The Emergence of Different Sustainable Development Approaches According to Environmental Ethics Theories

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ABSTRACT: In recent years, population growth, changes in consumption patterns, urbanization, industrialization, and structural changes in agricultural production have brought about various environmental problems worldwide. At the core of these issues lies the significant impact of viewing nature as a resource repository and a dumping ground for waste in production processes aimed at satisfying increasing consumption. Humanity in the twentieth century came to terms with the fact that these problems also threatened its own existence. Global risks that began with pollution from waste sources and thinning of the ozone layer in the twentieth century have made it imperative for governments to seek solutions beyond their borders in the twenty-first century, particularly with climate change and global warming. The sustainable development approach, under the leadership of the United Nations, has come to the forefront in meetings addressing these challenges. Sustainable development, in essence, envisions restructuring today's activities in a way that they can also be carried out by future generations. However, the fundamental cause of environmental problems is the uncertainty of human domination in human-environment relationships. Measures taken without ethical scrutiny in this context are only aimed at addressing current problems.

This study interprets the sustainable development approaches that have emerged in the quest for global solutions to environmental problems through various environmental ethics theories and discusses their theoretical foundations. Within the scope of this study, sustainability approaches are interpreted according to different environmental ethics theories, and different attitudes toward certain environmental problems are attempted to be revealed.

KEYWORDS: Sustainable development, ethics, environmental ethics, sustainable development approaches.

I. INTRODUCTION

Development is a significant argument used by developing societies in the modern world to express the model of society they aim to achieve in order to increase their well-being levels. While economic growth is often seen as a priority, the ultimate goal is to achieve comprehensive societal advancement. The holistic development approach envisages increasing the happiness and well-being levels of individuals constituting society. At this stage, the critical point is that the goal is for all individuals to lead a happy life, not just a segment of society. In economic and sociological contexts, various development models emerge, all promising comprehensive development for societies. However, the paths outlined to reach the ultimate goal of holistic development, as presented by development models, differ from each other.

When the history of humanity's quest for development is examined historically, it becomes evident that there has been a great struggle for sharing resources and managing them. This struggle has entered a massive orbit in areas where people share and manage resources. In ancient agricultural societies, they rose with the surplus value they obtained through agricultural production, and the economic values created were generally managed by imperial budgets. While agricultural production was carried out under the management and control of empires, the masses engaged in agricultural production were included in the general budget through a taxation system. In this way, farmers were made a part of a large system, ensuring the strengthening of the empire and the protection of producers against external threats. After connecting small structures in their surroundings to themselves with the aim of growing their economies, empires engaged in power struggles with other civilizations developing in the region. Feudalism and evolving bourgeois sectors within empires gradually began to weaken aristocracies by taking control of capital and production over time. After the Industrial Revolution in the eighteenth century, the bourgeoisie, which accelerated the pace of development, initiated a process that brought an end to empires, declaring their absolute domination in production areas. Development models began to emerge after this period. Until then, the production sector that was unequivocally loyal to empires began to be convinced to continue its loyalty with models promising comprehensive advancement within the framework of emerging democratic understanding. In the early stages of capitalism in the nineteenth century, a great industrialization movement began, where

environmental sensitivity, human rights, and working conditions were ignored, and economic development was targeted. Developing industries and industrialized agriculture, while recklessly exploiting natural resources, especially in terms of the sharing of raw materials and energy resources, led to significant conflicts between growing economies. Within this context, societies that went through two world wars realized that the damage they caused to the environment began to threaten their own existence by the second half of the twentieth century. When environmental problems that began at the regional level gradually turned into global disasters, it became evident that the search for solutions should take place on a supra-national level. Mainly under the leadership of the United Nations, in these platforms created for the sake of humanity's future, societies attempted to form common wisdom.

In this study, the "Sustainable Development" approach put forward by societies within the common wisdom platforms they created for their own futures is interpreted by different environmental ethics theories. In this context, it is attempted to reveal the ethical roots of different theories by questioning whether sustainable development aims for holistic happiness for humanity or the sustainability of the systems developed throughout the history of civilization.

II. SUSTAINABLE DEVELOPMENT

The emergence of the sustainable development approach has been greatly influenced by the recognition of the actual and potential environmental impacts on nature and humans caused by the path taken in development until the 20th century.

With industrialization, the first problem that profoundly affected humanity was the mass deaths that occurred in London in the 1950s. Although it was thought that these deaths were not coincidental and should have a common cause, the exact reason could not be determined. Environmental pollution began to be discussed globally when similar incidents occurred in the Ruhr Valley coal mines of Germany, another emerging power in industrialization and agriculture in Europe. This thinking brought the concept of "environment" and the environmental phenomenon to the forefront, leading to the declaration of June 5th as "World Environment Day" and the Stockholm Conference of 1972. Thus, the issue of the environment entered the agenda of humanity. With conferences held mainly under the leadership of the United Nations, efforts were made to create common knowledge about the future of humanity and to determine what should be done to protect and make the environment livable. Unfortunately, despite these efforts, the KYOTO Protocol, which was put forward in 1997, could not be adapted, implemented, or achieved its goals by those we can call Polluting Developed Countries [1,2]. After the conference held in Stockholm in 1972, the report titled "Our Common Future," prepared by the United Nations World Commission on Environment and Development, emphasized the necessity of "Sustainable and Balanced Development," taking into account the needs of future generations [3].

The sustainable development model, brought to the agenda of societies at meetings organized under the leadership of the United Nations, takes its spirit from an African proverb: "We did not inherit this world from our ancestors; we borrowed it from our children." In line with this principle, the goal is to restructure and organize all activities carried out in all production areas in a way that future generations can also continue these activities. In this context, activities have been initiated regarding the use of techniques that cause less harm to the environment, the preservation of resources, and the measurement and control of environmental pollution.

Since the conference in Stockholm, the global environmental agenda has been constantly changing. The reason for these changes is the inability to prevent and the continuous escalation and diversification of environmental problems due to industry, agriculture, and urbanization. Prominent among these problems are pollution from waste sources, nuclear waste, thinning and depletion of the ozone layer, air and water pollution, and global warming. The ongoing escalation of environmental problems worldwide is indicative of the failure of global measures to achieve their objectives.

III. ETHICS

The term "ethics" comes from the Greek word "Ethos," while the term "moral" comes from the Latin word "mos." Etymologically, both "ethos" and "mos" imply concepts like tradition, customs, habits, established emotional states, character, temperament, and more. The term "morality" used in our language as an equivalent to "moral" is also derived from the Arabic root "hulk," which carries meanings such as tradition, customs, habits, character, temperament, and more [4].

Different approaches to defining ethics have been developed in different periods. In general terms, "ethics corresponds to the subfield and discipline of philosophy related to morality and moral values" [5]. Morality and ethics are often confused and used interchangeably. However, although both morality and ethics have their roots in a common meaning related to tradition, customs, habits, character, temperament, and more, when we talk about ethics, we are referring to a general principles theory or the philosophy of morality. Morality is both an independent field from philosophy and constitutes the foundation of ethics, which is one of the main disciplines of philosophy. Independently of philosophy, morality refers primarily and to a large extent to the system of norms and rules established in society in some way. In this sense, morality can be seen as a series of action rules, norms, and value systems created to regulate the behavior and relationships of individuals within society.

There are different types of ethics, including descriptive ethics, normative ethics, meta-ethics, and applied ethics. Descriptive ethics involves the application of a scientific, empirical approach to ethics. Here, the philosopher takes on the role of an observer

and describer. Normative ethics aims to determine what is right and wrong. Meta-ethics is the highest level of ethical inquiry and represents a contemporary approach in moral philosophy [6]. Normative ethical theories have evolved along three axes. Deontological ethics approaches ethics in terms of moral obligations. In this approach, the evaluation prioritizes the direction of the action, not the outcome. Another approach is teleological ethics, where the moral value of an action depends on its consequences. Axiological ethics is also a teleological approach, but unlike it, it considers character traits and actions as having intrinsic value. Applied ethics, especially in recent years, is a subdiscipline that deals with controversial issues such as euthanasia, abortion, and environmental problems. Environmental ethics is also included among the theories of applied ethics.

Environmental Ethics

Environmental ethics is not a set of rules that dictate how to behave regarding the environment. If such a role were to exist, the term "environmental morality" would be more appropriate. Environmental ethics is a field that attempts to develop ethical approaches to human-environment relationships and to establish universal moral principles based on this. In this context, there are different approaches within environmental ethics. Environmental ethics theories are examined in three main categories: Anthropocentric, Biocentric, and Ecocentric. The Anthropocentric approach regards humans as the masters of nature [7]. In this approach, the focus is on human needs. The Biocentric approach emerged as a reaction to the anthropocentric approach and posits that other living beings also have value. The Ecocentric approach, while sharing similarities with the Biocentric approach, opposes the domination of biotic and abiotic elements over each other [8].

Anthropocentric Environmental Ethics

In the anthropocentric environmental ethics approach, everything is considered for the benefit of humans, and humans are seen as the masters of nature. As advanced and intelligent beings, humans are considered superior to all other living creatures, and they have the right to use them for their own interests. According to this approach, entities outside of humans gain intrinsic value only when humans use them for their benefit.

Anthropocentric ethics asserts that only humans possess moral value. Therefore, although we are told that we have responsibilities towards the natural world, we do not have a direct responsibility for the natural world [9].

It is acknowledged that the anthropocentric view emerged under the influence of Western culture. One of its most important advocates, Aristotle, placed humans at the top of a pyramid of living beings that he constructed according to their rationality levels, claiming that plants exist for animals, and animals for humans. He asserted that we should believe that nature does not produce anything without purpose and that everything is created specifically for humans. It is possible to base the views of Thomas Aquinas and Kant on the same foundation as Aristotle. Thomas Aquinas stated that the most intelligent beings are at the top of the chain of existence, and the less intelligent ones are at lower levels. Less intelligent beings are created for the benefit of more intelligent beings. The reason for the existence of a link in the chain is to serve the purposes of those who are more intelligent. Kant, on the other hand, claims that "the purpose is humanity." We do not have a direct responsibility for animals and inanimate objects. Because animals lack self-awareness, they are "merely a means to an end for a purpose." Inanimate objects deserve protection only if they are useful to humans [10].

Biocentric Environmental Ethics

Biocentric ethics is based on the view that living beings have value, importance, and rights. While eco-centric views attribute intrinsic value to all objects in nature, biocentric ethics assigns this value only to living beings and establishes principles accordingly. Aldo Leopold, who argued that a healthy environment can only be achieved with a new moral order that includes other living beings and the soil, laid the foundations of "biocentric environmental ethics" with the approach of "land ethics." This perspective requires individuals to see themselves not as rulers of the Earth but as its members and integral parts. This view, which was almost the opposite of the prevailing view at the time, requires a profound change in people's perspectives. Education is the most important tool to bring about this change. Leopold explains his view on environmental ethics with the statement, "If something is oriented towards preserving the integrity of the biotic community, it is correct, otherwise, it is wrong." According to the animal rights doctrine, animals have intrinsic value. Therefore, they have some natural or moral rights. The roots of the animal rights movement can be traced back to various humanitarian associations established in the 18th and 19th centuries to prevent cruelty to animals. This movement assumed from the very beginning that animals are worthy of moral consideration. They advocated for the banning of hunting, experimentation on animals, and animal farms. The most prominent advocates of this view are Peter Singer and Tom Regan. Another topic that needs to be emphasized under the heading of biocentric ethics is Schweitzer's "Ethics of Reverence for Life." Schweitzer believes that ethics is in constant evolution and that the boundaries of the moral community are constantly expanding. According to him, "The essence of goodness is this: Preserve life, promote life, help life to achieve its highest possibilities. The essence of evil is this: Destroy life, harm life, interfere with the development of life." Schweitzer concludes that the fundamental principle of ethics is respect for all living things. "Ethics of Reverence for Life" rejects the anthropocentric value system. It does not make a distinction between valuable or worthless, high or low lives. For an ethical person, all life is sacred [10].

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The biocentric approach, which focuses on the rights to life of living beings forming communities of plants and animals, also creates a perspective based on the lives of living beings in terms of environmental ethics. According to this approach, humans are not superior to nature; they are a part of living life [11].

As a biocentric theorist, Taylor presents a systematic and comprehensive narrative of the moral relationships between humans and other living beings. Taylor believes that this relationship is based on the intrinsic value of all life. He believes that all living beings create goodness in and of themselves. To be able to attribute intrinsic value to a living being, it is necessary for it to have a value in and of itself, but this is not sufficient. To say that a unit has intrinsic value is to put forward a normative claim that this unit has a right to moral consideration, and moral agents have responsibilities towards it. From the assertion that existence has value in and of itself, we come to understand and accept what Taylor calls the "biocentric perspective on nature," and we arrive at the normative claim that the living being has intrinsic value. Accepting this view and recognizing that all living beings have intrinsic value mean accepting respect for nature as the highest moral attitude. The acceptance of this attitude also means that we will behave in ethically responsible ways towards the natural environment [9].

Ecocentric Environmental Ethics

Ecosystems; forests, wetlands, lakes, grasslands, deserts, and the interactions of living and non-living entities within their environments are areas where they mutually benefit from each other [9]. Within this scope, there is a mutual existential connection between living beings and inanimate objects. The ecocentric ethical approach is based on this existential connection and considers the right to sustain the existence of all living and non-living elements in nature. In this context, a human is not superior to animals, plants, and vice versa; animals, plants, and humans are not superior to a rocky area that is part of nature.

In order to eliminate the effects of the environmental crisis created by the anthropocentric view, the ecocentric approach, which emerged in opposition to this view, sees humans as not the masters of nature but as a part of the ecosystem. Although humans are evolutionarily distinct from other species in terms of characteristics such as reason, conscience, subjectivity, they share a common origin with all living beings and are one of the links that make up the ecosystem. Whether evolutionarily or ecologically, they are not foreign to nature and their environment; they are an inseparable, complementary part of it. Here, it may be necessary to clarify the concept of an ecosystem. An ecosystem is a whole composed of all kinds of living and non-living entities living in a certain area and interacting with each other [12]. With this concept, living and non-living nature began to be seen as a single whole, a system. From here, when individuals recognize that living and non-living objects in the ecosystem have intrinsic values beyond being useful only to humans, the sense of environmental protection will strengthen, and along with increasing respect for the environment, a positive change in behaviour will be observed. As the value of forests, mountains, wetlands, and endangered plant and animal species is understood, the necessity of preserving them will also emerge, and it will be easier to establish a rational ethical framework for behaviour.

IV. INTERPRETATION OF THE CONCEPT OF SUSTAINABLE DEVELOPMENT ACCORDING TO DIFFERENT ENVIRONMENTAL ETHICS THEORIES

The concept of sustainable development aims to maintain activities with minimal or no harm to the environment. However, this approach presents a rather broad objective. The specifics, priorities, and attitudes to achieve this goal can be quite vague. Therefore, different ethical perspectives can lead to significantly different sustainability strategies.

Anthropocentric Sustainable Development

Within the framework of anthropocentric environmental ethics theory, there has been a growing emphasis on environmental protection. By taking a reverse perspective, it can be seen that some environmental protection theories and practices have their roots in human activities and interests. Although this may appear contradictory at first glance, considering that harm to the environment can threaten human health and the ability to carry out future activities, this approach can be considered realistic. In this context, anthropocentric sustainable development places the sustainability of human activities at the core of environmental protection. According to this approach, the environment and living beings can be used as resources for human activities, and changes can be made to them, but permanent damage should be avoided. Alternatively, restorative activities may be carried out to mitigate the damage.

Biocentric Sustainable Development

Biocentric sustainable development focuses on the continuity of all life forms within nature, in line with the concept of sustainability. In this context, all activities in industry, agriculture, and urban life should be carried out with a focus on preserving the biodiversity and living conditions of all life forms. Unlike the anthropocentric approach, harming living beings in any way is not an acceptable approach in this perspective. The priority is to develop a development model where such harm does not occur.

Ecocentric Sustainable Development

Ecocentric sustainable development envisions the development of a model that takes into account not only living creatures but also inanimate elements within the environment. Within this framework, activities should be conducted in a way that does not

harm the ecosystem. This approach views a significant portion of today's development activities as a risk to the environment. Kindly be advised that these interpretations are indicative of diverse ethical standpoints regarding sustainable development, potentially yielding a range of practical ramifications and strategies.

V. INTERPRETING SOME SCENARIOS OF DIFFERENT SUSTAINABLE DEVELOPMENT APPROACHES

Under this heading, scenarios have been developed to highlight the differences in environmental ethics theories' approaches to environmental issues. Of course, different interpretations can also be made within each environmental ethics theory. This study evaluates the dominant views within environmental ethics theory.

Scenario 1

It is widely known that fossil energy sources are the largest contributors to greenhouse gas emissions today. In this context, the development of renewable energy sources and the widespread adoption of renewable energy sources instead of fossil energy sources are targeted. This aims to reduce greenhouse gas emissions and combat global warming. Among renewable energy sources, wind energy is rapidly advancing as a sector that does not use fuel. However, the areas where wind energy turbines are installed are generally remote, high, mountainous, and forested regions, requiring tree cutting to clear the way for installation. Nevertheless, companies installing wind turbines claim that they compensate for this damage by planting more trees than they cut and that their energy activities make a significant contribution to combatting global warming, which is the most significant environmental disaster.

For this scenario, the approaches of different theories are as follows:

Anthropocentric Sustainable Development Approach: From the perspective of this theory, the company's activities are crucial. It will reduce greenhouse gas emissions by decreasing the use of fossil energy sources, making a significant contribution to combatting global warming. Cutting down forest trees is undoubtedly a negative practice, but planting new trees in their place can mitigate this problem. Overall, the activity contributes both to the continuity of human activities and to minimizing environmental harm to the lowest level. In this context, it is consistent with ethical principles according to this theory.

Biocentric Sustainable Development Approach: Renewable resources should be supported from the perspective of biocentric ethics because global warming caused by fossil energy sources affects all living beings, including humans. It leads to the extinction of many species. However, cutting down forest trees harms both plant life and the creatures living there. In this context, developing different alternatives to avoid tree cutting would be a more ethical choice.

Ecocentric Sustainable Development Approach: Renewable energy sources should be promoted, but the existence of all living and non-living environmental elements should take precedence over energy production. In this context, solutions that allow wind energy to be harnessed without cutting trees should be pursued.

Scenario 2:

Greenhouse gas emissions in livestock operations primarily originate from enteric fermentation in animals and manure. In this context, efforts are being made to reduce greenhouse gas emissions from livestock-related sources by reorganizing animal feed rations and utilizing composting techniques. The objective of these efforts is to mitigate greenhouse gas emissions associated with livestock activities.

For this scenario, different theoretical approaches are outlined as follows:

Anthropocentric Sustainable Development Approach: From the perspective of anthropocentric sustainable development theory, the sustainability of the livestock sector is crucial. However, it is essential to reduce the environmental impact of this sector. In this context, activities such as altering feed rations to decrease greenhouse gas emissions from enteric fermentation and developing composting technologies to mitigate emissions from manure should be supported.

Biocentric and Ecocentric Sustainable Development Approaches would share similar criticisms in this regard. Both theories would prioritize either downsizing or phasing out the livestock sector. The reason for the emergence of two distinct lines of criticism in both theories is the presence of significant vegetarian/vegan populations. For non-vegetarians/vegans, the livestock sector should be minimized in human diets, and ideally, animal husbandry should take place in natural settings rather than on farms. In this scenario, there would be no need for altering feed rations, as animals would predominantly graze in natural environments (e.g., pastures). Animal manure would naturally decompose in the areas where they graze. For vegetarian/vegan individuals, the livestock sector is viewed as a means of exploiting animals. Vegans advocate for the complete shutdown of the livestock sector, while vegetarians, with their own variations, argue for the closure of livestock facilities established for the purpose of meat production. In this context, from the perspectives of biocentric and ecocentric theories, the claims made in Scenario 2 are not consistent with environmental ethics.

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Scenario 3

In very high mountains, beyond a certain altitude, it is not possible for life to exist. Within this context, activities carried out in areas where no life exists have very minimal adverse effects on the environment. Therefore, shifting mining activities to these areas is considered a positive approach from an environmental perspective.

For this scenario, the approaches of different theories are outlined as follows:

Anthropocentric Sustainable Development Approach: From the perspective of h anthropocentric sustainable development, this suggestion is considered positive in the context of both environmental preservation and the sustainability of necessary mining activities for development. Therefore, it is welcomed from an environmental ethics standpoint.

Biocentric Sustainable Development Approach: From the perspective of biocentric sustainable development, this suggestion is considered positive as long as it has no indirect impact on the habitats of living beings. In this context, it is deemed supportable.

Ecocentric Sustainable Development Approach: From the perspective of ecocentric sustainable development, this suggestion, despite reducing its effects on living beings, still has negative impacts on the non-living elements of the environment. All elements of the environment, living and non-living, have intrinsic value, and human activities should not cause permanent deformations to these elements. Therefore, it is not considered supportable.

VI. CONCLUSION

The ethical discussion of environmental issues and the generation of rational solutions from these discussions are of critical importance in the reconfiguration of human-environment relationships and the reduction of environmental problems. Within societies, there are individuals with different ethical attitudes. Individuals with different ethical attitudes perceive the environment and living beings differently, which in turn shapes how they regulate their relationship with the environment. In this context, considering the attitudes of different ethical theories towards the environment and development is crucial for sustainability. In this study, the concept of sustainable development has been examined through the perspectives of different environmental ethics attitudes, and the criticisms they would develop in the face of different scenarios have been evaluated. While common views emerge in some scenarios, divergences are observed in others.Fundamentally, all environmental ethics theories prioritize the preservation of the elements of the environment. However, they develop different hierarchical approaches to human-environment relationships. This situation significantly influences sustainability approaches. For the concept of sustainability to transition from being mere rhetoric to the action stage, it is necessary to engage in discussions with communities holding different ethical attitudes and, wherever possible, develop areas of consensus in various fields.This process of dialogue and consensus-building can facilitate the development of more effective and inclusive sustainability policies and practices that address the complex and multifaceted challenges posed by environmental issues. As the world faces growing environmental concerns, fostering understanding and cooperation among diverse ethical perspectives becomes increasingly vital for achieving meaningful progress towards a more sustainable and harmonious coexistence with our environment and fellow beings.

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