

Sustainable Development and its Principles

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Abstract

Today, the objective of sustainable development is acclaimed by almost all international organizations, national governments, and also private enterprises. This general consensus seems mainly to rest upon the vague substance of the terms 'sustainable development' and 'sustainability' themselves, which leave much room for interpretation.

Different definitions of 'sustainable development' or 'sustainability', often general and vague, lead one to question how these terms can be of any practical value. In this article, I do not attempt to provide a single definition or single acceptable approach to sustainable development or sustainability. My intention is to point out that sustainable development (sustainability) is not a (key) principle, especially not a principle of environmental law. It is rather a fundamental and overarching objective, aiming to continuously improve the quality of life and well-being for present and future generations, by linking economic development, social justice and environmental protection. It is not a principle, but it has its own principles, and I am convinced that the real solutions of our current problems are embedded in the principles of sustainable development.

Keywords: *Sustainable development, sustainability, principles.*

1. THE ENVIRONMENTAL ROOTS OF SUSTAINABLE DEVELOPMENT

The basic idea behind sustainable development is not new, especially among traditional or indigenous societies. Since the industrial revolution, human actions have gradually become the main driver of global environmental change. In earlier centuries when physical survival was often the highest imperative, human population and densities were lower, technologies were simpler and their byproducts more benign. The use of steam power facilitated the concentration of factories in cities; environmental pollution was the inevitable by-product of industrial activities, experienced on a greater scale and in a more complex and concentrated form, than ever before. The spread of industrialization, followed by the development of science and technology, and the exponential growth of the population have put unprecedented stress on the environmental systems on which life depends.

Pollution due to human activities on a local scale has been around for a very long time. Degradation and deterioration of the environment started from the prehistoric times when man created the first fires. As early as the first quarter of the 19th century the environmental effects of intense economic growth became

apparent. The industrial revolution, the emergence of great factories and consumption of fossil fuels gave rise to unprecedented air pollution, a large volume of chemical discharges, and a growing load of untreated human waste.

Environmental pollution became a popular issue after World War II, due to radioactive fallout from atomic warfare and testing sometimes near inhabited areas, especially in the earlier stages of their development. What is relatively new and what has been giving rise to much current environmental concern since the end of the 1950s is the existence of human activities which lead to pollution on the global scale. Unprecedented growth in human numbers and accompanying increase in usage of natural resources is linked to threats to the global ecosystem.¹

In the United States, pollution began to draw major public attention between the mid-1950s and early 1970s. The theory of sustainability has its roots in the 1960s environmental movement when global environmental problems came into focus.

In 1962, an American biologist, Rachel Carson published a famous book titled "Silent Spring". The book's legacy was to produce a far greater awareness of environmental issues. The book suggested that the indiscriminate use of DDT and other pesticides without fully understanding their effects on the environment was a threat to wildlife, particularly birds. The agricultural use of DDT² questioned the logic of releasing large amounts of chemicals into the environment. The resulting public concern led to the creation of the US Environmental Protection Agency (EPA) in 1970.

In the 1970s the environmental movement gained rapid speed around the world. Environmentalists have seen a false trade-off between environmental protection and economic growth. To protect the environment from the adverse effects of pollution, many countries worldwide have enacted national legislation to regulate various types of environmental pollution. Public policies were problem specific: air, water and land pollution were examined as distinct subjects.

Nowadays there's a growing consensus in national governments and international organisations that it is impossible to separate economic issues from environment issues. Many forms of development erode the environmental resources upon which they must be based, and environmental degradation can undermine economic development.

The general 'environmental' element of sustainable development is the most fundamental aspect of the concept. The protection of the environment is a long-term activity, providing the basis for developing environment policy across all

¹ The term ecosystem was coined in 1930 by Roy Clapham, to denote the physical and biological components of an environment considered in relation to each other as a unit. British ecologist Arthur Tansley later refined the term, describing it as the interactive system established between biocoenosis (a group of living creatures) and their biotope (the environment in which they live).

² The abbreviation DDT stands for dichlorodiphenyltrichloroethane. During and after World War II, DDT became an extremely popular insecticide. By the early 1970s, however, serious questions were being raised about its environmental effects. DDT was first banned in Hungary in 1968.

environmental topics, including *inter alia* accelerating climate change, deterioration of our eco-systems and increasing overuse of natural resources. Environmental policies are designed to have positive impacts on the state of the environment in the future, but the timeframes are always too short to cover policy formulation, adoption and implementation in several areas because of the need for more information or because of other obstacles.

2. THE EMERGENCE OF SUSTAINABILITY

While numerous governments and other domestic actors have pressed the sustainable development goal in many countries, the impetus toward governmental adoption of the concept in all countries has been a direct result of international discussion, debate and pressure. The origins of sustainable development are usually identified in the Stockholm conference of 1972, which sought to emphasise links between human development and environmental protection. 42 years ago, the participants of the United Nations Conference on Man and Environment agreed on the urgent need to respond to the problem of environmental degradation and deterioration. This was the first of a series of world environmental conferences under the auspices of the United Nations, and a turning point in the development of international environmental policy and law.³

The Stockholm Conference focused the world's attention on actions to protect the ecosystems. It brought together the world: thousands of participants, including heads of State and Government, national delegates and leaders from non-governmental organizations (NGOs), businesses and other stakeholders. The Stockholm Conference also had a real impact on the development of EU environment policy: the Environmental and Consumer Protection Directorate was set up, and the first Environmental Action Program was adopted in 1973 by the European Community (that later became the European Union).

The rest of the 1970s and the 1980s witnessed the accumulation of many environmental instruments. Some of these instruments have played an important role in defining environmental problems in a global or a regional setting. Little, however, was done in the succeeding years to integrate environmental concerns into national economic planning and decision-making. Overall, the environment continued to deteriorate, and such problems as ozone depletion, global warming and water pollution grew more serious, while the destruction of natural resources accelerated at an alarming rate.

Since at least the early 1980s, sustainable development has been a fashionable

³ The next summits took place in Rio de Janeiro (Brazil) in 1992, in Johannesburg (South Africa) in 2002, and in Rio again, in 2012. Unfortunately, the international community could not embrace the priority of strengthening global environmental governance at the Rio+20 UN Conference on Sustainable Development. One of the most important outcomes of Rio+20 is the new aim of creating a framework for global goals and indicators – Sustainable Development Goals (SDGs) – which build on the current Millennium Development Goals (MDGs).

concept in environmental discourse, and an important element of international cooperation. By 1983, when the UN set up the World Commission on Environment and Development (WCED), environmental degradation, which had been seen as a side effect of industrial wealth with only a limited impact, was understood to be a matter of survival for developing nations. Led by Gro Harlem Brundtland of Norway, the Commission put forward the concept of sustainable development as an alternative approach to one simply based on economic growth. The member of the Commission explored the possibility of reconciling demands for development from developing countries with demands for environmental protection, primarily from rich industrialised countries.

The Commission was an independent body, linked to but outside the control of governments and the UN system. The Commission's mandate gave it three objectives:

- to re-examine the critical environment and development issues and to formulate realistic proposals for dealing with them;
- to propose new forms of international cooperation on these issues that will influence policies and events in the direction of needed changes; and
- to raise the levels of understanding and commitment to action of individuals, voluntary organizations, businesses, institutes, and governments.⁴

The World Commission on Environment and Development first met in October 1984, and published its seminal work on sustainable development, 'Our Common Future'⁵ (the 'Brundtland Report') 900 days later, in April 1987. The Brundtland Report was an extraordinarily optimistic piece of work: it brought many formerly opposing positions, particularly growth and environmental protection, into agreement around the same ideas.⁶ In the wake of the Report and the UN General Assembly Resolution adopting the report, the UN General Assembly called for the UN Conference on Environment and Development (UNCED).

In the case of sustainable development the history of the UNCED programme transpired largely outside of the realm of normal domestic politics. The number of actors involved was both very small and very professional, consisting predominantly of representatives of one or two governmental ministries and NGOs for environment and development. The specification of the programme took place over a period of five years (1987–92), mostly within closed committee sessions or working conferences for specially invited and certified representatives. The key issues of negotiation and the specifics of the draft documents were known to relatively few people, and the vast majority of sub-policies were formulated as

⁴ AN OVERVIEW BY THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, available at: <http://www.un-documents.net/ocf-ov.htm#L3> [cit. 2014-07-20].

⁵ World Commission on Environment and Development (WCED): *Our Common Future*, 1987, Oxford University Press, Oxford.

⁶ HOLDER, JANE – LEE, MARIA: *Environmental Protection, Law and Policy – Text and Materials*, Second Edition, 2007, Cambridge University Press, Cambridge, 220.

relatively abstract goals. Representatives from political parties were hardly ever represented as such, and the key issues being discussed and negotiated at the international level were generally not introduced into elections.⁷

The primary goals of the next UN Summit were to come to an understanding of “development” that would support socio-economic development and prevent the continued deterioration of the environment, and to lay a foundation for a global partnership between the developing and the more industrialized countries, based on mutual needs and common interests, that would ensure a healthy future for the planet. Consequently, a high level world conference was held in 1992 (the Rio ‘Earth Summit’), where – in view of the fact that global economic, social and environmental processes that are in close interaction with one another, are threatening societies’ development in a longer run – national governments adopted three major agreements aimed at changing the traditional approach to development:

- Agenda 21 (a comprehensive programme of action for global action in all areas of sustainable development);
- The Rio Declaration on Environment and Development (a series of principles defining the rights and responsibilities of States);
- The Statement of Forest Principles (a set of principles to underlie the sustainable management of forests worldwide).

In addition, two legally binding Conventions aimed at preventing global climate change and the eradication of the diversity of biological species were opened for signature at the Summit, giving high profile to these efforts:

- The United Nations Framework Convention on Climate Change (UNFCCC), and
- The Convention on Biological Diversity (CBD).

UNCED was heralded as a ‘paradigm shift’ from international environmental law to the international law of sustainable development. Although references to „sustainable development” and international law abound in Agenda 21, none of the formulations apparently follows that of Principle 27 (“international law in the field of sustainable development”),⁸ and there remain occasional references to “international environmental law”.⁹ Whether the variable terminology arises by accident or design is unclear. Anecdotal evidence suggests that the head of the Brazilian delegation persuaded Working Group III of UNCED’s Preparatory Committee to replace every reference in Agenda 21 to “international environmental law” to “international law in the field of sustainable development”.¹⁰

⁷ LAFFERTY, WILLIAM M. (ed.): *Governance for Sustainable Development – The Challenge of Adapting Form to Function*, 2004, Edward Elgar Publishing, London, 17-18.

⁸ Rio Declaration on Environment and Development, Principle 27; Report of the UN Conference on Environment and Development (“UNCED Report”), A/CONF.151/26/Rev.1 (vol. II), 3; 31 I.L.M. 874 (1992).

⁹ Agenda 21, para. 39.2

¹⁰ The diplomat, Pedro Motta Pinto Coelho, apparently remarked that this change would

It can also be observed that in the recent decades the concept of sustainable development featured both in agreements on economic cooperation and conventions adopted for the protection of the environment. We may discern an interesting tendency, according to which the concept of sustainable development opens the door to the enforcement of environmental considerations in economic agreements, while in the case of environmental treaties, the legal institution of sustainable development guarantees not only the protection of the environment, but also the satisfaction of the basic human needs, the fight against poverty and safeguarding the possibilities for development.¹¹

Nevertheless, the 1992 Earth Summit was a landmark achievement in integrating environmental, economic and social concerns into a single policy framework. After the Rio Conference, concepts such as sustainable development sounded initially like principles deprived of concrete content. The concept of sustainable development and the proposals set out in Agenda 21 have since been expanded and strengthened at several major UN conferences.

3. SUSTAINABLE DEVELOPMENT OR SUSTAINABILITY?

The interaction between economy and the environment that supports it lies at the core of sustainable development. In its essence, sustainable development is about reducing the overall (global) pressures on life-support systems and natural resources resulting from the ‘drivers’ of development. Such drivers are principally related to economic activity.

The relationship between economic development and environmental degradation was first placed on the international agenda in 1972, at the UN Conference on the Human environment, held in Stockholm. After the Conference, Governments set up the United Nations Environment Programme (UNEP), which today continues to act as a global catalyst for action to protect the global environment.

The term “sustainable development” has been included in the Rio Declaration on Environment and Development (1992) to denote the need to balance environmental and development considerations. The original articulation and the most widely quoted ‘definition’ of sustainable development comes from the Brundtland Report, according to which sustainable development means development that ‘meets the needs of the present without compromising the ability of future generations to meet their own needs’.¹² The definition contains within it two key concepts:

“keep you lawyers busy well into the 21st century”); see SAND, PETER: UNCED and the Development of International Environmental Law, in *Yearbook of International Environmental Law*, Vol. 3 (1992), 17.

¹¹ SZABÓ, MARCEL: A fenntartható fejlődés koncepciója a nemzetközi jogban [The Concept of Sustainable Development in International Law], in SZABÓ, MARCEL (ed.): *Ünnepi kötet Gál Gyula tiszteletére* [Liber Amicorum Gál Gyula], 2011, Európa Nostra, 171.

¹² WCED: *op. cit.* 43.

- 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.

From the late 1980s until the second half of the 1990s the formulation of environmental policy plans and strategies was the dominant approach to implementing sustainable development domestically. Sustainable development was mainly understood by policymakers in the sense of ‘environmentally’ or ‘ecologically’ sustainable development. This understanding of sustainable development gradually changed in the late 1990s and the early 2000s to include economic and social goals on an equal footing. As a result, comprehensive sustainable development strategies increasingly replaced the more environmentally focused plans and strategies.

In 2002, sustainable development was further articulated as having three pillars, namely: economic development, social development, and environmental protection. This means that the concept of sustainable development aims to continuously improve the quality of life and well-being for present and future generations, by linking economic development, protection of the environment and social justice. The social and economic pillars are as important as the environmental pillar.

The desired future state conjured by a policy of sustainable development is long term and dynamically changing. Rather than seeking a stable equilibrium, sustainable development is a dynamic concept, recognising that changes are inherent to human societies.¹³ The term “sustainable development” has been decried by some as devoid of content, as a concept used to express different and often disparate worldviews.¹⁴

Despite these misgivings, however, the expression has assisted in reconciling in one phrase what before seemed irreconcilable – namely, environmental protection and development. Sustainable development has put on the negotiating table issues of economic and social development that are prerequisites for the quality of life and environmental protection. It is interesting to see how sustainable development has been used in local communities to articulate goals and indicators for future development, such as the goals of equity, economic vitality, strong community, quality of education, good government, decent housing, healthy people, efficient transport and land-use, protected natural resources, and minimal pollution and waste.

The concept of sustainable development should be distinguished from that of sustainability, despite of the fact that the main problem regarding the evaluation of sustainable development is that neither the real meaning of sustainable

¹³ Measuring progress towards a more sustainable Europe, 2007 monitoring report of the EU sustainable development strategy, 2007, European Communities, 7.

¹⁴ And this is true, to some extent, as developed countries have used the concept to underline the importance of environmental values, whereas developing countries have used it to support their right to development.

development has been come to stay. ‘Sustainability’ is a property of a system, whereby it is maintained in a particular state through time. The concept of sustainable development refers to a long-term process involving change or development. Sustainable development aims to ‘achieve continuous improvement of quality of life’, and the focus is therefore on sustaining the process of improving human well-being.¹⁵

Another famous definition of sustainability was adopted by the World’s Scientific Academies in Tokyo, May 2000: “Sustainability implies meeting current human needs while preserving the environment and natural resources needed by future generations.”¹⁶ To preserve human well-being over the long term, people need to move toward new ways of meeting human needs, adopting consumption and production patterns that maintain the Earth’s life support systems and safeguard the resources needed by future generations.

Similarly, the Hungarian National Council for Sustainable Development emphasizes that “the essence of sustainability is to establish a system of relations – a culture – in which people, in their relations established with each other and the environment, do not deplete but preserve resources for the future. Sustainability is in search for this proper system of relations, to allow for the next generations to also be able to meet their needs.”¹⁷

Over the past decades innumerable definitions of sustainable development have been proposed. It is obvious that the integration of environmental protection into the concept of sustainable development tends to make environmental objectives (more or less) easily attainable. But the usage of the concept of sustainable development remains somewhat vague. From the beginning, a disagreement has existed as to the precise meaning of the concept. There are numerous mentions of the adjective ‘sustainable’ (sustainable growth, sustainable business solutions, sustainable mobility, sustainable tourism, etc.). Moreover, ‘sustainable development’ and ‘sustainability’ are often misused terms. They are popularly used to describe a wide variety of activities which may not necessarily be “sustainable” in the long term.

It is not necessary here to go into the issue of ‘weak’ vs ‘strong’ sustainability. I just mention that proponents of the weak sustainability view argue that there is essentially no inherent difference between natural and other forms of capital. Maintaining and enhancing the total stock of all capital (physical, human, etc.) alone is sufficient to attain sustainable development. In contrast, according to the strong sustainability view, there is inherent difference between natural and other forms of capital, physical or human capital cannot substitute for all the environmental resources comprising the natural capital stock, or all of the

¹⁵ Sustainable development in the European Union, 2011 monitoring report of the EU sustainable development strategy, 2011, European Union, 11.

¹⁶ IAP Statement on Transition to Sustainability, available at: <http://www.interacademies.net/10878/13933.aspx> [cit. 2014-08-11].

¹⁷ In search for the future. Summary report of the National Council for Sustainable Development for Hungarian Society, 9-10.

ecological services performed by nature.¹⁸

Finally, it is worth mentioning that sustainability itself is not an endpoint. It is rather an ideal toward which we strive. It has many interrelated dimensions (e.g., ecological, economic, social, political, and epistemological) and calls for a holistic, interdisciplinary and participatory approach.

Official documents often emphasize three types of sustainability:

- environmental sustainability means the conservation of our natural values, so that also our children can enjoy them;
- economic sustainability in turn means that we do not have to pay more taxes to ensure the successful operation of the results of development;
- social sustainability means that we have to assist more and more people to care for themselves and take responsibility for the country as a whole.

To put the issue in the context of an integrated approach to sustainable development, the challenge is how the environmental objective of reduced pollution can best be integrated with economic policy objectives of maintaining levels of output and employment which will enable the needs of the population to be met, consistent with the goal of social sustainability.

Nevertheless, achieving sustainable development is no easy task. ‘Sustainable development’ is like ‘democracy’, ‘freedom’ and other high-minded terms: it is universally desired, diversely understood, and extremely difficult to achieve, because the interactions among economic, social and environmental concerns are extremely complex and unpredictable. Sustainability poses the challenge of determining whether we can hope to see the current level of well-being at least maintained for future generations, or whether the most likely scenario is that it will decline. It is no longer a question of measuring the present, but of predicting the future.¹⁹

4. THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT

Environmental policies traditionally cover a wide range of issues related to sustainable development, and contribute to raising awareness of the opportunities and challenges lying ahead. The basic principles of the horizontal strategies on sustainable development (SDSs) make it possible to harmonise the various sectoral and development strategies with SDSs, and they also provide a general type of guidance for determining the SDSs’ priorities, more specifically defined goals and tasks, the frameworks and means of implementation, in a coordinated and harmonised way.

In my opinion, sustainable development is not a principle, but it has several

¹⁸ BAKER, SUSAN: *Sustainable Development*, 2006, Routledge, London and New York, 29-35.

¹⁹ STIGLITZ, JOSEPH E. – SEN, AMARTYA – FITOUSSI, JEAN-PAUL (eds.): *Report by the Commission on the Measurement of Economic Performance and Social Progress*, 61. Available at: http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf [cit. 2014-08-11].

principles. This may sound trivial, but most of the existing approaches fail to adopt this approach, leading to potentially confusing messages. For instance, confusion may arise when one tries to define sustainable development as a principle of environmental policy and/or environmental law.

The principles of sustainable development have been formulated, clarified, and adopted at the highest levels by the relevant bodies of both the UN and the EU. On account of their national relevance the following should be highlighted from the complete set of principles:

4.1. The principle of holistic approach

Things must be viewed as a system of inter-related elements, the elements themselves also being systems interacting with one another. Any intervention may trigger ripple effects even in remote systems. So local challenges can be adequately addressed relying on the knowledge of the wider environment and global trends alike.

4.2. Principle of intra-generation and inter-generation solidarity

The interests of sustainable development are focused on people. Sustainable development is not about maintaining a good quality of life for just one generation, but rather about passing the ability to realize a good quality of life from generation to generation.

4.3. The principle of sustainable management of resources

Sustainable management of resources with a view to the limitations of the carrying capacity of the environment; by using natural resources in a prudent and thrifty way it preserves resources required for future development. Biodiversity is also a natural resource and we attach high priority to its conservation.

4.4. The principle of social justice

The right to adequate conditions for living must be recognised and fundamental human rights must be guaranteed for all. All people should have equal opportunities for acquiring knowledge and skills required to become a worthy member of society.

4.5. The principle of integration

In the course of elaborating, evaluating, and implementing sectoral policies, plans, and programmes, economic, social, and environmental considerations and their relationships must also be taken into account to ensure that they can mutually reinforce each other. Local, regional, and national activities must be coordinated.

4.6. The principle of precaution and prevention

The precautionary approach means that wherever the possibility of severe or irreversible damage is perceived, lack of complete scientific certainty may not be used as an excuse for delaying effective action to prevent damage to the environment or endangering human health; i.e. action must be taken in view of the gravity of the perceived threat. Human activities must be planned and carried out

in line with this precautionary principle and activities damaging or polluting the environment endangering natural systems and human health must be prevented and – where it is not possible – reduced, and finally, damages must be restored to their original state as far as possible.

4.7. The polluter pays principle

Prices must reflect the real costs paid by society for activities involved in consumption and production as well as for their impacts, including the costs of using natural resources. Those engaged in activities damaging/polluting the environment must pay for damage caused to human health or the environment.

4.8. The principle of utilising local resources

Efforts should be made to supply the needs of communities on a local level, from local resources. Local features and diversity should be preserved. Preservation and sustainable utilisation of the man-made environment and the cultural heritage are also very important tasks.

4.9. The principle of public participation

Adequate access to information affecting social/economic life and the environment, to information on decision-making processes must be provided for all. People's knowledge about sustainable development, its social/economic and environmental implications, and about sustainable solutions and approaches must be clarified and enhanced. Public participation in decision making should be strengthened.

4.10. The principle of social responsibility

To enable sustainable development and to make higher quality of life possible, unsustainable patterns of production and consumption must be changed. Businesses' social responsibility must be strengthened, along with cooperation between the private and the public sector.²⁰

I agree with the doyen of European environmental law, Professor Ludwig Krämer who claims positively that sustainable development is rather a guideline to political action than an actual legal concept.²¹ In my opinion, the principles of integration, prevention and precaution, or public participation are the principles of environmental policy and law, such as the famous polluter pays principle, the principle of rectification at source or the need for international cooperation and partnership.²²

In the past couple of years a number of general principles of environmental law have also emerged, or are emerging. Basically they are general guidelines that have some indirect legal significance. Instead of repeating these legal principles, we can mention three other principles of sustainable development:

²⁰ National Sustainable Development Strategy of Hungary, June 2007, 3-4.

²¹ KRÄMER, LUDWIG: *Az Európai Unió környezeti joga* [EU Environmental Law], 2011, Dialóg Campus Kiadó, Budapest-Pécs, 36.

²² Most of them are included in the 2007 Lisbon Treaty.

4.11. Respect for all other forms of life

Every form of life on earth is an important part of this living entity. Human beings are members of a global community of life and they share a common mission and responsibility for the future of our planet.

4.12. Satisfaction of basic physical needs (water, food, shelter and other requirements for life and dignity) for everyone

Limits and enoughness are the two most widely ignored components of sustainability. We have to separate need from want, and thereby learn when enough is, in fact, enough.

4.13. Access to knowledge

Knowledge has always been crucial to human development. Knowledge is essential for so many human activities and values, including freedom, the exercise of political power, and economic, social and personal development. The knowledge gap can be narrowed by education, awareness raising, and share of innovations, exchange of best practices and other measures.

5. SUSTAINABLE DEVELOPMENT IN THE EU

In Europe, the current rate of progress observed over the past few decades in addressing environmental issues is insufficient, too. We can identify successes and improvements (recycling, bathing water quality, reduction of greenhouse gas emissions, etc.), but also register old legacies that need further effort such as, in particular, air pollution, water issues and contaminated sites. New threats call for coherent strategies and integrated measures at all levels, such as persistent chemicals in the environment, biodiversity loss and climate change.

Many individual improvements could be identified in different regions for different issues, but the overall picture is not one of progress.²³ Some local and global thresholds are being crossed; negative environmental trends could lead to dramatic and irreversible damage to some ecosystems and services, and contribute to the degradation of the environment up to the point of no return. Public concern continues to be high, and urgent action is needed to protect the environment, particularly halting loss of biodiversity, preserving natural resources that are under pressure and protecting public health.

The EU is a leading force in the world in taking action on environmental sustainability in order to move towards a sustainable development path. The EU always repeats its commitment to addressing climate change internally and on an international scale, to promoting environmental sustainability, to reducing dependence on external resources and to ensuring the competitiveness of European economies.

²³ The European Environment – State and Outlook 2010, European Environment Agency, 2010.

Sustainable development is a fundamental goal of the European Union, enshrined in the EU Treaties since 1997. The European Union was a strong supporter of the Declaration at the 1992 United Nations Earth Summit in Rio de Janeiro. At the 'Rio + 5' follow up conference, the European Union and its Member States committed themselves to adopt SDSs. As a result of this, the Amsterdam Treaty, signed in 1997, introduced sustainable development as a core objective of the European Union as set out in Articles 2, 3 and 6 of the EC Treaty. In 2001, the European Union adopted its sustainable development strategy (EU SDS) in Gothenburg that was renewed in June 2006 and July 2009.²⁴ In 2002, the external dimension of the Strategy was added by the European Council in Barcelona and the EU was active in supporting the conclusions of the World Summit on Sustainable Development in Johannesburg.²⁵

The EU SDS defines objectives and targets intended to put the European Union on a path towards sustainable development. The EU SDS aims for the continuous improvement of quality of life for current and future generations, by linking economic development, protection of the environment and social justice, and bringing together the many strands of economic, social and environmental policy under one overarching objective.

Measuring progress towards sustainable development is an integral part of the EU SDS. Regularly adopted monitoring reports of the EU are based on a set of sustainable development indicators (EU SDIs).

The EU examines the following SDI themes:

- 1) Socioeconomic development,
- 2) Sustainable consumption and production,
- 3) Social inclusion,
- 4) Demographic changes,
- 5) Public health,
- 6) Climate change and energy,
- 7) Sustainable transport,
- 8) Natural resources,
- 9) Global partnership,
- 10) Good governance.

There are several indicators within the individual themes of the EU SDI set, but the European Union has identified 12 of them as headline indicators:

- 1) Real GDP per capita,
- 2) Resource productivity,
- 3) People at risk of poverty or social exclusion,
- 4) Employment rate of older workers,
- 5) Life expectancy at birth,

²⁴ See the website of the European Commission on Sustainable Development, available at: <http://ec.europa.eu/environment/eussd/> [cit. 2014-07-01].

²⁵ See HORVÁTH, ZSUZSANNA: Greening Production and Consumption: Towards Sustainability in the EU Integrated Product Policy, in REBREANU, VERONICA (ed.): *Sustainable Development: Utopia or Reality?* 2010, SC Editura Sfrea SRL, Cluj-Napoca, 146-156.

- 6) Greenhouse gas emissions,
- 7) Share of renewable energy in gross final energy consumption,
- 8) Primary energy consumption,
- 9) Energy consumption of transport relative to GDP,
- 10) Common bird index (Abundance of common birds),
- 11) Fish catches from stocks outside safe biological limits,
- 12) Official Development Assistance.²⁶

It is very complicated to measure to what extent the EU is on track to achieving the concrete goals for sustainability. We need to look at the whole picture, and see the parts holistically. These headline indicators are intended to give an overall picture of whether the EU has achieved progress towards sustainable development in terms of the objectives and targets defined in the EU SDS. The evaluation of progress since 2000 based on these headline indicators shows a rather mixed picture.²⁷ Detailed assessments show that the EU is moving in a moderately unfavourable direction.

Within the context of the European Union, there's a real contradiction between the EU's primary market-oriented function and the demands of sustainable development. There's a traditional hierarchy of policy objectives, where environmental interests historically have tended to be ranked below issues of economics and finance. Furthermore the principal connotation of the term when used is usually with a reference to 'sustainable growth' in this context.²⁸ In accordance with sustainable growth, three priorities have been identified by the EU to contribute to objectives and targets of the Europe 2020²⁹ Strategy:

- a low-carbon economy (focus on investments in energy efficiency, buildings, renewables and clean transport);
- ecosystem services and biodiversity (focus on preserving and maximising the potential of the natural environment);
- ecoinnovation (focus on mobilising innovation partnerships and information technology).

²⁶ Good governance contains no headline indicator as no indicator is considered to be sufficiently robust and policy relevant to provide a comprehensive overview.

²⁷ Sustainable development in the European Union, 2013 monitoring report of the EU sustainable development strategy, 2013, European Union, 8.

²⁸ In 1992, when the term 'environment' was included into the key Articles 2 and 3 of the EC Treaty for the first time, which set out the objectives and activities of the Community, Article 2 referred to 'the promotion (...) of a harmonious and balanced development of activities, sustainable and non-inflationary growth respecting the environment'. The incorporation of an environmental objective was certainly of great political significance, but the formulation 'sustainable growth' was criticized as being marginally weaker than that of 'sustainable development'. See JANS, JAN H. – VEDDER, HANS H. B.: *European Environmental Law*, Third edition, 2008, Europa Law Publishing, 7.

²⁹ The Europe 2020 Strategy, adopted by the European Council in June 2010, builds on lessons learned from the earlier Lisbon Strategy of the EU, recognising its strengths but addressing its weaknesses. The objective of Europe 2020 is to turn the EU into a smart, sustainable and inclusive economy, delivering high levels of employment, productivity and social cohesion.

We can only hope that current policy making and future trends will make EU environment policy more effective in protecting the environment and in the pursuit of sustainable development. The European integration – a regional economic integration organisation which has its roots in hard industrial cooperation – has to realize that sustainable development is not only a necessity, but also an exceptional opportunity for the European economy. Air, water, land, species, soil and seas are amongst the natural resources that are crucial to our well-being and also to our economic prospects. Natural capital is a major source of economic development; preserving ecosystems leads to jobs and socio-economic development.

6. A GLIMPSE INTO THE FUTURE

We should not delude ourselves into believing that we live in a sustainable world. Today we are living through a period of rapid change and deep disturbance. Many ecological processes are not sustained: a broad range of species is threatened by extinction, whole ecosystems are at risk, and furthermore, climate change is becoming the most challenging threat to human life. We still do not recognize the great value of many environmental systems as we are not conscious of the importance of natural ecosystems to modern societies. Moreover, we place too little value on the future, and many of the benefits from environmental protection, from sustainable economic and social organization, are far into the future.

Over the past decades, the escalating economic and ecological damage costs of not investing in environmental protection and improvement have been repeatedly demonstrated. At this point in time, when the world does not yet show clear signs of recovery from the economic and financial crisis and is facing food and energy crises, climate change and threats to social cohesion and security, it is more than ever important to have a coherent and long-term vision for our future development.

While there are considerable differences of opinion as to what an effective implementation of achieving sustainability entails, there can be little doubt that the ambitions enunciated in Rio – prefigured by the Brundtland Report (WCED) in 1987 – involve significant changes in current patterns of development, production, consumption and behaviour. Sustainable development is necessary because ‘over-development’ in the richest countries and ‘under-development’ in the poorest countries is causing harm to local, regional and global life-support systems. A global population even of the current size cannot adopt “Western” lifestyles without destroying the ecosystems of the planet.

Countries vary greatly in their demonstrated willingness and ability to address the sustainable development challenge. It seems that the likelihood of achieving a common understanding of ‘sustainable development’ or ‘sustainability’ is even more remote than ever. The present system of international relations and law can hardly be expected to master the complex challenges which will have to be balanced in the quest to attain sustainability. But they are now being addressed holistically for the first time as a result of the emergence of the concept of sustainable development. Sustainable development should, therefore, be seen as a

continuous learning process, where appropriate answers and solutions may change as our experience increases.

Unfortunately, there is no sane alternative. As Simon Dresner argues: “the alternative to the pursuit of sustainability is to continue along the present path of unsustainability, leading to disaster.”³⁰ This challenge calls for nothing less than a shift in our collective worldview from the narrowness and linearity of techno-optimism and political-economic short-termism to embrace a much more systemic and future-oriented perspective.

It is increasingly clear that in the next decades the pressure for change will unavoidably grow; life on Earth will collapse if current patterns of production and consumption continue. An environmental disaster may be looming within the lifetime of the present, and certainly within the lifetime of the next generation. We have to survive in a hostile environment – destroyed by ourselves –, and to improve living conditions for future generations. Traditional expert-driven, top-down approaches to problem solving are not flexible enough to address complex, non-linear changes in the Earth System effectively.

In order to stop self-destruction, a U-turn in human behaviour and the way of our use of planet Earth should be implemented immediately.³¹ The changes in human attitudes depend on both appropriate legislation and non-legal measures (education, debate, campaigns, etc.). A real paradigm shift would be crucial to the future of mankind.³² Individuals who accept personal responsibility for the consequences of their thoughts, choices, and actions form the basis of sustainability.³³ Peoples of the Earth have to find ways to work together to raise the level of our collective consciousness to the point where we can move steadily toward sustainability, to sustain the dignity of being human. To achieve the needed changes, the next few years are going to be crucial.

Last but not least, environmental deterioration can lead to conflict between states and instability in the international order.³⁴ Although the “Cold War” came to an end during preparations for UNCED, other conflicts emerged, largely between developed and developing countries. These conflicts have revolved around the interplay between environmental measures, economic competition, and international trade and investment flows; the developing countries’ insistence on their right to develop economically; and disagreements about how the burden of taking action to deal with common environmental concerns should be borne. As environmental obligations increasingly address fundamental economic interests

³⁰ DRESNER, SIMON: *The principles of sustainability*, 2002, Earthscan Publications, London, 173.

³¹ See for example, EHRLICH, PAUL R. – EHRLICH, ANNE H.: *The betrayal of science and reason: how anti-environmental rhetoric threatens our future*, 1996, Island Press, Washington DC.

³² Just how fundamental a paradigm shift is, of course, another highly contentious topic.

³³ Sustainable development requires us to manage the only thing we can manage – ourselves.

³⁴ See SZABÓ, JÁNOS: *Fenntarthatóság, kockázatok, biztonság* [Sustainability, Risks, Security], 2007, Zrínyi Kiadó, Budapest.

and needs, actors which do not comply with their environmental obligations are perceived to gain unfair and perhaps unlawful, economic advantage from their environmentally harmful activities in relation to those actors which are complying with their obligations.

The growing demands of states and those subject to their jurisdiction for access to natural resources, coupled with a finite available resource base, provide the conditions for increasing conflict over access to natural resources. It seems unlikely that the quest for ever-increasing growth can continue unchecked without causing serious negative effects – and those effects might come sooner than we think...

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