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ECONOMIC CONDITIONS FOR SUSTAINABLE DEVELOPMENT

Sustainable development is a complex topic that can be analyzed from different perspectives. Key factors such as energy, population, food and economy have a significant impact on the mutual relationships between them. In the context of sustainable development, we distinguish the most important raw materials used for energy production, and those related to renewable energy sources. Although their global importance may be relatively small, they are crucial to achieving the goals of sustainable development. Disseminating information on this topic is essential to raise awareness and promote actions that promote ecological balance. The article focuses on the complexity of implementing the principles of sustainable development, which is a significant challenge in the context of global social and environmental changes. Analysis of data on population, energy and key issues of expenditure and production. The article indicates the interactions between these elements that can affect the effectiveness of actions for sustainable development.

Keywords: sustainable development, energy, population.

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Тұрақты даму үшін экономикалық жағдайлар

Тұрақты даму – әртүрлі көзқарастардан талдауға болатын күрделі тақырып. Олардың арасындағы қарым-қатынасқа энергия, халық, азық-түлік және экономика сияқты негізгі факторлар айтарлықтай әсер етеді. Тұрақты даму контекстінде біз энергия өндіру үшін пайдаланылатын және жаңартылатын энергия көздеріне қатысты ең маңызды шикізатты ажыратамыз. Олардың жаһандық маңызы салыстырмалы түрде аз болғанымен, олар Тұрақты даму мақсаттарына қол жеткізу үшін өте маңызды. Бұл тақырып бойынша ақпаратты тарату хабардарлықты арттыру және экологиялық тұрақтылықты қолдайтын әрекеттерді ілгерілету үшін маңызды. Мақалада жаһандық әлеуметтік және экологиялық өзгерістер контекстінде елеулі сын болып табылатын тұрақты даму қағидаттарын жүзеге асырудың күрделілігіне назар аударылады. Халық, энергия және негізгі шығындар мен өндіріс мәселелері бойынша деректерді талдау. Мақалада тұрақты даму бойынша іс-шаралардың тиімділігіне әсер етуі мүмкін осы элементтердің өзара әрекеттестігі көрсетілген.

Түйін сөздер: тұрақты даму, энергетика, халық саны.

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Экономические условия для устойчивого развития

Устойчивое развитие – сложная тема, которую можно анализировать с разных точек зрения. Ключевые факторы, такие как энергетика, население, продовольствие и экономика, оказывают существенное влияние на отношения между ними. В контексте устойчивого развития мы различаем наиболее важное сырье, используемое для производства энергии, и сырье, связанное с возобновляемыми источниками энергии. Хотя их глобальное значение может быть относительно небольшим, они имеют решающее значение для достижения Целей устойчивого развития. Распространение информации по этой теме имеет важное значение для повышения осведомленности и продвижения действий, способствующих экологической устойчивости. В статье акцентируется внимание на сложности реализации принципов устойчивого развития, что является существенной проблемой в условиях глобальных социальных и экологических изменений. Анализ данных по населению, энергетике и ключевым вопросам расходов и производства. В статье указаны взаимодействия между этими элементами, которые могут повлиять на эффективность деятельности по устойчивому развитию.

Ключевые слова: устойчивое развитие, энергетика, население.

Introduction

The modern world faces a shared responsibility and the need to adapt its development to the needs of people and nature. Present generations have the right to benefit from natural resources and a healthy environment, but they must not jeopardise the same rights of future generations. It can be said that at the global level, the hard work of holistic environmental perception and economic development has been significantly degraded by existing trends in production, consumption, and economic instability. The exploitation of natural resources is increasing, which is why more and more pollution is produced. Therefore, modern humanity needs a concept of sustainable development that simultaneously economically uses non-renewable and renewable energy sources and combines environmental, social and economic aspects of life. At the same time, this concept emphasizes the responsibility of each individual to protect the environment and thus allows for improved productivity and living standards. Sustainable development is oriented towards the development of a model that can meet socio-economic needs and meet the interests of citizens in a qualitative way, while significantly reducing the effects that threaten the environment and natural resources. It can be said that sustainable development is a general direction aimed at creating a better world by balancing social, economic and environmental factors. Sustainable development means the integration of economic, social and environmental aspects, as well as aspects of institutional development, most often those related to good governance. These aspects are often referred to as pillars or dimensions of sustainability. These pillars should be interconnected and these connections should be implemented. In addition to the environment, economic, social and cultural values are resources that we should acquire for future generations. Particular attention should be paid to the relationship between all three dimensions of sustainable development, as well as their impact on each other (Otterstad, 2008). Sustainable development standards are intended to prevent a range of unacceptable socio-economic and environmental consequences, such as threats to biodiversity (Bernaciak et al., 2023).

Literature review

Every observer at some point asks themselves about the meaning of life, the future, and the relationships and limitations that affect the course of our lives, both on a micro and macro scale. In seeking the optimistic aspects of our lives, it is an undeniable fact that every life cycle generates added value compared to the previous life cycle (Kern et al., 2018). The added value is the knowledge that with each cycle becomes more extensive and enriched with new aspects (Filho, 2000). One might wonder whether we are truly capable of creating or if it is better to understand the eternal natural order of things that has existed since the dawn of time. It should be noted that the issue of sustainable development has always been a priority, and those who failed to recognize the essence and importance of this aspect typically made mistakes.

In today's world, increasing attention is being paid to environmental protection and ecology (Ashrafi et al., 2020). Political, social, and economic actions are much more visible when decisions are made in harmony with the natural environment. People have begun to realize the importance of the environment, to appreciate the actions of those who care about it, and to condemn those who do not care (Popkova et al., 2021). It is not a new phenomenon; in the early 1970s, the problems of environmental degradation and the destruction of human production activities were emphasized. The term sustainable development was defined in the context of political, environmental, economic, and social aspects in the Declaration of the United Nations Conference on the Human Environment of June 16, 1972 (Kates et al., 2005). Then sustainable development was defined as "the right to satisfy the developmental aspirations of the present generation without compromising the ability of future generations to meet their own needs." Thus, current economic development should not negatively impact the economic development of future generations (Rockström et al., 2009). Destruction of the natural environment and the constant and sporadic use of limited natural resources without any reflection by the current generation may lead to a situation where these resources will not be sufficient for future generations (Kish et al., 2021).

On one hand, it can be assumed that it is about the process of development of individual countries and cities, on the other hand, the definition can be considered from a broader perspective, which definitely synthesizes the needs of the current generation, with the possibility of meeting the needs of future generations (Farley et al., 2021).

Sustainable development is defined as «a continuous process of change in which the use of resources, the structure of investments, the direction of technological progress, and institutional structures can be carried out in such a way that there are no contradictions between future and present needs.»

At the United Nations Conference on "Environment and Development" in Rio de Janeiro from June 3 to 14, 1992, reaffirming the declaration of the United Nations Conference on the Human Environment, 27 principles of sustainable development were established, which are now one of the longest and most accurate definitions of sustainable development. They had to create new and fair partnerships between countries, between basic social groups and nations. This allowed for the achievement of "international agreements that are beneficial for all and protect the integrity of the global environment and development system, recognizing the indivisible and interdependent nature of the entity connected to the Earth, our home." (Redclift, 2005).

The concept of sustainable development is closely related to eco-development. Analyzing the concept of sustainable development, one can notice that sustainable development in this case is defined as a balance between wildlife issues, the economy, and culture. According to this concept, economic development should not seriously impact the environment in which humans live and lead to environmental degradation. Sustainable development is development in which natural heritage is maintained in an unspoiled state for a certain period of time, thus allowing future generations to benefit from these gifts of nature (Stanny, 2005).

There are many definitions of sustainable development, and we can highlight some of the most common ones. The first one states: "Sustainable development is conducting any activity in harmony with nature, so as not to cause irreversible changes in nature or to manage in an environmentally acceptable, socially desirable, and economically viable manner." (Gold et al., 2010). Inna defines sustainable development as "socio-economic development harmonized with the natural environment, both local and broader – including various ecosystems and resources as well as the structure of soil, water, geol-

ogy, and atmosphere in general" (Berbés-Blázquez et al., 2016).

Sustainable development can be identified with a new philosophy that emerged as a result of growing environmental threats associated with rapid economic, civilizational, and cultural development (Vafaei et al., 2019). It is characterized by a global reach and is based on the belief that natural resources can be depleted and are not renewable. This may result from the improper use of these goods and lead to an imbalance between meeting the needs of the current generation and meeting the needs of future generations. From a practical point of view, the idea of sustainable development is the introduction of socalled "integrated management," which would integrate environmental, socio-economic, spatial, and institutional-political management (Grabara et.al., 2021). It follows that sustainable development can only be achieved through the implementation of environmental, socio-economic, and spatial policies.

In the pursuit of sustainable development, the development of ecological awareness is extremely important. "The term awareness defines the relationship of humans to nature, a set of information and beliefs about it, and a value system that is directed against them in their ways" (Lemańska-Majdzik et al., 2023). "Environmental issues are closely linked to social, economic, and cultural factors and cannot be solved solely through technological means. People's attitudes towards the natural environment depend on their awareness, that is, their knowledge and beliefs about the environment and the values they have followed in their behavior towards it. Raising awareness of the degradation of the environment and the consequences arising from the last few decades has led to a change in ecological awareness, and consequently, practices of initiatives." (Das et al., 2020).

According to the above model, consciousness can be:

- holistic characteristic of living organisms, involving the perception of the world as a whole, comprehensive, in-depth, general, global, thorough, complex, integrative, non-superficial, etc.
- qualitative involving the recognition of qualitative relationships in their entirety,
- spiritual existing and functioning not only in the mind but also in the psyche of a person,
- relational characterized by respect and reverence for everything that exists,
- evolutionary assuming the orientation of all processes in nature towards increasing diversity and richness of life,

- participatory – assuming that a person is not just an observer of the world but also its participant.

Environmental awareness among consumers affects the economic activity of the market. Increased wealth may influence the growing interest in meeting higher-order needs, but it may also affect the creation of behavioral ecology (Hassan et al., 2016). All political and social actions shaping consumers' ecological awareness contribute to a phenomenon in which the principles of sustainable development are moral principles of the individual, largely independent of any economic circumstances (Bakanauskienė et al., 2020).

Sustainable development is a multidimensional process encompassing (Poznańska et al., 2024):

- changes in science and technology development of various fields of environmental science and technology,
- changes in the economy transition from an economy focused on improving the comfort of life to an economy focused on improving the quality of life,
- changes in the social structure the involvement of all groups and social groups in the implementation of processes aimed at the implementation of sustainable development.
- change of policy introduction of environmentally friendly public policy solutions,
- changes in material, spiritual, and warehouse culture promoting the idea of respect for humanity towards nature.

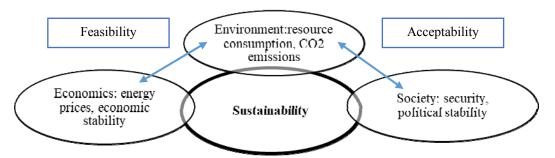


Figure 1 – Essential elements of sustainable development Note – compiled by the author based on the (Hassan et al., 2016)

In the past, the concept of sustainable development consisted of three components, namely environmental protection, sustainable economic development, and social and political stability. Recently, however, it has been suggested that a division into four main areas of sustainable development-economic, environmental, political, and cultural-would be more appropriate. Currently, both broad and narrow approaches operate within the concept of sustainable development. The narrow definition of sustainable development refers to environmental protection and generally also pertains to overall institutional development and political management. (Grabara et al., 2020). There are four main groups of definitions of sustainable development (Kielin-Maziarz, 2020):

- ethics and idealism in this case, sustainable development is related to the responsibilities of the current generation for the future, it is related to the appropriate management of natural resources;
- scientific and economic in this case, environmental issues are related to all economic activi-

ties, and therefore man should pay attention to the impact they have on the environment in all his activities;

- natural in this case, the laws of nature are of great importance;
- ethical in this case, the emphasis is on fair management of the world, all beings in the world have the same rights and opportunities for development, so people who use natural resources should give something in return, as well as be aware of other living beings and future generations.

Sustainability theory is growing, mainly within environmental economics. This concept is interdisciplinary. Sustainability is viewed in several ways. As a process of civilization, i.e. a social and philosophical idea, as well as a direction of economic development (Haseeb et al., 2019). In this case, sustainable development is divided into several dimensions – economic, environmental, psychological, social, demographic, spatial, and intertemporal. Subsequently, this development was seen as a direction for research.

Due to the growing interest in sustainable development issues, it is becoming particularly important. It is a multi-layered phenomenon, encompassing such research areas as ecology, philosophy, culture, society, politics, technology and economics. The main objective of sustainable development is the introduction of integrated management, which pays special attention to the corporate combination of environmental, socio-economic, spatial and institutional-political sustainability. This concept is implemented through the implementation of environmental, socio-economic and spatial policies, with particular emphasis on sustainable development in the political sense, as well as in the field of governance (Chład, 2020). The principles of sustainable development in the economy concern, m.in others, organic matter, unprecedented in economic history in this area. This reorientation of the global economy raises questions about the main determinants determining the possibility of developing concepts of philosophical and practical solutions, used, for example, by enterprises (Surya et al., 2024). The main goal of sustainable development is to protect natural capital as several important principles.

This concept is important for the reproduction of renewable resources, the integrity of the natural environment, the greening of the economy and its development – the environment must not be in conflict with the interests of the economy. The last principle refers to economization or policies in a way that minimizes social costs (Grabara, 2017). Sustainability factors are typically attributed to three categories of environmental, economic, and social. When it comes to how they interact, views on the subject vary, according to some, they are pillars at the same level, while others believe that they are three distinct but closely related aspects of sustainability. The environment or ecosystem is the basis of sustainable development. However, human activity causes its overexploitation. The idea is to meet people's needs, while reducing the impact of human activities on the environment. This aspect of sustainability is closely related to the protection of the living environment and the physical environment, including natural resources, processes and environmental sustainability. An important element is to establish a number of key objectives, namely:

- reduction of global warming;
- halting the loss of biodiversity:
- control and reduction of chemical pollutant emissions;
 - return to natural cycles of nutrients.

The economy, or rather economic development, as an aspect of sustainable development is perceived

as a goal, and the natural environment as a tool that allows the use of natural resources. It is an extremely important element of sustainable development, as it offers the opportunity to combat poverty or make a difference in our development. However, not all aspects of economic development mean progress towards sustainable development. Implementing principles in economic development can only speak if this development progresses, while reducing the environmental impact. Economic growth should no longer be associated with negative environmental impacts. It should take all measures that will allow for more environmentally friendly economic development (Chłąd et al., 2018). Therefore, economic policy must support sustainable development, and not (as it is now) to its detriment. It is therefore necessary to take the following actions:

- making sustainable development investments that pay off in both the public and private sectors. This will make potential investors more willing to take "profitable" actions, both for them and for the environment:
- focusing research on areas of expertise and solutions that promote sustainability. These activities require initial investment, but can also be mutually beneficial;
- influence consumer decisions at all levels. Try to educate consumers, for example by encouraging them to recycle.

In the face of global challenges such as climate change, environmental degradation and growing social inequalities, it is necessary to rethink traditional economic models. For the economy to effectively support sustainable development, it is crucial to take into account the full range of costs associated with economic activity. Environmental and social costs, often overlooked in conventional analyses, should become an integral part of business decisions. Introducing these costs into market prices will not only enable a fairer allocation of resources, but will also contribute to building more resilient and sustainable communities. Only through a comprehensive approach to costs can we lay the foundations for a future in which economic development coexists harmoniously with environmental protection and social welfare.

Methodology

The concept of sustainable development strongly emphasizes the principle of participation, i.e. socialization. It assumes that planning and decision-making processes must enable ef-

fective citizen participation. Transparency in decision-making and public engagement are key to improving planning processes for sustainable development. Participation depends on the recognition that the values and interests of all community members have legitimacy and should be expressed in decision-making processes. A key element of participatory planning is consensus understood as a decision-making process without voting. Consent is achieved by collecting and exchanging information, views, discussion, persuasion, explanation, synthesis of submitted proposals and creating completely new ones. However, striving for consensus requires patience, tolerance, listening skills, etc. The demand for a participatory approach to sustainable development is included in official documents. The justification adopted in the abovementioned documents is based on the current experience of implementing sustainable development. You should also pay attention to the rules adopted in the European Union. The participatory approach is consistent with the principle of subsidiarity, in

which decisions should be made taking into account the interests of citizens..

The data on sustainable development relating to the key factors mentioned above were analyzed. The first interpretation refers to the social aspect, i.e. its structure, as well as the interconnection between public groups. It also includes the impact of demographic factors such as population growth, migration, urbanization processes, as well as the impact of social factors on the development of a community or region. Additionally, the analysis may include elements such as education, employment, standard of living and social differences that shape the daily lives of individuals in the context of the team. This is presented by population data as of September 18, 2024 according to world meters data.

Results and discussion

The world population is about 8 billion people. This increase is particularly pronounced in developing countries, where birth rates remain high.

Table 1 – Population data

Name	Current world population	Births this year	Deaths this year	Net population growth this year	
Data	8,178,726,711	94,903,128	44,917,798	50,674,330	
Note – compiled by the author based on world meters					

Table 2 – World population in selected countries

Place in world statistics	Country	Population 2024	Region		
1	India	1 450 935 791	Asia		
2	China	1 419 321 278	Asia		
3	United States	345,426,571	South America		
6	Nigeria	232,679,478	Africa		
12	Japan	123,753,041	Asia		
13	Egypt	116,538,258	Africa		
19	Germany	84,552,242	Europe		
39	Poland	38 539 201	Europe		
Note – compiled by	Note – compiled by the author based on world meters				

Most people live in Asia, with India and China in the leading positions. Africa is also experiencing rapid population growth, which can lead to greater resource challenges. Many developed countries are struggling with the problem of an aging society. In countries such as Japan and Germany, the proportion of people aged 65 and over is increasing, which is affecting health and pension systems. Population growth leads to a greater demand for natural resources, which in turn contributes to environmental

degradation and climate change. Increased urbanization and industrial development have a significant impact on ecosystems.

Another important element regarding sustainable development is health protection. Health care expenditure is all costs incurred for health services and activities intended to maintain, improve and protect the health of the population. These include:

- medical costs, i.e. expenses for hospitalization, doctor's visits, medicines, medical and diagnostic procedures;
- prevention, i.e. expenditure on vaccinations, screening tests and disease prevention programs,

- rehabilitation, costs related to the rehabilitation of patients after injuries or illnesses;
- health promotion for educational campaigns and activities to increase health awareness of the public;
- administrative costs related to the management of health systems.

Global health care expenditure is a key indicator of the state of health care systems and has a significant impact on the health of the population, as shown in Table 2, according to world meters data as of September 18, 2024. compared to other global spending and production of the three most important products.

Table 3 – Spending and production (government and economics)

Name	Data			
Governments' Health Spending Today	\$ 12.142.713.244			
Education spending by governments today	\$ 8.053.297.777			
Military Spending by Governments Today	\$ 3.360.304.401			
Cars produced this year	48.561.216 pcs.			
Bicycles produced this year	100.108.902 pcs.			
Computers sold this year	252.769.268 pcs.			
Note – compiled by the author based on world meters				

Health care spending has increased in many countries in response to the COVID-19 pandemic (Maciejewski, 2023). Governments are investing in health systems to improve the availability of medical services, hospital beds and human resources. Spending on education has also increased, especially in the context of adapting to remote learning and the need to modernize educational infrastructure. Governments are investing in educational technology, teacher training, and student support programs. Many countries are also trying to reduce inequalities in access to education. Military spending is increasing in response to global geopolitical tensions. Car production at the turn of 2023 and 2024 is recovering from the chip crisis and disruptions in supply chains. Many manufacturers are increasing production to meet the growing demand, especially for electric vehicles. The production of bicycles has increased in response to the growing interest in ecological means of transport and a healthy lifestyle.

The estimated production is at the level of 100 million units. All three industries show upward trends, with an emphasis on innovation and adapting to changing consumer needs.

The world is in a phase of "intensifying" the energy transition, during which it consumes a lot of low-carbon energy and fossil fuels. The challenge is to move – for the first time ever – to the 'energy transition' phase, where low-carbon energy will grow exponentially to reduce fossil fuel consumption and greenhouse gas emissions. The world is in the "energy sector" phase of the energy transition, in which an increasing share of low-carbon energy and fossil fuels is being consumed. There have been many "energy booms" in the history of electricity, such as the coal boom, when the world switched from wood to coal as the main source of energy, and then oil quickly replaced coal as the dominant form. In each of these cases, the world continued to consume equal or greater amounts of energy.

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Table 4 \rightarrow Average annu-	al increas	in demand	l tor	nrimary	energy
Table 4 – Average annu	ai ilicicasi	, iii aciiiaiia	101	primary	CHCIEY

Year	1995-2022			
	PKB	Population	Energy (intensity)	
	3,5%	1,25%	-1,75%	
Year	Current Trajectory			
	PKB	Population	Energy (intensity)	
	2,4%	0,75%	-2,1%	
Year	2050			
	PKB	Population	Energy (intensity)	
	2,4%	0,75%	-3,25%	
Note – compiled by the author l	pased on world meters and BP	report		

Growth in global energy demand is underpinned by increasing levels of prosperity in emerging economies. The extent and sustainability of this growth depends on the pace of energy efficiency improvements. Average annual GDP growth rate of 2.4% compared to the outlook in both scenarios. This is slower growth than the average growth of nearly

3.5% per year seen over the previous 25 years, reflecting both slower population growth and weaker GDP per capita gains. Despite this, the size of the global economy will double by 2050. The main driver of this growth is the growing level of prosperity in emerging economies, which account for about 70% of the increase in global activity.

Table 5 – Energy consumption in selected countries

Country	Energy consumption (BTU)	World consumption	Per capita per year BTU
India	30 476 788 610 000	5,2%	22 415
China	138 689 472 800 000	23,8%	98 197
United States	97 661 161 460 000	16,8%	293 979
Canada	15 062 124 200 000	2,6%	409 202
Japan	19 402 928 820 000	3,3%	152 701
Brazil	12 566 399 560 000	2,2%	61 388
Germany	14 062 539 590 000	2,4%	169 216
Poland	4 334 474 486 000	0,74429%	113 305
Note – compiled by the a	author based on world meters		

China consumed 138,689,472,800,000 BTU (138.69 trillion BTU) of energy. This represents 23.81% of global energy consumption. China produced 110,225,746,800,000 BTU (110.23 trillion BTU) of energy, meeting 79% of its annual energy demand. The US consumed 97,661,161,460,000 BTU (97.66 trillion BTU) of energy. This represents 16.77% of global energy consumption. The United States produced 88,156,417,450,000 BTU (88.16 trillion BTU) of energy, meeting 90% of annual energy demand. However, for comparison, Poland consumed 4,334,474,486,000 BTU (4.33 trillion BTU)

of energy. This represents 0.74% of global energy consumption. Poland produced 2,482,160,865,000 BTU (2.48 trillion BTU) of energy, covering 57% of annual energy demand.

The challenge is to move – for the first time ever – from the current phase of energy addition as part of the energy transition to the phase of 'energy substitution', where low-carbon energy will grow fast enough to more than keep up with the increase in global energy demand, enabling a reduction in fossil fuel consumption and with it carbon emissions. The longer it takes for the world to transi-

tion to a rapid and sustainable energy transition, the greater the risk of a costly and chaotic path of adjustment in the future. The challenge posed by the energy transition is further complicated by the repercussions of the disruptions and shortages of energy caused by the war in Ukraine. These disruptions and the associated economic and social costs are a reminder to everyone that the transition must also take into account energy security and affordability.

The article addresses the topic of sustainable development from a socio-economic, energy and demographic perspective. The authors present the concept of sustainable development as a multidimensional process in which the interdependencies between population growth, energy consumption, the structure of public expenditure and industrial production are of key importance. The empirical part analyses demographic data, the level of global expenditure on health, education and the military, as well as energy consumption in selected countries. Studies have shown that dynamic population growth – especially in developing countries – generates pressure on the environment and increases the demand for resources. At the same time, economic development and growing energy needs are not yet effectively balanced by the increase in the use of renewable sources. Particular attention is paid to the need to move from the stage of "adding" lowemission energy sources to their real replacement of fossil fuels.

The discussion emphasized that the actions taken so far for sustainable development are fragmented and local, which limits their effectiveness. Another problem is the lack of a coherent policy that takes into account long-term environmental and social goals. According to the authors, it is necessary to intensify international cooperation, strengthen participatory mechanisms and integrate environmental costs in economic decisions. The article is an important voice in the debate on the global shape of sustainable development and indicates the need

for further interdisciplinary research that takes into account both regional conditions and global dependencies.

Conclusion

Sustainability is a concept that seeks to balance the needs of current generations with the capabilities of future generations. It includes three main pillars: environmental protection, economic development and social justice. The key Sustainable Development Goals set by the United Nations aim to eradicate poverty, protect the planet and ensure prosperity for all. In practice, sustainable development requires cooperation between different sectors, technological innovation, and a change in the way we think about consumption and production. Challenges such as climate change, environmental degradation and social inequalities require global action and local initiatives to create a more sustainable future. The world of ideas presented in the article aims to stimulate discussion and possible joint action in the context of progress towards sustainable development. Because the work carried out so far has been carried out on a micro and local scale.

The article raises important issues related to sustainable development, drawing attention to the need for coordinated actions at the global level. I agree that existing initiatives are often carried out in a fragmented and local way, which limits their effectiveness. Sovereign debt actually affects their ability to invest in the long-term goals of sustainable development and environmental protection. Many countries are struggling to service their debt, which puts priority on immediate needs rather than longterm strategies. To effectively pursue sustainable development, it is necessary to create a common policy that takes into account both local and global needs. Cooperation between countries, international organizations and the private sector can contribute to better resource management and the implementation of innovative solutions.

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