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## From Rio to 2015

An overview of select milestones in regional and global policy formation on sustainable development and environmental management

### The Prelude: Before Rio 1970s–1980s

#### 1970s

*A decade of expert warnings and international treaties recognising the growing threats to the environment from population explosion, poverty and unregulated land use and calling for a global commitment to environmental protection in the interests of human well-being and the conservation of biodiversity.*

#### 1972: UN Conference on Human Environment, Stockholm Sweden

**Stockholm Declaration** contained 26 principles and an Action Plan of 109 recommendations. This provided for a moratorium on whaling; prevention of deliberate oil discharges at sea; report on energy issues; and the creation of the UN Environment Programme (UNEP)<sup>1</sup>. Policy areas covered included renewable and non-renewable resources; the involvement of developing and developed countries; urban planning; and the promotion of human rights. It also asserted the right of people<sup>2</sup> to live in an environment of quality that permits dignity and well-being.

UNEP was established with a mandate for support, co-ordination, advice, developing plans for long-term UN programmes on environment; regular reporting on environment state and trends through the GEO and other regional reports.

**Limits to Growth**, was published by the Club of Rome providing computer projections setting out a doomsday scenario on the future of the planet Earth. It was compiled by 50 self appointed sages, giving projections for technology development, population growth, nutrition, natural resources and environmental changes. The principal theme was: If current trends continue, the global system will overshoot and collapse by the year 2100. If that is to be avoided, both population and economic growth will have to cease<sup>3</sup>.

**USA Landsat satellite:** started producing images of the world's surface allowing greater monitoring of environmental change; loss of forests, mangrove, wetlands; desertification, etc.

**World Heritage Convention agreed at UNESCO:** the designation of heritage sites started with the identification of the Galapagos Islands to be protected forever as a world cultural treasure. The definition of heritage covers monuments, groups of building, and sites with works of nature and man, of outstanding universal value from an historical, aesthetic,

scientific, ethnological, or anthropological point of view.

<http://whc.unesco.org/archive/convention-en.pdf>

**1973: Convention on International Trade in Endangered Species (CITES):**

This was an international accord to protect both flora and fauna from extinction through commercial exploitation.

**1973: RAMSAR Convention<sup>4</sup>**

This provided for conservation of wildfowl and their habitats, water quality, food production, wetlands areas and salt water coasts. By 2001, there were over 100 national signatories to the Convention, largely from NGO-led activities covering over 1,000 areas and 90 million hectares.

**1974: Cocoyoc, Mexico, Symposium**

UNEP and UNCTAD. On economic and social factors leading to environmental degradation.

*The principal theme of the symposium was: 'The task of statesmanship is to guide the nations towards a new system more capable of meeting the inner limits of basic human needs for all the world's people and of doing so without violating the outer limits of the planet's resources'.*

**1977: UN Convention to Combat Desertification**

The convention marked a recognition of the mounting problem of desertification across many continents arising from deforestation, soil degradation and climate change; by 2009, 193 countries were party to the convention.

<http://www.unccd.int/convention/menu.php>.

**1979: First World Conference on Climate Change, Geneva**

The conference found that CO<sub>2</sub> emissions could have a long-term impact on climate change. It led to the World Climate Programme 1979 and international research and development on climate issues.

**1980s**

*A decade marked by continued international commitment to action on environmental and human welfare in the face of rising poverty, increasing population pressure, negative economic growth per capita, mass migration from wars, growing debt crises, greater urban squalor, poverty and disease, major environmental disasters, more concern on climate change and the depletion of the ozone layer. The end of the Cold War brought an opportunity for using the peace dividend arising in many countries for social and environmental protection. But there was also in this decade increased international concern about reduced security on nuclear weapons and on the safe maintenance of civil nuclear reactors and growing threats of unsafe disposal of nuclear and other hazardous waste.*

**1982: UN Charter for Nature**

The charter asserted the intrinsic value of species and eco-systems: stating that 'the genetic viability of the Earth shall not be compromised'.

## 1982: United Nations Convention on the Law of the Sea (UNCLOS)

UN Convention on the Law of the Sea proposed the official delineation of marine zones, control of sea pollution, and marine species conservation.

## 1984: Disasters

**Bhopal Union Carbide plant disaster, India.** This is still considered one of the worst ever industrial disasters, involving emissions of toxic gas in a densely populated area killing 8,000 people within 72 hours and 25,000 subsequently. Whilst \$470 million compensation was paid to victims and their families and special provision made for long term rehabilitation, the disaster raised concern about the need for better international, national and local safety regulation of multinational companies and avoiding the location of hazardous industries in high population areas. <http://www.mp.gov.in/bgtrrdmp/relief.htm>

**Eritrean and Ethiopian Famine.** This major famine affected Eritrea and Ethiopia, arising from record low rainfall and the impact of military conflict, with political and economic restructuring reducing social support, food distribution and food security. The crisis produced an estimated 1 million deaths with 8 million people falling into destitution. The international and voluntary effort, especially through Live Aid, produced emergency relief and raised global awareness of poverty and social implications of military conflict in Africa.

**Chernobyl nuclear plant explosion.** This disaster in Russia caused extensive radioactive fall-out and 300 immediate deaths and probably 2–3,000 other deaths. Internationally, it raised questions about the safety of design and maintenance of nuclear reactors and their future in world energy production.

## 1987: World Commission on Environment and Development

Known as the Brundtland Commission, it was established in 1983, chaired by Gro Harlem Brundtland, former PM of Norway and subsequently Director General, WHO. It produced the groundbreaking publication *Our Common Future* defining sustainable development as:

*'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.*

The theme of the report was economic development without depleting natural resources or harming the environment. Topics included in the report were: global warming; loss of the ozone layer; renewable energy; desertification; international institutions poorly equipped to deal with complex issues; and the need for wider participation of public and private sectors and civil society in policy debates on sustainable development.

## 1989: Basel Convention

This convention set standards for the control of inter-country movement of dangerous waste; its effective date was 1992 and there were 149 signatories to the Convention by 2001.

## Montreal Protocol

This protocol was concerned with the implementation of the Vienna Convention on Protecting the Ozone layer. It was eventually signed by 182 countries by 2001.

## **Rio and beyond 1990–2015**

### **1990s**

*A decade of increasing commitment to reaching a global consensus on international and local action for sustainable development, through the iconic 1992 Rio Earth Summit. The commitment was made in the face of mass poverty in many countries, continued substantial population increase, growing evidence of hot-spots of environmental degradation and the identification of the neglect of the special vulnerability of small island developing states.*

#### **1990: Intergovernmental Panel on Climate Change (IPCC) First assessment report**

The panel provided a scientific assessment of climate change; followed in 1995 by second assessment; 2001 Third assessment; and 2007 fourth assessment, together with technical guidelines and summary for policy-makers. See [www.ipcc.ch](http://www.ipcc.ch)

#### **1991: Global Environment Facility established**

The facility is supervised by the World Bank for promoting environmental investment.

#### **1991: Caring for the Earth published**

IUCN, UNEP and WWF jointly commit themselves to promoting policy for environmental protection.

#### **1992: Rio de Janeiro UN Conference on Environment and Development (UNCED) ‘The Earth Summit’**

One hundred heads of state and government and civil society agreed policy statements and institutional frameworks for the pursuit of principles for environment and development, including :

- **Rio Declaration:** a 40 chapter Blueprint for implementing sustainable development (Agenda 21 – the Agenda for the 21st century<sup>5</sup>);
- **Declaration of Forest principles;**
- **UNFCCC – Framework** convention on Climate Change;
- **CBD – Convention** on Biodiversity;
- **UNCSD** new mechanism for monitoring progress; Commission for Sustainable Development; and
- Promotion of interests of women, indigenous people, youth, children, NGOs, local government bodies, trade unions and associations, business, farmers, scientific and technical bodies.

#### **1993: World Wide Web**

The WWW had just 50 pages in 1993 and covered 50 countries: but new PCs, emails and intranet and internet began to accelerate corporate and global communication. By the year 2006, the World Wide Web had 100 million sites and covered 134 countries. <http://www.zakon.org/robert/internet/timeline/>

#### **1994: Barbados Programme of Action**

This 1994 UN process recognised the vulnerability of Small Island Developing States (SIDS) and their special needs for support for policies and programmes for sustainable

development. The UN recognises 53 countries in this category which includes low-lying coastal countries such as Guinea Bissau.

#### **1995: World Business Council for Sustainable Development**

This Council, set up in 1995, embodies the key institutional role of business in securing sustainable development, providing a platform for innovation in environmentally friendly policies and programmes of production and marketing and accounting practice.

#### **1996: Nuclear Test Ban Treaty**

This international commitment aimed to stop further testing of nuclear weapons and was signed initially by 71 nations; by 2001, it had been signed by 161 nations with 79 having ratified it. 44 nations, each possessing various degrees of nuclear capability, must ratify the Comprehensive Test Ban Treaty for it to take effect. As of April 2009, nine of these 44 states have not ratified the treaty: China, Egypt, Indonesia, Iran, Israel and the United States have already signed the Treaty, whereas India, North Korea and Pakistan have not yet signed it. <http://www.atomicarchive.com/Treaties/Treaty19.shtml>

#### **1997: Kyoto Protocol of the UN Framework Convention on Climate Change**

This international commitment set targets for GHG reductions. Industrialised countries were required to reduce emissions to 5 per cent below 1990 levels by 2008-12 See: <http://unfccc.int/resource/docs/convkp/kpeng.html>

#### **1997: Global Environment Outlook 1 (GEO-1), UNEP publication**

*Global Environment Outlook (GEO)* is a regular report prepared by UNEP on the state of the global environment, through a consultative and decentralised process. The first edition known as 'GEO-1' was launched in 1997. The *GEO-2* report was launched in 2000, with a focus on the environmental crisis facing humanity in the new millennium. *GEO-3* was published in 2002 providing an overview of major developments between 1972 and 2002. The report presented a global and regional overview under each of eight environmental themes in turn: land, forests, biodiversity, freshwater, coastal and marine areas, atmosphere, urban areas and disasters. *GEO-3* report also broke new ground by using scenario analysis to explore the environmental outlook in an array of alternative futures that provide insight on where events could lead us at various stages between 2002 and 2032. *GEO-4* was published in 2007 and is the latest in this series of UNEP flagship reports, which assesses the current state of the global atmosphere, land, water and biodiversity, describes the changes since 1987, and identifies priorities for action. *GEO-4* also warns that we are living far beyond our means. The human population is now so large that 'the amount of resources needed to sustain it exceeds what is available ... humanity's footprint [its environmental demand] is 21.9 hectares per person while the Earth's biological capacity is, on average, only 15.7 ha/person.' *GEO-4* asserts that the well-being of billions of people in the developing world is at risk, because of a failure to remedy the relatively simple problems which have been successfully tackled elsewhere. *GEO-4* recalls the Brundtland Commission's statement that the world does not face separate crises – the 'environmental crisis', 'development crisis', and 'energy crisis' are all one. This crisis includes not just climate change, extinction rates and hunger, but other problems driven by growing human numbers, the rising consumption of the rich and the desperation of the poor.

### **1999: World Population reaches 6 billion**

Population growth continues to put pressure on land use for shelter and food and water supplies. Many SIDS suffering from water scarcity are using water charges, water efficiency schemes and conversion of flood water and used water to meet agricultural and industrial demand.

### **1999: World Treaty on Human Rights**

The treaty includes the following Human rights:

**Freedom** of association and collective negotiation, freedom from slavery, freedom from child labour, freedom from discrimination at work.

Environmental protection with emphasises on the precautionary principle for environmental protection, promotion of environmental responsibility and diffusion of environmental technology.

### **2000: UN Agreement on Persistent Organic Pollutants (POPs)**

The agreement bans use of POPs which carry health and environmental risks including a ban on 12 pesticides. An exception is made for the use of DDT for control of malaria, although this exception is not universally accepted by aid organisations and the use of DDT remains controversial.

### **2000: UN Bio-safety Protocol**

This protocol adopted the precautionary principle for application to genetically modified crops.

### **2000: USA refused to ratify the Kyoto Protocol**

The USA, one of the largest producers of GHGs, declined to sign the protocol and opted for voluntary reductions and the development of new technology.

### **2000: Millennium Summit and MDGs**

UN heads of government and of state met in a conference to promote sustainable development for the 21st century which gave a sharp focus to poverty, education, disease, climate change, environmental accounting, and a global study of the state of ecosystems. This Summit was seen as a prelude to the 2002 Earth Summit to be held in Johannesburg. It also initiated the UN Millennium Project for implementation of eight defined goals, the Millennium development Goals (MDGs) with measurable targets for implementation by 2015. The Goals covered poverty reduction, education, gender equality, health, environmental sustainability and partnerships for development.

### **2001: IPCC Third Assessment Report**

The report showed a raised estimate of global warming and provided guidelines for action.

**9/11: September 11 2001. Terrorist attack on the Twin Towers of the World Trade Centre and the Pentagon.** Following the attack which killed thousands of people in New York and destroyed the Trade Centre, the USA and other western nations formed an alliance for retaliation against the alleged sources of attack in Afghanistan and Iraq, seeking but failing to obtain full UN support for a controversial war strategy. The wars shifted the focus of much international strategy and media interest away from sustainable development, poverty relief, environmental protection, the MDGs and peaceful aid programmes.

**2002: World Summit on Sustainable Development, Johannesburg**

The UN summit set out a global strategy for sustainable development with the participation of 104 world leaders.

**2002: European Union ratifies the Kyoto Protocol**

EU states agreed to develop national systems of control with EU development of emissions trading. The commitment to this scheme is seen by some in stark contrast to that in countries such as the USA and Australia who continued to challenge the evidence of human factors in global warming.

**2002: *Nature* journal reports major impact of industrial fishing**

A report in *Nature* cites evidence that industrial marine fishing has killed 90 per cent of the biggest and economically most important fish species.

**2003: New Partnership for Africa's Development (NEPAD)**

African countries agree to a multi-sectoral partnership of the African Union and an action plan for development with inter-sectoral linkages for economy, environment, science and technology as part of a fresh process for development in Africa and as a means to seek external support.

**2003: WHO treaty on tobacco control**

WHO calls on countries to sign up to the treaty that aims to make major reductions in tobacco agriculture, processing, marketing and sales in order to reduce the human impact of tobacco through death and disease.

**2004: Indian Ocean tsunami December 2004**

A tsunami resulting from an earthquake close to the eastern shores of the Indian Ocean killed over 200,000 people and affected 2.4 million people causing massive loss of infrastructure as far as the Maldives, Seychelles and the East African Coast. This natural disaster set in course an international review, led by UNEP, of emergency procedures and early-warning systems to provide protection against sea surges and sea level rise in vulnerable island and coastal states world-wide.

**2004: UN Millennium Ecosystem Assessment report**

The report declared that: 60 per cent of Earth's ecosystem services (water, soil, nutrients, biodiversity) had been degraded or was being used unsustainably.

**2005: UN Mauritius SIDS Conference, Declaration and Strategy**

The UN conference held in Mauritius provided international commitment for support to vulnerable small island developing states. Pledges were made by major developed countries for financial and technical support and a follow-up procedure was established through the UN Commission on Sustainable Development (UNCSD) and through subsequent reports to the UN General Assembly.

See <http://www.un-ngls.org/orf/sids-mauritiusdeclaration.pdf>

**2005: Hyogo conference, Kobe, Japan on disaster preparedness**

This UN conference produced an agreement to the Hyogo framework for action to enhance early-warning systems and strengthen disaster response, through the UN agency International Strategy for Disaster Reduction (ISDR).

See <http://www.unisdr.org/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>

**2006: UN General Assembly review on progress with UN 2005 SIDS Mauritius Strategy**  
The UN received reports from all UN agencies and from three SIDS regional conferences (Caribbean, Pacific and the AIMS<sup>6</sup> region).

**2007: International Panel on Climate Change (IPCC) 4th Assessment Report (AR4)**

The report provided an assessment of global changes in climate, impact on regions and on SIDS and proposals for mitigating action.

<http://ipcc-wg1.ucar.edu/wg1/wg1-report.html>

**2008: UNEP publishes *Africa, Atlas for our changing environment***

This environmental atlas provided 400 pages of satellite and terrestrial maps, data and statistics on the good and the bad news of the changing environment of Africa, with detailed country profiles. It showed that, from 1950 to 2050, population increase in Africa will have reduced available land from 13.5 hectares per person to 1.5 hectares at current rates of population growth, i.e. 2.3 per cent per year, the highest rate of all world regions.

**2008: Global financial and economic crisis**

The collapse of financial key institutions in the USA following the unregulated pursuit by them of high-risk loan and investment strategies, had rapid impact on global confidence in banking and investment. This prompted governments and international financial institutions into massive emergency support to avert the collapse of world economy. Some countries used the opportunity to renew their commitment to eco-friendly budgets and government policies to reduce dependence on fossil fuel and to promote efficiency savings at home. International support agencies such as the UN, World Bank and the Commonwealth Secretariat undertook major assessments of the impact on the crisis on regional and national economic, social and environmental policies and the pursuit of the MDGs.

**2015: Target date for achievement of Millennium Development Goals**

See UNDP, World Bank and UN websites for updated position on progress towards targets.

[http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=1&REPORT\\_ID=1336&REQUEST\\_TYPE=VIEWADVANCED&HF=N](http://ddp-ext.worldbank.org/ext/ddpreports/ViewSharedReport?&CF=1&REPORT_ID=1336&REQUEST_TYPE=VIEWADVANCED&HF=N)

<http://mdgs.un.org/unsd/mdg/Data.aspx>

## Notes

- 1 Attributed to Niels Bohr 1885–1962 *Oxford Dictionary of Quotations*, OUP, 2005.
- 2 UNEP (2007). *Global Environment Outlook 4*, Environment for Development, UNEP, ISBN 978-92-807-2836-1.
- 3 Barrow C. J. (2006). *Environmental Management for Sustainable Development*, Routledge, ISBN10: 0-415-36534-1.
- 4 Khor M. (2006). Globalization, Global Governance and the Dilemmas of Development; Chapter in Chang H., *Rethinking development economics*, Anthem Press, ISBN-1-84331-1100.
- 5 Hanley N. et al (2001). *An Introduction to Environmental Economics*, Oxford, ISBN 13 978-0-19-877595-9.
- 6 Lomborg B. (2006). *The Skeptical Environmentalist, measuring the real state of the world*. Cambridge ISBN 0-521-80447-7, Chapter 24, Global Warming.