

# THE ECONOMIC-ECOLOGICAL APPROACH TO THE UNDERSTANDING OF HUMAN RIGHTS: A THEORETICAL AND LEGAL PERSPECTIVE

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**Abstract.** In the contemporary era of global scientific and technological development and the formation of a new world legal order, the concept of human ecology economics was introduced into scientific circulation, and a novel ecological and economic approach was developed in the theory of economic science. This approach enables the reduction of the risks of depletion of natural resources and environmental degradation due to unbalanced economic development. The ecological and economic approach is predicated on the widespread utilisation of an economic and legal mechanism that facilitates the reconciliation of environmental and economic interests of society with maximum respect for human rights in the formulation of economic policy. In the further development of a new branch of economic science, namely human ecology economics, it is essential to take the latest developments in the field of human rights into consideration, with particular emphasis on those pertaining to the generations of these rights. The article is dedicated to theoretical and legal approaches to understanding the generations of human rights in the era of globalization, at the crossroads of the world order and the emergence of existential challenges for modern civilisation. The new order should be formed based on the principle of respect for human rights as a fundamental value. However, contemporary economic policy and scientific and technological progress have the potential to compromise the right to human dignity, exacerbate disparities in access to fundamental resources, notably drinking water, and contribute to the infringement of other economic, social, cultural, and environmental rights. The new world order must be founded on the basis of respect for human rights and necessitates a radical transformation of the economy. The implementation of novel approaches to economic development, a component of which is the economy of human ecology, will facilitate reform. It has been demonstrated that the sustainable development model has a contribution to the development of a new type of economy. This necessitates novel approaches to environmental human rights, which, in light of scientific and technological progress, should be regarded as ecological-economic rights. The impact of economic development on human rights is analysed, and it is concluded that such development exacerbates risks, including resource depletion, violations of human rights to equality and non-discrimination, etc. Concurrently, it is emphasised that risks can be circumvented through the implementation of an ecological economy as a prerequisite for sustainable development. The text places particular emphasis on the economic aspect of environmental human rights. The ecosystemic approach to the classification of human rights is a concept that is currently being explored. It has been argued that it has significant potential; however, the rights of nature differ from human rights. These categories cannot be equated. Therefore, it is only appropriate to speak about the greening of human rights as part of the global process of greening world development. This new discourse requires a change in approach to understanding the category of "generations of human rights". Attempts to argue for the inclusion of somatic, digital and environmental rights in the fourth and fifth generations of human rights are being examined, respectively. The approach under discussion is rendered moot by the fact that it harbours risks of disrupting the established architecture of human rights. Drawing upon the jurisprudence of the European Court of Human Rights, this study underscores the emergence of digital and somatic

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rights as novel facets of the human right to life, the right to respect for private and family life, the right to freedom of expression, and the right to information confidentiality.

**Keywords:** economics of human ecology, economic-ecological approach, economic-legal mechanism, human rights, economic system, generation of human rights, scientific and technological progress, sustainable development.

**JEL Classification:** F01, K33

## 1. Introduction

In contemporary society, the notion of sustainable development has evolved into a paradigm of modern societal development. Proposed in the mid-20th century, it has undergone changes and been enriched with new approaches. One such approach that has been identified as showing great promise is the interdisciplinary economic-ecological approach developed by specialists such as R. Allen, M. Addleson, and A. O'Hara. These experts established the new field of "human ecology economics", defined as the interconnected global conditions and human systems. This is an interdisciplinary field that studies global conditions and human systems. The economic system is regarded by them as a subsystem of human ecology. It is the contention of the present study that economics and the economics of human ecology can be considered as a subfield of "human ecology". The proposal of this approach was made with the intention of providing economists with maximum conceptual freedom to rethink the boundaries and methods of their discipline (Human Ecology Economics a New Framework for Global Sustainability, 2007). Indeed, human ecology economics provides the most effective foundation for addressing global sustainability issues, as, in contrast to traditional economics, it is oriented towards the long term and effectively combines "sustainable development" with traditional economic sectors. A significant contribution to the development of the economic-ecological approach is attributed to R. Costanza, J. Cumberland, and others, who developed the fundamental principles of ecological economics (Costanza, Cumberland, 1997). I. Dubovich, O. Adamovskyi, and Kh. Vasylyshyn's research focused on the implementation of ecological economics tools, with a particular emphasis on the enhancement of regulatory and legal frameworks for sustainable development, and the assurance of their effective implementation (Dubovich, Adamovskyi, Vasylyshyn, 2021). It is important to acknowledge their achievements, yet it should be noted that the issue of environmental human rights has not been addressed. Human rights and economics are disciplines that should complement each other; they should not be in competition. However, a mutually beneficial combination did not materialise. Branco M. Couret demonstrates how the prevailing economic

discourse is characterised by a marked opposition to the promotion of human rights, particularly economic, social and cultural rights. The primary conclusion of the expert is that the enhancement of human rights in the era of the global economy necessitates a radical transformation of the economy. It is imperative that the economy is governed in a manner that upholds human dignity (Branco, Manuel Couret, 2009). This specialist area of study focuses on the economic aspect of environmental human rights, and is limited to the right to a clean and healthy environment, the right to access natural resources, particularly drinking water, and the right to access environmental information.

In the context of this research, it is evident that the issue of the place of environmental human rights in the economic aspect within the system of generations of human rights has practically not been considered by either Ukrainian or foreign specialists.

## 2. Human Rights in the Context of Sustainable Economic Development

In order to optimise relations in the sphere of human-environment interaction, the economic and legal mechanisms for ensuring environmental protection are employed extensively. The economic and legal mechanism is a complex category that incorporates legal, functional and economic components. The elements of the latter include economic measures for ensuring environmental protection, such as fees for special use of natural resources, environmental pollution, deterioration of the quality of natural resources, limiting the use of mineral resources and financing environmental protection measures. It is the contention of the present study that the structure of this mechanism, which acquires new meanings in the context of the economics of human ecology and must take into account the requirements of the ecological and economic approach, includes such a component as "ecological and economic human rights". This category has given rise to a number of debates among scientists concerning the position of ecological and economic rights within the framework of human rights.

Currently, it is important to discuss the polarisation of views on generations of human rights. This ranges from the acknowledgement of the significance of this field of research for legal science and practice by experts such as M. Batan, Y. Hotsuliak, A. Hryb and

M. Hartman (2025), to the rejection of the concept of generations of human rights in the work of P. Macklem (2015). O. Hyliaka (2023) studied the impact of economic factors, particularly innovative digital technologies, on the development of the concept of generations of human rights. They noted that the use of these technologies has not only led to socio-economic progress, but has also significantly affected and created problems for the extensive catalogue of human rights. He is supported by V. Kontsevich (2024), who noted that the emergence of new human rights in scientific discourse is primarily due to the realisation that scientific and technological progress and the development of high-precision technologies create new human possibilities that did not previously exist in nature. Accordingly, these possibilities could not previously be legally enshrined. Kontsevich proposed binary approaches to defining these new human rights. K. Weeramantry (1993) first outlined the problem back in 1990, rightly noting that the law cannot keep up with rapid technological changes and advancements.

Guaranteeing environmental human rights is a particularly pressing issue, given that economic growth has a negative impact on the environment and existing legal mechanisms are unable to ensure the sustainable use of natural resources.

Thus, the digital economy is currently experiencing rapid growth, enabling the development of new business models, digital platforms and services that generate novel forms of economic activity and transform traditional industries (Taranukha, 2021).

It is evident that economic factors, chiefly scientific and technological progress, exert a dual influence on human rights. These rights are intricately intertwined, as economic factors redefine the concept of human rights and freedoms, including environmental rights and the right to information, while concurrently engendering risks of escalated unlawful control and misinformation.

The application of the latest medical technologies is resulting in a re-evaluation of the concept of the economy of medical services. This field of study is predicated on the application of economic principles to the domain of medical services, with a core focus on the optimisation of resource allocation to enhance outcomes. It encompasses the financial behaviour of individuals, healthcare professionals, and governments, and the identification of the most economically efficient strategies for the provision of such services. The focus of this research is the generation of medical services, with a particular emphasis on the cost of medical interventions, the financial consequences of health-related behaviours, socialisation, and the self-identification of individuals in society. It is evident that changes have a profound impact on human rights, thereby expanding their scope and necessitating the

establishment of effective mechanisms to ensure their protection and promotion.

In this context, it is necessary to consider the latest challenges and threats associated with economic development and technological progress. Consequently, the advent of digital technologies, such as artificial intelligence, absent adequate safeguards, has the potential to jeopardise the entirety of human civilisation, particularly with regard to human rights (Resolution adopted by the General Assembly 78/213).

In such circumstances, the issue of generations of human rights remains a pivotal subject in the field of contemporary legal science. It exemplifies the evolution of methodologies employed for the recognition of novel human rights and the assurance of their protection within the paradigm of globalisation of economic development and the unification of the legal space.

### **3. The Concept of Generations of Human Rights in the Era of Ecological Economy**

K. Vasak is widely regarded as the progenitor of the notion of generations of human rights. In 1977, the author identified three generations of human rights. The rights of the first generation encompass civil and political rights, which are intrinsic to all individuals, are inherent, and are entrenched in the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights. The second generation is based on the provisions of the International Covenant on Economic, Social and Cultural Rights. The third generation is shaped by the evolution of the first two generations of human rights and society as a whole, uniting the collective or solidarity rights of nations, peoples, and specific social groups. The conceptualisation of the first, second, and third generations of human rights has been largely consolidated within the domain of legal science. The ensuing discourse has the potential to facilitate a more profound comprehension of the content, essence, and the establishment of enhanced mechanisms for their protection.

In the context of this research, the focus will be on environmental human rights, which are closely related to the right to development, meaning they have an economic component. In this context, it is important to note that scientific and technological progress is ambiguously assessed in society. On the one hand, it is capable of negatively impacting the natural environment and natural resource potential. Conversely, contemporary society is distinguished by economic advancement, the refinement of prevailing technologies, and the advent of novel, pioneering technologies. Concurrently, scientific and technological progress engenders the augmentation of prospects

for the judicious utilisation of natural resource potential.

Accordingly, in accordance with the principles of sustainable economic development espoused in the Rio de Janeiro Declaration on Environment and Development, a fundamental tenet of modern sustainable economic development is the limitation and elimination of unviable models of production and consumption, and the encouragement of appropriate demographic policies, with the aim of achieving a higher quality of life for all people. The implementation of this principle is achieved by means of comprehensive greening across all spheres of societal development. Human rights are not an exception to this.

The implementation of this principle is achieved through the comprehensive ecologization of all spheres of social development. Human rights are not an exception to this rule; rather, they are a fundamental component of human ecology economics. In today's world, human rights should be understood as both economic and ecological rights.

The right to a clean, healthy environment is considered fundamental to environmental rights. The right to exercise this right may be done so by an individual, a group of individuals, a collective of people, or humanity as a whole. A salient feature of this category of human rights is that their implementation engenders restrictions on first and second-generation rights. This assertion is further substantiated by the prevailing case law of the EU Court. L. Hauer challenged the prohibition on the expansion of vineyard plantings on her land in Rhineland-Palatinate (Germany), contending that this prohibition violated her property rights and her right to engage in economic activity (grape growing). The EU Court ruled that, whilst the right to property is guaranteed, it is not absolute and can be restricted in the interest of the Community if the restriction is proportionate to the pursued objective. Restrictions on property rights can be justified by economic expediency (Case 44/79).

The rights of the environment are positively enshrined in international law. As A. Cornescu has observed, these rights are typically classified as the third generation of human rights. However, the author further observes that the doctrine of environmental rights refers to these rights as "rights of future generations" and therefore they should be considered in the context of the trend towards establishing the fourth generation of rights (Cornescu, 2009).

It is the contention of the present study that environmental rights, such as the right to development, represent third-generation rights. It is evident that neither the Universal Declaration of Human Rights nor any other document pertaining to human rights imposes a limitation on human rights that is confined to the present era. It is acknowledged that all people

of the present and future generations possess rights, yet these rights are already known and classified as human rights. The Maastricht Principles on the Human Rights of Future Generations assert their application to the human rights of future generations (Maastricht Principles on the Human Rights of Future Generations).

In recent decades, there has been an increasing recognition of the necessity to acknowledge the intergenerational dimensions of contemporary behaviour. Humanity, the Earth on which it resides, and the natural systems with which it is intertwined, in conjunction with its political, social, cultural, and economic systems, are undergoing profound, rapid, and dangerous changes caused by human activity. The principles advocate a progressive interpretation and development of existing human rights standards in the context of the human rights of future generations. It is acknowledged that states may assume further obligations as the concept of human rights continues to evolve, and that enhanced human rights standards may be instituted in the future. The endeavours to incorporate the right to a clean and healthy environment within the Fifth Generation of Rights (Fifth Generation of Rights Contemporary Discourses, Developments and Challenges) are not supported by substantial evidence.

The endeavours to incorporate the concept of 'rights of nature' within the fifth generation of human rights appear to lack a solid foundation, as they extend beyond the conventional anthropocentric frameworks. Whilst not denying the fundamental premise of ecocentrism, it is crucial to acknowledge the significance of ecologicalising economic, ecological and legal development. In this regard, it is imperative to underscore the notion that the rights of nature represent an autonomous legal phenomenon, distinctly separate from human rights, though intricately intertwined with them.

It is therefore expedient to give the legislation an ecocentric orientation and to recognise the priority of ecological interests over economic ones. This should manifest in the greening of the legal and economic mechanisms. The acknowledgement of the principle of ecocentrism is imperative for the preservation of the natural environment, both in the present and for the benefit of future generations. Ecocentrism is predicated on the premise that nature and natural formations (e.g., animals, rivers, ecosystems) are to be recognised as independent values, with a concomitant emphasis on their preservation. The philosophy combines environmental rights, bioethics and sustainable development.

Subsequent scientific research has led to the conclusion that new human rights have emerged as a result of scientific and technological development. In the professional literature, they are characterised as somatic and digital rights. A number of specialists

have expressed the opinion that they do not fit into the traditional system of three generations of human rights. According to Risse Mathias (2021), a fourth generation of human rights is emerging.

Indeed, innovative development contributes to expanding the catalogue of human rights. Their legal mediation should take into account global challenges. Globalisation promotes economic development and the emergence of innovative services, but it also exacerbates inequality and exploitation. Technological progress creates new challenges in the areas of digital rights and privacy protection. These new realities require an interdisciplinary approach that considers the interconnectedness of economic, social, political and technological factors.

In the majority of cases, the fourth generation encompasses human somatic rights, namely the right to dispose of one's own body, tissues, and organs, reproductive rights, and the right to modify one's own body (Perepolkin, Perepolkin, Averianova, 2021). In the opinion of certain specialists, the right to same-sex marriage should be included in this generation (Semenets, 2023). However, the question must be posed: do these rights truly represent the fourth generation of human rights? It is asserted that a more appropriate classification would be "civil rights", which are considered to belong to the first generation of human rights. Any person has the right to human dignity, respect for family and private life, and the right to marry. Regarding the right to same-sex marriages, the ECtHR in the case of *Schalk and Kopf v. Austria* ruled that the cohabitation of a same-sex couple constitutes "family life" and is entitled to protection under Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms. Article 8 has also been invoked to safeguard reproductive rights, including the right to surrogacy (*Mennesson v. France*), abortion, euthanasia, and gender identity (*Bosso v. Italy, Haas v. Switzerland*).

New challenges and threats require improvements to the sustainable development model. Focusing on sustainable development and economic growth, the concept of a circular economy has emerged as a means of addressing socio-ecological issues. By its very nature, it is a restorative and regenerative process aimed at preserving products, components and materials. This is fundamentally different from the traditional linear economy paradigm of 'take, make, waste' (Innovation for Sustainability The Ellen MacArthur Foundation Releases New, 2022). A fundamental rethinking of the concept of growth is required, as is the decoupling of economic activity from the consumption of limited resources. Furthermore, the elimination of waste from the system is imperative, as is the transition to renewable energy sources, particularly through the nascent digital ecology. Consequently, it is not feasible to provide

a comprehensive characterisation of this category at the present time. It is the position of the present study that this concept signifies a series of instruments and methodologies that facilitate the mitigation of the deleterious effects of technologies on the natural environment.

While certain tenets of the circular economy may be subject to debate or ideological discourse, it is evident that the concept exerts a tangible influence on individuals' lives, rights, and interests. Consequently, the conceptualisation of this system is inconceivable without the consideration of environmental human rights.

With regard to the instruments of the circular economy, digitalisation is a particularly salient prospect. This is due to the fact that it influences not only the economy and technologies themselves, but also human rights. The subject under discussion is that of digital rights. It has been observed that there have been endeavours to categorise them as the fourth generation of human rights. However, it is argued that the advent of information technologies has contributed to the evolution of the conventional three generations of human rights, thereby conferring upon them a more expansive significance and establishing supplementary safeguards for their preservation.

It is evident that both international and domestic environmental law encompass provisions pertaining to information rights, encompassing the right to environmental safety, the right to information, the right to participation, and the right to access justice. Information technologies (the Internet, artificial intelligence, etc.) provide new opportunities for obtaining the necessary information. The timely receipt of information regarding accidents and disasters through internet technologies provides opportunities for rapid response, which is considered to be a guarantee of safety. The integration of artificial intelligence technology holds considerable potential in enhancing the capacity to recognise potential hazards and to identify more efficacious methods of ensuring personal safety. The right to participate can also be better realised through participation in online conferences where ecologically significant projects are discussed. Digital technologies have been demonstrated to facilitate the realisation of the right to access to justice. As with somatic rights, the ECtHR uses Article 8 of the European Convention on Human Rights to protect digital rights (see the cases of *Zakharov v. Russia* and *S. and Marper v. the United Kingdom*).

Digitalization does not offer a rapid route to social transformation. A comprehensive transformation of sustainable development is required, entailing fundamental changes in the social and economic order. This transformation should encompass the expansion of the catalogue of human rights and the creation of additional guarantees for environmental human rights.

The circular economy is predicated on the utilisation of economic and legal mechanisms, encompassing economic, legal and organisational dimensions. The overarching objective of the circular economy is to achieve a harmonious balance between the economic and environmental interests of society. The economic and legal mechanisms in place enable the integration of components that are oriented towards economic development, environmental protection and human rights protection. These mechanisms also embody a holistic approach to addressing the interplay between the system components of "economy – ecology – human rights".

#### 4. Conclusions

The contemporary global community finds itself at a critical juncture, navigating the transition towards a new world order amidst the evolving geopolitical landscape. The factors determining the course of action are twofold. Firstly, there are existential challenges and threats to sustainable development and civilizational values, in particular human rights. Secondly, there are new powerful opportunities for expanding their catalog and interpretation. The new

order is to be founded upon ecological economics, with respect for human rights constituting its primary principle, and the effective guarantee of these rights its overarching objective. The economic-ecological approach is instrumental in the formation of new human rights and the expansion of existing ones. Consequently, within the paradigm of ecological economics, a novel category has emerged: ecological-economic human rights. These rights constitute the third generation of human rights and function as an integral component of the economic and legal apparatus for nature management. The overarching objective of this management is to promote economic growth, ensure environmental protection, and enhance people's well-being.

This approach is pertinent to the economics of human ecology, as it emphasises the coherence and interdependence of human rights across all three generations (political, civil, economic, social and environmental). It integrates human rights, particularly those related to scientific and technological progress, into modern innovative ecological and economic development, and promotes respect for human rights and sustainable economic development within the paradigm of human ecology economics.

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