



## Sustainable development via environmental ethics

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### Abstract

This article analyzes the theoretical foundations, humanistic and naturalistic approaches, and schools. It deals with the sustainable development by the international community to get rid of poverty, social welfare, and environmental protection. Sustainable development is like a pyramid that comprises three sides of human life: social welfare, economic development, and environmental protection. It has a new look at human life and the environment, but the governments ignore the natural resources of the planet in their interest and are trying to get more profit. The article's basic hypothesis is that despite the many efforts of the United Nations in sustainable development, the governments are still seeking to gain more benefits in line with the humanistic approach. This approach considers only human beings as having intrinsic value. The result: the emphasis is on better implementation of sustainable development by applying a holistic ethical approach, in which humans and the environment have inherent value, and intergenerational fairness is respected in sustainable development.

**Keywords:** Sustainable development, humanistic approach, naturalistic approach, holistic approach

### Introduction

International environmental rights appeared in 1972 with the Stockholm Conference. Sustainable development was expressed implicitly in principles five and eight of the Stockholm Declaration, the correct use of non-renewable resources, and the necessity of economic and social development to ensure a good life. United Nations In 1992, twenty years later, explicitly announced sustainable development in the "Environment and Sustainable Development Declaration". After this conference, sustainable development was recognized in almost all environmental documents. The most important documents are the Johannesburg Declaration and the Rio +20 Declaration, which received the special attention of governments.

The International Court of Justice has also referred to sustainable development in the two lawsuits "Gabcikovo-Nagymaros" between Slovakia and Hungary and "Pulp Factory" between Argentina and Uruguay. Sustainable development is based on economic development, social welfare, and environmental protection. The main content of this protection is fairness between generations or the correct use of natural resources. Principle 3 of the Declaration of Rio considers realizing the right to development as meeting the fair needs of current and future generations.

Here, a question arises: is there a relationship between sustainable development and environmental ethics? If there is, which ethical approach can help to implement sustainable development better?

### Sustainable development

Sustainable development supports the development and improvement of the lives of present and future generations; it simultaneously attracts human, environmental, and ecosystem conditions (Dabiri, 64: 2018).

Indeed, sustainable development is connected as a bridge between the economic development aspects and environmental considerations. This principle seeks to combine the expansionist tendencies of governments by

carrying out their development projects with the need to protect the environment (Shamsai, 2005 11)<sup>[30]</sup>.

At the request of the General Assembly in 1983, a commission was formed, whose purpose was to present a long-term report for 2000; the report became a basis for the 1992 Rio Conference and Agenda 21. The mentioned report defines the concept of sustainable development: humanity can provide a development that meets the needs of the present generations with no harm to the future generations; the concept means limitations, not absolute limitations but limitations the current government technology and social organization have imposed on natural resources, and through the ability of organisms to absorb the human activities. However, technology and social organizations can manage progress towards a new period of economic growth. As the concept in the report suggests, we can continue economic growth until we develop better ways to manage the environment.

On December 22, 1989, the General Assembly, through Resolution 44/228, approved the establishment of the United Nations Conference on Environment and Development in Brazil in 1992. This conference raised some important issues: protection of the atmosphere, control of air pollution, protection of species diversity, proper disposal of waste materials, improvement of quality of life, human health, protection of oceans, protection of forests, and finally, financial issues to combat environmental pollution. This conference ended its work on June 14 by approving three non-binding texts: the Declaration of the United Nations Conference on Environment and Development, the Declaration of Principles on Forests, and the Action Plan for the 21st Century. 2 other conventions were approved on the sidelines of this conference: the Convention on Biodiversity and the Convention on Climate Changes, which in total this conference approved five documents (Taghizadeh Ansari, 2009: 15)<sup>[37]</sup>.

After ten years of the Rio Conference, the 2002 Johannesburg Conference titled "World Summit on Sustainable Development" was held in South Africa. It was held from August 26 to September 4, 2002, to review and

evaluate Agenda 21, which was approved at the 1992 Rio Summit. This summit examined how to fight poverty, environmental destruction, population growth, etc., and ultimately approved a document for implementing the decisions (Firouzi, 2014: 32).

Most representatives of countries and international organizations in Rio de Janeiro subsequently held the Rio +20 conference. The document of the Rio +20 conference has an international framework for sustainable development. The focus of the 2012 sustainable development conference was: “Green Economy in sustainable development”, “Poverty Reduction,” and “Institutional Framework for sustainable development”. The Rio+20 summit reflected a new model for international efforts to promote sustainable development (Dabiri, 2017: 67) <sup>[6]</sup>.

All environmental law documents are around sustainable development, environmental considerations, and the management of renewable resources. There are two explicit principles in sustainable development; first, the amount of harvesting should be equal to the amount of restoration; second, the amount of waste emissions must be equal to the natural absorption capacity of the ecosystem; otherwise, the failure of implementing natural resource management will lead to the failure of implementing sustainable development (Daly, 1990: 2) <sup>[7]</sup>. Sustainable development is inherently intergenerational. Sustainable development is a moral and philosophical commitment that focuses on the fairness of future generations (Weiss, 1992:19) <sup>[41]</sup>.

The questions of environmental thinkers on sustainable development, including Professor Weiss’s intergenerational justice of sustainable development, are the adoption of ethical and philosophical issues that deal with the interaction of humans with nature. Examining human interaction with nature is a task of environmental ethics linked to sustainable development. Here, we should examine the concept of environmental ethics first.

### Environmental ethics

Environmental ethics is a branch of applied philosophy and biological ethics that deals with human and natural relationships. It answers whether nature has intrinsic value and, if so, which parts are worthy of this value. This philosophical discipline discusses ought and ought not in human behavior with nature and the responsibilities of humans concerning the natural environment (Abedi Sarwestani, 7:2018). Environmental ethics includes our moral responsibility towards the environment and the future (Jeffery QC, 2005: 107) <sup>[16]</sup>.

Professor Weiss states, “Commitment to our deposit is a global commitment, which is inferable by accepting the global, intergenerational commitment and protecting the natural and cultural heritage for future generations. This commitment is deeply rooted in morality, cultural rules, and religious communities” (Weiss, 1984: 500).

Environmental ethics has played an effective role in developing ideas and opinions. It expresses approaches and inherent values: we should adopt a method that considers the benefit of humans and the rest of the world (Jeffery QC, 2005: 107) <sup>[16]</sup>. There are different approaches to environmental ethics; a difference of opinion in these approaches is about the inherent value belonging to humans or nature. We have to examine the approaches of environmental ethics and identify an approach that deals with the dimensions of sustainable development based on

economic development and environmental protection with intergenerational fairness to understand the subject matter of environmental ethics better.

### Ethical Approaches to the Environment

There are three approaches to the interaction between man and nature in historical periods expressed by environmental philosophers: anthropocentric, biocentric, and holistic. The holistic approach is an alternative approach that can implement intergenerational fairness in sustainable development, and many environmental problems are solvable through implementing this approach.

#### 1. Anthropocentric approach

In this approach, the environment does not exist for the sake of the environment but for protecting human beings and interests. The human person has value, and only human interests or goals are the subject of moral judgment. It has a strong instrumental approach to the environment, so protecting, cleaning, and improving the human environment are basic priorities (Fahimi, 2018: 201).

This approach is based on the value and benefit of humans. In line with anthropocentrism, experts in environmental philosophy have proposed existentialist, anthropocentric, utilitarian, mentalist, and consumerist analyses, etc. We discuss the most important of them.

#### 1.1 Humanism

Humanism, in the literal sense of the word, means the centrality of man and the integrity of ethics. As we know, only humans can reason and think about moral issues, so the discussion is about the centrality of man (Cochrane, 2006: 4).

When Christianity took over the Roman Empire, it took principles from the ancient Greek attitude towards the natural world. The influence of the Greeks' attitude on Christian philosophy occurred through the greatest philosopher of the Middle Ages, Thomas Aquinas, whose whole life integrated Christian theology with Aristotle's thought. For Aristotle, nature has a hierarchy in which beings that have less intelligence exist for the sake of beings that benefit from thinking power (Singer, 2006: 144)

It is clearly expressed in the thoughts of rationalist and empiricist philosophers such as Sir William Hamilton in the first half of the 19th century. Hamilton believed metaphysics should be rejected as unreasonable because the human brain is structurally only capable of knowing those things that belong to the material world and are limited to time and space, and human science can only be in this world. This science must be sensible and cannot be metaphysical. Even if there are truths from another level that transcend time and space, the human brain cannot know and experience them because it cannot reach beyond the temporal and spatial world. The human being does not have any faculty with the help of which he can find out truths of such a level. Since Hamilton expressed this opinion, this argument has become popular, and this forms the basis of *humanism* (Sherrard, 2: 1977) <sup>[34]</sup>

According to the Western tradition, the world of nature exists for the benefit of humans. God has dominated man over the world of nature, and for God, what we do with nature is not important. Humans are the only important moral members of this world. Nature has no intrinsic value,

and destroying plants and animals cannot be sinful unless we harm humans with this destruction (Singer, 2006: 145). Humanism sees man as the most important factor and its value as a natural value. In this approach, protecting the environment occurs through protecting human health. Some environmental experts have openly admitted that sustainable development is anthropocentric and less concerned with the rights of other species that live on the earth. Anthropocentrism always focuses on the interests of humans, and non-humans always have an instrumental value for them. Human beings come first, and human responsibilities towards non-human beings are based on human interests. The basis of this environmental ethics is human need and protection of the exploitation/damage of natural resources. Ethics allows exploitation of natural resources and pollution if it does not lead to irreversible damage and dangerous activities (Shastri, 2013 525)<sup>[32]</sup>. For anthropocentrism, human environmental rights indicate the point of view that the environment and natural resources rely only on the benefits of humans and are devoid of intrinsic value by themselves. It separates him from other natural species, especially focusing on humans' common goals and standards and considering the preservation of the environment toward human needs, not the necessities and needs of other species (Habibi, 2003: 138)<sup>[15]</sup>. An obvious example of anthropocentrism occurred in the 1947 General Agreement on Tariffs and Trade (GATT). The document discussed the "maximal use of global resources" (Qawamabadi, 2013: 414). Anthropocentrism mainly discusses the standards of human life. If there is any mention of the environment, it is only for providing a better human life, and environmental crisis finds meaning for it in line with the concept of human life. As for the dangers of nuclear fuel, this approach discusses that nuclear fuel harms human life; consequently, nuclear activities and the storage of nuclear bombs should be kept underground so that human life and standards do not face danger. But isn't it the case that humans live on a planet called Earth, and harming it is harming human life?

## 1.2 Utilitarianism

Utilitarianism was the invention of Jeremy Bentham (1832-1748), an English empiricist philosopher supposedly the founder and father of moral utilitarianism. We read his utilitarian views in his three major works, *An Essay on Government* (1776), *Introduction to the Principles of Ethics and Legislation* (1789), and *deontology* (1834). He made the only requirement for each person to acquire the greatest happiness for the greatest number of people in society (Atrak, 2004: 269)<sup>[3]</sup>. Jeremy Bentham's happiness principle gained considerable influence and credibility in the first half of the 19th century when most reformers spoke in the language of utilitarianism. Bentham's happiness principle faced many criticisms. The hedonic calculation, i.e., the difference in pleasure and pain (gains and losses) of different individuals to determine what provided the highest amount of pure pleasure, was considered a practical, if not theoretical, refusal (Sharifi Tarazkahi, 2017: 87)<sup>[31]</sup>. John Stewart Mill connects empiricism as an epistemological theory with utilitarianism as the epistemological action of the passing value of man with nature. Mill made the existence of objects dependent on the possibility of human perception (Novak, 2004: 70). Utilitarianism, in its most traditional form, is a theory of good and a theory of right. It

is having the most good, happiness, and freedom from pain and suffering (Wolff, 2008: 6)<sup>[42]</sup>.

The game theory in international treaties is also based on the interests of governments. Governments have no motivation or reason to do or refrain from international action unless it is in their interest. This situation does not make a difference where a government accepts a treaty because governments always have a logical motive to violate the treaty, and that is when they see that their interest is in its violation. Even where governments have sufficient motivation to implement the treaty (because they are in a repetitive situation, or because of the fear of guaranteeing the implementation, or because of maintaining their dignity and image), implementing the treaty is still because of expediency and political consideration with no ethical concern (Tasun, 2015: 177).

Utilitarianism is based on the subjective concept of value and allows it to calculate pleasure and pain but equally prevents its specific valuation, or anything that does not have feelings cannot experience pleasure and pain and is deprived of moral status. Therefore, oak trees, bacteria, Mount Everest, species and habitats, ecosystems, biodiversity, and the ozone layer do not have feelings, so they can have a derivative value. Bacteria and habitats provide the means of living for an individual. Perhaps they value sentient animals, but it is a value for human beings' future survival, enjoyment, and well-being. Achieving happiness, human well-being, and more enjoyment results in other lives; for example, economic growth and exclusive consumption patterns have brought many environmental costs. These damages and their results do not affect any creature, so they do not receive any record (O'Neill, 1997: 13). Some utilitarians have redefined utilitarianism: the preference for the satisfaction of individual desires as the greatest good. The preference in the free market is to follow the satisfaction of individuals (Wolff, 2008 6)<sup>[42]</sup>. The main realization of this school of thinking is in fundamental conflict with sustainable development. Utilitarians pay little attention to nature, and what is decisive for them is the benefit given to the majority in the highest amount. This is where the governments use natural resources indiscriminately and do not respect inter-generational fairness because of getting more profit.

## 2. Biocentric approach

Unlike the anthropocentric approach, the biocentric approach has paid attention to the ambitious interests of humans and the fact that some philosophers have tried to protect and support nature in two historical periods. The first group of thinkers dared to propose foundational theories and cause a fundamental biocentric movement. The theory of the end of nature (Bill McKibben), the theory of Gaia (James Ephraim Lovelock), the theory of risk society (Ulrich Beck), the theory of perception vacuum (Daniel Botkin), etc. are some examples. The second group provided the following theories: the theory of deep ecology (Arne Naess), transpersonal ecology (Warwick Fox), and other thinkers who presented views in line with the intrinsic value of nature. Here, we briefly deal with the theories of these thinkers.

### 2.1 Theory of the end of nature

Bill McKibben wrote 1989 a book called "The End of Nature". By proposing the theory of the end of nature,

Kibben considered the increase in the temperature of the earth because of human activities, and in his book, he proposed two observations: that the earth is changing rapidly, deeply, and dangerously because of our manipulations; and that it is a very wrong idea for us to think that people are few and the world is vast. We are transforming places where we are not by emitting invisible radioactive substances, toxic pollutants such as DDT, and byproducts of large-scale industrialization such as acid rain. We affect animals, rainfall, water evaporation, and soil decomposition. Every inch of the earth differs from another inch. Climate physics shows that the greatest changes occur in the North and South Poles, the farthest places from human societies. Human polluting products are the strongest force for changing the planet. This change is quantitatively so great that it becomes a change in quality.

The worst part of the global warming process is “feedback loops”, meaning that the more you increase the air temperature, the more it causes changes that increase the air temperature again. If you generate heat in the Arctic, for example, this causes the melting tundra ice and releases huge amounts of carbon into the atmosphere, which increases heat. Still, feedback loops operate in other areas as well. Over the last few centuries, we have forgotten how we are connected to the system of creation. The natural world is not as real to us as the economic world. We only stick to the economy and support it. Our politicians adjust their decisions to speed up future growth (McKibben, 2005: 154).

## 2.2 Gaia theory

James Ephraim Lovelock is an English chemist who, on October 19, 1961, received from NASA's Pasadena Laboratory an invitation as a consulting engineer in space exploration and mission to Mars (Dutreuil, 2018: 1) <sup>[10]</sup>. Gaia is a holistic idea of the Earth with a long tradition of seeing the Earth as a living and integrated whole. Gaia is a Greek goddess who describes the earth. James Lovelock chose its Greek version “Mother Nature” or “Mother Earth” from the novelist William Golding for his hypothesis. James Lovelock called his first proposal the Gaia hypothesis, but today, it is called the Gaia theory. It means that it is a general proposition that can predict and be tested against experimental facts (Lovelock, 2009: 197) <sup>[19]</sup>.

Lovelock's Gaia theory is opposed to humanism and individualism, values all beings on earth, and is opposed to approaches that consider only humans as valuable. This theory became the basis for the emergence of eco-feminisms, which condemn any change in nature.

## 2.3 Deep ecology

In 1973, Norwegian philosopher Arne Naess introduced deep ecology into environmental literature. Environmentalism emerged as a popular political movement in the 1960s with the publication of Rachel Carson's *Silent Spring*. Those already trying to preserve the environment and concerned about modern industrial technology joined them. Naess gave a speech in 1972 at the Third World Future Research Conference in Bucharest. He discussed the long history of the ecological movement and its relationship with the ethics that gave intrinsic value to nature and other creatures. Historical and contemporary movements presented two different environmentalisms: deep ecology movement and surface ecology movement (Drengson, 1995 2) <sup>[9]</sup>.

A complete going back on the anthropocentric approach is visible in the World Charter of Nature, which the General Assembly adopted on October 28, 1982 (G. A. Res. 7/37). It states that nature “and the humans as part of nature” should be respected (Tamushat, 2011: 141).

Naess and others have presented a set of eight principles to describe deep ecology. People have presented these eight principles with different backgrounds concerning the world and its creatures.

1. The happiness and prosperity of human and non-human life on earth has value (synonym: intrinsic value, natural value). These values do not need the benefit of the non-human world for human purposes.
2. The wealth and diversity of life forms contribute to realizing these values in themselves.
3. Humans have no right to reduce this wealth and diversity except to meet their vital needs.
4. The flourishing of human life and cultures depends on the significant reduction of the human population; non-human life also requires such a reduction.
5. Human intervention in the non-human world is too much, and the situation is rapidly deteriorating.
6. Therefore, policies must be changed. These policies affect the basic economic, technological, and ideological structures and produce a profoundly original state.
7. Ideological change mainly results from understanding the quality of life (living in situations with inherent value). This ideological change increases the commitment to living standards.
8. Those who endorsed the previous points must make efforts for the changes directly and indirectly (Devall, Sessions & Smith, 1985: 70) <sup>[8]</sup>.

After Arne Naess, philosophers such as Norton, Taylor, and Pelmod-Holmes developed the theory of deep ecology. In his article “Weak Anthropocentrism”, Professor Norton has tried to solve environmental crises with environmental ethics. According to him, “Ontological commitments to nature have intrinsic value, and this is provided by the weak anthropocentrism”, so that it can criticize the current destruction by including human concepts of nature” (Norton, 1984: 148) <sup>[22]</sup>.

Various biocentric schools of thought have emphasized that the environment has intrinsic value and that this value does not seek the interests of humans but attends to the nature of intrinsic value. From this point of view, all anthropocentric domestic and international rules should be changed.

## 3. Holistic approach

Environmental philosophers have presented an alternative approach that differs from the previous two approaches. It protects nature and human interests and tries to solve environmental crises in a new way; this approach returns to the principle of nature. The “holistic” approach balances the values of nature and human interests. The “environmental unity principle” is prevalent in this theory. Man is a part of nature, and nature is also a part of man. The interests of one end up with the interests of the other and vice versa. Everything affects everything in the environment. The world comprises interdependent beings, not a collection of separate objects or people (Fahimi, 2018: 211). Thus, moral and religious orders consider an additional responsibility for humans to protect the environment, according to which the

man is not the owner but the manager who has to manage it in a good way (Kiss, 2004: 13). As this approach sees, there is no serious difference and conflict between environmental protection and human rights, because humans are a part of the ecosystem and may benefit from natural resources if they do not cause inescapable damages. They are committed to protect the rights of other biological and non-biological species. This approach does not consider man the only creature on earth; there is no creature other than man with intelligence and the ability to protect the environment. Therefore, man as a manager must protect the environment, whether it is beneficial for him or her. This approach seeks to protect the environment through human rights and provide human rights through protecting the environment (Shelton, 1992: 105) <sup>[33]</sup>.

According to the environmental laws, the current generation may use and benefit from the resources of the earth and outer space. Still, using this right must be under the regulations, considering the long-term impact of their activities and preserving the main resources and the global environment to benefit future generations of humanity. Indeed, this definition expresses fairness in using resources (Mohammadi, 2016: 137) <sup>[21]</sup>.

As the holistic approach emphasizes, the present generations may benefit from the resources of the planet. Still, this use must be done to protect the interests of future generations. The principle of intergenerational fairness is a concept that pays special attention to the rights of future generations toward ecological preservation.

#### **Sustainable development and principles and concepts of international environmental law**

There is no comprehensive convention on sustainable development deals with its legal position, but many principles of international environmental law apply to clarify this concept. These principles, whose foundation is mainly a long-standing international practice, oblige all members of the international community, although their binding is different. These principles supposedly make up a unified whole because each complements the others. We discuss these principles below and some relevant concepts.

- **Principle of sovereignty:** Governments have the right of exclusive sovereignty over their natural resources, but exercising this right should not cause damage to the environment of other countries or regions outside the jurisdiction of governments. Notably, the Stockholm Declaration was a first document whose principle 21 specified that sovereignty over natural resources must be applied in an environmentally acceptable way. Article 2 of the Rio Declaration then repeats this, with brief but useful changes. So, it is possible to guide countries towards the general obligation to protect the environment and ultimately to implement sustainable development by relying on Article 21 of the Stockholm Declaration and Article 2 of the Rio Declaration, which has its roots in long-standing practice.
- **Principle of commitment to cooperation, information, and help in environmental emergencies:** Principle 5 of the Rio Declaration obliges all governments and all people to cooperation as a mandatory condition for sustainable development to remove deprivations. Article 9 of the Rio Declaration has required strengthening cooperation in line with the

principle of sustainable development or reforming and improving the understanding or exchange of scientific information and correct understanding of technology and development (in coordination); also, principle 27 of the Rio Declaration is based on the universal and general commitment of governments in cooperation to achieve sustainable development (Pourjafar, 2010: 63-64).

- **Principle of protection of the environment:** Since the regulations have accepted exploiting the species of life, both plant and animal, the term protection has practically become popular. It implies the “level of sustainable desirability of products“ based on which the exploitation of natural resources should be done so that it does not harm the renewable limit of that resource and provides the foundations for the sustainability of those natural reserves. Recent texts have supplemented or replaced protection with “sustainable development“, which pursues, in a more reassuring state, the production of exploitable natural resources and the protection of all species of plants and animals (Habibi, 2014: 76-77).
- **Principle of prevention:** both the experience and the opinion of scientific experts prove the principle of prevention is a “golden rule“ for the environment both ecologically and economically (Habibi, 2014: 76). Without doubt, it also has a prominent role to protect the rights of the present and future generations in the sustainable development.
- **Precautionary principle:** Policies should be based on precautionary action to achieve sustainable development. While the prevention principle had not yet left its basic effects on all environmental protection regulations, the precautionary principle was considered and developed more. We can see this principle as one of the most important initiatives of the Rio Declaration (Rousta, 2007: 121) <sup>[29]</sup>.
- **Polluter pays principle:** Since developed countries have been responsible for the largest share of global environmental destruction by the pollution caused by industrial activities, accepting the polluter pays principle helps the developing countries have another legal basis to demand “debt to nature“ and take steps towards the rights of future generations, as basic goals of sustainable development, with more seriousness and perseverance (Habibi, 2005: 77).
- **Concept of the common heritage of humanity:** Based on this concept, all governments are obliged to protect the regions' environment as the common heritage of humanity and not destroy or pollute it. Hence, these regions cannot be under the exclusive sovereignty of governments. Still, they must be protected and utilized to promote the welfare of all of humanity (both present and future generations) without prejudice.
- **Concept of the rights of future generations**  
International environmental law has also recognized the rights of future generations to enjoy suitable living conditions on the planet. It considers the destruction

and pollution of the environment, because of its negative consequences, as a violation of the rights of future generations and warns governments of it (Rousta, 2016: 41). Protecting the rights of future generations is a basic concept in many international documents on the environment and is of importance in the Stockholm and Rio declarations.

- **Concept of common but different responsibilities**

This concept is mentioned for the first time in introducing the Stockholm Declaration. The Stockholm Declaration summarizes the state of the world today. It foresees different tasks for each of the developing and developed countries, which, despite being different, lead to the protection of the environment. Since it has mentioned environmental considerations in the development process, the ultimate goal of the Stockholm Declaration is to bring northern and southern countries to sustainable development in two different ways. Article 7 of the Rio Declaration states: "Countries must work together for maintaining, protecting and restoring the integrity and health of the planet's ecosystem." Countries have a common but different responsibility despite their various roles in destroying the global environment. Developed countries have embraced the impact of their technological innovations in the international pursuit of sustainable development, considering the pressures of their societies on the global environment and their technological advancements and resources" (Pourhashemi, 2012: 162).

- **Challenges of achieving sustainable development**

The previous generation left immense wealth for the present generation, but seemingly, this generation cannot fulfill its obligation towards the future generations and leave something worthy for them. Nowadays, instability has spread at different levels in human life, damaging humans and living beings. We witness globally the destruction of the ozone layer, acid rains, greenhouse effects, nationally extensive exploitation of resources and mines, industrial policies and urbanization, local agricultural issues, illegal hunting, and habitat encroachment, all of which result from human activities, human being must take his steps to move towards sustainable development at these levels.

Futurists' emphasis on balancing has neglected four important factors: population, energy, resources, and environmental pollution. And man's effort to develop and progress, which is necessary for his life, must consider the environmental crises and challenges. When emphasizing the endless environmental accumulations cannot find an experience of environmental sustainability in all the world's industrial economies, and the term sustainable development becomes a mere quibble, the efforts should be redoubled to make the impossible possible in the way of sustainability. Notably, human survival requires considering the present and future generations' needs.

Acquiring new knowledge to access alternative sources of information and to discover new perspectives and strategies along with new tools, techniques, and communication for comprehensive development and correct management in decisions and processes of sustainability are the two basic issues of the sustainability challenge.

Therefore, some challenges that sustainable development faces in the international environmental law are:

- **Contrast between development and environmental protection**

For example, the International Court of Justice tried, with the Gabcikovo-Nagymaros project in 1997 (a dispute between Hungary and Slovakia), to moderate this contrast in its decision. The court connected economic development and environmental protection with these words: "The new norms and standards of international environmental law should be observed both when governments intend to carry out recent activities and when continuing an activity that started in the past. A required compromise between economic development and environmental protection lies in sustainable development. A government that intends to carry out economic and development operations must first considering the existing rules, and if a new authoritative rule appears during implementing economic activity, it must be considered in implementing that activity" (Gabcikovo, 1997: 107)<sup>[13]</sup>

- **The conflict between the interests of developing countries and developed countries and the lack of necessary convergence between them**

For example, the 19th special session of the United Nations General Assembly from June 23 to 27, 1997, the Summit Earth + 5, was held at the United Nations headquarters in New York for evaluating the implementation of its approved agreements and deciding on necessary measures to prevent further environmental destruction and achieve sustainable development after five years since the 1992 Rio conference and based on the decision of the same conference, with the participation of the heads and representatives of 185 countries and to investigate and analyzing the achievements of the Rio Conference. This meeting ended its work by achieving no results and by stating a plan for implementing Agenda 21 because of the existing differences between developing countries and industrialized countries in providing financial resources and transferring the technology to developing countries, and differences over renegotiations regarding Agenda 21, on the one hand, and differences between the United States and the European Union on setting a timetable for reducing the production of greenhouse gases on the other.

The development of technology has given power to humankind by which it has gained the ability to change its environment. The economic development of countries through the power of technology usually ignores the considerations and effects of the environment in its initial stages, and it has imposed irreparable environmental damage such as climate change and endangering the health of living beings and various types of pollution on our planet. One of the best methods and solutions for reducing these problems that seriously threaten the future life of humankind is to return to nature and take inspiration from it in planning human life.

Where the most harmless and clean technologies and the most complex research alone cannot lead society toward sustainable development in the long term, the best solution is environmental ethics. Environmental ethics refers to behaviors whose observance in production, consumption, and other aspects of life leads to the least waste and environmental damage while not causing problems to the

basis of life. This approach considers a kind of planning and design that gives importance to the natural cycle of life based on the use of the means that nature has provided to man (Partoi, 2001: 124).

Taking a model from the way humans know and communicate with their environment in the past, dealing with a type of production that harms not only the environment but also serves other systems, paying attention to solar energy and biodiversity make up a framework for sustainable development in the light of environmental ethics.

Thus, William McDonough *et al.* (1996) presented Hanover principles to provide ethical standards for sustainable design. McDonough *et al.* emphasize that we must accept the limitations of human creativity and ingenuity instead of insisting on a positive view of the role of science. The provided solutions will be effective when humankind stops trying to dominate nature and looks at nature as a model (Shamsaei, 2015: 11).

The Hanover Principles include

1. Insisting on the rights of humanity and nature to coexist in healthy, supportive, diverse, and sustainable conditions.
2. Recognizing mutual relations. Elements of human design interact with and depend on the natural world. Design considerations should be expanded to recognize even remote side effects.
3. Respecting matter and spirit and attention to the existing and future connection between the material and spiritual consciousness of objects and places.
4. Accepting the responsibility for the consequences of design decisions in the prosperity and livability of natural and symbiotic systems.
5. Producing objects for long-term use so that problems of inferior quality of products, processes, or standards are not imposed on future generations.
6. Removing garbage or waste, optimizing and evaluating the complete life cycle of products and processes by following the example of natural systems in which nothing is void or redundant.
7. Relying on natural energy sources. Like the living world, the human world must receive its eternal power from the eternal power of the sun and benefit from this energy effectively and safely for responsible use.
8. Accepting the limitations of the design. Nothing man-made lasts forever, and design does not solve all problems. Those who plan or build something must be humble in front of nature and accept nature as a model and guide, not as a source of trouble that must be controlled.
9. Seeking constant progress by sharing science and knowledge and encouraging open and extensive communication between colleagues, customers, manufacturers and users. This feature will strengthen the moral responsibility for sustainable development and provide the possibility of creating a connection between the natural process and human activity (Asl Falah, 2013: 84-85).

### Conclusion

Considering the inextricable relationship between environmental ethics and sustainable development investigated in this article, the holistic approach of environmental ethics can remove the environmental crises

caused by excessive consumption of non-renewable natural resources.

The holistic approach is looking for a way to resolve the difference of opinion on the inherent value of humans in the anthropocentric approach and the inherent value of nature in the biocentric approach. According to the holistic approach, the destruction of the environment is not prohibited but irreparable damage to the environment. Economic activities that cause irreparable damage to the environment are prohibited. Indeed, the holistic approach tries to implement intergenerational fairness in its genuine sense, which is the right to benefit from natural resources and the rights of future generations. The ideal of sustainable development pursues intergenerational fairness in economic development that does not cause irreparable environmental damage and does not violate future generations' rights by using resources.

Thinkers of environmental ethics are trying to transform the issues of environmental ethics from theoretical to practical. The first step sustainable development took to solve environmental crises is not visible on the sides of the pyramid of environmental-ethical sustainable development. Still, we can achieve environmental ethics by integrating economic development and environmental protection. Sustainable development strategy is economic development in which natural resources are protected for future generations.

Sustainable development emphasizes economic-environmental integration, environmental protection, intergenerational commitment and intra-generational and intergenerational justice, quality of life, and participation of individuals in the development process. It becomes realized when it improves the quality of life and makes the planet habitable. As for improving the quality of human life, development policies must be planned in such a way as to provide the basis for the excellence of all members of society, create the background for their physical and mental health, provide human beings with educational, health and welfare facilities at the level of a decent standard of living, and found political, economic and judicial security for him in such a way that proper human relations are established between family members and the entire society at the local, organizational and national levels. As for protecting the planet's habitability, it is a development desirable which preserves life support systems and ecological processes that cause the continuation of the cycle of basic elements (air, water, soil, etc.) and the diversity of biological species, guarantee the sustainability of renewable resources, minimize the consumption of non-renewable resources and respect the carrying capacity of the earth and ecosystem. We expect that sustainable development will leave its theoretical state and become an important fundamental principle in international environmental law to become practical.

### Reference

1. Abadi Sarwestani A. Environmental ethics and its role in protecting nature. *Iranian Nature*, 2017, 3(2).
2. Asal Fallah M. Green Design, Green Life. *Achievement (Industrial Design Magazine of Art University)*, 2003, 19.
3. Atrak H. Ethical Utilitarianism. *Review and Opinion Magazine*, 2004, 37-38.
4. Beery T. Ecozoic Era. *Western Tourism Magazine*, 2006, 33.

5. Cochrane A. Environmental ethics. Online encyclopedia entry, 2008.
6. Dabiri F. Sustainable development from the perspective of international environmental law. *Human and Environment Quarterly*, 2017, 44.
7. Daly HE. *Toward some operational principles of sustainable development*. Elsevier Science Publishers B.V, Amsterdam-printed in the Netherlands, 1990.
8. Devall B, Sessions G, Smith G. *Deep Ecology*. Salt Lake City, 1985.
9. Drenson A. *The deep ecology movement*. University of Victoria, 1995.
10. Dutreuil S. James Lovelock's Gaia hypothesis. *A New Look at Life on Earth for the Life and the Earth sciences*, 2018.
11. Fahimi A. Intrinsic and instrumental value in environmental philosophy: from philosophical approaches to legal strategies. *Philosophical-Theological Researches*, 2008, 41.
12. Firouzi M. *Right to the Environment*. Jihad Daneshgahi Publications, 2004.
13. Gabcikovo – Nagy Maros project (Hungry Slovakia), 1997. *Icy*, 7, 107 (Sept, 25).
14. Golding MP. *The Concept of Right: A Historical Introduction*. Translated by Mohammad Rasekh. Tehran, *Legal Research Magazine*, 1999, 25-26.
15. Habibi MH. Right to enjoy a healthy environment as humanity. *Faculty of Law and Political Science Journal*, 2003, 60.
16. Jeffery MQC. Michael. *MQJICEL*. VOL2, 2005. Available.
17. Kiss A. *Droit international de l'environnement*. Pedone, Paris, 2004.
18. Lovelock J. Hands up for Gaia hypothesis. *Nature*, 1990.
19. Lovelock J. *The Vanishing Face of Gaia*. Basic Books, 2009.
20. McKiben B. The End of Nature. *Western Tourism Magazine*, 2004, 24.
21. Mohammadi M. Studying Human Right on the Environment. *Bi-Quarterly Journal of Islamic Human Rights Studies*, 2016, 12.
22. Norton BG. *Environmental Ethic and Weak Anthropocentrism*. ISBN: 0163-4275, 1984.
23. Novak G. *Empiricism*. Translated by Parviz Babaei. Tehran: Azad Mehr Publishing, 2017.
24. O'Neill O. *Environmental Value Anthropocentrism and Speciesism*. The White Horse Press, 1991.
25. Partovi P. Environmental ethics and sustainable development. *Honar Namah (specialized magazine of Art University)*, 2019, 12.
26. Porfashmi SA, Arghand A. *Generalities of International Environmental Law*. Tehran: Publishing Dadgostar, 2012.
27. Pourjafar MR, Khodaei Z, Pour Khairi A. Analytical approach to understanding the components, indicators, and features of sustainable urban development. *Journal of Social Development Studies of Iran*, 2018, 3(3).
28. Qawamabadi MH. From Rio to Rio: In the pursuit of sustainable development. *Legal Researches Magazine*, 2012, 62.
29. Rousta FZ. Analyzing the concept and requirements of sustainable development in the Johannesburg document and its impact on the country's environmental laws and regulations. MSc thesis in environmental law, Islamic Azad University, Tehran Science and Research Branch, 2007.
30. Shamsai M. International economic law and the principle of sustainable development. *Journal of Public Law Research*, 2006, 19.
31. Sharifi Tarazkahi H. *Human Rights Theories and Procedures*. Tehran: Mizan Publications, 2017.
32. Shastri S. Note and comments (Environmental ethics anthropocentric to eco-centric approach: a paradigm shift). *Journal of the Indian Institute*, 2013, 55(4).
33. Shelton D. Human Rights, Environmental Rights, and the Right to Environment. *Stanford Journal of International Law*, 1992, 28(1).
34. Sherrard P. *Modern sciences and the dehumanization of man*. Javidan Kherad. Translated by Hadi Sharifi, 1977.
35. Singer P. *Environmental ethics*. Naqd and Nazar magazine. Translated by Alireza Al Boyeh, 2007.
36. *Stockholm Declaration on the Human Environment of the United Nations Conference on the Human Environment*, 1972.
37. Taghizadeh Ansari M. *International Responsibility of Governments in Environmental Protection*. Rah Vakalat Magazine, 2009, 4.
38. Tamoshat C. *Human Rights*. Translated by Hossein Sharifi Tarazkahi. Tehran: Mizan Publications, 2012.
39. Tesson F. *Philosophy of International Law*. Translated by Mohsen Mohebi. Tehran: Shahr-danesh Publications, 2014.
40. Weiss EB. *The planetary trust: conservation and intergenerational equity*. Georgetown University Law Center, 1984.
41. Weiss EB. In fairness to future generations and sustainable development. *American University International Law Review*, 1992, 8(1).
42. Wolff BG. *Environmental Studies and Utilitarian Ethics*. University of Minnesota Conservation Biology Program, 2008, 34(2).