Sustainable development and assistance

7 States shall ensure that conservation is treated as an integral part of the planning and implementation of development activities and provide assistance to other states, especially to developing countries, in support of environmental protection and sustainable development.

General obligation to co-operate

8 States shall co-operate in good faith with other states in implementing the preceding rights and obligations.

II PRINCIPLES, RIGHTS, AND OBLIGATIONS CONCERNING TRANSBOUNDARY NATURAL RESOURCES AND ENVIRONMENTAL INTERFERENCES

Reasonable and equitable use

9 States shall use transboundary resources in a reasonable and equitable manner.

Prevention and abatement

10 States shall prevent or abate any transboundary environmental interference which could cause or causes significant harm (but subject to certain exceptions provided for in Articles 11 and 12 below).

Strict liability

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

Prior agreements when prevention costs greatly exceed harm

12 States shall enter into negotiations with the affected state on the equitable conditions under which the activity could be carried out when planning to carry out or permit the activities causing transboundary harm which is substantial but far less than the cost of prevention. (If no agreement can be reached, see Article 22.)

Non-discrimination

13 States shall apply as a minimum at least the same standards for environmental conduct and impacts regarding transboundary natural resources and environmental interferences as are applied domestically (ie, do not do to others what you would not do to your own citizens).

General obligation to co-operate on transboundary environmental problems

14 States shall co-operate in good faith with other states to achieve optimal use of transboundary natural resources and effective prevention or abatement of transboundary natural resources or environmental interferences.

Exchange of information

15 States of origin shall provide timely and relevant information to the other concerned states regarding transboundary natural resources or environmental interferences.

Prior assessment and notification

16 States shall provide prior and timely notification and relevant information to the other concerned states and shall make or require an environmental assessment of planned activities which may have significant transboundary effects.

Prior consultations

17 States of origin shall consult at an early stage and in good faith with other concerned states regarding existing or potential transboundary interferences with their use of a natural resource or the environment.

Co-operation arrangements for environmental assessment and protection

18 States shall co-operate with the concerned states in monitoring, scientific research and standard setting regarding transboundary natural resources and environmental interferences.

Emergency situations

19 States shall develop contingency plans regarding emergency situations likely to cause transboundary environmental interferences and shall promptly warn, provide relevant information to and co-operate with concerned states when emergencies occur.

Equal access and treatment

20 States shall grant equal access, due process and equal treatment in administrative and judicial proceedings to all person who are or may be affected by transboundary interferences with their use of a natural resource or the environment.

III STATE RESPONSIBILITY

21 States shall cease activities which breach an international obligation regarding the environment and provide compensation for the harm caused.

IV PEACEFUL SETTLEMENT OF DISPUTES

22 States shall settle environmental disputes by peaceful means. If mutual agreement on a solution or on other dispute settlement arrangements is not reached within 18 months, the dispute shall be submitted to conciliation and , if unresolved, thereafter to arbitration or judicial settlement at the request of any of the concerned states.[16]

The immediate aim of establishing a universal declaration of economic rights was not realised but the recommendations of the WCED did have an impact on a number of specialised and regional environmental measures. The WCED Report also led directly to the General Assembly's decision to convene a UN Conference on Environment and Development (UNCED).

18.5 The 1992 Earth Summit

In June 1992 176 states met in Rio de Janeiro for the United Nations Conference on Environment and Development. The preparatory debates for the Conference revealed that there was still considerable dispute as to where the emphasis was

16 *Summary of proposed Legal Principles for Environmental Protection and Sustainable Development Adopted by the WCED Experts on Environmental Law reproduced in Annex 1 of Our Common Future*, Oxford University Press, 1987. The full Report of an Experts Group on Environmental Law was published separately as Munro and Lammers, *Environmental Protection and Sustainable Development*, London, 1987.

to be put: on environment or on development. Although the Conference had as its backdrop the ending of the Cold War, the recent successful international action against Iraq and President Bush's calls for the establishment of a new international order, the divisions between North and South on environmental and developmental issues were still very much apparent. Nonetheless, the Conference succeeded in producing five major documents:

1 Agenda 21 which is a 800-page document setting out an action plan for managing the various sectors of the environment in the 21st century;
2 the Climate Change Convention;
3 the Biological Diversity Convention;
4 a non-binding Statement of Consensus on Forest Principles; and
5 a Declaration on Environment and Development.

The Rio Declaration was adopted by consensus of those 176 states attending the Conference and, although not formally binding, is of major legal significance and can be seen as an example of soft law. In the preamble to the Declaration the Conference reaffirmed the Stockholm Declaration and expressed the desire to build upon it.

THE RIO DECLARATION ON ENVIRONMENT AND DEVELOPMENT[17]

Principle 1

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 2

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 3

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

Principle 4

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 5

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

17 UN Doc A/CONF 151/5/Rev 1, 13 June 1992, reprinted at (1992) 31 *ILM* 874.

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 7

States shall co-operate 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 of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

Principle 8

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 9

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

Principle 10

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to 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 11

States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental 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 12

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

Principle 13

States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also co-operate 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 14

States should effectively co-operate 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 15

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 16

National authorities should endeavour to promote the internalisation 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 17

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 18

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 19

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 20

Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

Principle 21

The creativity, ideas and courage of the youth of the world should be mobilised to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

Principle 22

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 recognise and duly support

their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

Principle 23

The environment and natural resources of people under oppression, domination and occupation shall be protected.

Principle 24

Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and co-operate in its further development, as necessary.[18]

Principle 25

Peace, development and environmental protection are interdependent and indivisible.

Principle 26

States shall resolve all their environmental disputes peacefully and by appropriate means in accordance with the Charter of the United Nations.

Principle 27

States and people shall co-operate 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.

Subsequently the United Nations established the Commission on Sustainable Development[19] as a commission of ECOSOC. Its primary role is to monitor, review and consider progress in the implementation of international environmental policy and law. The following year, in acknowledgement of the seriousness attached now to environmental matters, the International Court of Justice established a 'Chamber of the Court for Environmental Matters' under the provisions of Article 26 of the Statute of the ICJ. The Constitution of a Chamber of the Court for Environmental Matters provides:

> ... in view of the developments in the field of environmental law and protection which have taken place in the last few years, and considering that it should be prepared to the fullest possible extent to deal with any environmental case falling within its jurisdiction, the Court has now deemed it appropriate to establish a seven-member Chamber for Environmental Matters.[20]

18.6 General principles

It should already be clear that it is not possible to maintain an absolute notion of territorial sovereignty. The freedom of states to act is necessarily constrained by the duty to have regard to the rights of other states and the environment in general. The principle of 'good neighbourliness' is a feature of international law.

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18 The need for this principle was demonstrated by the recent Gulf Conflict. During their retreat from Kuwait in the spring of 1991 Iraqi forces set fire to 700 oil wells. In the nine months it took to bring the fires under control, a huge amount of hazardous gases was released into the atmosphere.

19 See UN General Assembly Resolution 47/191 (1992).

20 *ICJ Communiqué No 93/20* of 19 July 1993. The usual chamber consists of three judges.

In the sphere of environmental law this extremely general principle has been developed further and a number of more specific governing principles can be identified.

18.6.1 The duty to prevent, reduce and control environmental harm

Reference has already been made to the *Trail Smelter Arbitration*[21] in which the tribunal made it clear that states are under a duty not to use or permit the use of their territory in such a manner as to cause injury in or to the territory of another state. Similarly in the *Corfu Channel* case the International Court made reference to 'every state's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other states'.[22] Principle 21 of the Stockholm Declaration, while affirming the sovereign right of states to exploit their own resources, re-affirms the duty incumbent on states 'to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or to areas beyond the limits of national jurisdiction'. A number of states made clear at the Stockholm Conference that they felt Principle 21 to be declaratory of existing customary international law. Its use in numerous conventions, declarations and resolutions since then only strengthens the view that it is indeed a rule of international law.

It should be noted that the principle involves more than the need to make reparation for damage caused. States are under a duty to prevent future harm occurring. This duty is often expressed as the need for states to exercise 'due diligence'. In deciding whether due diligence has been exercised it is legitimate to take into account a state's resources and capabilities, the effectiveness of territorial control and the nature of the specific activities under consideration. The more inherently dangerous the activity undertaken, the greater the amount of diligence required. Of course, such a formulation does not clearly provide what specific action is required of a state and there have been attempts to provide a more detailed minimum standard of care. Alternatively, a number of conventions have used the formulation of 'best available technology' or 'best practicable means'.[23] Increasingly, reference is made to the 'precautionary principle' according to which states have a duty undertake assessment of the likely consequences for the environment of planned activities and to take preventive measures where appropriate. However, the principle should be used with care:

> Despite its attractions, the great variety of interpretations given to the precautionary principle, and the novel and far-reaching effects of some applications, suggest that it is not yet a principle of international law. Difficult questions concerning the point at which it becomes applicable to any given activity remain unanswered and seriously undermine its normative character and practical utility, although support for it does indicate a policy of greater prudence on the part of those states willing to accept it.[24]

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21 (1941) 3 RIAA 1905.

22 [1949] *ICJ Rep* 4 at p 22.

23 See, for example, Article 194(1) Law of the Sea Convention 1982; Article 4(3) Convention for the Prevention of Marine Pollution from Land Based Sources 1974.

24 Boyle and Birnie, *International Law and the Environment,* 1992, Oxford: Oxford Unitersity Press at p 98.

18.6.2 Consultation, co-operation and communication

An increasingly common provision in international conventions on the environment requires states to co-operate with other states likely to suffer environmental risks from proposed activities. In the *Lac Lanoux Arbitration*[25] Spain complained that France had violated a treaty by diverting a river which flowed through the territory of both states. Although the tribunal found no treaty violation it affirmed the requirement of prior notice and consultation:

> ... a state which is liable to suffer repercussions from work undertaken by a neighbouring state is the sole judge of its interests and if the neighbouring state has not taken the initiative the other state cannot be denied the right to insist on notification of works or concessions which are the object of a scheme.[26]

The tribunal made clear that consultations between the two states must be genuine and conducted in good faith.

Principle 24 of the Stockholm Declaration re-affirms the need for co-operation and the duty to notify and consult has been repeated in a number of conventions and draft conventions dealing with shared natural resources.[27] It is generally accepted that states are under a duty to give timely notification to states at risk following environmental accidents and emergencies. Thus it can be seen that while states are under a duty to prevent accidents, should an accident or emergency occur they have a continuing obligation to minimise its effects.

18.6.3 The polluter pays principle

A guiding principle that has found growing support in various measures taken to prevent pollution is that the polluter pays. The principle was endorsed by the OECD states in 1972 and adopted by the First Environmental Action Programme 1973 of the European Union. Article 25 of the Single European Act 1986 provides that action taken by the EU relating to the environment shall be based on the principles 'that environmental damage should as a priority be rectified at source and that the polluter should pay'. The principle was again endorsed, this time by the Conference on Security and Co-operation in Europe, in 1990. For long it was argued that the principle was only supported by the industrial states but Principle 16 of the Declaration on Environment and Development 1992 calls for national authorities to endeavour to internalise environmental costs by making the polluter 'in principle' bear the cost of pollution.

18.7 Pollution

Although the *Trail Smelter Arbitration*[28] illustrates that the discharge of toxic or other harmful substances in such a way as to cause harm on or to neighbouring

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25 *Spain v France* (1957) 24 ILR 101.

26 (1957) 24 LIR at p 138.

27 Most notably in the ILC's Draft Articles on the Non-Navigational Uses of International watercourses, 1994 which are widely accepted as being generally declaratory on customary international law. See also the Convention on Transboundary Air Pollution 1979.

28 (1941) 3 RIAA 1905.

states would give rise to international liability, until the 1970s there was no real attempt to control pollution in other situations. The urgent need for action to be taken in respect of pollution was acknowledged by states at the Stockholm Conference in 1972.[29] After the conference UNEP, along with other concerned organisations, began investigating more specific measures that could be adopted to control pollution. One difficulty that was encountered early on was how best to define the level of pollution that would give rise to international responsibility. In 1974 the OECD adopted a definition of pollution that referred to:

> ... the introduction by man, directly or indirectly, of substances or energy into the environment resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems, and impair or interfere with amenities and other legitimate uses of the environment.

This definition was subsequently included in Article 1 of the Convention on Long-Range Transboundary Air Pollution 1979 and has been used in a number of other conventions. The definition has two main implications. First, the term is confined to introduction of substances or energy by man into the environment and thus, over-use of resources, however harmful it might be, will not in itself constitute pollution. Secondly, the issue is raised of how harmful pollution needs to be before it will give rise to liability. Many conventions refer to harmful or deleterious effects, not just to property, but also to living resources and ecosystems. It would appear that some injury is necessary to establish responsibility subject to *de minimis* principles. Often the question of degree of harm is linked to the need to act with due diligence. Very often the allocation of responsibility will involve a balancing exercise between the harm caused and the practicable, available means to prevent such harm.

18.7.1 Atmospheric pollution

The municipal laws of industrialised states have long shown a concern with air pollution and have endeavoured to minimise the emission of noxious or other harmful gases. Unfortunately one of the methods often used to reduce the risk to the local population is to ensure that emissions are sent high into the atmosphere to disperse. It gradually came to be recognised that such actions did not irradiate the pollution but merely postponed and transferred the harmful effects. Today the major source of air pollution is the burning of fossil fuels in the course of energy production. Advances in scientific knowledge have meant that it has become more possible to track the spread of gases such as sulphur dioxide and nitrogen oxide to be able to establish both the source of the pollution and the location of its harmful effects. During the 1980s there was growing concern about the phenomena of acid rain, caused by the reaction of sulphur and nitrogen with water vapour in the air, and global warming. In addition the discovery was made that the ozone layer, which protects the earth from the sun's ultraviolet radiation, was being damaged by the release of high levels of chlorine-based substances.

One aspect of the law relating to air pollution has been the question of sovereign rights to air space (discussed in Chapter 12). It is accepted that for the

29 See in particular Principles 6 and 7 of the Stockholm Declaration.

purposes of control of pollution the transient physical characteristics of the atmosphere must be recognised. As a result there has been a tendency to treat the atmosphere as a shared resource for the purposes of pollution and other environmental protection. This approach was adopted by the Geneva Convention on Long-Range Transboundary Air Pollution 1979 which governs issues of air pollution within Europe and North America. The convention is largely an expression of broad principles and the parties agree to 'endeavour to limit' and gradually reduce air pollution. The important provisions relate to information exchange and the need to give notification of significant risks.

CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION[30]

Definitions

Article 1

For the purposes of the present Convention:

(a) 'air pollution' means the introduction by man, directly or indirectly, of substances or energy into the air resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems and material property and impair or interfere with amenities and other legitimate uses of the environment, and 'air pollutants' shall be construed accordingly;

(b) 'long-range transboundary air pollution' means air pollution whose physical origin is situated wholly or in part within the area under the national jurisdiction of one state and which has adverse effects in the area under the jurisdiction of another state at such a distance that it is not generally possible to distinguish the contribution of individual emission sources of groups of sources.

Fundamental principles

Article 2

The Contracting Parties, taking due account of the facts and problems involved, are determined to protect man and his environment against air pollution and shall endeavour to limit and, as far as possible, gradually reduce and prevent air pollution, including long-range transboundary air pollution.

Article 3

The Contracting Parties, within the framework or the present Convention, shall by means of exchanges of information, consultation, research and monitoring, develop without undue delay policies and strategies which shall serve as a means of combating the discharge of air pollutants, taking into account efforts already made at national and international levels.

Article 4

The Contracting Parties shall exchange information on and review their policies, scientific activities and technical measures which may have adverse effects,

30 Done at Geneva, 13 November 1979, entered into force 16 March 1983 – reproduced in (1979) 18 ILM 1442.

thereby contributing to the reduction of air pollution including long-range transboundary air pollution.

Article 5

Consultations shall be held, upon request, at an early stage between, on the one hand, Contracting Parties which are actually affected by or exposed to a significant risk of long-range transboundary air pollution and, on the other hand, Contracting Parties within which and subject to whose jurisdiction a significant contribution to long-range transboundary air pollution originates, in connection with activities carried on or contemplated therein.

Air quality management

Article 6

Taking into account Articles 2–5, the ongoing research, exchange of information and monitoring and the results therefor, the cost and effectiveness of local and other remedies and, in order to combat air pollution, in particular that originating from new or rebuilt installations, each Contracting Party undertakes to develop the best policies and strategies including air quality management systems and, as part of them, control measures compatible with balanced development, in particular by using the best available technology which is economically feasible and low- and non-waste technology.

Research and development

Article 7

The Contracting Parties, as appropriate to their needs, shall initiate and co-operate in the conduct of research into and/or development of:

(a) existing and proposed technologies for reducing emissions of sulphur compounds and other major air pollutants, including technical and economic feasibility, and environmental consequences;

(b) instrumentation and other techniques for monitoring and measuring emission rates and ambient concentrations of air pollutants;

(c) improved models for a better understanding of the transmission of long-range transboundary air pollutants;

(d) the effects of sulphur compounds and other major air pollutants on human health and the environment, including agriculture, forestry, materials, aquatic and other natural ecosystems and visibility, with a view to establishing a scientific basis for dose/effect relationships designed to protect the environment;

(e) the economic, social and environmental assessment of alternative measures for attaining environmental objectives including the reduction of long-range transboundary air pollution;

(f) education and training programmes related to the environmental aspects of pollution by sulphur compounds and other major air pollutants.

Exchange of information[31]

Article 8

The Contracting Parties, within the framework of the Executive Body referred to in Article 10 and bilaterally, shall, in their common interests, exchange available information on:

31 Provisions relating to exchange of information and publicity are increasingly common in treaties concerned with environmental issues. Adverse publicity and informed lobbying by the general public are seen as major sanctions against pollution.