/tratop_e/envir_e/issu5_e.htm
- 15 Communication from the Commission to the Council and the European Parliament - Bringing our needs and responsibilities together Integrating environmental issues with economic policy /* COM/2000/0576 final */
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- 18 http://ozone.unep.org/Ratification_status/
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- 2 Text available at: http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm
- 3 Text available at: http://www.ats.ag/documents/recatt/Att249_e.pdf
- 4 Available at: <http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-%28CLC%29.aspx>
- 5 Available at: <http://www.ecolex.org/server2.php/libcat/docs/TRE/Multilateral/En/TRE001341.pdf>
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- 8 Article 1, Lugano Convention.
- 9 Bewteen EC Member States, the Convention applies only to the extent that there is no eC rule governing the subject concerned. Article 25, Lugano Convention.
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- 11 http://books.google.com/books?id=7_CMjSLO9cUC&printsec=frontcover&source=gbs_atb#v=onepage&q&f=false, p 29.
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- 13 <http://www.ecolex.org/server2.php/libcat/docs/TRE/Multilateral/En/TRE001372.pdf>
- 14 https://bch.cbd.int/protocol/cpb_art27_info.shtml
- 15 <http://biodiversity-l.iisd.org/news/four-countries-sign-supplementary-protocol-on-liability-and-redress-at-opening-for-signature/?referrer=linkages-iisdrs>
- 16 National Commission On The BP Deepwater Horizon Oil Spill & Offshore Drilling, Report To The President, Deepwater: The Gulf Oil Disaster And The Future Of Offshore Drilling Vi (2011), available at http://www.oilspillcommission.gov/sites/default/files/documents/DEEPWATER_ReporttothePresident_FINAL.pdf.
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- Law Review and Vanderbilt Law and Economics Program Conference on the BP Deepwater Horizon Oil Spill, April 1, 2011. Available at <http://www.hks.harvard.edu/fs/rzeckhau/DeteringandCompensating.pdf>
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- 21 http://www.cedre.fr/en/spill/deepwater_horizon/compensation.php
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- 24 http://books.google.com/books?id=7_CMjSLO9cUC&printsec=frontcover&source=gbs_atb#v=onepage&q&f=false, p11.
- 25 See Oppenheim on International Law (1912: 243-44) Chapter Eight p.220: A State, in spite of its territorial supremacy, is not allowed to alter the natural conditions of its own territory to the disadvantage of the natural conditions of the territory of a neighbouring State.
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- 27 http://books.google.com/books?id=7_CMjSLO9cUC&printsec=frontcover&source=gbs_atb#v=onepage&q&f=false p 12
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- 3 Article 8.
- 4 Article 10.
- 5 <http://www.ecolex.org/ecolex/ledge/view/RecordDetails?id=TRE-001104&index=treaties>
- 6 Available at <http://chm.pops.int/Convention/ConventionText/tabid/2232/language/en-GB/Default.aspx>
- 7 The Food and Agriculture Organization (FAO) of the United Nations (UN) compiled an inventory of obsolete stockpiles for 45 countries in Africa. The stockpiles estimated to exist in Africa was totalled at 20,000 tonnes, but more stockpiles have since been declared. This includes heavily contaminated soil and empty and contaminated pesticide containers, so the current total stands at nearly 50,000 tonnes and is likely to increase much above this total. These substances are produced and exported by the 11 most powerful multinational chemical companies who dominate 90% of the world market, namely American Cyanamid, BASF, Bayer, Ciba-Geigy, DowElanco, DuPont, Monsanto, Rhône-Poulenc, Sandoz, Zeneca, and AgrEVO. (see FAO. 1999c. 'Inventory of obsolete, unwanted and/or banned pesticides. Prevention and disposal of obsolete and unwanted pesticide stocks in Africa and the Near East.').
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- 14 Greenemeier, L., 2009, U.S. lags behind world with its patchwork approach to curbing E-Waste, in Scientific American.
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- 18 <http://www.greenpeace.org.uk/blog/toxics/nike-adidas-time-detox-worlds-water-20110713>
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Waste Prevention and Recycling. Available at http://www.ieep.eu/assets/771/Final_Report_final_25_Oct.pdf

Principle 15:

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- 3 Sands, P (2003) "General Principles and Rules" Principles of International Environmental Law Second Edition, Cambridge, p. 267 see: http://books.google.co.uk/books?id=2N5gR1UYT3YC&pg=PA267&lpg=PA267&dq=AOSIS+and+precautionary+principle&source=bl&ots=IEhVzHwDAE&sig=5V3-9dsWjXHLxZmHUTwYLDcP--A&hl=en&ei=IFPuTcKWA03tObHYpZII&sa=X&oi=book_result&ct=result&resnum=1&sqi=2&ved=0CB8Q6AEwAA#v=onepage&q&f=false
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- 26 Science and Environmental Health Network write up of the Wingspread Conference (1998), see: <http://www.sehn.org/wing.html>
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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses, income, and any other financial activities. The text explains that proper record-keeping is essential for identifying trends, managing cash flow, and preparing for tax obligations. It also highlights the role of regular audits in verifying the accuracy of the records and detecting any potential errors or fraud. The document provides detailed instructions on how to organize and maintain these records, including the use of ledgers, journals, and supporting documents. It also discusses the importance of keeping records for a sufficient period of time to comply with legal requirements and for future reference. The second part of the document focuses on the analysis of the financial data. It describes various methods for interpreting the records, such as comparing current performance with historical data and industry benchmarks. It also discusses the use of financial ratios and other analytical tools to assess the company's financial health and identify areas for improvement. The text provides examples of how to calculate and interpret these ratios, and it offers practical advice on how to use the results to make informed business decisions. Finally, the document concludes with a summary of the key points and a call to action, encouraging the reader to implement the principles and practices discussed throughout the text.

the fact that the β parameter is not known, the β parameter is estimated by the maximum likelihood method. The maximum likelihood estimates of the parameters are given by

$$\hat{\beta} = \frac{\sum_{i=1}^n x_i^2}{\sum_{i=1}^n x_i} \quad \text{and} \quad \hat{\alpha} = \frac{\sum_{i=1}^n x_i}{n} \quad (1)$$

where $\hat{\beta}$ and $\hat{\alpha}$ are the maximum likelihood estimates of the parameters β and α , respectively.

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where $\hat{\beta}$ and $\hat{\alpha}$ are the maximum likelihood estimates of the parameters β and α , respectively.

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where $\hat{\beta}$ and $\hat{\alpha}$ are the maximum likelihood estimates of the parameters β and α , respectively.