

Sustainable Development from Past to Present

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Introduction

Our planet is the product of an evolutionary process that has continued for millions of years. With the emergence of human beings at the end of the formation stages of our planet, the history of mankind has begun. In this context, human-nature relationship has started simultaneously with human existence in the earth. Throughout human history, human-nature relationship has continued in various ways. People have been in a relationship with their environment throughout their entire life since their creation. This relationship has continued in various ways in accordance with the needs, demands, and expectations of people. In the early times, in the relationship between the environment and human being, the environment was the strong side. Because human beings were in need of environment to meet their needs and survive. Therefore, they were weak and powerless in the face of the environment. However, as time passed, this relationship turned to harm the environment with the change and development of mankind over time, and the desire to dominate the environment in line with the changing needs and demands of people (Altınışık, 2016; Özerkmen, 2002).

From the time of their existence, human beings meet their needs such as hunting, finding food, sheltering and dressing from the nature. The relationship between human and the nature was based on the provision of vital activities. But with the advancement of time, as a result of the change of people's needs and expectations, the desire to have more luxurious living standards, and the competition between countries and societies, the relationship between human and the nature has turned into a ruthless use of the environment, which only one side would benefit for a certain period of time. Especially with the industrial revolution and noticing that the results of the steps taken for industrialization threatened human health and risked the future by forcing the capacity of the planet, taking measures to stop this bad course has become mandatory. Although the steps taken in the name of modernization and industrialization using the nature and resources unconsciously provide short-term welfare, but in the long-term, it is understood that it is very risky for the future of humanity. As environmental problems started to threaten the livability of the planet, the environmental problems and their impact on public health had to be addressed on a global scale (Yeni, 2014; Alagöz, 2004).

In the twentieth century, the rise of environmental damage to the upper levels caused by unconscious steps in the name of development under the influence of the rapid growth of population with industrialization and urbanization brought the concerns about human health and the future of the world. As a result of the destruction of natural life and the unconscious use of resources, food and water shortages and, consequently, many fatal problems such as hunger, disease, and poverty began to emerge in some regions around the world. In addition, the melting of glaciers, changes in the climate, destruction of the ozone layer, and global warming to a serious extent have started to threaten the world today and tomorrow. With the emergence of these problems, it has been recognized by all the societies in which the self-renewal capacity of the world has been damaged. In the case of continuation of this trend, the world has begun to search for solutions as soon as it is understood that it will lose its character of being a habitable planet. In the absence of measures to address these problems, solutions have been started to be searched on a global scale as a result of realizing that it will threaten the whole world over time. By understanding that the solution to these problems can only be found if every individual, every society, and every state in the world act together in cooperation by taking certain responsibilities, the states have come together in international conferences and started to produce solutions. The concept of Sustainable Development has come to the fore as a result of the efforts made for the protection of our planet today and tomorrow (Ulusoy & Vural, 2001; Altunbaş, 2003; Karabışık & Armağan, 2004; Başol, Duman, & Çelik, 2005; Baykal & Baykal, 2008).

Sustainable Development

Sustainable development; is a matter of different disciplines which is formed by the combination of sustainability and development concepts.

Sustainability

The concept of sustainability; is a concept used for many areas such as environment, economics, education, the use of natural resources and energy resources, national and international government policies, production, and society. As a concept, sustainability for the first time was included in the World Charter for Nature document, which was adopted in 1982 by the International Union for Conservation of Nature (IUCN). Sustainability in this document; was expressed as the most appropriate way to sustain the ecosystem, land, water and atmosphere sources and organisms that individuals benefit from throughout their life and to carry out the process of sustainability without harming the ecosystems (Yavuz, 2010).

Sustainability in the general sense; is the continuity capacity of a condition or phenomenon. Therefore, the concept of sustainability is a concept that expresses the process because the ecosystem concept is meant to ensure that people benefit from

many phenomena such as atmosphere, water, and land resources for generations (Eryılmaz, 2011).

Development

Development concept as meaning; can be expressed as growth, modernization or structural change to a better state. Development is not a change, activity or social development in any area. As known, individuals and societies are constantly developing and changing depending on changing conditions of the world. Social structure, customs and traditions, beliefs, attitudes and behaviors of individuals, and social values and norms are in a continuous change depending on time. Therefore, the concept of development has a very wide field of influence and can be defined as all of the interventions to improve the change and development processes in a positive way.

In other words, development is all of the attempts to get a better state than the current state of individuals or societies. It is a wide-ranging concept that covers the whole of the efforts made for the positive development of the economic, social and cultural structures of societies (Tolunay & Akyol, 2006).

Definition of Sustainable Development

Mankind has maintained his life in relation with the environment from his existence until this time. From the first age to this time, people have met their needs from the nature. As time went by, with the advances in technology and science, people have used nature generously in the way of achieving the level of advanced civilization. Depending on the requirements of the era with the increase in population, this usage amount has reached the highest level. However, the nature also has a capacity. As a result of the unconscious use of the resources used for living in better standards, the non-renewable nature of some resources, the destruction of resources as a result of unconscious use, and even the consumption of them, an unhealthy and improper environment not suitable for living has been created in many parts of the world (Engin, 2010).

The number of people living on earth is increasing day by day. The number of people living in the world in 2050 is expected to reach 9 billion. The increase in the number of people means the need for resources to meet housing, nutrition, care, education, and job opportunities. When the growth rate of the world population is examined, the rise in the amount of increase stands out in the last century. The rate of increase that was 0.65% in the 1900s has reached 2.09% in 1970 and 1.70% today. The increase in the production and consumption activities brought by the rapid population growth pushes people to consume more natural resources. Problems such as environmental pollution, industrialization, distorted urbanization, and so on are some of the problems that rapid population growth caused. Today, around one billion people worldwide face poverty,

unemployment, and hunger problems. In addition, a considerable number of people have been deprived of the right to education, which is a basic need, for various reasons. This number is rising in proportion to the increase in the world population. These and similar problems, which prevent society from living in prosperity, caused the concept of sustainable development to be on the agenda. (Sarıçoban, 2011).

Sustainable development is a concept that has debates on its definition due to its wide range of meaning. Since the sustainable development has been adopted by many masses such as governments, large enterprises, companies, social reformers and environmentalists etc., the field-centered definitions by each audience have been made (Giddings, Hopwood, & O' Brien, 2002).

Although there are many definitions of sustainable development, the most valid definition is defined in 1987 in the Brundtland Report of the World Commission on Environment and Development. In this report, sustainable development was defined as meeting today's needs in a way that does not eliminate the capacity of the next generation to meet their needs (Brundtland Report, 1987).

Dimensions of Sustainable Development

When we look at the definitions of sustainable development, international texts, and sustainable development approaches, sustainable development has three dimensions: economy, environment and society. Only the development of the economy, society or the environment does not express sustainable development. In order for sustainable development to take place, people must live in a healthy environment, in economic prosperity, and social equality. For the realization of sustainable development, the sustainability of these three dimensions must be ensured simultaneously (Sandel, Öhman, & Östman, 2006; Alkış, 2007).

Environmental Sustainability

Environment is a setting in which living and nonliving beings are connected to each other by various relationships, they interact and are influenced by each other. The environment is a structure that contains both living and nonliving elements. While the living beings of the environment can be plants, animals, microorganisms, people, the nonliving beings of the environment can be soil, air, water, climate, underground resources that is living things except everything. The environment is not a static structure. On the contrary, the environment is a dynamic structure that contains living and nonliving elements and is affected by social, cultural and physical changes. Environment is the whole of interactions and relationships between people with other people, people with plants and animals, living beings nonliving beings such as air, water, underground resources, climate and so on (Ak, 2008).

Since its existence, humanity has lived in a relationship with the environment. This relationship was initially in the form of meeting the needs such as nutrition, shelter or protection. The center of the human-environment relationship was in the form of meeting the vital needs of man, but as time progressed, the shape of the human-environment relationship changed. Until the industrial revolution, the impact of people on the environment was not destructive. With the effects of economic developments, urbanization, and industrialization, environmental pollution increased to higher levels. Over the years, many factors such as technological developments, population growth and unplanned urbanization have increased the impact of human on the environment to destroy natural life. This destruction has not only limited the ability of nature to renew itself, but also began to threaten life of living beings (Aslan & Çınar, 2015).

Many reasons such as the loss of livability of the world, environmental pollution causing to deaths, global warming, and climate change have led people to take measures. In the 1950s, some work was initiated to stop this miscarriage. The concept of sustainable development has emerged in this search for solutions. The environmental sustainability, which is one of the three dimensions of sustainable development, needs to be ensured for the realization of sustainable development.

Sustainability of the environment is that we can leave the next generations in a more livable environment by improving the environmental conditions that we have. This is only possible with less environmental damage (Alkan, 2015). Some of the actions required to prevent environmental damage and ensure the sustainability of the environment are listed below:

- Protection of natural resources,
- Biodiversity and protection of endangered organisms,
- Reducing the concentration of carbon dioxide in the atmosphere as a result of the use of nonrenewable energy sources and motor vehicles,
- Widespread use of renewable energy sources,
- Reproduction of green areas,
- Prevention of environmental pollution (water, soil and air pollution),
- To ensure that waste is recycled, thus reducing the use of raw materials,
- Preventing climate change, which is the most significant impact of global warming by taking serious measures for global warming,
- Supporting environmental oriented activities by increasing the number of

environmental organizations

- Minimization of ecological footprint, (Dinç, 2015; Tosunoğlu, 2014; Ergün & Çobanoğlu, 2012; Koçak & Balcı, 2010; Özçuhadar, 2007; Toprak, 2006; UNESCO, 2006).

Environmental sustainability can be expressed in general as that the speed of consumption of natural resources should be slower than the speed of self-renewability of the nature and that the practices that harm the natural life are kept under control. The number of people living in the world is increasing day by day and the increase in the use of natural resources in line with this increase is an obstacle for the sustainable environment. For this reason, natural resources should be protected and the consumption rate should be kept at a level that will not exceed the rate of self-renewal.

The vast majority of people provide their energy needs from fossil fuels such as coal and oil. As a result of the use of fossil fuels, various toxic gases accumulate in the atmosphere. Particulate matter and toxic gases accumulated in the atmosphere due to the use of fossil fuels and motor vehicles cause respiratory diseases, lung problems, cardio problems, cancer and even death in individuals (Karakas, 2015).

The accumulated gases in the atmosphere due to the use of fossil fuels and motor vehicles not only affect human health, but also disrupt the balance of natural life. Especially after the industrial revolution, the greenhouse gases such as CO₂, N₂O, and CH₄ that's concentration has been highly increased in the atmosphere increases the surface temperature due to the excessive greenhouse effect. Global warming as a result of the increase in earth temperature is a serious threat to the future of the world. Global warming causes climate changes. Extreme weather temperatures in different regions of the world, melting of glaciers and hence the rise of sea and ocean levels, heating of sea and ocean waters and damage to the aquatic ecosystem, extreme temperature in one part of the world, floods and storms in another part of the world, the extinction of the plant and animal species that are endangered due to climate change caused by global warming, are just a few of the damages of global warming. Therefore, renewable energy sources (solar energy, geothermal energy, etc.) that we call clean energy sources found in natural life should be used instead of fossil energy sources (coal, oil, natural gas) as a requirement of a sustainable environment (Sever, 2013; Akin, 2006)

Water, soil and air pollution to reach harmful dimensions prevent environmental sustainability. These sources, which are polluted for many reasons such as waste, industrial enterprises, also threaten the health of living. Recycling policies should be implemented to end waste pollution. Recycling of waste will reduce resource use for raw materials and prevent environmental pollution and therefore many problems caused by environmental pollution (Korkmaz, 2015).

The sustainability of forests is very important for the sustainability of the environment. Nowadays, forested areas are destroyed by many reasons such as pollution caused by enterprises, firewood supply, grazing, mining activities, and forest fires caused by people's deliberate or careless behavior. Destruction of forests means destruction of natural life. In addition to providing oxygen and raw materials, our forests are the sine qua non of a healthy world with many other benefits such as preventing global warming, preventing air pollution, preventing erosion, protecting biodiversity, providing job opportunities, making life healthy, and preventing disasters such as floods, landslides etc. Therefore, conservation of our existing forests planting trees should be supported on a global scale (Sever, 2002; General Directorate of Forestry, 2017).

Another important issue for the sustainable environment is the ecological footprint. The ecological footprint is expressed as the amount of fertile water and land needed to compensate for the resources and wastes that people use throughout their lives, or the amount of productive space people use throughout their lives. When the definition of ecological footprint is considered, it is seen that the concept is based on the carrying capacity of the world and the main purpose is to ensure the continuity of the environment (Ünal & Bağcı, 2017).

The importance of environmental organizations for a sustainable environment is indicated by the Agenda 21 published in the Conference on Environment and Development in Rio de Janeiro in 1992. Environmental organizations play a very important role in addressing environmental pollution and other environmental problems and in solving these problems. As a result of the activities of these organizations, raising individuals who are aware of environmental problems and taking an active role in the solution of environmental problems is very important in terms of ensuring sustainability because sustainable development can only be realized when all individuals are involved in economic, social, and environmental sustainability activities (Uzun & Sağlam, 2007).

Social Sustainability

Society is the whole of the relationships formed by a large number of people who maintain their existence for a certain period of time at a known physical environment, engage in activities to meet the necessary requirements for the survival, constantly interact with each other and the environment in which they live, and take roles in the forming and sharing process of a common culture. A general definition is the community of individuals living in a certain location, with a valid written legal system of its own, covering many sub-social groups, and with a unique economic system. In a nutshell, society is a community of people who have existed for a long time, who exist in a certain region and share a common way of life (Aslan, 2001).

Social sustainability, which is one of the three main dimensions of sustainable development, is the capacity to provide welfare, security, health and education to every individual in society without any social class or gender discrimination. The meaning of social sustainability for a region is the capacity to support the effective communication of different stakeholders with each other and the aim of achieving the same objectives at all levels through the close relationships of institutions and organizations. Sustainable societies occur only when formal and informal processes, systems, structures, and relationships promote the creation of healthy and livable communities in today's and future generations (UNESCO, 2006; Hürol, 2014).

The necessity of social sustainability is to ensure that all individuals living in the world have equal rights such as health, education, justice, shelter, freedom and other social services regardless of language, religion or gender. Sustainable societies are productive, healthy and determined societies where all individuals live in prosperity. However, although societies who have income distribution disparity, unrest, and health problems seem to have experienced short-term relief or recovery with some temporary solutions, sustainable societies that are necessary for sustainable development cannot be provided unless this improvement is continuous (Türer, 2010).

In sustainable societies, each individual should have equal income distribution and living standards. In this context, poverty is the biggest problem that prevents the sustainable development in social dimension. For this reason, a development movement that does not eliminate poverty is not sustainable. Of course, poverty is not the only problem. Many problems such as lack of education, unemployment, problems in the health system, and unreliable residential areas hamper the creation of sustainable societies. For social sustainability, these problems need to be eliminated by permanent solutions (Aydoğan, 2010; Kara, 2017).

In order for the society to be sustainable, the living standards of future generations are at worst as the living standards of the people who are living at the moment. Some of the opportunities that should be provided to all individuals for a sustainable society are listed below.

For all individuals;

- Ensuring gender equality and social justice,
- Equal treatment of each individual regardless of language, religion or race,
- Ensuring the right to health and education,
- The right to safe and peaceful life,

- Establishment of healthy settlements,
- Taking responsibility at the social level to increase the welfare level of individuals,
- The right to benefit from social services,
- Ensuring the cultural diversity.

Social sustainability is to increase the welfare of every individual in society and thus to benefit from individual potentials in full efficiency because the success of societies is directly proportional to the personal success of each individual. Social development means investing in people. For this reason, all the obstacles that cause the development of individuals need to be removed because only people who guarantee quality of life can serve the society more productively. Every individual has the right to grow in a safe environment, to have the opportunity to develop his/her skills, to have a good education, and to benefit from health services equally with all other individuals. Only when these conditions are fulfilled, individuals can meet their needs, and if they have a profession with sufficient income, they can be beneficial to themselves, their families and thus to society and thus social sustainability can be achieved (Altuntaş, 2012; Özmete, 2011; Hoşkara, 2007; Atıl, Gülgün, & Yörük, 2005).

The productivity of societies is very important in the realization of sustainable development. The productivity of the societies depends on the productivity of the individuals who make up the society. Therefore, the social functioning of individuals should be increased. For this reason, society has responsibilities other than providing a safe place to live. Day cares and nurseries where children of working parents are well looked after and begin their initial education, nursing homes and orphanages established for the survival of the elderly and orphans, and providing home care services for individuals who are sick and handicapped are the responsibility of communities. In addition to this, the child protection institutions established to raise the children whose parents have died or are not economically qualified to meet the needs of their children and social assistance and solidarity institution that provides financial support to the individuals whose financial status is not sufficient are of great importance for sustainable societies as social services provided by governments (Economic and Social Inclusion Corporation).

The importance of social services is also very important in the creation of sustainable societies. Many services such as dormitories, scholarships, credits, youth centers established in provinces and districts, vocational training courses provided by local authorities for students and family counseling, mother-child health and family planning centers, and disabled care and rehabilitation centers fulfill the responsibilities of administrations and are very important for high welfare and sustainable societies.

Social justice is the equal distribution of existing values to all individuals in the society without discrimination of language, religion, race or gender. Social justice means that all individuals benefit equally from the rights of education, health, justice, housing and social services, and not to be judged by anyone's race, belief or language. In other words, it means that all individuals in the society have equal rights and freedoms (Sunal, 2011). Social justice contributes to the sustainability of societies by eliminating negative elements such as inequality of opportunity, inequality of income distribution, and treatment by status (Çetin, 2015).

Another issue that is important for a sustainable society is gender discrimination. Gender discrimination caused by the roles that society places on women and men causes women's status to be perceived as low compared to men due to stereotypes. In many countries, limited work opportunities for women, not sending girls to school, preventing them from entering work life, and violence they are exposed to are among the situations caused by gender discrimination. There is no room for gender discrimination in sustainable societies. Almost half of the world consists of women. According to Eroglu (2004), the values given to women in societies reflect the level of development of that society. Therefore, the employment of women is very important. As women receive education and work, they will believe in their individual competences and stand on their own feet, thus contributing to the formation of a more productive society by strengthening their status both individually and in society (Tutar & Yetişen, 2009; Eroğlu, 2004).

Taking actions on a global level is essential for sustainable development. Environmental or economic crises occurring at one end of the world will affect us sooner or later. In the report titled 'The Limits of Growth' published by the Rome Club in 1972, it was clearly stated that the problems such as hunger, poverty, resource consumption, economic crisis, civil war, and population increase in different regions of the world threaten not only those regions but the whole world and it is emphasized that the world will lose its habitability, if the solution is not found (Çankır, Fındık, & Koçak, 2012).

If we think that all people live in the same world, we can understand more clearly that we have no chance of not being affected by resource consumption, poverty, hunger, and war happening in other countries. For this reason, the way to leave a livable world for future generations is that people who have different beliefs, languages and people living in different regions cooperate together for the same aim. Many events such as sports organizations, competitions, conferences, concerts all around the world enable many people with different cultures to come together, to interact and to have a common share in a global scale. Therefore, given that the only way for sustainable development is to act together, the intercultural interaction is very important (Bekiroglu & Balci, 2014).

Economic Sustainability

Before the concept of sustainable development came into our lives, the economy and the environment were seen as two independent systems. According to this idea, the environment was a system where the resources needed to develop the economy were provided. The idea that nature can be used without limits for the economy is contrary to the principle of not reducing the capacity of future generations to meet their needs that is the fundamental aim of sustainable development. Consumption increases with increasing population and resources are rapidly depleted and the world is losing its ability to renew itself. The idea that nature is an unlimited source ended with the discussion of environmental problems on a global scale, and the period in which economic growth was based on the increase in income level was closed and the economic developments started to be planned for the benefit of the environment and society (West, 2013; Çolak, 2012).

Especially in the process of industrialization, the environment has been used very brutally for economic growth. This situation caused the world to face serious health and environmental problems. The rapid growth of the environment and health problems caused by the steps taken in the name of economic growth and industrialization made it necessary for governments to come together to act at the international level, to identify problems, to take measures, and to produce solutions. One of the five documents published by the United Nations Commission on Environment and Development (UNCED) as a result of the Earth Summit with the participation of thousands of people is Agenda 21. In the Agenda 21, which is an action plan for sustainable development, it was emphasized that economic policies should be organized in the light of sustainability in order to ensure the requirements for social and environmental sustainability and thus the realization of sustainable development (Zafir, 1998; Türkel, 2011; Sarıçoban, 2011).

Some articles of Agenda 21 related to sustainable economy:

- To plan economic policies in a way that reduces the negative effects of production technologies on the environment,
- To organize ongoing production and consumption models according to sustainability,
- To plan environmental and economic policies in a way to benefit each other,
- Providing the necessary support for the development of developing and underdeveloped countries.

All growths and developments in the economy are not covered by the sustainable economy. Economic growth and sustainable economy have different meanings. The criterion in economic growth is generally the increase in income at the national level and industrialization. The gross national product (GNP), which is the equivalent of all goods and services produced within a country within a certain period of time, is an indicator for economic growth. The resources consumed for growth, the applications, and the damage caused by the industrialization to the environment and human health are not within the scope of economic growth. Sustainable economy is a system that works for the benefit of the society, takes the future generations into consideration while meeting the needs of individuals and society, not only focuses on economic growth, but also acts as a source of exhaustion of resources, and structures the production and consumption models in a way that harms the nature the least. Sustainable economic systems are based on economic growth, social welfare, and environmental damage (UNESCO, 2006; Gürses, 2009; Tandoğan & Özyurt, 2013).

The basis of sustainable economy is based on the concept of economic capability. The idea of economic capability emphasizes that developments in the economic sphere are tools used to enable people to have better living standards. The main aim for economic capability is the improvement of the current situation of the individuals and the society, that is, the welfare of the society, and the economic developments combined with the ethical rules play a role in providing this welfare in the social dimension (Gürses, 2009; Yüksek, 2010; Kaya, 2013).

Individuals have duties in the sustainability of the economy. As time goes on, societies become consumption-oriented. This situation affects not only economic sustainability but also environmental and social sustainability. In order to meet the needs of continuously consuming societies, economic systems are continuously producing and utilizing nature as a source of energy and raw materials for production. This reduces the life of natural resources and damages the environment. As the damage to the environment significantly affects the soil, air and water, as long as this situation continues, all individuals living on the earth will be under threat of famine (Hayta, 2009; Dücan, Polat, & Balcioğlu, 2016).

In economic sustainability, it is essential to use all resources used in the process of production of goods and services with a controlled and environmentally friendly approach. Because after the industrial revolution, the world's natural resources have been quickly destroyed and consumed for many reasons such as population growth, industrialization, and urbanization. If the use of resources and environment for certain reasons continues in this way, even the existing individuals will have to struggle with many problems, let alone the future generations. Therefore, focusing only on the growth of the economy and the increase in income may provide economic relief for a while, but

it will not be effective in the long term. A system that consumes resources for economic growth will lose its function when resources are destroyed or consumed. Systems should be structured on a sustainability basis if welfare, growth and development are to be permanent. This is only possible by changing the existing models of production and consumption according to the social responsibility of economic policies and the enterprises and to the principles of sustainable development in a way that enables long-term use by taking the environmental and social benefits into consideration. Only the economic development planned in this way is sustainable (Özçağ & Hatunoğlu, 2015; Hayta, 2006).

Developments in technology and science are the result of research and development (R&D) activities carried out by companies and firms. These technological products resulting from R&D activities can be purchased from the technologically advanced countries (which are not economic and continuous in the long term) and countries can produce these technologies with their R&D studies. With these innovations, countries can compete with other companies and firms on international trade platforms. Competition between firms is very important in economic sustainability. Intercompany competition leads to increased market share and profit. Since R&D studies provide competition among firms, it is very important in forming sustainable economic systems (Korkmaz, 2010).

Sustainability of the economy for sustainable development is that the economic activities meet the needs of individuals and societies in an active way by taking the interests of future generations into consideration. In sustainable economic systems, economic conditions should be structured to support the initiatives of individuals or organizations. In economic systems, governments should conduct debt management (borrowing) in a way that will not undermine the capacity of today's people and future generations to meet their needs as individuals and as a society. In addition, safe environments should be created for investors and investments, vital sectors (health, education, etc.) should be encouraged to invest, market movements should be prevented from being unbalanced and investments should be made in systems that can achieve high profits by looking out for environmental responsibilities (Özkan, 2017).

For the sustainability of economic systems, the process from the production of goods and services to consumption and even the process after the consumption should be planned within the framework of sustainability. In the production of goods and services, the resources should be used in the most economical way, the products should be made of raw materials that cause the least harm to the environment and human health, product technologies should take environment protection measures, and products should be made of as much recyclable materials as possible for the consumption and after process. Thus, recycling of waste can reduce raw material use and environmental pollution as well as increasing economic gains by recycling (Yücel, 2003).

Sustainable development fights hunger, poverty, and unemployment. Therefore, sustainable economic systems are obliged to provide income and employment to all individuals in order to ensure the sustainability of the society. Sustainable development is a global issue that needs to be evaluated together. Therefore, the sustainable economy must also exist in the international dimension. For this reason, it is very important for states to trade with each other in the framework of fair trade and to keep international trade alive with the investments in different regions (Yüksek, 2010).

As mentioned before, the environment, economy, and society are the three main pillars of sustainable development. Sustainable development cannot be mentioned unless sustainability is provided in these areas (Özsoy, 2015).

Sustainable Development Approaches

Sustainable development consists of three dimensions: society (social), environment and economy. It has 3 main dimensions:

Social sustainability is the provision of topics such as gender equality, social justice, social services, the right to health and education, the right to live safe and peaceful life, intercultural interactions, healthy settlements, and the efforts to increase the well-being of individuals as well as language, religion and racial equality and freedom for all people on earth.

Environmental sustainability is the provision of topics such as protection of natural life, protection of resources, protection of biological diversity and endangered species, reduction of environmental pollution (water, air, soil pollution), use of renewable energy sources (geothermal, wind energy etc.) instead of nonrenewable energy sources (coal, oil, etc.), conservation and reproduction of green areas, reduction of resource use and environmental pollution through waste recycling, reduction of ecological footprint, and fighting global warming.

Economic sustainability is the provision of topics such as saving of resources, income-expenditure balance, income distribution disparity inequality, sustainable production and cost, reliable environments for investments, investment in high-income sectors, investment in sectors of vital importance, and R&D activities (Kuşat, 2013; Şahin & Kutlu, 2014; Olsson, Gericke, & Chang Runghen, 2016).

The concept of sustainable development took place officially for the first time in 1987 in the 'Our Common Future' (Brundtland Report), published by the World Commission on Environment and Development. In the periods before the emergence of the concept of sustainable development, the fields of environment, economy and society were considered independently (Figure-1).

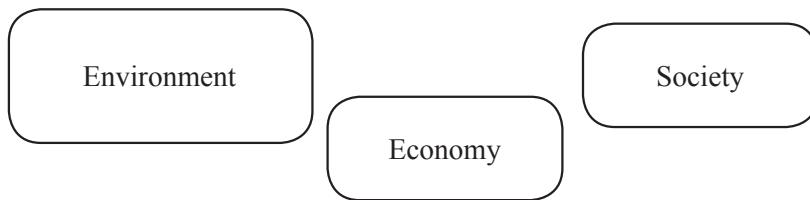


Figure 1. Separate Thinking of the Dimensions of Sustainable Development

The definition of sustainable development in the Our Common Future report, which is to meet the needs of today's people without harming the capacity of future generations to meet their needs, revealed that sustainable development is a necessity in the era of a high level of environmental pollution, social injustice, and economic inequality and that environment, society, and economics areas should not be considered independent of each other to actualize sustainable development. After the Our Common Future report of 1987, the relationship between environment, economy, and society has been began to be examined. Ideas were put forward as to the ways and the scope of the relationship between environment, economy, and society (Palabıyık, 2009; Gürlük, 2010).

One of these ideas is the approach that the element of society encompasses the element of economy and the element of environment encompasses the element of society. According to this approach, the economy element cannot exist without the elements of society and environment, the element of society can continue its existence independently of the economy, and the environment element can continue its existence without society and economy elements.

This approach is also known as the 'Russian Doll Model'. Looking at the model, although economic element seems to be the center of the sustainable development, this does not mean that it is the most important factor. On the contrary, while the economy element is dependent on society and environment elements in the model, the environment element is able to continue without them even though it covers by society and economy elements. In other words, the Russian Doll Model is an economy-centered approach within the boundaries of the environment. The total of the figure refers to sustainable development (Levett, 1998; Figure-2).

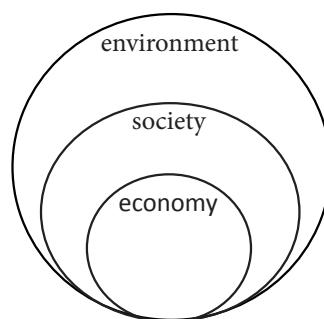


Figure 2. Russian Doll Model

Another model that tries to explain the relationships between the dimensions of sustainable development is the model which is accepted today as the three pillars supporting each other and which looks like a Venn diagram when looking from the top. The original name of the model is Three Pillars (People, Planet, Profit).

This model is also known as the Three E's Balance Rule. Three E in the Three E's Balance Rule is called: Environment / Ecology, Equity / Equality and Economy / Employment (Hürol, 2014; Figure-3).



Figure 3. Three Column Model

In the three-column model, the intersection of environment, society and economy clusters is the point of sustainable development. Looking at the model, it is seen that the environmental, economic and social dimensions have an equal impact on sustainable development. According to the three-column model, sustainable development is made possible by the simultaneous provision of economic, social and environmental sustainability. In sustainable development, economy, environment, and society are the dimensions that affect each other in an interaction. In the three pillars model, the three main dimensions of sustainable development are in a balance. In the model, environment, economy, and society dimensions are given separately but interrelated. The intersection of these three dimensions represents the point where they work together for humanity and this is where sustainable development takes place. That is, sustainable development can take place when they achieve the simultaneous sustainability of the three dimensions (Manzi, Lucas, Lloyd Jones, & Allen, 2010; Akgül, 2010; Özdemir, 2008; Thwing.org).

Historical Development of Sustainable Development

The concept of sustainable development emerged as a result of realizing increasing environmental and health problems, poverty, inequality, injustice, humanity's concerns about a healthy future along with the problems of socio-economic issues, and that the current situation does not promise a positive future for a livable world (Hopwood, Melor, & O'Brien, 2005).

In his book *Silent Spring*, which was written in 1962 by Rachel Carson, first signals were given that sustainable development is a necessity. The book emphasized that the negative effects of human activities on the nature continues to grow more and that in the event that the damage to the nature progresses rapidly, all resources will be polluted and even exhausted and the world will become unfit for living conditions (Dinç, 2015).

The foundations of sustainable development were laid in 1972 at the United Nations (UN) Stockholm Conference. The conference, which took place with the participation of many countries in the process of development and industrialization, pointed out that the productive and healthy environment is the right of individuals. The conference is very important in terms of being the first conference to address the issue of environmental protection at the level of many different government officials. The conference emphasized that the measures to be taken for the protection of the environment should not be national but global. The Stockholm Declaration, consisting of 29 articles published at the end of the conference, laid the foundation for international environmental cooperation. In the Stockholm Declaration, although the term sustainable development was not used, emphasizing the importance of discussing environmental issues in international platforms has formed the basis of sustainable development (Bozdoğan, 2005).

In the report titled 'The Limits of Growth' published by the Rome Club in 1972, it was emphasized that the relationship between environment and economy should be included in the development policies. In the report, it was questioned how much more natural resources on earth can be sustained compared to population growth and increasing consumption. Environmental pollution, hunger, poverty, lack of raw material resources, population growth, production-consumption imbalance were addressed and it was stated that these problems did not only threaten the future of certain regions, but also the future of the world. The report stated that increasing population and consumption would put pressure on natural resources. The report also clearly stated that if the population growth and consumption continue to increase rapidly, in the near future our planet will be based on the limits of growth and the world will not have the habitable quality. This report, also known as the 'Zero Growth Report', has been a sign of the need for sustainable development policies with the pessimistic approach of relationship among industrialization, environment and economy, although sustainable development was not covered as a concept (Yalçın, 2013).

The World Environment and Development Commission (WCED) was established in 1983 by the United Nations General Assembly to ensure that sustainable development is addressed within the legal framework. With the establishment of the World Commission on Environment and Development, it was emphasized that sustainable development can take place if a joint action is taken with the participation of many states. In 1987, the Commission published a report entitled 'Our Common Future'. In 1987, Gro Harlem

Brundtland was the chairman of the commission. Therefore, this report is also known as the 'Brundtland Report'. The report highlighted four main points for sustainable development: reduction of poverty, future generations, basic needs, and resources. Brundtland report addressed many issues, from environmental problems to providing social peace, from energy sources to industrialization and urbanization, and from food resources to management policies and emphasized the importance of the continuity as much as the importance of development and production. In this report, the principles that sustainable development should include were presented.

The sustainable development process started with the Brundtland Report followed by the United Nations Conference on Environment and Development. The Conference on Environment and Development (UNCED) took place in Rio de Janeiro, Brazil on the 20th anniversary of the Stockholm Conference in 1992. The conference, which took place in June 1992 with the participation of thousands of people from 178 countries, is also known as the 'Earth Summit', 'World Summit', or 'Rio Conference'. The purpose of the conference is to evaluate the situation after the Stockholm Conference and to develop strategies for the solution of the problems related to development by acting jointly for the development-environment relationship. One of the most important features of the Rio Conference is to constitute more extensive sustainable development awareness by emphasizing that society has a very important place in the development process as well as the environment. At the conference, it was decided to organize economic policies and legal regulations in accordance with the principles of sustainable development and the existing principles and theories in theory were put into practice. The conference is important for bringing the sustainable development to the global level by presenting the opportunity to the governments that are the leaders of sustainable development in order to cooperate to solve the existing problems (Sahin, 2004; Uzun, 2007).

As a result of the Rio Conference, five documents were published under the names of the Rio Declaration, Forest Principles, the Convention on Biological Diversity, the Convention on Climate Change, and the Agenda 21. From these documents, the Rio Declaration provides a general framework for sustainable development and includes the duties and responsibilities of governments. In addition, the Rio Declaration is of great importance in terms of the fact that environment and human rights are highly related to each other, that environmental policies should not be separated from other policies, and that sustainable development will take place with the participation of societies (Bilgili, 2015). The Forest Principles are based on the principle of forest protection and reproduction. The Convention on Climate Change is based on the principle of conducting the duties and responsibilities of the States in cooperation in order to take measures to reduce the release of toxic gases that cause climate change. The Convention on Biological Diversity has been published for the protection of animal

and plant species throughout the world. Agenda 21 is called as 'Agenda of 21st Century' because it aims to prevent the environmental problems in future generations while solving the problems of today's environment by examining the content of development and environmental strategies and the interaction between sub-chapters. Agenda 21 is an action plan for the achievement of sustainable development. The implementation of Agenda 21, which covers many national and international issues ranging from poverty to justice inequality, is the responsibility of states with the participation of individuals (Çamur & Vaizoğlu, 2007; Ökmen & Görmmez, 2009).

Five years after the Rio Conference, the Rio+5 Summit was held in 1997 with the participation of 165 countries at the United Nations General Assembly. Rio+5 Summit, also known as the World Summit 2. The purpose of the gathering of the World Summit 2 was to assess the progress made in the name of sustainable development since the Rio Conference in 1992 until 1997 and to determine whether the decisions taken at the Rio Conference are implemented and how effective they were. In the World Summit 2 that aimed to determine whether the objectives of the Rio Conference were achieved and to determine the reasons for failure and the measures to be taken for the prevention, it was determined that the poverty and environmental problems continue in the less developed and developing countries, the advancement in the developed countries was limited, and the inequality between less developed and developed countries has increased. As a result of the conference, it was emphasized that the global recovery expected from the Rio Conference was not realized and that more concrete steps should be taken for the realization of sustainable development (Erdinç, 2016).

Another important initiative that needs to be addressed in the history of Sustainable Development is the United Nations Millennium Development Summit. The summit, also known as 'the Millennium Summit' or the 'Millennium Development Goals', was held in New York under the leadership of the Secretary-General of the United Nations Kofi Annan in 2000, with the participation of 189 countries. In the Millennium Summit largest summit held until that time, eight Millennium Development Goals (MDGs) that were planned to be successful in the local and global platforms until 2015 were determined. With the goals set at the summit, it was aimed to eliminate the problems and to ensure inter-governmental cooperation by ensuring that the development takes place on a global platform by emphasizing issues such as hunger, poverty, inequality of opportunity and environmental problems. The goals set as the Millennium Development Goals are a crucial step in terms of actualizing the main dimensions of sustainable development.

Another important step in the history of sustainable development is the United Nations Johannesburg Summit. The Johannesburg Summit, which took place 10 years after the Rio Conference in 2002, is also known as the Rio+10 summit. The Johannesburg Summit hosted 104 country leaders, private sector and non-governmental organizations. The

purpose of the summit gathering is to determine to what extent the objectives and decisions related to the sustainable development determined in the Rio Conference were actualized in the 10-year period from the Rio Conference held in 1992 until 2002, and to work on eliminating the wrong arrangements and deficiencies. In the summit, many topics such as environmental protection, conservation of natural resources and economic use of them, fight against poverty, health, sustainable development, sustainable development for Africa, forming production and consumption strategies according to the principles of sustainable development have been examined. The Johannesburg Declaration and Johannesburg Implementation Plan were published at the end of the summit (Çimrin, 2014; UN, 2002; Arat, Türkeş, & Saner, 2002).

At the Johannesburg Conference, the participation of state leaders as well as private sector organizations and non-governmental organizations was very important to achieve the goals of sustainable development. In this conference, it was seen that specific and concrete steps were taken for sustainable development rather than abstract and general steps and projects and activities were carried out in cooperation of governments and organizations. The conference emphasized that sustainable development is a global responsibility (Bozlağan, 2010).

The United Nations Conference on Sustainable Development (Rio+20) was held in Rio de Janeiro, Brazil in 2012, 10 years from the Johannesburg Conference and 20 years after the Rio Conference (Tıraş, 2012). This was the largest meeting so far because it was held with the participation of forty-six thousand people. As in previous summits, the importance of sustainable development was emphasized in Rio+20 as well. In order to achieve the goals of sustainable development, a call for global cooperation has been made. At the conference, it was aimed to evaluate the decisions taken in previous summits, to fight against new problems, and to identify and eliminate the deficiencies (Özcan, 2016). With this conference, the commitment to the realization of sustainable development has been emphasized once again. At the end of the conference, a declaration of 53 pages and 283 items, called 'The Future We Want', was published. The 283 items in the declaration were prepared under the themes of our common vision, political stability, the green economy for the prevention of poverty in the context of sustainable development, the theoretical framework of sustainable development, the implementation framework of the sustainable development, and the methods of implementation. This declaration is a guide for the creation of the desired future (United Nations, 2012).

One of the activities organized in order to realize sustainable development is the UN Sustainable Development Summit held in New York in September 2015. The summit was held with the participation of 193 countries that are members of the United Nations. Although the Millennium Development Goals realized in 2000 had partial

improvements, the Human Development Index data published in 2015 showed that this partial improvement was insufficient for sustainable development. After that, sustainable development targets for after 2015 were discussed and our Changing World: Sustainable Development 2030 Agenda was adopted. The global goals of the 2030 Agenda aims to compensate for the failure of the Millennium Development Goals. With the Agenda 2030, the global goals for sustainable development that are aimed to achieve success by 2030 are listed under 17 themes (United Nations, 2015; Şanlı & Armağan, 2017).

Conclusion

There is no other living space that human beings can live in except the Earth we live in. This shows that there is a high likelihood of future generations continuing to live in this world like people living on earth today. With the industrial revolution, the resources of our Earth have started to be consumed very quickly and the human population has started to increase rapidly as a result of the success of human beings with struggle against the nature. As a result of waste of resources, side effects of industrialization, and rapid population growth, our world has started to give signals of danger. Since the second half of the 1900s, this situation has been brought into the international agenda and many attempts have been made to take measures together. These developments have led to the emergence of the concept of sustainable development. The concept of sustainable development, which consists of the dimensions of Environment, Society and Economy, highlighted an approach to development that considers future generations. The understanding of sustainable development that especially the developed countries such as U.S. and China, which harms our world the most, continue to resist to implement is still the only way of survival for our planet and humanity.

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