SUSTAINABLE DEVELOPMENT AND ITS EVOLUTION IN THE REALM OF INTERNATIONAL ENVIRONMENTAL LAW*

Abstract

Sustainable development has become a term of recurrent use by governments, policy makers, academics and environmental activists. It denotes a process of human development through which resources are used to meet human needs while preserving the quality of natural environment and the objective of which is to meet the needs of the current and future generations. Sustainable development envisions the world as an entity connecting space and time. When one thinks of the world as an entity connecting space, it is understood that air pollution from North America affects air quality in Asia, and that pesticides spraved in Argentina could harm fish stocks off the coast of Australia. Again when one thinks of the world as an entity connecting time, it is realized that the decisions that our grandparents made as how to farm the land continue to affect agricultural practice today, and the economic policies we endorse today will have an impact on our next generations. The concept of sustainable development is rooted in this sort of thinking. It helps us to understand our resources, our environment and the world.¹ This study traced the development of the concept and significance of sustainable development in the realm of international law specifically international environmental law. It also explored how the term has been reflected in multiple international environmental law instruments.

Key words: Sustainable Development, Evolution, International Law, Environmental Protection

1. Introduction

The term 'development' may have different interpretations in the perceptions of different countries although if viewed from the economic growth perspective it would be easier to measure the level of development of a nation. However, the level of economic growth and wealth does not necessarily provide a complete picture about the development scenario of a country. Countries with similar level of economic growth may differ in terms of quality of life of its people, access to education and health care, employment opportunities, access to clean water and environment etc. A balanced notion of development. According to the 1996 Human Development Report published by the United Nations Development Program (UNDP), "human development is the end—economic growth a means." There exist a number of examples where economic growth was not supported by similar progress in human development and their economic development was achieved at the expense of greater inequality, unemployment, weak democracy or overconsumption of natural resources. Experts view this kind of growth and development as unsustainable and this is where the term 'sustainable development' comes into operation.²

Over the last quarter of a century, two new and complementary themes have had considerable impact on the development of contemporary international law, namely, environmental protection and sustainable development. It denotes a process of human development through

¹ IISD, 'Sustainable Development', http://www.iisd.org/sd/ accessed on 22/03/2016.

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² T. P. Soubbotina, 'Beyond Economic Growth: An Introduction to Sustainable Development', Wbi Learning Resources Series, Second Edition, The World Bank, 2000, http://www.worldbank.org/depweb/english/beyond/beyondco/beg_00.pdf accessed on 22/03/2016.

which resources are used to meet human needs while preserving the quality of natural environment, and its objective is to meet the needs of the current generation as well as the needs of the generations to come. The paradigm of sustainable development evolved over many years through attempts to take into account concerns regarding economic development, environmental protection and social development.³ With the adoption of the Rio instruments⁴ in 1992 at the United Nations Conference on Environment and Development (UNCED), sustainable development became and has so far remained the leading concept of international environmental policy.

The objective of this article is to trace the development of the concept of sustainable development in the realm of international law, specifically international environmental law, and to explore the reflection of the term in multiple international environmental law instruments along with some environmental disputes before international courts and tribunals. In addition, this article deals with the criticism and significance of the concept as a principle of international environmental law.

1.1 The Concept of Sustainable Development

The concept of sustainable development has increasingly been addressed in academic circles, amongst environmental lawyers and policy makers and amongst the social and natural scientists who have been striving to give meaning to the concept. Academic literature reflects many dimensions of the concept of sustainable development: economic, human, environmental, technological, epistemological, etc. Some economic definitions focus narrowly on the physical aspects of sustainable development, while others focus on optimal resource management to maximize the net benefits of economic development, subject to maintaining the services and quality of natural resources. More than 70 definitions of sustainable development had been offered by early 1990s. Multiple disciplines have influenced and contributed to the sustainable development debate making different explanations about the relation between the environment and human beings.⁵

The most popular definition of 'Sustainable Development' is that offered in the Brundtland Commission's Report, 'Our Common Future' which states, 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.⁶ The definition incorporates two aspects:⁷

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

³ D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook of International Environmental Law* (Oxford & New York: Oxford University Press, 2007) p. 614.

⁴ The Rio instruments refer to both the binding and non-binding instruments adopted at the 1992 Rio Conference and include the 1992 Rio Declaration on Environment and Development, Agenda 21, Statement of Forest Principles, the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity.

⁵ J.A. Elliott, *An Introduction to Sustainable Development*, 3rd Edition, Routledge Perspectives on Development Series, (London & New York: Routledge, 2006) p. 9.

⁶ World Commission on Environment and Development (WCED), 'Report of the World Commission on Environment and Development: Our Common Future', http://www.un-documents.net/our-common-future.pdf accessed on 21/03/2016.

⁷ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) pp. 252-253.

In 1994 the International Union for the Conservation of Nature (IUCN) introduced the 'Egg of Sustainability' model. The model compares the relationship between human and ecosystem with an egg. Human beings are part of the ecosystem and both humans and ecosystem are mutually dependent upon each other just as an egg is good as long as the white and yolk are good. Development is sustainable only if both humans and the ecosystem are well. Thus, according to this model,⁸ Sustainable Development = Human well-being + Ecosystem well-being.

Sustainable Development is the development based on patterns of production and consumption that can be pursued into the future without degrading the human or natural environment. Principle 5 of the 2002 Johannesburg Declaration identified three interdependent and mutually reinforcing pillars of sustainable development namely, economic development, social development and environmental protection. In the current context of globalization, the challenge of sustainable development lies in this complex interdependency of economic, social and environmental factors.⁹ The economic aspect of the concept refers to an economically sustainable system able to produce products and services on a continuous basis. The social aspect refers to social sustainability capable to achieve social services including health and education, gender equity, political accountability and participation. The environmental aspect denotes environmental sustainability which prevents over-exploitation and depletion of natural resources.¹⁰

1.2 Nature of the Concept of Sustainable Development

There remain fundamental uncertainties about the nature of sustainable development. International legal scholars continue to debate regarding the legal and normative status of the concept. Some authors consider the reference to the concept in treaties as evidence of the concept's translation as a legal principle into the more binding status of customary law.¹¹ Sands observed that "there can be little doubt that the concept of sustainable development has entered the corpus of international customary law requiring different streams of international law to be treated in an integrated manner".¹² However, Lowe observes that the concept of sustainable development is not a binding norm of international law in the sense of the 'normative logic' of traditional international law as reflected in Article 38(1) of the Statute of ICJ.¹⁴ As opposed to the

⁸ Centre for Environment Education (CEE), South Asia Youth Environment Network (SAYEN) Secretariat & Swiss Agency for Development & Cooperation (SDC), 'Sustainable Development: An Introduction', Internship Series, Vol. 1, Centre for Environment Education, 2007, http://www.sayen.org/volume-i.pdf accessed on 21/03/2016.

⁹ J.A. Elliott, *An Introduction to Sustainable Development*, 3rd Edition, Routledge Perspectives on Development Series, (London & New York: Routledge, 2006) p. 2

¹⁰ J.M. Harris, 'Basic Principles of Sustainable Development', Global Development and Environment Institute Working Paper, http://www.ase.tufts.edu/gdae/publications/working_papers/Sustainable%20Development.PDF accessed on 17/03/2016.

¹¹ M.V. Harmelen, M.S.V Leeuwen and T.D. Vette, 'International Law of Sustainable Development: Legal Aspects of Environmental Security on the Indonesian Island of Kalimantan', Institute for Environmental Security, Prototype EnviroSecurity Assessments Kalimantan, Indonesia, Part 2 Legal Analysis, 2005 http://www.envirosecurity.org/espa/PDF/IES_ESA_CS_Kalimantan_Legal_Analysis.pdf, accessed on 22/03/2016.

¹² P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) p.254.

¹³ V. Lowe, 1999, "Sustainable Development and Unsustainable Arguments", in A. Boyle et.al (eds.), *International Law and Sustainable Development: Past Achievements and Future Challenges*, (Oxford, New York: Oxford University Press, 1999) p. 31.

¹⁴ M.V. Harmelen, M.S.V Leeuwen and T.D. Vette, 'International Law of Sustainable Development: Legal Aspects of Environmental Security on the Indonesian Island of Kalimantan', Institute for Environmental Security,

aforesaid observation, Lowe also considers that sustainable development can properly claim a normative status as an element of the process of judicial reasoning. Further, Lowe labels sustainable development as a meta-principle, a legal concept exercising a kind of "interstitial normativity", pushing and pulling the boundaries of true primary norms when they threaten to overlap or conflict with each other. This means that where two primary norms come into conflict, the principle of sustainable development, as an interstitial norm, can serve to clarify how the two norms are to be balanced in a particular case. For example, where two primary norms of environmental protection, the principle of sustainable development as an interstitial norm can serve to clarify how these two norms are to be balanced in a particular case.¹⁵

2. Key Components of Sustainable Development

Sustainable development contains both substantive and procedural elements. The substantive elements are mainly set out in Principle 3-8 of the Rio Declaration on Environment and Development which include: (1) Sustainable utilization of natural resources, (2) The integration of environmental protection and economic development, (3) Inter and intra generational equity, and (4) Right to development.

The procedural elements of sustainable development are found in principles 10 and 17 of the Rio Declaration dealing with public participation in decision making, access to information and environmental impact assessment. Another category of principles can be drawn from other areas of international environmental law and is intended to provide assistance in achieving sustainable development. These principles are States sovereignty over natural resources and responsibility not to cause environmental damage (commonly known as the 'no harm' principle), International cooperation, Common but Differentiated Responsibility, Precautionary Principle, and Polluter Pays Principle.

2.1 Sustainable utilization of natural resources

In spite of being an important element of sustainable development, sustainable utilization is an independent concept best understood in the context of international law concerning natural resources. Treaties and other international acts have supported the development of the concept of sustainable use through the use of terms which are closely related. International legal instruments have aimed for conservation measures and programs which are 'rational', 'wise', 'sound', or 'appropriate', or a combination of these. These words are usually used without definition and often interchangeably and accordingly the meaning of each term depends upon its application in each instrument.¹⁶ The principle is reflected in each of the UNCED instruments. Principle 8 of the Rio Declaration talks only of the need to reduce and eliminate unsustainable patterns of production and consumption. The idea can also be observed in both the Climate Change Convention and in the Biological Diversity Convention and the term is expressly employed in the 1995 Agreement for the Conservation for Straddling and Highly Migratory Fish Stocks, the 1997 Convention on the Non-navigational Uses of International Watercourses and the 1994 International Tropical Timber Agreement. Older Agreements referred to maximum 'sustainable yield' or 'optimum sustainable productivity' e.g. 1946 International Whaling Convention, 1952 North Pacific Fisheries Convention, 1976 Pacific Fur

Prototype EnviroSecurity Assessments Kalimantan, Indonesia, Part 2 Legal Analysis, 2005 http://www.envirosecurity.org/espa/PDF/IES_ESA_CS_Kalimantan_Legal_Analysis.pdf, accessed on 22/03/2016.

¹⁵ ibid.

¹⁶ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) p. 260.

Seals Convention, 1982 UNCLOS, etc. Sustainable use also applies to non-marine resources, e.g. the 1968 African Nature Convention, 1985 ASEAN Agreement, and 1992 OSPAR Convention.¹⁷ The term also now appears in instruments relating to international economic law and policy, for example, the 1994 WTO Agreement, 1989 Lome Convention etc. All these agreements express a concern for more rational use and conservation of natural resources and a desire to strengthen the existing law of conservation of resources.

2.2 The integration of environmental protection and economic development

The second component of sustainable development is the integration of environmental consideration into economic and other development activities and to take into account the needs of economic and other social development in the interpretation and implementation of environmental obligations. The integration can be achieved through collection and dissemination of environmental information and by conducting environmental impact assessments. Integration of environmental protection and economic development can also form a prerequisite for bilateral and multilateral development assistance.¹⁸ In 1971, the UN General Assembly in its Resolution 2849 affirmed that, 'development plans should be compatible with a sound ecology and that adequate environmental conditions can best be assured by the promotion of development, both at the national and international levels'. Since the UNCED the relationship between environmental protection and economic development has been increasingly recognized by the international community. The UNCED instruments reflect the need to integrate environment and development. Principle 4 of the Rio Declaration provides that 'environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it'. This requirement is reflected in subsequent agreements and declarations including the 1994 Convention to Combat Desertification and the 1995 Washington Declaration on the Protection of the Marine Environment from the Land Based Activities. Numerous regional treaties also support such integration approach. Examples include the 1974 Paris Convention (calls for 'integrated planning policy consistent with the requirement of environmental protection'), the 1978 Amazonian Treaty (affirms the need to 'maintain balance between economic growth and conservation of environment'), the 1985 ASEAN Convention ('conservation and management of natural resources are treated as an integral part of development planning at all stages and at all levels') and the 1989 Fourth Lome Convention (requires the 'preparation and implementation of coherent modes of development that have due regard for ecological balances').¹⁹

2.3 Inter and intra generational equity

The principles of intergenerational and intra generational equity have emanated and developed along with the concept of sustainable development.

2.3.1 Intergenerational equity: Intergenerational equity lays down the optimum basis for the relationship of one generation with the next. It requires each generation to use and develop its natural and cultural heritage in a manner that it can be passed on to future generations in no worse condition than it was received. The central theme of this idea is the conservation of options for the future use of resources and the maintenance of the quality of natural environment. The idea had been relied upon by USA in 1893 in the *Pacific Fur Seals*

¹⁷ *ibid* p.258.

¹⁸ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) p. 263.

¹⁹ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) pp.263-265.

Arbitrations.²⁰ It has also been expressly or implicitly referred to in many of the early environmental treaties, including the 1946 International Whaling Convention, 1968 African Conservation Convention, 1972 World Heritage Convention, 1973 Convention on International Trade in Endangered Species (CITES), etc. Recent treaties have also focused on the need to preserve natural resources and environmental assets for the benefit of present and future generations. These include the 1992 Transboundary Water Convention, 1992 Convention on Climate Change and 1992 Biodiversity Convention, etc. Soft law instruments also refer to intergenerational equity as an important aspect of the concept of sustainable development. Examples include Principle 1 of the 1972 Stockholm Declaration (Man bears a solemn responsibility to protect and improve the environment for present and future generations), UNGA Resolution 35/8 of 1980 (the responsibility to present and future generations is a historic one for the preservation of nature) and the 1993 Vienna Declaration on Human Rights (the right to development should be fulfilled so as to meet equitably the developmental and environmental needs of present and future generations). Principle 3 of the 1992 Rio Declaration also follows similar language in stating that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations. These instruments illustrate the importance attached in international policy to the protection of the environment for the benefit of the future generations.²¹ This component of intergenerational equity is one of the major features of sustainable development that distinguishes it from other traditional environmental policies.²²

2.3.2 Intragenerational equity: As opposed to intergenerational equity, intragenerational equity addresses inequity within the current generation. Intragenerational equity deals with the question as to how to allocate responsibilities for environmental protection between states with different economic realities, with different degree of contributions towards environmental problems and with different environmental and developmental needs and priorities. Intragenerational equity, therefore, takes into account the special needs of developing countries, and in global environmental conventions this is best described in the form of financial assistance, capacity building and by the principle of common but differentiated responsibility. The UNCED instruments recognize the role of equity in the achievement of sustainable development which implies that intra generational concerns are important part of the contemporary development of international environmental law.²³

2.4 Right to development

The need for integration of economic development and environmental protection in Principle 4 of the Rio Declaration was a matter of concern for the developing states who were advocating for their right to development. The international community fully endorsed the right to development for the first time through Principle 3 of the Rio Declaration which made the right an important component of sustainable development. Although critics have argued that this not a right at all due to its uncertain character in the 1986 Declaration on the Right to Development and in the 1993 Vienna Declaration on Human Rights. Right to development embraces both promotion of economic development by states and also the social and cultural aspects of human

²⁰ Pacific Fur Seals Arbitrations (USA v. Great Britain) [1893], Moore's International Arbitration Awards.

²¹ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) pp. 256-257.

²² R. Emas, 'The Concept of Sustainable Development: Definition and Defining Principles', https://sustainabledevelopment.un.org/content/documents/5839GSDR%202015_SD_concept_definiton_rev.pdf accessed on 22/03/2016.

²³ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) pp. 262-263.

development as recognized in the 1966 UN Covenant on Economic, Social and Cultural Rights. Inclusion of the right to development in the Rio Declaration represents a success for the developing country advocates, and acknowledges their concern that environmental protection should not outweigh the need for economic development.²⁴

2.5 Procedural components of the concept of sustainable development

No discussion of sustainable development should overlook the procedural components which facilitates implementation at national level. These procedural components include cooperation between states, Environmental Impact Assessment (EIA), public participation in environmental decision making and access to information. These components have been recognized by the International Law Commission (ILC) in its codification of the Law relating to Transboundary Risks. EIA and public participation are also the central themes of two important ECE Treaties, namely, the 1991 Espoo Convention on Environmental Impact Assessment in a Transboundary Context and the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.²⁵

3. Reflection of the Concept of Sustainable Development in International Law

State practice suggests that the idea of 'sustainability' has been a feature in international legal relations since 1893, when USA in the *Pacific Fur Seals Arbitration*²⁶ claimed against Great Britain, a right to ensure the conservation and protection of fur seals for the benefit of mankind. In response to this, the Arbitral Tribunal adopted regulations for the conduct of sealing which introduced some of the elements of sustainable approach to the use of natural resources. Since then, many treaties and other international instruments, as well as decisions of international courts, have supported directly or indirectly, the concept of sustainable development and the principle that states have the responsibility to ensure the sustainable use of resources.

3.1 International Treaties and Conventions

Since the Second World War, a large body of law has emerged to enhance economic development, to protect the environment and to promote human rights. Landmarks in the development of a more integrated economic, social and environmental approach in international law include the following: The 1946 Convention for the International Regulation of Whaling provides for the proper conservation of whale stocks for the orderly development of the whaling industry. The developments under the 1948 General Agreements on Tariffs and Trade (GATT) recognizes that international regulation may impose different standards for a particular state depending upon their level of development. The 1982 UN Convention on the Law of the Sea provides for a legal order for the seas and oceans, which will promote equitable and efficient utilization of their resources, the conservation of their living resources and the protection of marine environment. The 1987 Montreal Protocol recognizes for the first time that the capacity of developing countries to comply with their substantive obligations will depend upon the effective implementation by the developed countries of their financial obligations. The 1992 United Nations Framework Convention on Climate Change (UNFCCC), a legally binding international agreement, intended to stabilize greenhouse gases in the atmosphere at a level preventing dangerous anthropogenic interference with the climate system, provides in Article 3 that 'the Parties have a right to, and should, promote sustainable development'. The 1992 Convention on Biodiversity is a legally binding agreement that strives

²⁴ *ibid* pp.265-266.

²⁵ P. Birnie, A. Boyle & C. Redgwell, *International Law & the Environment*, 3rd Edition, (Oxford, New York: Oxford University Press, 2008) p. 123.

²⁶Pacific Fur Seals Arbitration (USA v. Great Britain) (1893), Moore's International Arbitration Awards 755.

to conserve world's genetic species and ecosystem diversity and puts emphasis on 'sustainable use' of biological resources. The Convention has three separate but interrelated objectives: 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. It is the latter two objectives of the Convention which address the importance of sustainable development. In 1994, sustainable development was recognized as an objective of the World Trade Organization (WTO) in the first paragraph of the Preamble to the Marrakech Agreement Establishing the World Trade Organization (WTO Agreement).

3.2 Non-binding International Instruments

3.2.1 The Stockholm Conference and Declaration: Apart from the multilateral treaty initiatives, earlier UN efforts developed a comprehensive global approach towards the use and conservation of natural resources. The 1972 UN Conference on the Human Environment (Stockholm Conference) provided encouragement for governments to work towards protection and improvement of human environment. The Stockholm Declaration which was adopted in this Conference deals with the integration of economic, environmental and social justice issues. For example, the Preamble mentions human rights, economic development and developing countries priorities; Principle 11 relates to the effects of environmental policies on development and international economies; Principle 21 includes the responsibility of states towards the protection of environment while exploiting their natural resources. Thus, without using the term 'sustainable development', the Stockholm Declaration foreshadows the holistic approach embodied in the concept.

3.2.2 The World Charter for Nature: The 1981 World Charter for Nature, a purely ecological instrument, laid down principles of conservation by which all human conduct affecting nature is to be guided and judged. The Charter proposed rules for the sustainable use of natural resources such as living resources should not be used in excess of their natural capacity for regeneration; the resources should be re-used or re-cycled: and non-renewable resources should be used with restraint.

3.2.3 The World Conservation Strategies: During 1980s and 1990s various nongovernmental initiatives took place of which two are particularly relevant for the concept of sustainable development. These are the two world conservation strategies adopted in 1980 and 1991 by the IUCN for the conservation of nature. The 1980 World Conservation Strategy used the term sustainable development for the first time in an international instrument and led to the preparation of national and sub-national conservation strategies in more than 50 countries. In 1991, another strategy 'Caring for the Earth: A Strategy for Sustainable Living' was prepared. The Strategy defines sustainable development as improving the quality of human life while living within the caring capacity of supporting eco-systems and sets forth Principles, Additional Action for Sustainable Living and Guidelines for Implementation.²⁷

3.2.4 The Brundtland Report: The term sustainable development received international exposure and was defined in 1987 by the World Commission on Environment and Development (WCED or the Brundtland Commission named after its chair Gro Harlem Brundtland), an independent body created by the UNGA. Its report titled 'Our Common Future' brought the term 'sustainable development' to the forefront of international discourse and

²⁷ B. Hopwood, M. Mary and G. O'Brien, 'Sustainable Development: Mapping Different Approaches', Vol. 13 (2005) *Sustainable Development*, pp. 38-52.

policy making. It provided an expanded role for sustainable development and maintained that it is possible to attain economic development which meets the needs of the present generation without compromising the chances of future generation to meet their needs. The Report also proposed the creation of a UN Programme on Sustainable Development.²⁸

3.2.5 UNCED and the resulting instruments: In the 1992 United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, the world leaders officially adopted sustainable development as the development paradigm. Sustainable Development forms the underlying theme of the five instruments adopted at the Conference i.e. the Rio Declaration, Agenda 21, the Forest Principles, the UN Framework Convention on Climate change, and the Convention on Biological Diversity.

3.2.5.1 The Rio Declaration: The Rio Declaration on Environment and Development which contains 27 key Principles to guide the integration of environment and development policies focuses on sustainable development in Principle 1, 'Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature'. Principles 3 and 4 lie at the heart of the Rio Declaration. Principle 3 provides that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations. Again according to Principle 4, 'in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.²⁹

3.2.5.2 Agenda 21: Agenda 21, a comprehensive global plan of action for the implementation of sustainable development, was designed to create a 'global partnership for sustainable development'. Agenda 21's blue print is designed to integrate environment and development concerns to lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystem and a safer and more prosperous future.

3.2.5.3 The Forest Principles: The guiding objective of the Forest Principles, which comprises a Preamble and 15 Principles and applies to all types of forests, is to contribute to the management, conservation and sustainable development of the world's forests.

3.2.6 The Copenhagen Declaration on Social Development: The Copenhagen Declaration on Social Development 1995 was the first United Nations instrument to make an explicit linkage between economic development, social development and environmental protection. Paragraph 6 of the Declaration acknowledges that "economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development, which is the framework for our efforts to achieve a higher quality of life for all people."³⁰

3.2.7 United Nations Millennium Declaration: In 2000, the UN General Assembly adopted the UN Millennium Declaration, which reaffirmed the UNGA's support for principles of sustainable development agreed upon at UNCED. The Millennium Declaration also identified

²⁸ J.A. Elliott, *An Introduction to Sustainable Development*, 3rd Edition, Routledge Perspectives on Development Series, (London & New York: Routledge, 2006) p. 7.

²⁹ United Nations Declaration on Environment and Development, (also known as Rio Declaration) available at: http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163 accessed on 20/03/2016.

³⁰ D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook of International Environmental Law* (Oxford & New York: Oxford University Press, 2007) p. 617.

eight goals, known as the Millennium Development Goals (MDGs), which all UN member states have agreed to try to achieve by the year 2015. MDG 7 focuses on environmental sustainability, and the first of three targets under MDG 7 is to 'integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources'.

3.2.7 Johannesburg World Summit on Sustainable Development 2002: At the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002, representatives from around the world again reaffirmed their commitment to sustainable development. The WSSD Plan of Implementation recognizes poverty eradication, changing unsustainable production and consumption patterns and protecting and managing the natural resources for economic and social development as essential requirements for sustainable development.³¹ At the Johannesburg Summit more diverse range of actors participated than in the Rio Conference. NGOs from the developing world participated and represented the issues of human rights and social justice which suggested new ways for implementing sustainable development.³²

3.2.8 United Nations Conference on Sustainable Development (UNCSD) (Rio+20): The United Nations Conference on Sustainable Development (UNCSD), also known as Rio+20 or Earth Summit, was held in Rio de Janeiro, Brazil in 2012 and was a 20-year follow-up of the 1992 Rio Conference and the 10th anniversary of the 2002 Johannesburg Summit. The Rio Conference recognized the importance of sustainable development for countries at all stages of development. The 2002 Johannesburg Summit reinforced sustainable development through the inclusion of the private sector in the process. The 2012 Rio+20 Conference proposed the concept of greening the economy as a tool for sustainable development.³³

The primary result of the conference was a non-binding document, *The Future We Want*, through which the states renewed their political commitment to sustainable development. The document laid ground for formation of Sustainable Development Goals (SDGs), a set of measurable targets to promote sustainable development globally.³⁴

3.2.9 The Sustainable Development Goals 2015 – The New Sustainable Development Agenda: The year 2015 marked the official launch of the 2030 Agenda for Sustainable Development adopted at the United Nations. The new Agenda set forth 17 Sustainable Development Goals (SDGs) to be achieved over the next 15 years. The SDGs stress on the needs of people in both developed and developing countries and ensure that 'no one should be left behind'. The newly adopted SDGs also reinforce the three pillars of sustainable development: social, economic and environmental. The primary responsibility of the attainment of these goals lies with the countries. The SDGs along with the 169 targets of the new agenda will be monitored and reviewed using a set of global indicators which will be compiled into an Annual SDG Progress Report.³⁵

³¹ D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook of International Environmental Law* (Oxford & New York: Oxford University Press, 2007) p. 617.

³² J.A. Elliott, *An Introduction to Sustainable Development*, 3rd Edition, Routledge Perspectives on Development Series, (London & New York: Routledge, 2006) p. 9.

³³ P. Bartelmus, 'The future we want: Green growth or sustainable development?' Vol.7 (2013) *Environmental Development* pp. 165–170.

³⁴ Rio+20 United Nations Conference on Sustainable Development, 'About Rio+20', http://www.uncsd2012.org/about.html accessed on 23/03/2016 March.

³⁵ Sustainable Development Knowledge Platform, 'Launch of new sustainable development agenda to guide development actions for the next 15 years' https://sustainabledevelopment.un.org/?page=view&nr=1021&type=230&menu=2059 accessed on 18/03/2016.

3.3 Decisions of International Courts and Tribunals

On various occasions, the concept of sustainable development has been used by the International Courts and Tribunals. Lowe observed that sustainable development and its components are very relevant when Courts or international bodies have to interpret, apply or develop treaties or general international law.³⁶ That is perhaps the most important lesson to be drawn from the references to the concept of sustainable development by the International Court of Justice (ICJ) in the *Pulp Mills Case* and in *the Gabcikovo-Nagymaros Case* and from the WTO Appellate Body's decision in the *Shrimp/Turtle Case*. Sustainable development represents a policy which can influence the outcome of cases, the interpretation of treaties and the practice of states and international organizations, and may lead to significant changes and developments in the existing law.

In the Gabcikovo-Nagymaros Project Case (Hungary v. Czechoslovakia)³⁷, the ICJ referred for the first time to the need to reconcile economic development with protection of the environment which is apply expressed in the concept of sustainable development. The case concerned a dispute between Hungary and Czechoslovakia over the construction of the Gabcikovo and the Nagymaros barrages and the diversion of the Danube River in Slovakia. The dispute arose over a treaty between Hungary and Czechoslovakia who agreed to construct jointly a dam and a barrage system. However, the Hungarian government suspended the construction of the barrages on its part on the ground of environmental concerns which ultimately led the two states to resort to the International Court of Justice. By invoking the concept of sustainable development, the ICJ indicated that the term has a legal function and both a procedural aspect (by obliging the parties to look 'afresh' at the environmental consequences of the operation of the project) and a substantive aspect (the obligation of result to ensure that a 'satisfactory volume of water' be released from the by-pass canal into the main river and its original side arms). The separate opinion of Judge Weeramantry reflects his view about the operation of the concept of sustainable development within international law. He writes that the normative value of sustainable development derives in part from its wide and general acceptance by the global community. That acceptance is shown by its adoption in multilateral treaties, international declarations, the practice of international financial institutions, planning documents and state practice.³⁸ Weeramantry considered sustainable development as a legal principle of customary international law with an erga omnes character.³⁹

The *Pulp Mills Case (Argentina v. Uruguay)* concerned a dispute between Argentina and Uruguay concerning the construction of pulp mills on the Uruguay River. Proceedings were brought before the International Court of Justice and the Court ruled that, although Uruguay failed to inform Argentina of the operations, it did not pollute the river and for that reason closing the pulp mill would be unjustified. The conflict ended in 2010 with the establishment of a joint coordination of the activities in the river. The decision of the ICJ highlighted the

³⁶ V. Lowe, "Sustainable Development and Unsustainable Arguments", in A. Boyle et.al (eds.), *International Law and Sustainable Development: Past Achievements and Future Challenges*, (Oxford, New York: Oxford University Press, 1999) p. 31.

³⁷Gabcikovo-Nagymaros Project Case (Hungary V. Czechoslovakia) [1997] ICJ Reports.

³⁸ P. Sands, *Principles of International Environmental Law*, 2nd Edition (Cambridge: Cambridge University Press) pp. 254-255.

³⁹ D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook of International Environmental Law* (Oxford & New York: Oxford University Press, 2007) pp. 625.

importance of the need to ensure environmental protection of shared natural resources while allowing for sustainable economic development.⁴⁰

The *Shrimp-Turtle Case*⁴¹ is an example of the conflict between trade liberalization and policies formulated to protect the environment. The United States imposed a ban on the import of shrimp that had been caught using traps that were not "Turtle Excludary". In other words, the United States imposed a ban on the import of shrimp that were caught without special traps that prevented endangered sea turtles from being killed in the process of catching shrimp. In 1998, the World Trade Organization demanded that the United States remove the ban claiming that this was a restriction on free trade. India, Malaysia, Thailand, and Pakistan were the countries who brought this issue to the World Trade Organization.⁴² The WTO Appellate body invoked the concept of sustainable development in assessing whether the conservation measures adopted by United States with regard to sea turtles have been applied in a discriminatory fashion. Holding the US measures as discriminatory, it was reaffirmed by the Appellate Body that the Preamble to the WTO Agreement explicitly acknowledges sustainable development and characterizes it as a concept which 'has been generally accepted as integrating economic and social development and environmental protection'.⁴³

Reflection of the components of the concept of sustainable development can be also found in the Legality of the Threat or Use of Nuclear Weapons Case⁴⁴ and in the Iron Rhine Arbitration.⁴⁵ In its Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons Case, the ICJ recognized that 'the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn'.⁴⁶ The Iron Rhine Arbitration concerned a dispute between Belgium and Netherlands concerning the reactivation of the Iron Rhine railway line, which is a railway linking the port of Antwerp, Belgium to the Rhine basin in Germany, via the Dutch provinces of Noord-Brabant and Limburg. The two countries differed over the entitlement of Belgium, on the one hand, to establish the plan for the reactivation and the entitlement of the Netherlands, on the other, to insist on conditions specified under Dutch law for such a reactivation. The Arbitral Tribunal laid emphasis on Principle 4 of the Rio Declaration which talks about integration of environmental protection and economic development and therefore constitutes a component of sustainable development, and regarded it as 'a principle of general international law' which

⁴⁰ *Pulp Mills on the River Uruguay (Argentina v. Uruguay),* Request for the indication of provisional measures Summary of the Order of 13 July 2006, http://www.icj-cij.org/docket/files/135/11235.pdf accessed on 23/03/2016.

⁴¹ WTO, Environment Disputes 8, 'India etc versus US: shrimp-turtle', United States — Import Prohibition of Certain Shrimp and Shrimp Products, WTO case Nos. 58 (and 61). Ruling adopted on 6 November 1998, http://www.wto.org/english/tratop_e/envir_e/edis08_e.htm> accessed on 22/03/2016.

⁴² WTO, United States - Import Prohibition of Certain Shrimp and Shrimp Products, Report of the Appellate Body, https://www.wto.org/english/tratop_e/dispu_e/58abr.pdf, accessed on 22/03/2016.

⁴³ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) pp. 255-256.

⁴⁴ Legality of the Threat or Use of Nuclear Weapons Case [1996] ICJ Reports.

⁴⁵ Award in the Arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway between the Kingdom of Belgium and the Kingdom of the Netherlands, Reports of International Arbitral Awards, Decision of 24 May 2005, Vol. XXVII pp.35-125.

http://legal.un.org/riaa/cases/vol_XXVII/35-125.pdf accessed on 22/03/2016.

⁴⁶ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) p. 257.

applies not only in autonomous activities but also in activities undertaken in implementation of specific treaties between the parties.⁴⁷

4. Some Criticisms against Sustainable Development

The concept of sustainable development has been subject to criticism due to some of the contradictions contained in the concept itself. The concept of "sustainable development" is criticized because of its vagueness. There remains considerable uncertainty as to what 'sustainable development' actually means, both in theory and in practice.⁴⁸ Some find that the concept favours only rich countries. Now that they are developed, they are imposing a restrictive vision of development on emerging countries who aspire to the same level of development. This criticism was also forwarded during the adoption of the Brundtland Report as certain representatives of emergent countries did not want their industrialization or their demographic growth to be restricted.⁴⁹ Doubts have also been expressed on the outcome of the concept. It has been redefined in multiple ways and also refers to so many aspects of society and environment relationships that it has been suspected 'whether anything good can ever be agreed'.⁵⁰

Deep ecologists argue that the concept of sustainable development is too much human-centric. Their primary concern is the environment and its intrinsic value and needs.⁵¹ Some environmentalists view the concept with suspicion because they believe that sustainable development is anthropocentric in nature and detracts attention from the debate on environmental protection. Lee criticized sustainable development as an "unashamedly anthropocentric concept."⁵² The 'needs and limitations' aspect as embedded in the definition of sustainable development given by the Brundtland Report is also subject to criticism. The idea of 'need' may vary among different groups of people. New needs may be created within a particular group while the basic need of others may remain unsatisfied. Therefore the value of the concept becomes questionable by conflicts among different categories of needs i.e. conflicts between the needs of present and future generations; between the needs of human being and nature; between the needs of poor and rich; and between local and global needs.⁵³

5. The Significance of the Concept of Sustainable DevelopmentSince the concept was enshrined in the Rio Declaration, it has become a central issue of the activities in the

⁴⁷ Award in the Arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway between the Kingdom of Belgium and the Kingdom of the Netherlands, Reports of International Arbitral Awards, Decision of 24 May 2005, Vol. XXVII pp.35-125.

http://legal.un.org/riaa/cases/vol_XXVII/35-125.pdf accessed on 22/03/2016.

⁴⁸ P. Sands, 'International Law in the Field of Sustainable Development, Vol. 65(1995) *British Yearbook of International Law*, pp. 303-381.

⁴⁹ Good Planet Info, 'Degrowth: Against Sustainable Development' http://www.goodplanet.info/en/encyclopedia/2008/09/16/degrowth-against-sustainable-development/ accessed on 22/03/2016.

⁵⁰ J.A. Elliott, *An Introduction to Sustainable Development*, 3rd Edition, Routledge Perspectives on Development Series, (London & New York: Routledge, 2006) p. 8.

⁵¹ B. Hopwood, M. Mary and G. O'Brien, 'Sustainable Development: Mapping Different Approaches', Vol. 13 (2005) *Sustainable Development*, pp. 38-52.

⁵² K. Lee, "Global Sustainable Development: Its Intellectual and Historical Roots" in K. Lee K et.al (eds.) Global *Sustainable Development in the 21st Century* (Edinburgh: Edinburgh University Press, 2000) p. 32.

⁵³ J.A. Elliott, *An Introduction to Sustainable Development*, 3rd Edition, Routledge Perspectives on Development Series, (London & New York: Routledge, 2006) p. 11.

international, regional and national planes despite the criticisms revolving around.⁵⁴ The significance of the concept can be briefed in the following manner:

5.1 Sustainable development as a legal and policy instrument: The role and significance of sustainable development in the evolution of international law and policy regarding the protection of environment secured universal recognition at the Rio Conference on Environment and Development. As discussed earlier in this article, sustainable development occupies much of the content of the Rio Declaration, as well as the Conventions on Climate Change and Biological Diversity, and it is also central to global environmental responsibility by these and other instruments.⁵⁵ Since the Rio Conference, sustainable development has been adopted as a policy by numerous governments, both at national and regional level. It has influenced the implementation and development of law and policy by various international organizations, including the FAO, IMO, World Bank, WTO and UNDP, as well as treaty bodies such as the International Tropical Timber Organization and the European Energy Charter.⁵⁶ The impact of sustainable development on the evolution of existing international environmental law is evident from the decision in the *Gabcikovo-Nagymaros Case*. The ICJ's judgment had significant implications for the law of international watercourses.⁵⁷

5.2 Influence on general principles of international environmental law: The concept of sustainable development has implications for some general principles and key concepts of international environmental law which includes equity and the duty to cooperate, precaution, environmental governance and prior informed consent for local communities, etc.⁵⁸ Sustainable development has significantly influenced the content of the duty to cooperate, for both developed and developing states, through the principle of common but differentiated responsibility (CBDR). CBDR requires all countries to play their part for the achievement of sustainable development. It further acknowledges the different contributions to environmental degradation by developed and developing countries are endowed with greater responsibility towards the protection of environment.⁵⁹ Sustainable development has also influenced the precautionary principle i.e. duty to protect the environment even in the presence of scientific uncertainty.⁶⁰

5.3 Impact on procedural tools of international environmental law: Transparency, public participation, access to justice, environmental impact assessment, etc., are certain procedural tools of international environmental law which have been instrumental in the pursuit of

⁵⁴ G. Loibl, "The Evolving Regime on Climate Change", in N. Schrijver & F. Weiss (eds.) *International Law and Sustainable Development Principles and Practice*, (Leiden, Boston: Martinus Nijhoff Publishers, 2004) p. 97.

 ⁵⁵ A. Boyle & D. Freestone, "Introduction", in A. Boyle & D. Freestone (eds.), *International Law and Sustainable Development Past Achievements and Future Challenges* (Oxford, New York: Oxford University Press, 1999) p.
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⁵⁶ P. Birnie, A. Boyle & C. Redgwell, *International Law & the Environment*, 3rd Edition, (Oxford, New York: Oxford University Press, 2008) p. 125.

⁵⁷ A. Boyle & D. Freestone, "Introduction", in A. Boyle & D. Freestone (eds.), *International Law and Sustainable Development Past Achievements and Future Challenges* (Oxford, New York: Oxford University Press, 1999) p 6.

⁵⁸ D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook of International Environmental Law* (Oxford & New York: Oxford University Press, 2007) p. 628.

⁵⁹ R. Emas, 'The Concept of Sustainable Development: Definition and Defining Principles', https://sustainabledevelopment.un.org/content/documents/5839GSDR%202015_SD_concept_definiton_rev.pdf accessed on 22/03/2016.

⁶⁰ D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook of International Environmental Law* (Oxford & New York: Oxford University Press, 2007) pp. 630-632, 637.

sustainable development. These tools and mechanisms are used to gather information and to understand nature-human interaction and thereby to implement sustainable development policies and laws. Sustainable development determines how and where these tools are to be used.⁶¹

Transparency, public participation and access to justice are relevant at the national level of decision making for attaining sustainable development. However, sustainable development has increased the importance of these tools in decision making at the international level as well. For instance, international institutions and development banks facilitate and finance projects to be executed in developing countries which may have significant impacts on the people of the country in question. Their participation in decision making regarding relevant projects becomes important both at the national level and at the international level of decision making since public participation is sometimes required from the international institutions as well as a partial implementation of sustainable development.⁶²

The concept of sustainable development also has influence on environmental impact assessments and the accounting techniques used in such assessments. The idea and components of sustainable development have been used in broadening the scope of these mechanisms both geographically and with respect to the elements assessed. EIAs take social, economic and environmental considerations into account while assessing a project and thereby facilitate a comprehensive assessment of the projects or activities concerned.⁶³

5.4 Influence on municipal laws: Some countries have expressly included sustainable development as a substantive requirement in their municipal law. For instance, in Australia, the term has been used in domestic statutory law. The Australian National Environment Protection Council states that 'the concept of ecologically sustainable development should be used by all levels of Government in the assessment of natural resources, land use decisions and approval processes'. The Canadian Environmental Protection Act also mentions sustainable development in several sections. The Preamble states: "The Government of Canada seeks to achieve sustainable development that is based on an ecologically efficient use of natural, social and economic resources and acknowledges the need to integrate environmental, economic and social factors in the making of all decisions by government and private entities." Sustainable development has also influenced domestic law although not expressly mentioned in the statute; for example, the United States National Environmental Policy Act 1969. The government of New Zealand has also legislated specifically for sustainable development.⁶⁴ In Bangladesh, the Environment Conservation Act 1995 and the Environment Conservation Rules 1997 also promote different substantive and procedural aspects of sustainable development, for example, the precautionary and polluter pays approach and the obligation to conduct Environmental Impact Assessment (EIA). In Nigeria, the National Environmental Standards and Regulations Enforcement Agency (NESREA) Act requires Nigerian environment and natural resources to be developed in a sustainable manner. Section 2 of the Act which deals with the objectives of the enforcement Agency states: "The Agency, shall, subject to the provisions of this Act, have responsibility for the protection and development of the environment, biodiversity conservation and sustainable development of Nigeria's natural resources in general and environmental

⁶¹ *ibid* pp. 632-633.

 ⁶² D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook of International Environmental Law* (Oxford & New York: Oxford University Press, 2007) pp. 633-634.
⁶³ *ibid* pp. 635-637.

⁶⁴ D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook of International Environmental Law* (Oxford & New York: Oxford University Press, 2007) p. 627.

technology, including coordination and liaison with relevant stakeholders within and outside Nigeria on matters of enforcement of environmental standards, regulations, rules, laws, policies and guidelines".⁶⁵

6. Conclusion:

The idea of sustainable development was adopted by the international community with the objective of improving the quality of human life and to value other living and non-living components of environment. Although, there remain significant uncertainties regarding the precise meaning and legal status of the notion, there is, however, no doubt about the fact that it has had profound impact on international environmental law. The concept and its core elements have not only been repeatedly expressed in multiple numbers of international environmental law instruments but it has also influenced the principles of international environmental law and the tools that are used to implement these principles.⁶⁶ The concept of sustainable development does represent a policy capable of influencing the decisions of international organizations and thus bears the competence to contribute towards changes and developments in the realm of existing international environmental law. States and international bodies are now required by international law to take into account the objective of sustainable development and the appropriate process to achieve the same.⁶⁷

⁶⁵ S.G. Ogbodo, 'The Paradox of the Concept of Sustainable Development under Nigeria's Environmental Law', Vol. 3 No. 3 (2010) *Journal of Sustainable Development*, pp. 201-207.

⁶⁶ D.B. Magraw and L.D. Hawke, "Sustainable Development", in D. Bodansky et.al (eds.), *The Oxford Handbook* of *International Environmental Law* (Oxford & New York: Oxford University Press, 2007) p. 637.

⁶⁷ P. Birnie, A. Boyle & C. Redgwell, *International Law & the Environment*, 3rd Edition, (Oxford, New York: Oxford University Press, 2008) p. 127.