RELISE

SUSTAINABLE DEVELOPMENT: THEORETICAL-CONCEPTUAL APPROACH[1]

DESENVOLVIMENTO SUSTENTÁVEL: ABORDAGEM TEÓRICO-CONCEITUAL

Uonis Raasch Pagel[2]

ABSTRACT

The concept of sustainable development emerged as a response to growing concerns about the environmental and social impacts of economic growth. Although it is still in the process of consolidation, it is widely disseminated as a development model that seeks to meet the needs of the present without compromising the ability of future generations to meet their own needs. In this context, the article aims to investigate the approaches that underpin sustainable development, systematizing, for this purpose, a theoretical and conceptual basis and emphasizing the relevance of this type of development. The methodology employed is characterized as applied, qualitative and descriptive research, using multiple sources of information, with emphasis on the use of secondary data, bibliographic and documentary research and consultation of specialized websites. The results indicate that sustainable development transcends a reductionist view focused exclusively on environmental issues, consolidating itself as a multidimensional and strategic theme. It represents a holistic approach that seeks to balance, mainly, economic growth, environmental protection and social equity. The associated opportunities include the transition to sustainable practices based on energy efficiency and resource management, the encouragement of technical, scientific and technological cooperation, the strengthening of green and circular economies and the promotion of inclusive and resilient growth. However, it also faces challenges, such as the need to reconcile economic growth and environmental protection, the mitigation of social inequalities and the implementation of effective policies in different socio-political contexts. It is concluded that topics such as these are current and relevant to all sectors of society.

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[2] Universidade Federal do Espírito Santo. uonispagel@gmail.com

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RESUMO

O conceito de desenvolvimento sustentável surgiu como uma resposta às crescentes preocupações com os impactos ambientais e sociais do crescimento econômico. Embora ainda esteja em processo de consolidação, é amplamente difundido como um modelo de desenvolvimento que busca atender às necessidades do presente sem comprometer a capacidade das futuras gerações de satisfazerem suas próprias necessidades. Nesse contexto, o artigo objetiva investigar as abordagens que fundamentam o desenvolvimento sustentável, sistematizando, para isso, uma base teórica e conceitual e enfatizando a relevância desse tipo de desenvolvimento. A metodologia empregada caracteriza-se como pesquisa aplicada, qualitativa e descritiva, utilizando-se de múltiplas fontes de informações, com ênfase no uso de dados secundários, pesquisa bibliográfica, documental e consulta a sites especializados. Os resultados indicam que o desenvolvimento sustentável transcende uma visão reducionista centrada exclusivamente nas questões ambientais, consolidando-se como um tema multidimensional e estratégico. Ele representa uma abordagem holística que busca equilibrar, principalmente, o crescimento econômico, a proteção ambiental e a equidade social. As oportunidades associadas incluem a transição para práticas sustentáveis baseadas na eficiência energética e na gestão de recursos, o incentivo à cooperação técnica, científica e tecnológica, o fortalecimento de economias verdes e circulares e a promoção de um crescimento inclusivo e resiliente. No entanto, também enfrenta desafios, como a necessidade de reconciliação entre crescimento econômico e proteção ambiental, a mitigação das desigualdades sociais e a implementação de políticas eficazes em diferentes contextos sociopolíticos. Conclui-se que temas como esse mostram-se atuais e relevantes a todos os setores da sociedade.

Palavras-chave: desenvolvimento sustentável, crescimento econômico, proteção ambiental, equidade social, conferências mundiais.

INTRODUCTION

Sustainable development has become a central paradigm in global debates since the late 20th century, seeking to reconcile meeting present needs with the preservation of resources and conditions necessary for future generations (WCED, 1987). This concept integrates economic, environmental, and social dimensions, proposing solutions that ensure sustained, sustainable, and inclusive development, respectively (Sachs, 2008). However, its implementation faces complex structural challenges, such as uncontrolled population growth, the unsustainable exploitation of non-renewable natural resources, the persistence of poverty among a large portion of the global population, as well as issues of social injustice, violence, inequality, and frequent natural disasters (Silva; Lobato; Valentim, 2020).

The concept of sustainable development has generated various interpretations regarding its role as a goal to be achieved (TEEB, 2010). Many scholars have sought to formulate a definition that is widely accepted by economists and environmentalists, recognizing that sustainability-related issues are legitimate, urgent, and demand effective responses. In this context, defining sustainable development also implies discussing the meaning of sustainability itself (Barbosa, 2008). Cavalcanti (2003) highlights that the debate surrounding sustainable development has contributed to the acceptance of the need to establish limits on material progress and consumption, traditionally viewed as unlimited. Raworth (2019) advances this debate by proposing an economic model that seeks to balance human needs within the planet's ecological limits. Barbosa (2008) reinforces the complexity of the concept, pointing out that sustainability represents a conceptual challenge – an enigma that can be analyzed from various perspectives but is unlikely to be definitively resolved.

Sustainable development is primarily a public objective. However, it can only be achieved if the private sector, the third sector, and individuals have the

conditions and incentives to adapt to the necessary changes (Dalcomuni, 2006). The challenge, in this sense, is to find a balance between private, economic, and socio-environmental interests, promoting sustainability from extractive industries to the commercialization and final consumption of products.

This concept emerged in response to growing concerns about the environmental and social impacts of economic growth (Mishra et al., 2024). Although still in the process of consolidation, sustainable development is widely disseminated as a model that seeks to meet present needs without compromising the ability of future generations to meet their own needs (WCED, 1987). This holistic approach primarily aims to balance economic growth, environmental protection, and social equity.

In recent decades, sustainable development has been consolidated as a central theme in global discussions, especially in forums and conferences promoted by the United Nations (UN). These meetings have not only helped to formulate fundamental concepts but have also established commitments and goals that have guided environmental policies at the international level (Barbosa, 2008). It is essential, however, that sustainable development be understood as a concrete and comprehensive strategy, rather than reduced to a mere political slogan.

Given this context, the central question arises: what are the theoretical and conceptual foundations of sustainable development, and how has it evolved over time? The objective of this article is to investigate the main approaches that underpin the concept of sustainable development, systematizing a theoretical and conceptual framework and highlighting its relevance in the contemporary scenario, as well as the challenges to its implementation.

The justification for this study lies in the need to overcome the reductionist view that sustainable development is limited exclusively to environmental issues. In reality, it also encompasses social, economic, political,

and geographic dimensions, with implications in both national and global contexts. Furthermore, theoretical research contributes to the formulation of well-founded public policies. Understanding sustainable development and its impacts is essential for modifying – or creating – more effective public policies adapted to current needs.

To this end, the study is structured into five sections, including this introduction. The second section describes the methodology used, the third addresses the theoretical-conceptual aspects of sustainable development, the fourth explores important agreements, conferences, and global milestones related to sustainability, and the fifth presents the conclusion.

METODOLOGY

This article consists of a theoretical essay, whose adopted methodology was designed in accordance with the previously established objective. It is an applied research study, with a qualitative approach and a descriptive nature, which in its development was based on multiple sources of information, with an emphasis on the use of secondary data, bibliographic research, and consultation of specialized websites (Marconi; Lakatos, 2003).

The bibliographic research aimed to build the theoretical foundation of the study. The literature review focused on books, scientific articles, and academic journals from the Scopus, SciELO, Web of Science, and Google Scholar databases, as well as theses and dissertations from the Brazilian Digital Library of Theses and Dissertations (BDTD). Consultation of specialized websites from public institutions related to the research topic was crucial for the characterization of the object of study.

The methodological steps of the research were structured as follows: (i) definition of the research objective; (ii) identification and selection of relevant studies; (iii) data extraction; and, finally, (iv) organization, synthesis, and

integration of the collected data, culminating in the preparation of the study (Peters et al., 2020).

SUSTAINABLE DEVELOPMENT FROM A THEORETICAL-CONCEPTUAL PERSPECTIVE

The relationship between economic development and the environment has been the subject of debate over the past decades. According to Dalcomuni (2006), the international literature identifies four distinct periods of environmental awareness and their interrelations with the economy: (1) prior to 1960; (2) from 1960 to the late 1970s; (3) from the late 1970s to the mid-1980s; and (4) from the mid-1980s to the present.

(1) Period prior to 1960: marked by economic growth as a priority. During this period, little or no interrelationship between environmental and economic issues is observed. Economic science focused on economic growth, emphasizing job and income generation, while environmental impacts were considered an acceptable cost of material progress, which at the time was understood as unlimited. This conception was reflected in an implicit “social pact,” in which environmental degradation was perceived as a price to be paid for development. The expression that would best characterize this period could be: “the greatest pollution is poverty” (Dalcomuni, 2006).

(2) Period from 1960 to the late 1970s: marked by the emergence of environmental awareness. The cultural revolution of the 1960s in the United States, driven by the hippie movement, raised questions about the impacts of industrialization and consumerism in that country. The intensity of natural resource use and the polluting effects of production and consumption became subjects of questioning, although still restricted to alternative groups, with little influence on academia or public policy. During this period, environmental movements were initially discredited, often seen as manifestations of middle

classes disconnected from structural economic issues, such as income distribution and the exploitation of humans by humans. Sectors of the political left criticized these mobilizations for considering them a distraction from the systemic inequalities of capitalism, arguing that priority should be given to overcoming the prevailing economic system through socialist transition. However, as environmental awareness reached broader segments of American society, political pressures emerged that culminated in the creation of the Environmental Protection Agency (EPA), the agency responsible for environmental regulation in the United States. This movement, although initially restricted to that country, marked the beginning of greater institutionalization of environmental issues (Dalcomuni, 2006).

The decisive milestone of this period occurred in 1972, during the Stockholm Conference, when a group of scientists from the Massachusetts Institute of Technology (MIT) published the report *The Limits to Growth*. This report argued that if the pattern and pace of economic growth observed in the United States between 1920 and 1972 were replicated globally, it would lead to the exhaustion of natural resources and the inability of the environment to absorb the polluting impacts of expanded production and consumption. From then on, the “zero growth” thesis gained prominence, advocating the need to limit economic expansion to avoid environmental collapse. This diagnosis internationalized the debate on the environmental implications of economic development and incorporated the theme more prominently into academic and political agendas, especially in countries of the Northern Hemisphere (Dalcomuni, 2006).

In the field of public policy, the first initiatives related to environmental issues focused on mitigating resource scarcity and correcting environmental damage, resulting in fragmented actions supported by isolated measures, with little integration and low efficiency. Only from the 1970s onward did some

countries begin to structure more comprehensive policies, with preventive approaches and more articulated regulations (Barbieri, 2016).

(3) Period from the late 1970s to the mid-1980s: marked by a reduction in environmental pressures. The impacts of the sharp increases in oil barrel prices in 1974 and 1979 (oil shocks[3]), environmental pressures receded. The economic slowdown observed especially in European and North American countries redirected political concerns towards economic recovery and job creation, temporarily overshadowing environmental demands. During this period, the implementation of environmental policies took a back seat, with governments and companies prioritizing structural adjustments and strategies to deal with the new energy costs resulting from oil dependence. Thus, the emphasis on economic growth and social stability once again dominated international political and academic agendas (Dalcomuni, 2006).

(4) Period from the mid-1980s to the present: marked by the consolidation of the sustainability paradigm. With the overcoming of the oil crisis and the resumption of economic growth in the countries of the Northern Hemisphere, the environmental agenda regained relevance, driven by the occurrence of events of great international repercussion. Among them, the Chernobyl nuclear disaster stands out.[4], in the Soviet Union, and the growing recognition of global environmental phenomena, such as the greenhouse effect, climate change, and acid rain. At the same time, European integration strengthened the adoption of new environmental regulations, consolidating Europe as a central hub in the formulation of environmental policies. Thus, while

[3] The Organization of the Petroleum Exporting Countries (OPEC) proclaimed an oil embargo. The embargo caused an oil crisis, or "shock," with many short- and long-term effects on global politics and the economy (Sene; Moreira, 1998).

[4] The Chernobyl accident, which occurred on April 26, 1986, resulted in the explosion of reactor 4 at the nuclear power plant in the then Soviet Union (now Ukraine). Caused by operational failures and violations of safety protocols, the disaster released a large amount of radioactive material, caused thousands of deaths, and contributed to the collapse of the Soviet Union (Sene; Moreira, 1998).

in the 1960s the United States represented the main reference in environmental mobilization, from the 1980s onward, the leadership of this debate shifted to Europe (Dalcomuni, 2006).

In 1987, with the aim of reconciling the antagonism between economic growth and environmental preservation, the United Nations established the World Commission on Environment and Development (WCED), also known as the Brundtland Commission, under the coordination of the then Prime Minister of Norway, Gro Brundtland. The commission was responsible for preparing the "Brundtland Report," officially titled Our Common Future, which became a milestone in discussions on sustainable development by establishing this concept as an integrated approach to economic progress, social equity, and environmental conservation (Dalcomuni, 2006).

The report highlighted the imbalances caused by the prevailing economic model. Problems such as poverty in developing countries, excessive consumerism in developed nations, environmental degradation, and climate change were emphasized (WCED, 1991). At that time, on the one hand, the world had achieved unprecedented levels of wealth and abundance; on the other, it faced worsening poverty, environmental degradation, and pollution. These phenomena were attributed to chronic poverty in so-called Third World countries[5] and to excessive consumerism in industrialized countries, factors that prevented equitable development and contributed to serious environmental crises (Dalcomuni, 2006). Among the actions recommended in the report, the following stood out: limiting population growth; guaranteeing basic resources (water, food, energy) in the long term; preserving biodiversity and ecosystems; reducing energy consumption and developing technologies using renewable energy

[5] The term was originally used to designate countries that adopted a position of neutrality during the Cold War, not aligning themselves with either the United States and its capitalist allies, or the Soviet Union and the socialist countries. These countries were mostly characterized by high levels of poverty and faced serious social problems such as violence, extreme misery, and corruption (Sene; Moreira, 1998).

sources; increasing industrial production in non-industrialized countries based on ecologically adapted technologies; controlling disordered urbanization and integrating the countryside with smaller cities; meeting basic needs (such as health, education, housing), among others (WCED, 1991).

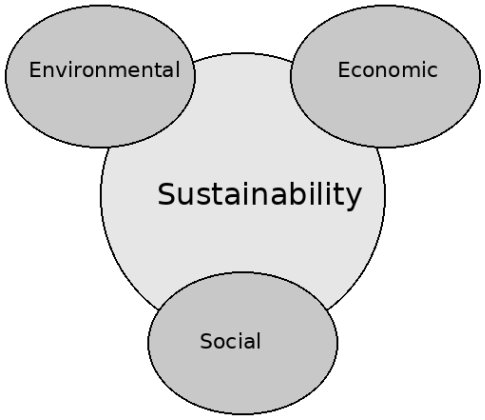
From the report, the concept of sustainable development, which had been conceived since the 1970s, was disseminated throughout the world, as:

> Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. [...] Many of us live beyond ecological means, for example, in our energy consumption patterns. [...] At a minimum, sustainable development should not jeopardize the natural systems that sustain life on Earth: the atmosphere, water, soil, and living beings. [...] At its core, sustainable development is a process of change in which resource exploitation, investment direction, technological development guidance, and institutional change are in harmony and reinforce the current and future potential to meet human aspirations and needs (WCED, 1987, p. 41-42).

Through its key thesis – meeting the needs of the present generation without compromising the ability of future generations to meet their own needs – sustainable development transcends the definition of a simple concept, configuring itself as the expression of a collective objective of changing social, environmental and economic paradigms (Daly, 2002). This principle emphasizes the existence of maximum limits for the exploitation of natural resources, highlighting the importance of their preservation to guarantee the sustainability of future generations (Veiga, 2015).

According to Dalcomuni (2006), in principle, sustainable development meant a warning about the possibility of exhaustion of natural resources and a demand for intergenerational responsibility in the use of these resources. That is, the requirement to incorporate the dimension of the natural environment into the concept and implementation of economic development. In this sense, sustainable development is based on three basic and interconnected pillars: economic, social and environmental, as can be seen in Figure 1 and Chart 1.

Figure 1. Basic pillars of sustainable development



Source: Prepared by the author (2025).

Chart 1. Basic pillars of sustainable development

Pillar	Description
Economic	It refers to promoting economic growth that is inclusive and sustainable, ensuring that the benefits of growth are widely distributed and that natural resources are used efficiently and responsibly (Sachs, 2015).
Envrionmental	It involves protecting and restoring ecosystems, reducing pollutant emissions, and using natural resources sustainably. This pillar emphasizes the need to mitigate climate change and preserve biodiversity (Rockström et al., 2009).
Social	It focuses on promoting social equity, reducing inequalities, and strengthening communities. This includes ensuring access to basic services such as education, health, and sanitation, and promoting social justice and inclusive participation (Sen, 2011).

Source: Prepared by the author (2025).

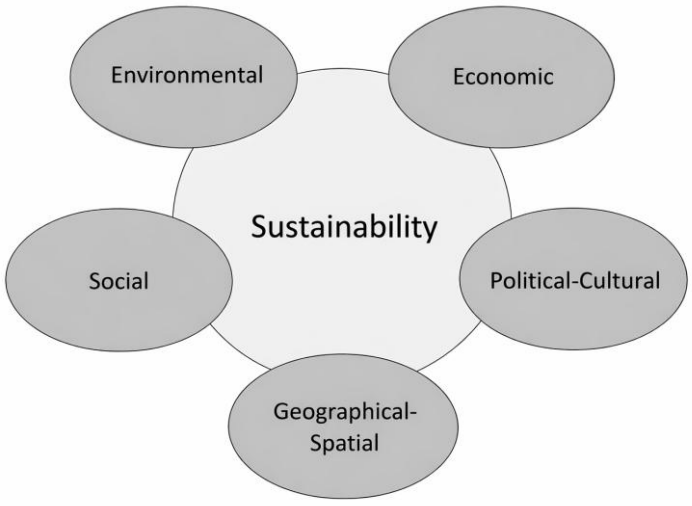
The economic, social, and environmental dimensions of sustainable development require that the market and its suppliers consider the impact of their activities, reassessing practices related to the exploitation and use of natural resources in order to promote rational use that mitigates impacts (Tera Ambiental, 2024). As highlighted by Suslick, Machado, and Ferreira (2005), many natural resources used in industrial production are finite, making their rational use essential to meet both current needs and those of future generations.

In this context, the conservation of natural resources and sustainability can be seen as two sides of the same coin. The greater the level of conservation, the greater the legacy left for future generations; however, the lower the

availability of resources to meet the demands of present society. This duality illustrates the inherent complexity of the relationship between the availability of natural resources and sustainable development. Nevertheless, as the interactions between the environment and the economy become better understood, new realities may emerge.

Two decades after its initial formulations, the concept of sustainable development was substantially expanded, gaining greater influence across various fields of activity and in economic and social values. It then came to be approached through five fundamental dimensions, largely incorporating theoretical contributions developed since the 1970s. These dimensions are: economic, social, environmental, political-cultural, and geographic-spatial, as represented in Figure 2 and Chart 2 (Dalcomuni, 2006).

Figure 2. Key dimensions of sustainable development



Source: Prepared by the author (2025).

Chart 2. Key dimensions of sustainable development

Dimension	Description
Economic	The basis of development means expanding the goods and services produced by society for a growing population that is increasingly sophisticated in its needs.
Environmental	It means pursuing economic development in harmony with the natural environment, understood not only as a source of natural resources as inputs, but primarily as natural heritage, that is, something whose value should not only be maintained, but, if possible, improved.
Social	Equitable distribution of this expanded production means social access to the material wealth produced.
Political-cultural	It means democratic participation in decisions regarding the production and access to the material wealth produced, within a context of respect for the existing ethnic and cultural diversity in society.
Geographical-spatial	It means the perception and challenge of harmonizing the spatial distribution of human activities, productive or not, which decisively impact the sustainability of development.

Source: Prepared by the author based on Dalcomuni (2006).

From the 1990s onward, more systematic efforts began to converge toward the development of the field of Environmental Economics, which is broadly organized into main subdivisions: Ecological Economics, Environmental Economics, Natural Resource Economics, and Pollution Economics (May, 2018). However, this study does not intend to address this issue in greater detail. For that purpose, works by other authors may be consulted.

One of the most recent approaches to understanding the dimensions of sustainable development is that proposed by Sachs (2002; 2008), which identifies eight interdependent dimensions (Figure 3 and Chart 3). Each of these dimensions is composed of specific criteria that contribute to the theoretical construction of the concept of sustainable development. It is important to emphasize that the conception of these dimensions is not intended to establish a dichotomy between right and wrong, but to offer a systemic and integrated understanding of its multiple facets.

Figure 3. Recent dimensions of sustainable development

Source: Prepared by the author (2025).

Chart 3. Recent dimensions of sustainable development

Dimension	Descritpion
Environmental	It refers to maintaining the carrying capacity of ecosystems, which implies the ability of ecosystems to absorb and replenish themselves in the face of anthropogenic aggressions.
Economic	It refers to the efficient management of resources in general and is characterized by the regularity of flows of public and private investment. It implies the evaluation of efficiency through macro-social processes.
Social	It refers to development aimed at improving the quality of life of the population. In the case of countries with problems of inequality and social inclusion, it implies the adoption of distributive policies and the universalization of services such as health, education, housing and social security.
Political (national)	It refers to the process of building citizenship to ensure the full inclusion of individuals in the development process, guaranteeing the distribution and sharing of benefits through democratic governance. It is based on partnership and collaboration between the public, private and third sectors. Society must prioritize consensus and solidarity, overcoming particular interests through dialogue and democracy.
Political (international)	It refers to the pursuit of building cooperative relationships between countries, with an emphasis on promoting peace (including the prevention of conflicts and wars) and human development. It involves promoting equality among peoples, ensuring effective control of the financial system and international business. It implies the application of the precautionary principle in environmental and natural resource management, as well as encouraging processes of technical, scientific and technological cooperation,

(continues)

Chart 3. Recent dimensions of sustainable development

(continuation)

Dimension	Descritpion
Territorial	It refers to the spatial distribution of resources, populations and activities, with an emphasis on promoting a balanced relationship between urban and rural areas. This includes eliminating the tendency to concentrate public investments exclusively in urban areas, overcoming inter-regional disparities, and implementing environmentally sustainable development strategies, especially in ecologically fragile areas.
Cultural	It refers to respect for the cultural specificities, identities, and traditions of local communities. Equally important is the capacity of society to exercise autonomy in building an integrated national project, strengthening its self-confidence and promoting a balanced openness to the world.
Ecological	It refers to the physical basis of the growth process and aims at maintaining stocks of natural resources incorporated into productive activities.

Source: Prepared by the autor based on Sachs (2002; 2008); Corrêa and Passini (2022).

MAIN GLOBAL DEBATES ON SUSTAINABLE DEVELOPMENT

Over the past few decades, sustainable development has been the subject of discussion in various global forums and conferences organized by the UN. These meetings not only defined fundamental concepts but also established commitments and goals that shaped international environmental policies. Below are the main milestones of these debates and their unfolding events.

Stockholm Conference (1972)

The Stockholm Conference, held from June 5 to 16, 1972, in Sweden, was the first global event organized by the United Nations aimed at discussing environmental issues. With the participation of representatives from 113 countries, including Brazil, as well as more than 400 governmental and non-governmental organizations, the conference marked the beginning of a new era of debates on the impact of human activities on the environment (Macieira, 2022).

The event was characterized by two opposing positions: the Optimists (the cornucopians) and the Pessimists (the doomsayers). While the former supported the continuation of industrial development with few restrictions, the latter argued for the need to establish strict targets to reduce industrial activities

in order to preserve the environment. In the view of the optimists – who anticipated abundance – environmental concerns were unfounded, as they would hinder or delay the efforts of developing countries toward industrialization in order to catch up with developed nations. The environment was not the priority; accelerating growth was. In contrast, the pessimists (or catastrophists) – who predicted an imminent collapse if economic and demographic growth were not immediately contained – believed that by the end of the century, humanity would face a difficult choice: either disappear due to resource exhaustion or succumb to the devastating effects of pollution. This polarization reflected a central conflict of the conference: the search for a development model capable of balancing the use of non-renewable natural resources with economic growth (Dalcomuni, 2006).

Brazil advocated a position focused on immediate economic development, placing less emphasis on environmental preservation. The Brazilian stance, led by Costa e Cavalcanti, Minister of the Interior, stood out for defending economic development at any cost. Cavalcanti's statement – "Develop first and pay the costs of pollution later" – exemplified the country's position, which prioritized the exploitation of natural resources without immediate concern for environmental preservation (Guitarrara, 2024).

Among the main objectives of the conference were: discussing climate change; debating solutions to reduce natural disasters; reducing and finding solutions for insecurity-related challenges; establishing the foundations of a sustainable economy; limiting the use of pesticides in agriculture; and reducing the amount of heavy metals released into nature (United Nations, 2024).

One of the main outcomes of the conference was the publication of the report Limits to Growth, which established fundamental principles such as: ensuring a safe environment to improve quality of life; providing financial assistance and technology transfer to developing countries; improving the

environmental policies of UN member states; rational management of natural resources for the benefit of the entire population; investment in education and research; and the complete elimination of weapons of mass destruction, including nuclear bombs. As a legacy, the conference became a milestone for sustainable development, inaugurating the global environmental agenda and leading to the creation of the United Nations Environment Programme (UNEP), as well as the establishment of World Environment Day, celebrated on June 5 (United Nations, 2024).

Rio-92 or Eco-92 (1992)

Between June 3 and 14, 1992, the United Nations Conference on Environment and Development (UNCED) took place in Rio de Janeiro, widely known as Eco-92, Rio-92, or the Earth Summit. The event brought together delegations from 172 countries, including heads of state, as well as around 1,400 non-governmental organizations. Although the participating countries unanimously signed a series of commitments, the conference became marked by the low level of implementation of the agreed measures (United Nations, 2024).

The name Earth Summit reflects the event's mediating role, as it promoted agreements among heads of state. The conference revisited themes addressed in the report Limits to Growth, presented at the Stockholm Conference (1972), highlighting the shift of environmental problems from a local scale to a global dimension. It was also recognized that the model of maximum exploitation of natural resources for profit was unsustainable, given the expected scarcity of resources in the 21st century (United Nations, 2024).

One of the main agreements of Eco-92 was Agenda 21, a document composed of 40 chapters that brings together recommendations to be followed by signatories in order to pursue sustainable paths. Its main objectives included: international cooperation – especially by developed countries – to accelerate

sustainable development in developing nations; poverty reduction; changes in consumption patterns; combating deforestation; biodiversity conservation; and promoting universal access to education, healthcare, and income distribution (MMA, 2024; United Nations, 2024).

Even considering that Agenda 21 is a guiding document without mandatory enforcement, it highlights the need for a global effort to profoundly transform the direction of worldwide economic development. Despite being an international initiative, and due to the broad adherence to its principles, the agenda has encouraged the adoption of new approaches to natural resource use, changes in consumption patterns, and the implementation of cleaner technologies. From it emerged a range of efforts to create programs – both local and global – focused on sustainability (MMA, 2024).

In addition to Agenda 21, other important documents resulted from the conference, such as: the Rio Declaration on Environment and Development – a set of principles to guide the relationship between economic development and environmental protection; the Statement of Forest Principles – a collection of guidelines for the sustainable management of forests; the United Nations Convention on Biological Diversity (CBD) – focused on the conservation and sustainable use of biodiversity; and the Convention to Combat Desertification – aimed at preventing and controlling land degradation (MMA, 2024; United Nations, 2024).

The implementation of Agenda 21 was carried out in a decentralized manner, with each country developing its own national and local version. In Brazil, the discussions were coordinated by the Commission on Sustainable Development Policies and the National Agenda 21 (CPDS), created through Decree No. 4 of 2004 (Brazil, 2004). The conference also established that a new meeting would be held after a ten-year interval in order to assess the progress achieved.

Conference of the Parties (Cop) (1995 - Present)

The 1992 Earth Summit (Eco-92) resulted in the United Nations Framework Convention on Climate Change (UNFCCC), which discussed global warming trends[6] and aimed to propose targets for reducing the concentration of Greenhouse Gases (GHGs)[7] in the atmosphere, responsible for accelerating the increase in global temperatures. To make this possible, commitments and targets were defined for all countries, in what became known as the Conference of the Parties (COP) (CETESB, 2021). Chart 4 presents an overview of the COPs that have taken place.

International climate agreements established at the COPs, together with their regulatory instruments, constitute the technical, scientific, and legal foundation that guides States in formulating domestic policies aimed at addressing the effects of climate change (CETESB, 2021).

In Brazil, the UNFCCC was promulgated by Decree No. 2,652 of 1998 (Brazil, 1998). However, at that time, the convention did not establish greenhouse gas (GHG) reduction targets. Effective actions were only proposed in February 2005 with the Kyoto Protocol. Additionally, Law No. 12,187/2009 established the National Policy on Climate Change (PNMC), which, in its Article 4, set the goal of reducing anthropogenic GHG emissions from different sources (Brazil, 2009). This law consolidates a regulatory framework that aligns the country with international climate commitments, providing tools for a transition toward a low-

[6] This refers to the increase in the average temperature of the Earth's surface relative to a reference period. It is caused by anthropogenic greenhouse gas emissions from different sources. To mitigate this process, an intense decarbonization of the global economy is necessary in the coming decades, as the sustainability of development will depend precisely on this challenge (Veiga, 2015).

[7] These are gases that trap heat in the atmosphere. Main examples and percentage contributions to global warming: Carbon dioxide (CO2) 60%; Methane (CH4) 20%; Nitric oxide (N2O) 6%; other gases such as Chlorofluorocarbons (CFCs), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulfur hexane fluoride (SF6) 14% (CETESB, 2021).

carbon economy. Furthermore, the legislation emphasizes the importance of records, inventories, estimates, assessments, and studies on GHG emissions and their sources (Brazil, 2009). These data, developed from information provided by public and private entities, are essential for monitoring and implementing effective climate policies.

Chart 4. Conference of the Parties (COP) events held

Year	COP	City (Country)
1995	COP 1	Berlin (Germany)
1996	COP 2	Geneva (Switzerland)
1997	COP 3	Kyoto (Japan)
1998	COP 4	Buenos Aires (Argentina)
1999	COP 5	Bonn (Germany)
2000	COP 6	The Hague (Netherlands)
2001	COP 7	Marrakech (Morocco
2002	COP 8	New Delhi (India)
2003	COP 9	Milan (Italy)
2004	COP 10	Buenos Aires (Argentina)
2005	COP 11	Montreal (Canada)
2006	COP 12	Nairobi (Kenya)
2007	COP 13	Bali (Indonesia)
2008	COP 14	Poznan (Poland)
2009	COP 15	Copenhagen (Denmark)
2010	COP 16	Cancun (Mexico)
2011	COP 17	Durban (South Africa)
2012	COP 18	Doha (Qatar)
2013	COP 19	Warsaw (Poland)
2014	COP 20	Lima (Peru)
2015	COP 21	Paris (France)
2016	COP 22	Marrakech (Morocco)
2017	COP 23	Bonn (Germany)
2018	COP 24	Katowice (Poland)
2019	COP 25	Madrid (Spain)
2020	None	Covid-19 Pandemic
2021	COP 26	Glasgow (Scotland)
2022	COP 27	Sharm El-Sheikh (Egypt)
2023	COP 28	Dubai (United Arab Emirates)
2024	COP 29	Baku (Azerbaijan)
2025	COP 30	Belém (Brazil)

Source: Prepared by the author (2025).

The COPs have also resulted in important deliberations, such as the Kyoto Protocol (1997) and the Paris Agreement (2015), which marked significant advances in the fight against climate change. However, they have also generated

controversies, as in the case of the Copenhagen Accord (2009), where disagreements among countries and negotiating blocs compromised the expected outcomes. These events are discussed in detail in the following sections.

Kyoto protocol (1997)

The Kyoto Protocol, adopted during COP 3 in 1997 in Japan, represented the first international treaty with specific commitments to reduce greenhouse gas (GHG) emissions on a global scale. It entered into force in 2005 after being ratified by 128 of the 192 signatory countries, establishing a target to reduce global carbon dioxide (CO_2) emissions by 5.2% between 2008 and 2012, compared to 1990 levels. This milestone marked a new phase in global climate negotiations by introducing binding targets for developed nations and placing global warming as a priority on the international agenda (CETESB, 2021; MCTI, 2021; Sousa, 2024).

Despite this progress, the protocol faced significant resistance, notably from the United States, the largest GHG emitter at the time, responsible for approximately 52% of global CO_2 emissions (Sousa, 2024). Under the presidency of George W. Bush, the United States refused to ratify the agreement, arguing that the commitments imposed by the protocol could harm the American economy. Bush also questioned the absence of binding targets for developing countries (Sousa, 2024). This decision weakened the scope of the treaty, especially considering the weight of U.S. emissions in the global context.

Brazil, in turn, signed the protocol under the presidency of Fernando Henrique Cardoso through Decree No. 5,445/2005 (Brazil, 2005), although it did not assume initial binding targets, as it was classified as a developing country. Even so, the country played a strategic role in the discussions, particularly due to its biodiversity and its potential for mitigation actions, such as combating

deforestation and promoting renewable energy (Sousa, 2024).

One of the innovations of the Kyoto Protocol was the establishment of market mechanisms, such as carbon credit trading, which enabled signatory countries to buy and sell emission rights. Through the Clean Development Mechanism (CDM), nations with reduction targets were able to certify and trade effective emission reductions, generating carbon credits. Each carbon credit corresponds to one metric ton of CO_2 that was either not emitted or removed from the atmosphere. These credits can be traded in the carbon market, allowing companies or countries that exceed their emission limits to offset their impact by purchasing credits from others that have reduced emissions beyond their required targets. This system functions as an economic incentive for adopting clean technologies and sustainable practices (MCTI, 2021; UNFCCC, 2024).

In Brazil, the regulation of carbon credit trading was formalized by Decree No. 5,882 of 2006 (Brazil, 2006). Countries such as Germany, France, Japan, and other members of the European Union led carbon credit transactions, establishing themselves as key players in this market (UNFCCC, 2024).

The Kyoto Protocol represented an initial, yet limited, step in addressing climate change. The absence of commitments from major emitters, such as the United States, and gaps in its implementation highlighted the need for more inclusive and comprehensive climate negotiations, which ultimately led to the development of subsequent agreements.

Copenhagen Accord (2009)

COP 15, held in 2009 in Copenhagen, Denmark, brought together leaders from 192 countries. The event aimed to establish a legally binding global agreement to succeed the Kyoto Protocol. However, significant divergences between countries and negotiating blocs compromised the expected outcomes (Ipea, 2011; Pereira; Curi, 2012).

One of the main documents of the conference was the “Copenhagen Accord,” an informal text that recognized the need to limit the increase in global temperature to 2°C above pre-industrial levels (Ipea, 2011). The document was drafted in a context of accelerated negotiations, led by a limited number of world leaders who strategically represented the main groups and blocs of global influence. Brazil played a prominent role in the discussions, with the active participation of President Luiz Inácio Lula da Silva (Serra, 2010).

However, the lack of consensus regarding the drafting process of the agreement led countries such as Bolivia, Venezuela, Nicaragua, Sudan, Tuvalu, and Cuba to reject it, claiming a lack of transparency and democracy in the negotiations, which prevented the formal adoption of the agreement and limited its practical implications. As a result of these disputes, COP decided only to “take note” of the document, granting it a non-binding status and reducing its practical effectiveness (Serra, 2010).

Among the proposals of the accord, the commitment of developed countries to mobilize financial resources to support developing countries in mitigating and adapting to climate change stood out. The commitments included the allocation of US$10 billion annually from 2010 to 2012 and the promise to mobilize US$100 billion annually by 2020 through the Green Climate Fund (Serra, 2010). However, the absence of legally binding obligations limited the effective implementation of these financial targets. As a result, the outcome achieved at COP 15 fell short of the proposed objectives (Motta, 2010).

COP 15 represented a moment of frustration in climate negotiations, highlighting the challenges of reconciling divergent interests between developed and developing nations (Serra, 2010). Although it failed to produce a legally binding agreement, the conference served as a starting point for subsequent discussions, culminating in the Paris Agreement of 2015, which achieved greater global adherence and more concrete commitments to combat climate change.

Paris accord (2015)

Held in Paris, France, between November 30 and December 12, 2015, COP 21 represented a historic moment in global climate negotiations. For the first time, 187 countries reached a consensus, approving by acclamation the “Paris Agreement,” a universal plan to combat climate change (United Nations, 2024).

The agreement established ambitious targets, such as reducing global GHG emissions by 40% to 70% by 2050 compared to 2010 levels, and limiting the increase in global temperature to 2°C by the end of the century, with efforts to keep it at 1.5°C (MMA, 2023). In addition, it provided for the creation of a fund of US$100 billion annually by developed countries, intended to finance mitigation and adaptation measures in the most vulnerable countries (MMA, 2023). In Brazil, the agreement was promulgated through Decree No. 9,073/2017 (Brazil, 2017).

However, the agreement faced significant political challenges. In 2017, the United States, under the presidency of Donald Trump, announced its withdrawal, claiming that the agreement brought economic disadvantages to the country (G1, 2025). This decision placed the United States alongside Syria and Nicaragua as the only countries outside the agreement at the time (G1, 2017). The withdrawal of one of the world’s largest economies and the second-largest GHG emitter in the world (behind only China) (CNN, 2021) raised concerns about the impact on global progress toward achieving the established climate targets.

In 2021, this position was immediately reversed by the administration of President Joe Biden on his first day in office, who reaffirmed the United States’ commitment to the agreement, restoring its participation. However, in 2025, Donald Trump’s return to the presidency resulted in a new withdrawal of the country, justified by the perception that the agreement benefited other nations at the expense of the United States (G1, 2025). In addition, Trump proposed intensifying the exploitation of fossil fuels, including oil, natural gas, and coal, as

part of his energy agenda. In his inauguration speech, Trump declared: “We will drill, baby, drill. We have something that no other nation will ever have, the largest amount of oil and gas of any country on Earth, and we are going to use it” (Schonhardt; Colman; Mathiesen, 2025, n. p., our translation). This decision placed the United States alongside countries such as Iran, Libya, and Yemen as the only nations outside the agreement (G1, 2025).

Despite these adversities, the Paris Agreement remains a fundamental milestone to this day, serving as a basis for coordinated actions among nations. It consolidated the idea of shared responsibility, with differentiated and flexible commitments, allowing each country to adapt its reduction targets to its economic and social realities (MMA, 2023). COP 21 reaffirmed the importance of international cooperation in the search for solutions that ensure a sustainable future for the planet.

Rio+5 (1997)

Between June 23 and 27, 1997, New York hosted the Rio+5 conference, organized by the United Nations to review and assess the implementation of Agenda 21, established at Eco-92. This meeting, which brought together more than 100 heads of state, marked a moment of reflection on the progress and challenges in addressing environmental issues and sustainable development, five years after the historic milestone in Rio de Janeiro (United Nations, 2024).

The assessment carried out presented a concerning diagnosis: the planet’s environmental health continued to deteriorate, and setbacks in social and economic aspects worsened global inequalities. These results exposed the insufficiency of the actions taken up to that point by the signatory countries, highlighting the gap between the commitments made and the practices effectively implemented (United Nations, 2024).

Despite the discouraging conclusions, Rio+5 played a strategic role by

creating a favorable political environment for the consolidation of more robust climate agreements. Rio+5 highlighted the importance of periodic reviews and the strengthening of multilateralism as mechanisms to align concrete actions with universal sustainability goals. Although it revealed persistent challenges, the event reaffirmed the commitment of the international community to the environmental and social agenda, paving the way for advances in climate policies (United Nations, 2024).

Millennium development doals (2000)

The Millennium Development Goals (MDGs) were established in 2000 by the United Nations “Millennium Declaration,” adopted by 191 member states, including Brazil. These goals represented a global commitment aimed at overcoming socioeconomic and environmental challenges, with the objective of promoting human development. The UN thus assumed the project of making development sustainable (Veiga, 2015).

Eight main goals were defined: (1) Eradicate extreme poverty and hunger; (2) Achieve universal primary education; (3) Promote gender equality and empower women; (4) Reduce child mortality; (5) Improve maternal health; (6) Combat Human Immunodeficiency Virus (HIV), malaria, and other diseases; (7) Ensure environmental sustainability; and (8) Establish a global partnership for development. These goals were broken down into 21 targets and monitored through 60 indicators, enabling comparisons and assessments among countries (Mishra et al., 2024).

Despite their complex nature, the implementation of the MDGs resulted in significant progress during their 15-year period (2000–2015), such as the reduction of extreme poverty rates, improvements in maternal and child health, and greater access to basic education. However, it also revealed persistent inequalities among regions and countries, highlighting the need for more

comprehensive and inclusive strategies. Overall, the results were uneven (Mishra et al., 2024).

The MDGs were an initial milestone that mobilized governments, companies, international organizations, and civil society around a collective commitment, paving the way for a more ambitious and comprehensive global agenda focused on sustainability (Mishra et al., 2024).

Rio+10 (2002)

Held between August 26 and September 4, 2002, in Johannesburg, South Africa, Rio+10 brought together representatives from 189 countries to review progress since Rio-92 and propose new actions for sustainable development (Barbosa, 2008; Francisco, 2024). However, the conference took place under the aftermath of the terrorist attacks of September 11, 2001, when the twin towers of the World Trade Center in New York were brought down, which influenced global attention and the political climate (Veiga, 2015).

The main document of the conference, the “Johannesburg Plan of Implementation” or “Johannesburg Declaration,” emphasized priorities such as: eradication of poverty and hunger; public health issues; fair trade; education, science, and technology; as well as the sustainable management of natural resources (United Nations, 2024). Despite these guidelines, the practical results of Rio+10 were limited, especially due to the resistance of developed countries to cancel the debts of poorer nations. Another point of tension was the target of achieving 10% renewable energy sources, rejected by member countries of the Organization of the Petroleum Exporting Countries (OPEC), which did not sign the declaration (Francisco, 2024).

Among the challenges expressed at the conference, in addition to the persistence of several environmental problems of a universal nature, issues associated with globalization were highlighted for the first time, since the benefits

and costs associated with it are unevenly distributed. The risk was pointed out that poverty could generate distrust in democratic systems, which could favor the emergence of dictatorial regimes (Diniz, 2002). The event also highlighted the fundamental role of science and technology in promoting innovations to address global challenges (Trigueiro, 2003).

The conference took place in a context of growing attention to the impacts of climate change and global crises. Events such as hurricanes and the convergence of food, energy, and financial crises highlighted the vulnerability of nations and the need for more resilient and sustainable development. The inclusion of incentives for green economies in economic stimulus packages highlighted the relationship between sustainable development and economic recovery in times of crisis (Francisco, 2024).

Although it faced challenges and limitations, Rio+10 reinforced the importance of coordinated global actions to achieve sustainable development.

Rio+20 (2012)

In 2012, Brazil hosted Rio+20, referring to Eco-92 held in the same location two decades earlier. With the participation of 193 UN member countries, the conference was a milestone, not only due to the magnitude of its media coverage, but also because of the debate it proposed: “What future do we want?”. This reflection culminated in the production of the report of the same name, *The Future We Want*, which outlined priorities for promoting sustainable development (Brazil, 2012; United Nations, 2024).

Among the main objectives defined in the report were the eradication of poverty, the integration of economic, social, and environmental aspects into sustainable development, the protection of natural resources, changes in consumption patterns, the promotion of sustainable economic growth, the reduction of inequalities, and the improvement of basic living conditions. These

principles reaffirmed commitments outlined in previous conferences, while being updated to respond to contemporary challenges (Brazil, 2012).

Rio+20 defined strategic guidelines for energy, food security, oceans, and cities, promoting green economy policies and financing mechanisms for sustainable development. The event emphasized the need to reorient consumption and production patterns, highlighting the importance of transitioning to a circular and low-carbon economy. In addition, it stressed the urgency of protecting natural resources, warning that unsustainable exploitation compromises both biodiversity and the quality of life of populations (United Nations, 2024).

The conference reinforced Brazil's role as one of the leading actors in the international debate on sustainability. As the host country, it reaffirmed its commitment to the global agenda, highlighting good practices in renewable energy and environmental conservation, while also recognizing the challenges associated with poverty eradication and reducing inequalities. Despite criticism of Rio+20 for the absence of binding targets and immediate concrete commitments, the event represented a moment of renewal for the climate and social agenda (Brazil, 2012).

2030 Agenda (2015)

One of the most significant legacies of Rio+20 was the replacement of the MDGs by the Sustainable Development Goals (SDGs) within the context of the post-2015 development agenda (Veiga, 2015). This process was strengthened by the dialogues and lessons learned over the 15 years of the MDGs' implementation (2000–2015), which culminated in the formulation of the SDGs (Mishra et al., 2024).

To this end, in 2015, the UN world summit fully approved the SDG proposals that, since August 2014, had emerged from a broad consensus-

building process conducted by an Open Working Group (OWG) appointed by the General Assembly and coordinated by the permanent representatives of Hungary, Csaba Kőrösi, and Kenya, Macharia Kamau: the OWG-SDGs (Veiga, 2015). The adopted proposals became part of the “2030 Agenda,” entitled *Transforming Our World: The 2030 Agenda for Sustainable Development*. The agenda consists of 169 universal targets, organized around four major categories: social, environmental, economic, and institutional, and structured into 17 SDGs (United Nations, 2015a; Mishra et al., 2024), as illustrated in Chart 5.

Chart 5. The Sustainable Development Goals (SDGs) of the 2030 Agenda

SDG		Description	Number of Goals
1	Eradication of poverty	End poverty in all its forms everywhere	7
2	Zero hunger and sustainable agriculture	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	8
3	Health and well-being	Ensure healthy lives and promote well-being for all at all ages	13
4	Quality education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	10
5	Gender equality	Achieve gender equality and empower all women and girls	9
6	Clean water and sanitation	Ensure availability and sustainable management of water and sanitation for all	8
7	Affordable and clean energy	Ensure access to affordable, reliable, sustainable and modern energy for all	5
8	Decent work and economic growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	12
9	Industry, innovation and infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	8
10	Reducing inequalities	Reduce inequality within and among countries	10
11	Sustainable cities and communities	Make cities and human settlements inclusive, safe, resilient and sustainable	10
12	Responsible consumption and production	Ensure sustainable consumption and production patterns	11

(continues)

Chart 5. The Sustainable Development Goals (SDGs) of the 2030 Agenda
(continuation)

SDG		Description	Number of Goals
13	Action against global climate change	Take urgent action to combat climate change and its impacts	5
14	Life below water	Conserve and promote sustainable use of the oceans, seas and marine resources for sustainable development	10
15	Life on land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss	12
16	Peace, justice and strong institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	12
17	Partnerships and means of implementation	Strengthen the means of implementation and revitalize the global partnership for sustainable development	19

Source: Prepared by the author based on UN (2023); Silva, Lobato and Amorim (2020).

The SDGs were designed to address, in an integrated manner, the challenges identified at Rio+20, incorporating the principles of Agenda 21 and expanding its scope (Veiga, 2015). The development of the SDGs was consolidated as a comprehensive strategic plan to align the efforts of countries, institutions, companies, and civil society in the search for solutions that combine economic development, social justice, and environmental preservation (Mishra et al., 2024).

All 194 UN member countries, including Brazil, commit to implementing public policies and actions aimed at improving the quality of life of populations and changing behaviors toward environmental conservation. The central proposal of the agenda is to guide countries' actions over a 15-year period (2015–2030), with the aim of promoting sustainable development on a global scale (Mishra et al., 2024).

Although Brazil, as a signatory of the 2030 Agenda, recognizes the challenges shared by both developed and developing countries in the pursuit of

sustainability, public policies related to the implementation of the agenda in the country present limitations. As highlighted by Silva, Lobato, and Amorim (2020), the lack of a coercive nature in public policies associated with the SDGs in Brazil compromises their effectiveness and hinders the full achievement of the established objectives.

Each country that is a signatory to the agenda is responsible for implementing individual actions to achieve the SDGs, adapting to its respective cultural, political, economic, environmental, and social realities. This effort is part of a strategic plan created by the United Nations General Assembly (UNGA) through Resolution 70/1, with the objective of eradicating poverty and ensuring dignity for all individuals by 2030 (United Nations, 2015b).

The themes and targets that make up the 17 SDGs of the 2030 Agenda were developed based on broad public consultations, which identified the areas of greatest global vulnerability (Mishra et al., 2024). During the formulation process, government leaders and representatives of the private sector actively participated in the discussions, representing their nations. In Brazil, the National Commission for the Sustainable Development Goals (CNODS) was established through Decree No. 8,892/2016, repealed by Decree No. 11,704/2023. The commission is composed of representatives from the federal, state, and municipal governments, as well as members of civil society, with the responsibility of coordinating and implementing actions linked to the 2030 Agenda (Brazil, 2023).

However, ten years after the establishment of the SDGs, these objectives are still far from being fully achieved. Periodic UN reports have shown progress in some areas, but mainly warned of setbacks. The *Sustainable Development Goals Report 2022*, for example, revealed a possible regression in global progress, impacted by large-scale events such as the Covid-19 pandemic and the war in Ukraine. These events exacerbated vulnerabilities in critical areas such as food security, health, education, the environment, and peace, projecting that

between 75 and 95 million people could fall into extreme poverty by 2025 (United Nations, 2022). These examples illustrate the challenges of implementing the SDGs at a global level, requiring integrated and adaptive approaches to overcome emerging obstacles and promote inclusive and resilient sustainable development.

CONCLUSION

This study aimed to investigate the approaches that underpin sustainable development, systematizing a theoretical and conceptual framework, with emphasis on the relevance of this paradigm for the contemporary scenario. The analysis revealed that sustainable development encompasses a broad spectrum of dimensions that go beyond environmental issues, also involving social, economic, political, geographical aspects, etc., with implications in both national and global contexts.

The results show that sustainable development presents significant opportunities, such as the transition to sustainable practices associated with energy efficiency and resource management, the encouragement of technical, scientific, and technological cooperation processes, the strengthening of green and circular economies, as well as the promotion of inclusive and resilient growth. However, it also faces complex challenges, such as the need to reconcile economic growth with environmental protection, the mitigation of social inequalities, and the implementation of effective public policies that respect the different sociopolitical realities around the world.

In addition, the study highlighted the relevance of important forums, conferences, and global milestones in promoting international dialogue and in the search for solutions to environmental challenges. These spaces have been decisive in consolidating sustainable development as a fundamental pillar for the future of humanity, by enabling the construction of consensus and the formulation

of collective commitments in addressing universal environmental issues.

It is concluded that topics such as this are current and relevant to all sectors of society, as environmental pressures on natural resources intensify, directly affecting the quality of life of humanity and the planetary balance. Sustainable development is, without a doubt, an essential pillar for building a balanced and resilient future. However, its effectiveness depends on the adoption of intersectoral approaches and public policies that reconcile economic growth with environmental preservation. The need for constant revision of global and local strategies, especially in the face of social inequalities and growing environmental demands, is urgent.

Despite notable advances in global initiatives, such as the Paris Agreement and the 2030 Agenda, significant challenges still persist. Reconciling economic, social, and environmental objectives requires coordinated action among governments, companies, and civil society, while the implementation of inclusive policies faces institutional barriers that demand collaborative solutions. The path toward effective sustainable development depends on overcoming these barriers and creating an environment conducive to change, one that truly allows meeting the needs of present generations without compromising the opportunities of future generations.

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