

Part-III

(Post-1992 Earth Summit Position)

**Chapter-5- International Conventions /
Resolutions / Summits**

5.1-CONVENTION ON BIOLOGICAL DIVERSITY, 1992

The Convention is aimed at the conservation of biodiversity. The objective of the Convention is the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Biological diversity has thus attained the same status as mineral and other natural resources¹. Parties to the Biodiversity Treaty "affirm sovereign rights over the biological resources found within their countries, while accepting responsibility for conserving biological diversity and using biological resources in a sustainable manner," according to an International Union for the Conservation of Nature (IUCN) assessment of the treaty².

Conservation, sustainable utilization, and equitable benefit sharing of biological diversity³: The three objectives of the Convention on Biological Diversity (CBD) are "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, taking into account all rights over those resources and to technologies, and by appropriate funding." The CBD also recognizes in its preamble that the conservation of biological diversity is a common concern of humankind, which implies a common responsibility to the issue based on its importance to the international community as a whole⁴.

Intellectual property protection currently available⁵: Keeping biotechnology 'secret' can also be a valuable form of protection. National treatment of trade secrets is diverse, and all attempts to harmonize trade secret laws in Europe, for example, have failed. However, the problem with this form of protection is that the secret generally becomes public once the biotechnology is used commercially and thus the protection is lost⁶. An attempt to register

¹ http://www.auswaertiges-amt.de/www/en/aussenpolitik/vn/umweltpolitik/biovielfalt_html

² <http://www.ciesin.org/TG/PI/TREATY/bio.html>

³ http://www.unescap.org/drpad/vc/orientation/legal/3_biod.htm

⁴ Ibid.

⁵ <http://www.ciesin.org/docs/008-265/008-265i.html>

⁶ It is conceivable that the law of copyright could afford some protection for biotechnology. Lines of genetic code are analogous to some extent with computer program code, which has now been incorporated into the copyright systems of most industrialised countries. However, this route to protection is fraught with practical

the name of a plant or an animal, as a trademark is unlikely to be successful as public policy would prevent it⁷.

Rights in plant varieties⁸

Prior to the mid-1960s only a few countries⁹ gave any intellectual property protection to plant varieties, which eventually culminated in the formation of an International Union for the Protection of New Varieties of plants (UPOV) and the signing of a Convention¹⁰. The national authority responsible conducts satisfaction of the DUS criteria, usually by growing the variety over at least two seasons¹¹. Grant of plant variety rights confers certain exclusive rights on the holder, including the exclusive right to sell the reproductive material¹² of the protected variety. However the rights do not extend to consumption material¹³. The new 1991 text will provide far greater protection than is afforded at present, most notably by requiring that all member countries apply the convention to all genera and species, by extending the exclusive rights to include harvested material¹⁴ and, most controversially, by allowing enforcement against farm-saved seed¹⁵.

Patents for biotechnology

A patent will provide a wide range of legal rights, including the right to possess, use, transfer by sale or gift, and to exclude others from similar rights. Duration will be for around 20 years¹⁶. Whilst the majority of countries provide some form of patent protection, only a few

and conceptual difficulties and is generally thought to be unsuitable. There is as yet no recorded case of biotechnologists claiming copyright in their inventions.

⁷ In England, registrations for names of varieties of roses have been removed from the Trade Mark Register for lack of distinctiveness and because of the likelihood of confusion

⁸ Ibid.

⁹ (e.g., Germany, USA)

¹⁰ (The UPOV Convention 1961)

¹¹ There is also an important requirement that the variety be maintained throughout the duration of protection. A country may apply the system to all genera or species, but there is no obligation to do so and thus the system has been extended only gradually.

¹² (e.g. seed, cuttings, whole plants)

¹³ (e.g. fruit, wheat seed grown for milling flour)

¹⁴ (e.g., fruit, wheat grown for milling into flour)

¹⁵ (where a farmer produces further seed of the protected variety from the previous year's crop)

¹⁶ (although for only 17 years in the USA)

provide patent protection for biotechnology¹⁷. However, prior to 1980, the US Patent Office would not grant utility patents¹⁸ living matter because it deemed products of nature not to be within the terms of the utility patent statute. That was until the landmark decision of the US Supreme Court in *Diamond v Chakrabarty*¹⁹, which held that a particular genetically engineered bacterium was statutory subject matter for a utility patent. This decision has been the basis upon which patents have been granted for higher life forms. An application under the EPC is for a European patent, or Europatent, for short²⁰. The EPC provides that "plant or animal varieties or essentially biological processes for the production of plants or animals" are excluded from patent²¹. The most important practical result of the convention is that it is possible to claim priority from an application made in a convention country for all subsequent convention countries within 12 months of the original filing²². The Foundation's programme for training and advice on Iguana ranching is called the Iguana Management Programme (IMP). The IMP is based in Costa Rica but it is intended to implement it throughout Latin America and possibly elsewhere²³.

The new technology and expertise, which have been incorporated into an iguana ranching model, are being applied for an industrial purpose (i.e. agriculture) and are of commercial value; they thus fall within the area of intellectual property law as applied to biotechnology.

¹⁷ (these include: Australia, Bulgaria, Canada, Czechoslovakia, Hungary, Romania, Japan, the Soviet Union and the parties to the European Patent Convention)

¹⁸ (separate from The Plant Patent Act)

¹⁹ 447 US 303 (1980) (from which the above quote is taken)

²⁰ If the European Patent Office (EPO) grants a Europatent it has the same effect, and is subject to the same conditions, as a national patent in each of the member countries designated in the application. In other words, through a single application a bundle of national patents can be obtained.

²¹ protection (although the exclusion is expressly stated not to apply to microbiological processes and products)

²² The Deposit Treaty, as the full title suggests, is concerned with the deposit of examples of microorganisms for the purposes of patent applications. Applications for patents for biotechnology often face considerable difficulties in describing the nature of the invention sufficiently. The Deposit Treaty is a vehicle for solving these problems, primarily through the setting up of a series of International Depository Authorities (IDA) and through the recognition by all member countries of a deposit in a single IDA.

²³ The primary purpose of the IMP is to conserve living natural resources; its basic premise is that if farmers can raise iguanas as a food crop, the status of the wild species will be improved and forest clearance might be reduced. Farmers adopting iguana ranching would have to protect or re-establish areas of forest to provide food for stock. Research indicates that meat production per hectare by iguanas is approximately three times higher than by cattle. Income can be derived from selling iguanas and their products (meat, eggs, leather) and products from the forest.

The biotechnological components of the ranching model are the genetic brood stock²⁴ and the husbandry procedures²⁵. The technologies involved in the IMP are vulnerable to piracy. Much of the work of the Fundacion is contained in the genetic make-up of the Genetic Brood Stock²⁶. Because of the uncertainties of the world's intellectual laws with regard to biotechnology the availability of protection for the most important components of the IMP is questionable²⁷. This provides no incentives for exploitation of useful genetic materials in the natural environment, even though in developing countries natural resources are obvious subjects for investment²⁸. Intellectual property rights could be a means of influencing developing countries to maintain and develop diverse resources in return for the value that these resources render to the world community²⁹.

The CBD has been recognised as the main means of achieving this aim. In 2001 the Gutenberg European Council adopted the objective of halting the loss of biodiversity in the Union by 2010³⁰. The CBD is designed to conserve biological diversity, ensure the sustainable use of this diversity and share the benefits generated by the use of genetic resources, in particular through appropriate access to genetic resources and appropriate transfer of relevant technologies, taking into account all rights over those resources and technologies, and through adequate funding.

The Biodiversity Convention provides a number of general obligations for member states. These include in particular a commitment to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity.³¹ Generally,

²⁴ (The Fundacion has 'bioengineered' an improved stock of Green Iguanas)

²⁵ (egg laying and incubation, nutrition, disease control, release and harvesting)

²⁶ Once these Iguanas are transferred or sold the Fundacion loses its direct control over the animals. In addition, the success of the Iguana ranching model is dependent on the expertise to use the technologies efficiently; this is information which took years to develop but which can be pirated very easily once a license is purchased.

²⁷ At present there is widespread discrimination against the application of intellectual property rights to natural genetic materials and in favor of human-modified genetic materials.

²⁸ However, one important way to limit conversion of natural resources is to ensure that fair value is paid for current uses of the existing resource base.

²⁹ <http://www.ciesin.org/docs/008-265/008-265i.html>

³⁰ <http://europa.eu.int/scadplus/leg/en/lvb/l28102.htm>

³¹ Member states must also integrate the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

member states are required to promote the sustainable use of biological resources by integrating consideration of the conservation and sustainable use of biological resources into national decision-making, adopting measures relating to the use of biological resources to avoid or minimize adverse impacts on biological diversity; protecting and encouraging customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements; supporting local populations to develop and implementing remedial action in degraded areas where biological diversity has been reduced; and encouraging cooperation between its governmental authorities and its private sector in developing methods for sustainable use of biological resources³².

The institutional structure of the Biodiversity Convention includes a number of bodies. These include the COP, a Subsidiary Body on Scientific, Technical and Technological Advice³³, and the Secretariat.³⁴ More specifically, it reviews progress under the Convention, identifies new priorities to be pursued, sets work plans for members, amends the Convention, creates expert advisory bodies, reviews progress reports by member nations and collaborates with other international organizations and agreements³⁵. Periodic state reports to the Conference of the Parties constitute one of the main monitoring instruments instituted under the Convention. State parties must report on the means they have adopted to implement the objectives of the Convention and the level of success of such measures. For conservation convention on climate change also became important, which has been discussed in the next topic.

³² Article 10 of the Biodiversity Convention

³³ (SBSTTA)

³⁴ The Conference of the Parties, which brings together all member states, is generally mandated with keeping the implementation of the Convention under review.

³⁵ The Conference of the Parties has launched a number of thematic programmes covering, for instance, the biodiversity of inland waters, forests, marine and coastal areas, dry lands and agricultural lands, agricultural biodiversity and cross-cutting issues.

5.2-UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (1992)

In the previous topic it was evident that conservation of bio-diversity had the utmost importance. The Framework Convention on Climate Change was one of two binding treaties opened for signature at the United Nations Conference on Environment and Development (UNCED) in 1992.¹ Though stated only in general terms, the Climate Convention parties agreed to attempt to limit emissions of greenhouse gases, mainly carbon dioxide (CO₂) and methane (CH₄)². It also has been one of the international community's most essential tools in the struggle to promote sustainable development. A great deal has been accomplished since Rio -- but the most difficult decisions still lie ahead³.

The Environmental Challenge⁴

It was not until the 1970s, however, that scientists' growing understanding of the Earth-atmosphere system brought this previously obscure field of science to wider attention⁵. The IPCC⁶ was given a mandate to assess the state of existing knowledge about the climate system and climate change; the environmental, economic and social impacts of climate change; and possible response strategies⁷.

This is what the IPCC has found: Humanity's emissions of greenhouse gases are likely to cause rapid climate change. Carbon dioxide is produced when fossil fuels are burned, and its effects intensify when carbon-dioxide-absorbent forests are cut down. Methane and nitrous

¹ The treaty, also known as the Climate Convention, addresses potential human-induced global warming by pledging countries to seek "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."

² <http://www.ciesin.org/TG/PI/TREATY/framwork.html>

³ <http://www.un.org/ecosocdev/geninfo/sustdev/climate.htm>

⁴ <http://www.un.org/ecosocdev/geninfo/sustdev/climate.htm>

⁵ To give policy makers and the general public a better understanding of what researchers had learned, the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) established the Intergovernmental Panel on Climate Change (IPCC) in 1988.

⁶ Intergovernmental Panel on Climate Change

⁷ The IPCC released its First Assessment Report in 1990. Approved after a painstaking peer review process by hundreds of leading scientists and experts, the Report confirmed the scientific basis for climate change. It had a powerful effect on both policy makers and the general public and strongly influenced negotiations on the Climate Change Convention.

oxide are released as a result of agricultural practices, changes in land use and other causes.⁸ Past and current emissions have already ensured that there will be some degree of climate change in the twenty-first century; Based on current trends, the growth in emissions of carbon dioxide and other greenhouse gases is expected to result in the equivalent of a doubling of pre-industrial CO₂ concentrations in the atmosphere by 2030, and a trebling by 2100. Stabilizing global CO₂ emissions at their current levels would postpone CO₂ doubling to 2100⁹. In 1990, the Second World Climate Conference called for a framework treaty on climate change. Sponsored by the WMO, UNEP and other international organizations, this conference featured negotiations and ministerial-level discussions among 137 States plus the European Community¹⁰. In particular, it set up a system whereby Governments report information on their national greenhouse gas emissions and climate change strategies¹¹. They were also committed to taking measures aimed at returning their greenhouse gas emissions to 1990 levels by the year 2000¹².

The Political Challenge: The costs of climate change will vary widely from country to country¹³. The key players are:

⁸ Climate models predict that the global temperature will rise by about 1 - 3.5C by 2100. Climate change will have powerful effects on the global environment. In general, the faster the climate changes, the greater will be the risk of damage. Human society will face new risks and pressures. Global food security is unlikely to be threatened, but some regions may experience food shortages and hunger. People and ecosystems will need to adapt to the future climate regime.

⁹ Emissions would eventually have to fall to less than 30 per cent of their current levels if concentrations were to be stabilized at doubled CO₂ levels sometime in the twenty-second century. Such cuts would have to be made despite growing populations and an expanding world economy.

¹⁰ The final declaration, adopted after hard bargaining, did not specify any international targets for reducing emissions. However, it did support a number of principles later included in the Climate Change Convention. These were climate change as a "common concern of humankind", the importance of equity, the "common but differentiated responsibilities" of countries at different levels of development, sustainable development and the precautionary principle--where there are threats of serious or irreversible damage, a lack of scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

¹¹ This information is reviewed on a regular basis in order to track the Convention's progress. In addition, developed countries agreed to promote the transfer of funding and technology to help developing countries respond to climate change.

¹² The Convention entered into force on 21 March 1994 and today boasts some 165 States Parties.

¹³ Developed countries are responsible for over two thirds of past emissions and some 75 per cent of current emissions, but they are best positioned to protect themselves from damage.

- *The JUSSCANZ countries--the non-EU developed countries--including Japan, the United States, Switzerland, Canada, Australia, New Zealand and Norway. The United States in particular played a key role in the drafting of article 4.2, on developed-country commitments to limit emissions¹⁴.*
- *Countries with economies in transition.* The industrialized countries of Central and Eastern Europe and the former Soviet Union are significant emitters of greenhouse gases¹⁵.
- *The Group of 77 and China.* Developing countries work through the Group of 77 to develop common positions on emissions-reduction commitments and financial and technological transfers¹⁶.
- *The Organization of Petroleum Exporting Countries.* OPEC members tend to be concerned about the likely impact on their economies if other countries reduce their use of oil¹⁷.
- *Business.* The first business groups to attend the climate talks as observers represented energy-intensive firms concerned about the negative economic implications of a convention¹⁸.
- *Environmentalists.* Many are active in lobbying delegates and the media and produce newsletters during international meetings¹⁹.

¹⁴ Despite what has been called the "creative ambiguity" of the final text, it is almost universally interpreted as committing developed countries to make a sincere effort to return their greenhouse gas emissions to 1990 levels by 2000.

¹⁵ However, due to the economic slump following the end of communism, they will likely succeed in keeping their emissions below 1990 levels through 2000.

¹⁶ However, the G77 does not always present a united front, owing to the widely differing interests of its members.

¹⁷ Saudi Arabia, Kuwait and others have emphasized the existence of scientific uncertainty and argued that the convention process should move forward cautiously.

¹⁸ More recently, other business sectors have started to follow the process more closely, including the insurance sector, which sees itself as vulnerable to increased storms and other possible climate change impacts, and clean energy firms that see market opportunities.

¹⁹ The majority is from developed countries, although constant efforts are made to promote the participation of more non-governmental organizations from developing countries.

After the Convention was adopted in Rio, the Intergovernmental Negotiating Committee (INC) that drafted it continued its preparatory work, meeting for another six sessions to discuss matters relating to commitments, arrangements for the financial mechanism, technical and financial support to developing countries, and procedural and institutional matters²⁰. The Convention required COP-1 to review whether the commitment of developed countries to take measures aimed at returning their emissions to 1990 levels by 2000 was adequate for meeting the Convention's objective²¹. Ministers released a declaration stressing the need to accelerate talks on how to strengthen the Climate Change Convention and endorsed the Second Assessment Report "as currently the most comprehensive and authoritative assessment of the science of climate change, its impacts and response options now available"²². The sharing of information by Governments is central to how the Climate Change Convention works. Parties must therefore submit "national communications" to the COP on a regular basis²³. The 1996 review of national communications from developed countries (developing countries will start making their initial submissions in 1997) reveals that carbon dioxide emissions continue to rise in most of them²⁴. The data also show that carbon dioxide accounts for 80.5 per cent of total greenhouse gas emissions from developed countries. Fuel combustion is confirmed as the most important source of CO₂²⁵. Specific measures are being used for most of the major economic sectors. Policies for the energy

²⁰ The INC was dissolved after its eleventh and final session in February 1995, and the Conference of the Parties (COP) became the Convention's ultimate authority. The COP held its first session in Berlin from 28 March to 7 April 1995.

²¹ The Parties agreed that new commitments were indeed needed for the post-2000 period. They established the Ad hoc Group on the Berlin Mandate (AGBM) to draft "a protocol or another legal instrument" for adoption at COP-3 in 1997.

²² They further stated that the Report "should provide a scientific basis for urgently strengthening action at the global, regional and national levels, particularly action by Annex I (industrialized) countries to limit and reduce emissions of greenhouse gases".

²³ This information about national greenhouse gas emissions, international cooperation and national activities is reviewed periodically so that the parties can track the Convention's effectiveness and draw lessons for future national and global action.

²⁴ Comparing the data from 1990 inventories with projections for 2000 shows carbon dioxide emissions rising over the decade if additional measures are not adopted. The major exceptions are the countries with economies in transition.

²⁵ With the 33 countries included accounting for around 63 per cent of the global CO₂ emissions in 1990, this seems to confirm carbon dioxide as the most important greenhouse gas resulting from human activities.

sector²⁶ include switching to low- or no-carbon fuels, reforming market regulations to spur competition, and removing subsidies on coal. The focus in the residential, commercial and institutional sector is on energy-efficiency standards for new buildings, higher energy prices and public information campaigns²⁷.

The Twenty-first Century²⁸ An agreed text must be circulated to Governments for review by June 1997²⁹. Some of the key issues now being debated are these: *Binding timetables and targets for emissions reductions*. A number of Governments (including some EU members) are calling for 10 per cent reductions in CO₂ by 2005³⁰.

Obstacles and Slow Progress³¹ Many of the objectives highlighted above have still not been recognized. For example, the industrialized countries have not provided much help in many areas such as effective emission reductions and stalling on developing country commitments, or opposing the Kyoto protocol itself.

Since 1992 the Conference of Parties (COP) has met a number of times³². At the Rio Earth Summit is agreed that emissions of greenhouse gases, particularly carbon dioxide, should be stabilised at 1990 levels by the year 2000. At the third Conference of Parties in Kyoto, Japan, in 1997 participating nations agreed to reduce greenhouse gas emissions by 5% by 2008-2012. When this Kyoto Protocol is ratified by enough countries, it will become legally binding. The scope of liability is also an important issue, which has been discussed, in the next topic.

²⁶ (The largest source of emissions for many countries)

²⁷ Agricultural measures include reducing herd sizes and fertilizer use and improving waste management.

²⁸ <http://www.un.org/ecosocdev/geninfo/sustdev/climate.htm>

²⁹ This text will be the subject of continued intense negotiations at meetings to be held in Bonn in March, August and October.

³⁰ . Some (such as the low-lying island States) want an even more ambitious cut of 20 per cent by that date. Still others (including Australia, Canada, Japan and the United States) argue that a 2005 date is unrealistic and propose objectives for the 2010-2015 period.

³¹ <http://www.globalissues.org/EnvIssues/GlobalWarming/Convention.asp#ObstaclesandSlowProgress>

³² http://www.ace.mmu.ac.uk/eae/Global_Warming/Older/FCCC.html

5.3-CONVENTION ON CIVIL LIABILITY FOR DAMAGE RESULTING FROM ACTIVITIES DANGEROUS TO THE ENVIRONMENT (1993 LUGANO CONVENTION)

The Convention aims to provide adequate compensation for damage resulting from activities dangerous to the environment and thereby it also protects and conserves natural resources.¹ Chapter III of the Lugano Convention is concerned with Access to Information and includes provisions for people to access environmental information held by public authorities (similar to those of the EC Environmental Information Directive).² For example, an operator may be required to produce specific information, which is necessary to establish cause and link relationships for environmental damage³.

Liability in respect of substances, organisms and certain waste installations or sites⁴

The operator in respect of a dangerous activity mentioned under Article 2, paragraph 1⁵, subparagraphs a to c shall be liable for the damage caused by the activity as a result of incidents at the time or during the period when he was exercising the control of that activity.

¹ Exemptions to the Convention are indicated in Article 4; these include damage caused by a nuclear substance, which arises from a nuclear accident. In the Convention liability is directed to the operator in respect of incidents causing damage from a dangerous activity and does not include the option for parties to limit liability.

² In addition, the Convention also entitles people to access environmental information held by 'bodies with public responsibilities for the environment and under the control of a public authority' and to access information held by operators.

³ http://europa.eu.int/comm/development/body/theme/environment/env_integ/env_integration/envman-1610.html

⁴ Article 6

⁵ "Dangerous activity" means one or more of the following activities provided that it is performed professionally, including activities conducted by public authorities:

The production, handling, storage, use or discharge of one or more dangerous substances or any operation of a similar nature dealing with such substances;

The production, culturing, handling, storage, use, destruction, disposal, release or any other operation dealing with one or more:

Genetically modified organisms which as a result of the properties of the organism, the genetic modification and the conditions under which the operation is exercised, pose a significant risk for man, the environment or property;

Micro-organisms which as a result of their properties and the conditions under which the operation is exercised pose a significant risk for man, the environment or property, such as those micro-organisms which are pathogenic or which produce toxins;

Liability in respect of sites for the permanent deposit of waste⁶: Liability under this article shall apply to the exclusion of any liability of the operator under Article 6, irrespective of the nature of the waste⁷.

Exemptions⁸: The operator shall not be liable under this Convention for damage, which he proves: was caused by an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exceptional, inevitable and irresistible character; was caused by an act done with the intent to cause damage by a third party, despite safety measures appropriate to the type of dangerous activity in question; resulted necessarily from compliance with a specific order or compulsory measure of a public authority; was caused by pollution at tolerable levels under local relevant circumstances; or was caused by a dangerous activity taken lawfully in the interests of the person who suffered the damage, whereby it was reasonable towards this person to expose him to the risks of the dangerous activity. The Convention on Civil Liability for Oil Pollution Damage, which is intended to ensure that adequate compensation, is available to victims and which places the liability for the damage on the shipowner⁹. The problem of oil pollution—not only as a result of accidents but also through normal tanker operations, especially the cleaning of cargo tanks—was so great in some areas that there was serious concern for the marine environment¹⁰.

The operation of an installation or site for the incineration, treatment, handling or recycling of waste, such as those installations or sites specified in Annex II, provided that the quantities involved pose a significant risk for man, the environment or property;

The operation of a site for the permanent deposit of waste.

⁶ Article 7

⁷ Liability under this article shall apply to the exclusion of any liability of the operator under Article 6 if the same operator conducts another dangerous activity on the site for the permanent deposit of waste. However, if this operator or the person who has suffered damage proves that only a part of the damage was caused by the activity concerning the permanent deposit of waste, this article shall only apply to that part of the damage. Nothing in this Convention shall prejudice any right of recourse of the operator against any third party.

⁸ Article 8

⁹ Two years later, a conference convened by the IMO led to the adoption of the Convention for the Establishment of an International Fund for Compensation for Oil Pollution Damage. The fund, with headquarters in London, is made up of contributions from oil importers. If an accident at sea results in pollution damage, which exceeds the compensation available under the Civil Liability Convention, the fund is made available to pay an additional amount.

¹⁰ In association with the IAEA and the European Nuclear Energy Agency of the OECD, the IMO convened a conference in 1971, which adopted the Convention on Civil Liability in the Field of Maritime Carriage of Nuclear Matter.

CEFIC¹¹ appreciates the openness of the Commission when addressing legal questions related to remediation of environmental damage, especially the efforts made to ensure early consultations with all relevant interested parties. CEFIC wishes to stress the following key concerns: CEFIC welcomes the fundamental recognition that historic pollution requires different solutions from future pollution; Traditional civil liability rules should be respected, maintaining essential causation and evidence requirements while linking liability to operational control of the activity, this in full application of the "polluter-pays" principle¹²; As rightly stressed by the Commission, negative experiences like the US Superfund should be avoided at all costs¹³. Resources are limited, especially in this period of recession; CEFIC would like to stress that any liability and compensation systems adopted at national or international levels, should be based on an economically sound and legally- balanced approach. CEFIC considers that there is a need for wide-ranging and comprehensive discussions between all parties concerned¹⁴; the industry believes that pollution prevention and harmonization of environmental standards are important aspects of Community legislation¹⁵.

Given these international instruments and the issues addressed in the Green Paper which might ultimately lead to legislative proposals from the Commission, the Member States of the Community must answer the fundamental question whether there is a real need for harmonisation or whether this subject should better be covered by the principle of subsidiary¹⁶. We also note the opposition by the Member States to past Commission

¹¹ European Chemical Industry Council

¹² CEFIC calls for clear, predictable and balanced solutions to tackle the problem without jeopardizing competitiveness or employment.

¹³ In contrast, we believe that the question of clean-up mechanisms for historic, non-liability related situations should be guided by the Subsidiary principle and addressed in a strict cost benefit manner and at individual Member State level with full regard for their industrial, social and legal traditions.

¹⁴ http://www.cefic.be/position/Sec/pp_sec03.htm

¹⁵ Whilst CEFIC considers civil liability less important than the above points - "an ounce of prevention is worth a pound of cure" - CEFIC nevertheless would like to contribute to the discussions on remedying environmental damage. As a matter of principle CEFIC expects that the conclusions drawn from these discussions will be in line with the principle of sustainable development and will achieve a balance between ensuring the continued wealth-creation necessary for the well-being of the Community and progress towards improving the environment.

¹⁶ The chemical industry is not convinced of the argument that there is a need for harmonisation because different national laws will lead to distortion of competition in the Common Market.

proposals concerning civil liability, such as the draft Directive on Civil Liability for Damages Caused by Waste¹⁷. Likewise the scope of the notion "damage" under civil law should not be seen in isolation from criteria established under public law¹⁸. CEFIC recognises that, apart from civil liability, the other main aspect of the Green Paper is to address *non-liability related situations* related to past and future environmental damage¹⁹.

Scope Of Liability²⁰ In addition, it is of fundamental importance to the chemical industry that liability is linked to the actual operational control. Otherwise any liability system will contradict the Polluter-Pays-Principle and can only be considered a "deep pocket" approach against the party having the most financial assets instead of against the party, which actually has caused the damage²¹.

DEFINITION OF DAMAGE TO THE ENVIRONMENT

Public laws of Member States deal with this problem and there is no need to introduce a civil cause of action in an area, which concerns the public at large²². CEFIC is of the opinion that

¹⁷ It is for this reason that CEFIC considers also that the Council of Ministers should not authorize the Commission to sign the Draft Council of Europe Convention on behalf of the Community before it has made up its mind on whether there is a real need for harmonisation. If so, it would need additionally to decide whether the Convention was, in all respects, the right model for such harmonization to take.

¹⁸ CEFIC therefore considers that the Green Paper stresses the prevention aspect of civil liability rules too much.

¹⁹ We do agree with the Green Paper that civil liability cannot be *a means for compensating the non-liability related damages resulting from the past*. Retrospective liability should not be imposed, in particular for acts, which were legal or met the established environmental standards at the time. For these types of environmental damages a reasonable and fair solution needs to be found.

²⁰ http://www.cefic.be/position/Sec/pp_sec03.htm

²¹ CEFIC would have preferred the Green Paper to state unambiguously that strict liability has to be linked to operational control instead of stating "*Should liability be channeled to the party with the technical know-how, resources and operational control of the activity?*" CEFIC has strongly opposed the Commission's draft Directive on Civil Liability for Damage Caused by Waste for its explicit rejection, in relation to transport incidents, of the link between liability and operational control. Such approach would permit liability to fall on one who does not have control over the activity leading to the pollution.

²² CEFIC believes that it should be left to society, and hence to public law, to determine the level of environmental quality. CEFIC therefore considers that civil laws are an unsuitable basis for allowing action against ecological damages.

the extension of liability to indirect loss of profit, as contained in the explanatory memorandum of the Council of Europe Convention, is unacceptable²³.

Article 27 of the Cartagena Protocol on Biosafety (Protocol) requires Parties to the Protocol to engage in a process to consider the appropriate elaboration of international rules and procedures for damage resulting from transboundary movements of living modified organisms (LMOs). Another relevant question is which approaches result in the best environmental protection? ²⁴ When creating legislation at the national level or legal instruments at the international level, there are two distinct approaches for liability and redress for damage to biodiversity²⁵. The second is the establishment of general or “horizontal” environmental liability legislation, which focuses on holding those responsible for environmental harm liable, regardless of the activity involved²⁶.

These basic ideas, simple in conception and generally accepted, are starting point of Dr. Xue’s wideranging²⁷ examination of the contemporary law and practice applicable to claims by a State for physical damage originating in or caused by other States²⁸. It will also apply to anyone, including research laboratories, which releases harmful genetically modified organisms²⁹.

From the above discussion it is evident that the provisions are good enough to conserve resources but implementation is more important than making other provisions, as the convention for combating desertification which has been discussed in detail in the next topic.

²³ Here again one might have to take specific national situations into account and should therefore leave this issue to national law.

²⁴ http://www.croplifeasia.org/ref_library/biotechnology/2004%201%2026-DOC-Independant%20Handbook-draft-e.pdf

²⁵ International, regional or national instruments may address damage to “biodiversity,” the “environment” or “natural resources.” While there can be important distinctions between these terms, for purposes of the general discussion in this paper, the terms biodiversity and environment are used.

²⁶ A combination of these approaches also is possible and involves the establishment of a general environmental liability and redress regime with differentiated rules for certain ultra-hazardous activities.

²⁷ Professor **Xu**, Mayor of Shanghai

²⁸ http://assets.cambridge.org/052181/4235/frontmatter/0521814235_frontmatter.pdf

²⁹ <http://www.newscientist.com/article/mg13718661.400.html>

5.4-THE UN CONVENTION TO COMBAT DESERTIFICATION, 1994

Desertification is against the conservation policy and this convention speaks to minimize desertification. Desertification¹ means land degradation, caused by climatic variation and human activities, such as over cultivation, overgrazing, deforestation and poor irrigation practices. Desertification threatens the livelihood of more than 1 billion people in all regions of the world.

Drylands and biodiversity²: Grasslands, shrublands and savannas are, after forests, the second most important habitat for Globally Threatened Birds, with 32% of these species using such habitats. Subtropical and tropical dry forests are an additional important habitat for Globally Threatened Birds. Many Important Bird Areas (IBAs) are situated in drylands³.

The United Nations Convention to Combat Desertification (CCD)⁴: The UNCCD⁵ is often referred to as one of the Rio Conventions, alongside the Climate Change Convention and the Convention on Biological Diversity. The Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa – that's its full name - entered into force in December 1996 and currently has 185 country Parties. It has two objectives: to combat desertification and to mitigate the effects of drought.

BirdLife International and the UNCCD⁶: Birds are affected by desertification, particularly through the deterioration and loss of habitats, with deforestation and the degradation of wetlands being amongst the greatest threats⁷.

¹ (Adopted 1994, entered into force, 1996)

² <http://www.birdlife.org/action/change/desertification/index.html>

³ In Africa, 38 IBAs have been designated for the species they hold which are restricted to the Sahel biome while a further 73 IBAs harbour species typical of the Somali-Masai biome. More than 400 IBAs in Europe contain steppe or dry calcareous grassland. Some 78% of the 391 IBAs in the Middle East, support predominantly dry habitat types (bushland 18%, grassland 23%, agriculture 20%, desert 17%).

⁴ See supra 2.

⁵ United Nations Convention to Combat Desertification.

⁶ Supra 4.

⁷ In cooperation with the International NGO Network on Desertification (RIOD), BirdLife has been working with the UNCCD Conferences of the Parties and the Committee for the Review of the Implementation of the

Complex interactions which cause desertification:⁸ The UN Convention to Combat Desertification adopted a definition of desertification as defined by UNEP and modified by UNCED to read "desertification is land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities." In order to achieve its objectives and ensure adequate implementation, the Convention lists four principles to guide the parties. The Convention pioneers a democratic bottom-up philosophy in international environmental law⁹.

The Principles:¹⁰ The first principle binds parties to ensure the participation of populations and local communities in the design and implementation of programs to combat desertification. Desertification¹¹: The UN Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, is one of the achievements of the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992¹². The UNCCD obliged the affected developing countries to give priority to combating desertification within their strategies for sustainable development¹³. The NAPs are broadly defined and include, for instance¹⁴: measures to improve national economic environments with a view to eradicating poverty, sustainable management of natural resources, activities in the field of capacity building. The UN General Assembly established such a committee in 1992¹⁵.

Convention (CRIC). A focus has been on advocating stronger links with the Convention on Biological Diversity, the Ramsar Convention on Wetlands and the Convention on Migratory Species.

⁸ http://www.unescap.org/DRPAD/VC/orientation/legal/3_desert.htm

⁹ It emphasizes that the people who bear the brunt of the desertification and who best understand the fragile environment in which they live, must be fully involved and be allowed to participate in the decisions that will shape their lives.

¹⁰ See supra 8.

¹¹ http://www.auswaertiges-amt.de/www/en/aussenpolitik/vn/umweltpolitik/wuestensekr_html

¹² With it, an internationally binding framework was created for cooperation between the states affected by desertification, particularly in Africa, and the developed countries.

¹³ The developed countries in turn undertook to support the efforts of affected developing countries by providing substantial financial resources within the framework of existing bilateral and multilateral development cooperation.

¹⁴ http://www.auswaertiges-amt.de/www/en/aussenpolitik/vn/umweltpolitik/wuestensekr_html

¹⁵ The INCD drafted the Convention and four regional Annexes for Africa, Asia, Latin America and the Caribbean, and the Northern Mediterranean during five meetings between May 1993 and June 1994. The

The Convention recognizes: the physical, biological and socioeconomic aspects of desertification; the importance of redirecting technology transfer so that it is demand driven; and the involvement of local populations¹⁶. The purpose of using an innovative “bottom-up” approach, by involving people who are affected by desertification in decision-making, is to facilitate effective implementation of the Convention¹⁷. In 1992, the UN General Assembly, adopted resolution 47/188 calling for the establishment of the Intergovernmental Negotiating Committee for the elaboration of an international convention to combat desertification in those countries experiencing serious drought and/or desertification, particularly in Africa (INCD)¹⁸. The preparations included discussion of issues for the Global Mechanism, the physical location of the Permanent Secretariat and the establishment of the Committee on Science and Technology¹⁹.

The First Conference of the Parties (COP-1) to the Convention to Combat Desertification met in Rome, Italy, from 29 September to 10 October 1997. The CST held its first session simultaneously on 2 - 3 October. One hundred and two States submitted their instruments of ratification by the requisite date and participated as Parties to the Convention²⁰. Delegates to the **Second Conference of the Parties (COP-2)** met in Dakar, Senegal, from 30 November to 11 December 1998. The Committee on Science and Technology (CST) met in parallel to the COP from 1 to 4 December²¹. The COP approved adjustments to its budget and adopted

Convention to Combat Desertification was adopted on 17 June 1994 and was opened for signature in October 1994 in Paris.

¹⁶ The core of the CCD is the development of national and sub regional/regional action programmes by national governments in cooperation with donors, local populations and non-governmental organizations (NGOs).

¹⁷ A sign of the CCD's commitment to the bottom-up approach was the COP-1 invitation for NGOs to organize a Plenary dialogue with delegates on building partnerships for the CCD. COP-1 delegates adopted a decision calling for plenary meetings at future COPs to be devoted to similar NGO dialogues.

¹⁸ At the organizational session of the INCD in January 1993, delegates elected Ambassador Bo Kjellén (Sweden) as Chair of the Committee.

¹⁹ Progress was made, especially on scientific and technological cooperation, but the size and membership of the COP Bureau were left for COP-1 to decide, as were questions about the host institutions and some functions of the Global Mechanism.

²⁰ The COP-1 and CST-1 agendas contained primarily organizational matters. Delegates selected Bonn, Germany, as the location for the Permanent Secretariat and the International Fund for Agricultural Development (IFAD) as the organization to administer the Global Mechanism.

²¹ Delegates approved arrangements for the institutional linkage between the Convention and the UN Secretariat and the headquarters agreement with the Government of Germany.

the outstanding rules of procedure concerning bureau members, but retained bracketed language regarding majority voting absent consensus²². COP-2 delegates considered, but deferred to COP-3, decisions on the Secretariat's medium-term strategy, adoption of the Memorandum of Understanding between the COP and IFAD regarding the Global Mechanism, and the G-77/China proposal to establish a Committee on the Review of the Implementation of the Convention (CRIC)²³ and consideration of traditional knowledge, sub-regional and regional action programmes to draw conclusions and propose concrete recommendations on further steps in the implementation of the Convention²⁴. CCD Parties met from 11-22 December 2000 in Bonn, Germany for the **Fourth Conference of the Parties (COP-4)**. The CST met in tandem with the COP from 12-15 December²⁵. Developed country Parties outlined their efforts to support the implementation process and made proposals for further improvements²⁶. The **Fifth Conference of the Parties (COP-5)** took place in Geneva, Switzerland, from 1-13 October 2001. COP-5²⁷ focused on setting the modalities of work for the two-year interval before the next COP²⁷. The first meeting of the **CCD's Committee for the Review of the Implementation of the Convention (CRIC-1)** convened from 11-22 November 2002 at the Food and Agriculture Organization (FAO) headquarters in Rome, Italy²⁸. During the first week, delegates heard case study presentations from the five CCD regions, with national development strategies; measures for

²² Eastern and Central European countries were invited to submit to COP-3 a draft regional implementation annex. The CST established an ad hoc panel to follow-up its discussion on links between traditional and modern knowledge.

²³ Late-starts on both the UNEP-led survey and evaluation of existing networks and the operation of the Global Mechanism, called for by COP-1, precluded substantive discussions on these first fruits of the CST's and COP's deliberations.

²⁴ Delegates also agreed to continue consultations on the additional draft regional implementation annex for Eastern and Central Europe, with a view to adopting it at COP-4. They noted the need for a declaration on the commitments to enhance implementation of the Convention and decided to invite proposals for the formulation of such a declaration for consideration and adoption at COP-4.

²⁵ The Conference's notable achievements were the adoption of the fifth regional annex for Eastern and Central Europe, commencement of work by the ad hoc working group (AHWG) to review CCD implementation, initiation of the consideration of modalities for the establishment of a committee to review implementation of the Convention (CRIC), submission of proposals to improve the work of the CST, and the adoption of a decision on the Global Environment

²⁶ http://www.iisd.ca/process/forest_desertification_land-ccdintro.htm

²⁷ Delegates established the Committee for the Review of Implementation of the Convention (CRIC), identified modalities to improve the efficiency and effectiveness of the CST, and supported a proposal by the Global Environment Facility (GEF) to designate land degradation as another focal area for funding.

²⁸ See supra 26.

the rehabilitation of degraded land, drought and desertification monitoring and assessment²⁹. These measures are underpinned by international cooperation and partnership arrangements, with Agenda 21, to contribute to sustainable development in the areas concerned.³⁰ Action 21 is an international action plan designed to achieve sustainable development in the 21st century³¹. Local communities play a key role in the formulation and implementation of these action programmes, as they are dependent on the land³².

The Conference of the Parties is the Convention's supreme body. It is responsible for taking the decisions necessary to promote its effective implementation³³. The Convention was drawn up at the Earth Summit in Rio de Janeiro in 1992, was signed in 1994 and came into force on 26 December 1996³⁴. To date over 170 countries have ratified the Convention, which is a legally binding instrument. The next important development for sustainable use of resources held in Johannesburg Summit.

²⁹Early warning systems for mitigating the effects of drought; access by affected country Parties, particularly affected developing country Parties, to appropriate technology, knowledge and know-how; and resource mobilization and coordination, both domestic and international, including conclusions of partnership agreements.

³⁰ <http://europa.eu.int/scadplus/leg/en/lvb/r12523.htm>

³¹ The Convention consists of 40 articles and 5 annexes defining the arrangements for implementing the Convention in Africa, Asia, Latin America, the Caribbean, Northern Mediterranean and Central and Eastern Europe.

³² Closer international cooperation between developed and developing countries is essential to implement the Convention. Nevertheless, the governments of the countries affected by desertification retain responsibility for the creation of an enabling environment to help local populations themselves bring an end to the process of land degradation. Governments must make politically sensitive changes such as greater decentralisation of decision-making, improvement of land tenure systems and empowerment of women and farmers.

³³ Desertification poses the greatest threat in Africa. The disappearance of forest cover at a rate of 3.7 to 5 million hectares a year has an impact on surface and underground water, and 50% of agricultural land on the African continent is affected by soil degradation and erosion.

³⁴ In October 2001 the 5th session of the Conference of the Parties set up a subsidiary body, the Committee for the Review of the Implementation of the Convention (known under the acronym CRIC). The Committee reviews and analyses the national progress reports on the Convention's implementation submitted to the Conference of the Parties by the Parties and by observers. Its aim is to use these examinations and analyses to improve the consistency, impact and efficiency of policies and programmes to restore the agro-ecological balance of dry areas. The Committee has held two meetings to date, one in November 2002 and one in September 2003.

5.5-WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT 2002

In the face of growing poverty and increasing environmental degradation and for the purpose of proper conservation of global resources, the World Summit has succeeded in generating a sense of urgency, commitments for action, and partnerships to achieve measurable results, according to Johannesburg Summit¹ Secretary-General Nitin Desai. The document was negotiated in meetings held in New York, Bali, and finally Johannesburg². In addition, the EU announced a \$700 million partnership initiative on energy and the US announced investments of up to \$43 million for energy in 2003³. There were many commitments made to protect biodiversity and improve ecosystem management, Desai said. These include commitments to reduce biodiversity loss by 2010; to restore fisheries to their maximum sustainable yields by 2015; to establish a representative network of marine protected areas by 2012; and to improve developing countries' access to environmentally-sound alternatives to ozone depleting chemicals by 2010⁴.

Plan Of Implementation⁵

The United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, provided the fundamental principles and the programme of action for achieving sustainable development. Including those contained in the United Nations Millennium Declaration and in the outcomes of the major United Nations conferences and

¹ http://www.johannesburgsummit.org/html/whats_new/feature_story38.htm

² By any standard, participation and interest in the Summit has been high. More than 21,000 people, including more than 9,000 delegates, 8,000 NGOs and 4,000 members of the press, joined the 104 Heads of State and Government that took part in the Summit. As a result of the Summit, governments agreed on a series of commitments in five priority areas that were backed up by specific government announcements on programmes, and by partnership initiatives. More than 220 partnerships, representing \$235 million in resources, were identified during the Summit process to complement the government commitments, and many more were announced outside of the formal Summit proceedings.

³ On health issues, in addition to actions to fight HIV/AIDS and reduce water borne diseases, and the health risks due to pollution, countries agreed to phase out, by 2020, the use and production of chemicals that harm human health and the environment.

⁴ . These commitments are supported by 32 partnership initiatives submitted to the UN, with \$100 million in additional resources, and a US announcement of \$53 million for forest management in 2002-2005.

⁵ http://www.johannesburgsummit.org/html/documents/summit_docs/2309_planfinal.htm

international agreements since 1992⁶. As a result of globalization, external factors have become critical in determining the success or failure of developing countries in their national efforts⁷. Eradicating poverty is the greatest global challenge facing the world today and an indispensable requirement for sustainable development, particularly for developing countries⁸.

⁶ The present plan of implementation will further build on the achievements made since UNCED and expedite the realization of the remaining goals. To this end, we commit ourselves to undertaking concrete actions and measures at all levels and to enhancing international cooperation, taking into account the Rio Principles, including, inter alia, the principle of common but differentiated responsibilities as set out in principle 7 of the Rio Declaration on Environment and Development. These efforts will also promote the integration of the three components of sustainable development — economic development, social development and environmental protection — as interdependent and mutually reinforcing pillars. Poverty eradication, changing unsustainable patterns of production and consumption, and protecting and managing the natural resource base of economic and social development are overarching objectives of, and essential requirements for, sustainable development.

⁷ The gap between developed and developing countries points to the continued need for a dynamic and enabling international economic environment supportive of international cooperation, particularly in the areas of finance, technology transfer, debt and trade, and full and effective participation of developing countries in global decision-making, if the momentum for global progress towards sustainable development is to be maintained and increased.

⁸ Although each country has the primary responsibility for its own sustainable development and poverty eradication and the role of national policies and development strategies cannot be overemphasized, concerted and concrete measures are required at all levels to enable developing countries to achieve their sustainable development goals as related to the internationally agreed poverty-related targets and goals, including those contained in Agenda 21, the relevant outcomes of other United Nations conferences and the United Nations Millennium Declaration. This would include actions at all levels to:

Halve, by the year 2015, the proportion of the world's people whose income is less than \$1 a day and the proportion of people who suffer from hunger and, by the same date, to halve the proportion of people without access to safe drinking water;

Establish a world solidarity fund to eradicate poverty and to promote social and human development in the developing countries pursuant to modalities to be determined by the General Assembly, while stressing the voluntary nature of the contributions, the need to avoid duplication of existing United Nations funds, and encouraging the role of the private sector and individual citizens relative to Governments in funding the endeavours;

Develop national programmes for sustainable development and local and community development, where appropriate within country-owned poverty reduction strategies, to promote the empowerment of people living in poverty and their organizations. These programmes should reflect their priorities and enable them to increase access to productive resources, public services and institutions, in particular land, water, employment opportunities, credit, education and health;

Promote women's equal access to and full participation, on the basis of equality with men, in decision-making at all levels, mainstreaming gender perspectives in all policies and strategies, eliminating all forms of violence and discrimination against women, and improving the status, health and economic welfare of women and girls through full and equal access to economic opportunity, land, credit, education and health-care services;

Develop policies and ways and means to improve access by indigenous people and their communities to economic activities, and increase their employment through, where appropriate, such measures as training, technical assistance and credit facilities. Recognize that traditional and direct dependence on renewable

Key Outcomes of the Summit⁹

The understanding of sustainable development was broadened and strengthened as a result of the Summit, particularly the important linkages between poverty, the environment and the use of natural resources¹⁰. In late August, 2002, government, business and civil society leaders from around the world will gather in Johannesburg, South Africa, for the World Summit on Sustainable Development. For many months, meetings have been held around the world in preparation for WSSD and the consultations have resulted in a growing volume of intergovernmental reports, academic analysis and hardening advocacy positions¹¹.

From Stockholm to Rio de Janeiro to Johannesburg¹²

At the Johannesburg Summit we achieved much in bringing together a rich tapestry of peoples and views in a constructive search for a common path, towards a world that respects and implements the vision of sustainable development. Johannesburg also confirmed that significant progress has been made towards achieving a global consensus and partnership amongst all the people of our planet.

The Johannesburg Summit Test: What Will Change?¹³

What the world wanted, the General Assembly said, was not a new philosophical or political debate but rather, a summit of actions and results. By any account, the Johannesburg Summit

resources and ecosystems, including sustainable harvesting, continues to be essential to the cultural, economic and physical well-being of indigenous people and their communities;

⁹http://www.johannesburgsummit.org/html/documents/summit_docs/2009_keyoutcomes_commitments.pdf

¹⁰ The views of civil society were given prominence at the Summit in recognition of the key role of civil society in implementing the outcomes and in promoting partnership initiatives. Over 8,000 civil society participants attended the Summit, reinforced by parallel events which included major groups, such as, NGOs, women, indigenous people, youth, farmers, trade unions, business leaders, the scientific and technological community and local authorities as well as Chief Justices from various countries.

¹¹ <http://www.iisd.org/briefcase/ten+ten.asp>

¹² http://www.johannesburgsummit.org/html/documents/summit_docs/0409_l6rev2_pol_decl.pdf

¹³ http://www.johannesburgsummit.org/html/whats_new/feature_story41.html

has laid the groundwork and paved the way for action¹⁴. As an implementation-focused Summit, Johannesburg did not produce a particularly dramatic outcome— there were no agreements that will lead to new treaties and many of the agreed targets were derived from panoply of assorted lower profile meetings¹⁵. Beyond speeches and platitudes, the participants in the Summit were forced to confront the needs and the arguments of other actors in a truly interactive dialogue¹⁶.

Commitments were made in Johannesburg— not only by governments, but also by NGOs, intergovernmental organizations and businesses, who launched over 300 voluntary initiatives¹⁷. We need to bring the energy of corporations into our agenda if we are going to make good on our commitments."¹⁸ Julian Hunt, Minister of International Trade and Civil

¹⁴ Yet among all the targets, timetables and commitments that were agreed upon at Johannesburg, there were no silver bullet solutions to aid the fight against poverty and a continually deteriorating natural environment. In fact, there was no magic and no miracle— only the realization that practical and sustained steps were needed to address many of the world's most pressing problems.

¹⁵ But some important new targets were established, such as: to halve the proportion of people without access to basic sanitation by 2015; to use and produce chemicals by 2020 in ways that do not lead to significant adverse effects on human health and the environment; to maintain or restore depleted fish stocks to levels that can produce the maximum sustainable yield on an urgent basis and where possible by 2015; and to achieve by 2010 a significant reduction in the current rate of loss of biological diversity. But Johannesburg also marked a major departure from previous UN conferences in many ways, in structure and in outcome that could have a major effect on the way the international community approaches problem solving in the future.

¹⁶ "Johannesburg gives us a solid basis for implementation and action to go forward," Desai said. "Although the Johannesburg Plan of Implementation is only some 50 pages long, in many ways it is more targeted and more focused than Agenda 21. We have agreed on global priorities for action and we have agreed to take action." United Nations Secretary-General Kofi Annan told the press on the last day of the Summit, "I think we have to be careful not to expect conferences like this to produce miracles. But we do expect conferences like this to generate political commitment, momentum and energy for the attainment of the goals."

¹⁷ Follow-through on these commitments will be the yardstick of success or failure, according to Mr. Annan. "We invited the leaders of the world to come here and commit themselves to sustainable development, to protecting our planet, to maintaining the essential balance and to go back home and take action. It is on the ground that we will have to test how really successful we are. But we have started off well. Johannesburg is a beginning. I am not saying Johannesburg is the end of it. It is a beginning." By any indication, there was substantial interest in the Summit. One hundred world leaders addressed the Summit and all in all, more than 22,000 people participated in WSSD, including more than 10,000 delegates, 8,000 NGOs and representatives of civil society, and 4,000 members of the press. "We knew from the beginning of the Johannesburg process that the Summit would not produce any new treaties or any single momentous breakthrough," Desai said. "But the results of the Summit have been far more comprehensive than any previous outcome. We have put together not only a work plan, but we have identified the actors who are expected to achieve results."

¹⁸ Desai warned, however, that the partnerships were not a substitute for government responsibilities and commitments and that the partnerships are solely intended to deepen the quality of implementation. Not everyone was pleased with the outcome of Johannesburg; particularly some NGOs who felt the Summit did not go far enough in setting targets for increasing the use of renewable energies. Jonathan Lash, World

Aviation of Saint Lucia, speaking on behalf of SIDS, said that small islands needed more help to confront the trade aspects of globalization, and that efforts to promote the use of renewable energy were frustrated by multinationals who demand a quick return on their investment¹⁹. Many countries have created new institutions and adopted laws and policies to promote sustainable development and have taken concrete actions to protect the environment, improve social equity, and strengthen governance and human rights²⁰.

The importance of sustainable energy supply²¹

The Johannesburg Summit also highlighted the importance of sustainable energy supply for development and poverty reduction. It was agreed in the Plan of Implementation to "urgently" increase the proportion of renewable energies worldwide. Germany and the EU tried to introduce as a worldwide target for the year 2010 that the proportion of renewable energies in overall energy consumption should be raised to 15 percent.²²

Further international initiatives stimulated by the Johannesburg World Summit include the EU initiative "Energy for Poverty Reduction and Sustainable Development" and the "Global Village Energy Partnership". Moreover, Germany helped to found the Global Network on Energy for Sustainable Development. This network also promotes the development and dissemination of renewable energies.

Resources Institute President, said, "We have missed an opportunity to increase energy production from non-polluting sources like solar, biomass, and wind, and to provide the many companies taking action to reduce emissions with a secure framework for their actions."

¹⁹ United States Secretary of State Colin Powell called the Summit a "successful effort." He said, "I think it shows that we have a shared vision of how to move forward. I think it shows that the world is committed to sustainable development. He added, however, that the real challenge "is not just what is said in the statement, but the actions that will take place in the months and years ahead."

²⁰ http://www.ciel.org/Tae/Johannesburg_Call_Action.html

²¹ <http://www.bmz.de/en/issues/Environment/internatKonferenzen/2002.html>

²² However, it did not prove possible to insert such wording in the plan. Germany subsequently joined forces with like-minded states in the Johannesburg Renewable Energy Coalition (JREC). The coalition members adopted clear targets and schedules for increasing the proportion of renewable energies. Germany contributed to the joint JREC declaration - "The Way Forward on Renewable Energy" - and sought to elicit support from other states. These efforts have built a broad international base for the worldwide expansion of renewable energies. Eighty states have since joined the coalition.