

Quick Guide to Sustainable Development: History and Concepts

Quick Guide

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Brief History of Sustainable Development

Though SD thinking is widely recognised to have its origins in the 1972 UN Conference on the Human Environment, SD as a concept began to gather momentum following the 1987 Brundtland Report, *Our Common Future*, and the 1992 UN Conference on Environment and Development (UNCED), also known as the Earth Summit. For the first time, the Brundtland Report introduced the need for the integration of economic development, environmental protection, and social justice and inclusion.

The main outcomes of the Earth Summit were

- the **Rio Declaration**, which recognised the right of states to economic and social development and contained 27 principles of sustainable development, including the well-known precautionary and polluter pays principles;
- endorsement of the **Forest Principles**, which recognised the importance of forests for economic and social development, indigenous communities, biodiversity and maintaining ecological processes;
- the signing of the **Convention on Biological Diversity** and the **Framework Convention on Climate Change**; and
- **Agenda 21**, which was a voluntary SD plan of action, for implementation by national, regional and local governments.

Agenda 21 contained a wide range of programme areas focused on social and economic development, environmental protection and enhancement and encouraging participation from communities, non-governmental organisations (NGOs) and groups identified by the UN as under-represented in decision-making, including women, children and indigenous communities. Chapter 28 of Agenda 21 recognised that many of the issues that Agenda 21 sought to address were rooted in local activities, and required local authorities in every country to be involved in actions to address them. The Chapter suggested that local authorities in each country should 'enter into a dialogue' with their 'citizens, local organisations and private enterprises and adopt a "Local Agenda 21"'. Local Agenda 21 saw local authority strategies produced to enable the sustainable development of communities. In the UK, it was the basis for the work of many local community groups, some of whom are still working on SD issues, such as **Ymlaen Ceredigion**, who work in partnership with Ceredigion County Council.

Since the Earth Summit, the UN has created a wide range of programmes, institutions and international agreements with the aim of achieving global sustainable development. A list of major agreements and conventions since 1992 is available on the **UN Sustainable Development Knowledge Platform**. The most significant milestones in this journey have been:



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- **1993** – the creation of the Commission for Sustainable Development to monitor and promote the implementation of Agenda 21;
- **1997** – Earth Summit +5, which reviewed and renewed commitment to implementation of Agenda 21;
- **2000** – Millennium Summit in New York, which resulted in the UN Millennium Declaration, a set of targets to be achieved by 2015 that included environmental sustainability, the eradication of extreme poverty and equality for women, now known as the Millennium Development Goals;
- **2002** – World Summit on Sustainable Development in Johannesburg, which renewed international commitment to the pursuit of SD with the Johannesburg Plan of Implementation (JPOI);
- **2012** – Rio+20, which resulted in an outcome document, *The Future We Want*, in which States reaffirmed commitments to all previous SD agreements, plans and targets. They also committed to develop a suite of **Sustainable Development Goals (SDGs)** building on the priorities identified in Agenda 21 and the JPOI, and decided to **replace the Commission for Sustainable Development with a 'high-level political forum'** to progress implementation of Agenda 21 and the JPOI, and the achievement of the SDGs.

Definitions of Sustainable Development

The original, and best-known, definition of SD comes from the Brundtland Report:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

Variations of the Brundtland definition are commonly used in national SD strategies. **The EU Sustainable Development Strategy (2006)** says:

Sustainable development means that the needs of the present generation should be met without compromising the ability of future generations to meet their own needs. [...] It is about safeguarding the earth's capacity to support life in all its diversity and is based on the **principles** of democracy, gender equality, solidarity, the rule of law and respect for fundamental rights, including freedom and equal opportunities for all. It aims at **the continuous improvement of the quality of life and well-being on Earth for present and future generations**. To that end it promotes a dynamic economy with full employment and a high level of education, health protection, social and territorial cohesion and environmental protection in a peaceful and secure world, respecting cultural diversity.

The **UK Sustainable Development Strategy (2005)** says:

The goal of sustainable development is to **enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life**, without compromising the quality of life of future generations.



For the UK Government and the Devolved Administrations, that goal will be pursued in an integrated way through a **sustainable, innovative and productive economy** that delivers high levels of employment; and a **just society** that promotes **social inclusion, sustainable communities and personal wellbeing**. This will be done in ways that **protect and enhance the physical and natural environment**, and **use resources and energy** as **efficiently** as possible.

The Welsh Sustainable Development Scheme, *One Wales: One Planet*, uses the following definition:

In Wales, sustainable development means **enhancing the economic, social and environmental wellbeing of people and communities, achieving a better quality of life for our own and future generations:**

- In ways which promote social justice and equality of opportunity; and
- In ways which enhance the natural and cultural environment and respect its limits - using only our fair share of the earth's resources and sustaining our cultural legacy.

Sustainable development is the process by which we reach the goal of sustainability.

Principles and Concepts

Common Principles

International and national SD agreements and strategies commonly include certain principles to be applied when making governance decisions in a sustainable way. Most of these are derived from the two key concepts identified in the Brundtland definition: the concept of needs, particularly the needs of poor people, and the concept of limits, particularly the limits on the environment's ability to deliver people's needs.

Common governing principles are:

- living within environmental limits;
- integrated decision making (policy and legislation that works in a complementary way);
- 'good' governance that is democratic, transparent, inclusive, participatory and accountable; and
- responsible use of robust and credible scientific evidence in decision making.

In addition to these principles, the Precautionary Principle and the Polluter Pays Principle are well recognised, particularly in relation to environmental decision-making.

The Precautionary Principle is used when a risk has been identified that human activities may cause 'morally unacceptable harm'¹. In this case, lack of full scientific certainty (of cause or effects) should not be used as a reason for inaction, so long as that action is proportionate and the costs and benefits of action versus inaction have been evaluated. It is commonly used in arguments for taking action on climate change.

¹ <http://www.precautionaryprinciple.eu/>

The Polluter Pays principle is used to ensure third parties do not bear the external costs of other people's activities, such as air pollution or the impacts of climate change, where these are a by-product of certain business activities. The **EU Emissions Trading Scheme** is an example of a solution that addresses this principle, as it puts a price on carbon, which is paid by industries that make their money from carbon emitting activities.

Planetary Boundaries

In order to crystallise the concept of environmental limits, a group of 28 scientists developed the concept of the nine **Planetary Boundaries** in 2009. The **Stockholm Resilience Centre** provides full details of the **latest research** on its website. The boundaries represent global Earth systems and processes within which there is a safe living space for humans and wildlife. It is argued that exceeding one or more of these boundaries could create a tipping point where the global Earth system may shift into a permanently less hospitable state. The nine Planetary Boundaries are:

1. Climate change
2. Change in biosphere integrity (biodiversity loss and species extinction)
3. Stratospheric ozone depletion
4. Ocean acidification
5. Biogeochemical flows (phosphorus and nitrogen cycles)
6. Land-system change (e.g. deforestation)
7. Freshwater use
8. Atmospheric aerosol loading (microscopic particles in the atmosphere that affect climate and living organisms)
9. Introduction of novel entities (e.g. organic pollutants, radioactive materials, nanomaterials, and micro-plastics).

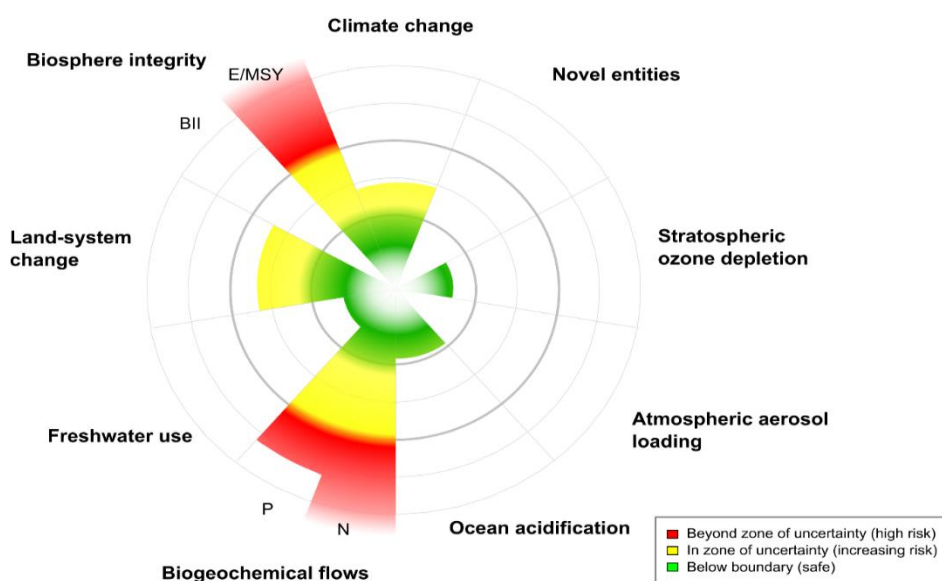


Image credit: Steffen et al, 16 January 2015, Science

Key: BII = functional diversity of ecosystems taking into account human impacts (boundary not quantified)

E/MSY = biodiversity loss measured in extinctions per millions of species per year

According to the Stockholm Centre, the latest research shows that **Earth has already exceeded four of the Planetary Boundaries:** climate change, change in biosphere integrity (biodiversity loss), land-system change and biogeochemical flows (in terms of phosphorous and nitrogen depletion). Scientists have not yet quantified three of the boundaries because identifying a global threshold requires analysis of many individual components and their interactions, making it difficult to decide where the global boundary would be. These boundaries are functional diversity, novel entities and atmospheric aerosol loading.



Further information

For further information on the **Quick Guide to Sustainable Development: History and Concepts**, please contact **Karen Whitfield** (Karen.Whitfield@Assembly.Wales), Research Service.

See also:

- [European Commission Sustainable Development policy web-page](#)
- [ICLEI – Local Governments for Sustainability website](#)

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