

ASERS

# Journal of Environmental Management and Tourism

Quarterly

Volume XII

Issue 5(53)

Fall 2021

ISSN 2068 – 7729

Journal DOI

<https://doi.org/10.14505/jemt>

ASERS  
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ISSN 2068 – 7729

Journal DOI: <https://doi.org/10.14505/ient>

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# Call for Papers Winter Issues 2021 Journal of Environmental Management and Tourism

**Journal of Environmental Management and Tourism** is an interdisciplinary research journal, aimed to publish articles and original research papers that should contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences.

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DOI: [https://doi.org/10.14505/jemt.v12.5\(53\).03](https://doi.org/10.14505/jemt.v12.5(53).03)

## Sustainable Development: Trends in Ukraine and the World

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### Suggested Citation:

Zelinska, H. *et al.* (2021). Sustainable Development: Trends in Ukraine and the World. *Journal of Environmental Management and Tourism*, (Volume XII, Fall), 5(53): 1179-1187. DOI: [10.14505/jemt.v12.5\(53\).03](https://doi.org/10.14505/jemt.v12.5(53).03)

### Article's History:

Received 18<sup>th</sup> of May 2021; Received in revised form 30<sup>th</sup> of May 2021; Accepted 14<sup>th</sup> of June 2021; Published 10<sup>th</sup> of September 2021. Copyright © 2021 by ASERS® Publishing. All rights reserved.

### Abstract:

The paper studies sustainable development in the realities of Ukraine and the world. In particular, the global trends in human and sustainable development are analyzed. The tendencies of changes in the world measurement of human development are revealed through the human development index and partial indices characterizing the development for socio-economic inequality (IHD), gender development (GDI), gender inequality (GII). It was found that sustainable development of society is impossible without solving the problem of a safe environment and preserving the environment for future generations. It has been determined that sustainable development presupposes the solution of triune tasks: economy, ecology and social sphere. It is noted that Ukraine has an extremely acute need for the transition to a sustainable development model, which is due to: a sufficiently large share of raw materials and energy-intensive types of production in the overall structure of the economy, which leads to the depletion of natural resources by a high level of environmental pollution, which negatively affects the health of the population. In terms of human development, significant differences remain between Ukraine and other countries when it comes to the well-being of the population, life expectancy and attitude to the environment. It was analyzed that the largest increase in the HDI rating for the period from 2010 to 2020 occurred in Ireland, the largest decrease in the HDI rating occurred in the Syrian Arab Republic and Libya, in countries affected by military conflicts. It has been determined that education is the primary and one of the most important factors for ensuring sustainable development of mankind. Attention is focused on solving the problem of creating an effective system for monitoring the environment, organizing an observation system, collecting, processing, transmitting, storing and analyzing information about the state of the environment, predicting its changes and making decisions on preventing negative changes in terms of its impact on public health. A model of ensuring human and sustainable development for Ukraine is proposed. The main directions of development should be the use of innovative approaches to environmental, demographic, educational and social components through the implementation of targeted regional development programs, outsourcing, insurance medicine, public-private partnerships, international educational online environment, international environmental projects.

**Keywords:** development; human; sustainable development; environment; index; world; Ukraine; education; model.

**JEL Classification:** M12; F29; H40; I29; O15.

## Introduction

Modern global problems of the world require the solution of various issues of both social, economic, environmental and political nature. Among a number of problems, the issues of human and sustainable development, which are directly dependent on each other, acquire special meaning, since it is a person who is the basic component of all processes taking place in the world cycle. The adoption of the Millennium Sustainable Development Goals makes the issue of assessing contemporary risks to human development more relevant than ever, especially now, in the context of the global corona virus pandemic.

At the end of the twentieth century, the world community identified two main priorities for social development: ensuring human development as the main goal and the main factor of development, ensuring sustainable development as a non-alternative, conditions for the further development of human civilization, which once again updates the study of the relationship of these problems.

### 1. Literature Review

The ideas of sustainable development originate in the work of H. Daly (2017), who argues that human development is the basis for sustainable development of society. Contribution to the development of sustainable development has been made by many scientists, in particular (J. Hulse 2007, R. Kates 2012) who say that compliance with its goals is a requirement of today. We agree that "sustainability means transforming our ways of living to maximize the chances that environmental and social conditions will indefinitely support human security, well-being and health." (A. McMichael *et al.* 2003).

F. Becerra-Posada (2015) argues that sustainable development goals need to be adhered to, with a focus on continuous human development. I. Stupak *et al.* (2021) say that a development agenda for achieving the Sustainable Development Goals requires, among other things, significant investments in several sectors (health and wellness).

J. Waage *et al.* (2015) and I. Kinash *et al.* (2021) in their works investigated the impact of infrastructure provision on the achievement of sustainable development goals. The work, R. Anker *et al.* (2003) is devoted to defining criteria and basic concepts of decent work. A. Ferrannini *et al.* say that today the entire world is grappling with the global health emergency of our time, which soon turned into an economic, social and human crisis and affected all key dimensions of our lives (2021) They prove that we will feel the consequences of this crisis in ten years. As the crisis strongly affects the dynamics of production in each country, industrial policy is considered part of the response to the major economic and social problems arising from extreme unemployment, depression and poverty (Y. Rohozian *et al.* 2020). S. Anand & A. Sen (2000) views sustainable development as intergenerational equity, examining the relationship between distribution equity, sustainable development, optimal growth, and clean time benefits. R. Arocena & J. Sutz (2021) say that innovation in social development is a topical issue today, where sustainable human development is the main concept, which means focusing on the development of the least favorable sectors. S. Pan & S. Zhang (2020) argue that, despite significant harm to human lives and livelihoods, the coronavirus pandemic is an excellent opportunity for the human family to act in solidarity and turn this crisis into an impetus for achieving the UN Sustainable Development Goals. A. Nikiforova & A. Shyian (2021) proposed a model that allows the use of effective incentives for workers, which will increase productivity and their sustainable development.

In Ukraine, the problem of human development has been studied for a long time by I. Popadynets *et al.* (2020) and H. Zelinska *et al.* (2020), who argue that it is the person who is the driving force of sustainable development. Ievdokymov *et al.* (2020) consider social capital as a potential resource for successful interaction in the context of the implementation of the Sustainable Development Goals of the state. Scientists (L. Simkiv *et al.* (2021), U. Andrusiv (2021) and O. Kneysler *et al.* (2020) investigated the relationship between sustainable energy conservation and sustainable development. They found that this issue is relevant and has a significant impact on the sustainable development of the country.

At the same time, the issue of sustainable development and research of its development trends in Ukraine and the world requires more thorough research.

The article aims at a comparative analysis of trends in sustainable, in particular human development on a global scale in the context of the formation of a model for ensuring sustainable development in the conditions of modern Ukraine.

### 2. Case Studies

The essence of Sustainable Human Development is the equality of all people in terms of development opportunities and the preservation of the environment now and in the future (O. Tulai & I. Humovska 2015). The

connection between human and sustainable development has the character of a synergistic interaction, which explains the process of self-organization, the emergence, maintenance of stability and the collapse of structures in complex social systems, such as a person, society, and the state.

Human Development is based on an anthropocentric approach. In the report of the United Nations International Commission on Environment and Development, Sustainable Development was outlined as the integral development of society, which allows meeting the needs of present generations without compromising the ability of future generations to meet their own needs (2020). So, the paradigm of sustainable development combined the ideas of environmental protection, social justice and economics.

Ukraine has an extremely acute need for a transition to a sustainable development model, which is due to (I. Ivashkiv *et al.* 2020; I. Kramarenko *et al.* 2020): a sufficiently large share of raw materials and energy-intensive types of production in the overall structure of the economy, which leads to the depletion of natural resources with a high level of environmental pollution, which negatively affects the health of the population.

The economic component sustainable development lies in the optimal use of limited resources and the use of nature, energy and material-saving technologies to create a stream of total income, which would ensure the minimum preservation of total capital. From the point of view of ecology, sustainable development should ensure the integrity of biological and physical natural systems, their viability, on which the global stability of the entire biosphere depends. The social component is focused on the development of society. The systemic coordination and balance of these three components is a task of enormous complexity. Therefore, the main challenge of our time for national governments, authoritative international organizations and all the progressive people of the world is to solve these problems.

The concept of HDI is because the main criterion for assessing the development of the country is the people and their opportunities, not just economic growth. The Human Development Index (HDI) is a summary indicator and is measured in three main areas: long-term and healthy living, access to knowledge, a decent standard of living, which, of course, is formed under the influence of processes occurring in the economy and the environment. Thus, long and healthy life is measured by life expectancy, the level of knowledge is measured by the average number of years spent on education by adults. The standard of living is measured by gross national income (GNI) per capita in dollars of constant purchasing power at the level of 2011, convertible by the coefficients of transition to purchasing power parity (PPP).

After analyzing the new ranking of 189 countries and territories on the HDI published by the United Nations Development Program (UNDP), it can be argued that Norway, Switzerland, Australia, Ireland and Germany are in the lead, while Niger, Central African Republic, South Sudan, Chad and Burundi are at the bottom of this ranking, reflecting the HDI measure of national achievement in terms of health, education and income (Human Development Report, 2019).

The updated statistics presents the HDI for 2020, taking into account socio-economic inequality (IHD), gender development index (GDI), gender inequality index (GII).

Globally, the trend is towards continuing progress in the field of human development (HD), with many countries moving to a higher category in terms of HD: today, out of 189 countries, the group with a very high level of human development includes 59 countries and the group with a low level HD includes 38 countries. Just 10 years ago, in 2010, these groups numbered 46 and 49, respectively.

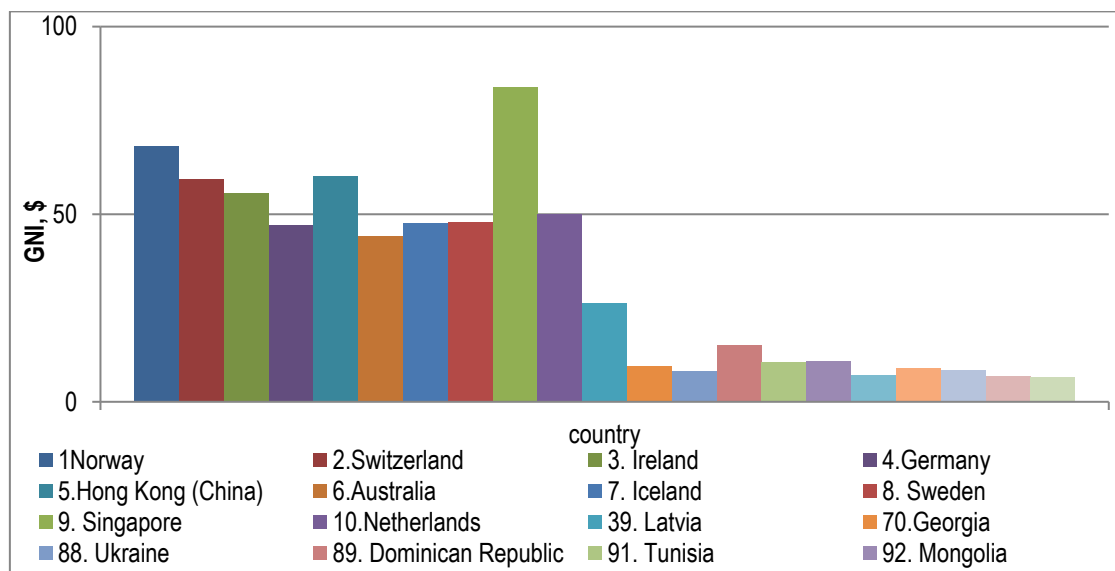
The largest increase in the HDI ranking for the period from 2010 to 2020 occurred in Ireland, which rose 13 positions; Turkey, the Dominican Republic and Botswana also developed intensively, each of which rose eight positions. The most dramatic drops in the HDI rating are related to countries affected by conflicts: the largest drop in the HDI rating occurred in the Syrian Arab Republic - by 27 positions, followed by Libya (26 positions) and Yemen (20 positions).

Education is the primary and one of the most important factors for the sustainable development of mankind. It is obvious that the development of education in Ukraine, in particular in the direction of sustainable development, requires new pedagogical conditions, models, a new culture and content. In terms of length of schooling, today's school-age children can expect to be 3.4 years longer in school than the 1980 generation. Average HDI levels have risen significantly since 1990 - by 22 percent globally and 51 percent in least developed countries, reflecting the fact that on average people live longer, have higher levels of education and higher incomes. However, across countries and regions of the world, large-scale differences in the level of human well-being persist. Today, a child born in Norway – the country with the highest HDI – can expect to live to almost 83 years old and go to school for almost 18 years. And a child born in Niger – the country with the lowest HDI – can expect to live only to 60 years and spend only five years in school (Human Development Report 2019).

Although significant inequality is observed in many countries it is more pronounced in countries with low HR levels. Countries with low and medium HRs lose 31 and 25 percent of their HR levels due to inequalities, respectively, and countries with very high HRs lose an average of 11 percent.

The inequality in gross national income per capita can be traced in Figure 1.

Figure 1. Ranking of countries by GNI per capita by PPP, excluding US, 2020



Source: developed by the authors according to the data (Human development indices and indicators 2020 statistical update)

Inequality between and within countries, in all its forms and dimensions, limits the choices and possibilities of people, acting as a brake on progress. One of the main sources of inequality within countries is the gap in opportunities, achievement and distribution of rights and powers between men and women. Globally, the average HDI for women is six percent lower than for men, due to lower income and educational attainment of women in many countries. The global economic activity rate for women is lower than the corresponding indicator for men – 49 percent versus 75 percent. And when women enter the labor market, their unemployment rate is 24 percent higher than their male counterparts. Overall, the proportion of parliamentary seats held by women also remains low, although it varies by region – from 17.5 and 18 percent in South Asia and the Arab States – to 29 percent in Latin America and the Caribbean and OECD countries.

High adolescent fertility, early motherhood, and inadequate and unequal access to antenatal and postnatal health care lead to high maternal mortality rates. The adolescent fertility rate in Africa is 101 per 1,000 live births, more than double the global average of 44 per 1,000 live births. There is a colossal range of indicators across countries for the quality of education, health care, and many other key dimensions of development. It is important to note that this gap is noticeable both in highly developed countries and in countries with an average level of development. For example, in Africa, there are an average of 39 pupils per teacher in primary school. The second place from the bottom on this indicator is occupied by the region of South Asia, where there are 35 students per teacher.

At the same time, in OECD countries, East Asia and the Pacific, as well as in Europe and Central Asia, there are 16-18 primary school students per teacher.

The HDI and other indicators of the HR allow to identify the most important regional development trends, in particular in the regions of the world:

- Arab states. Since 1990, the region's average HDI has increased by 25.5 %. At the same time, when adjusted for inequality, the total HDI of the Arab States is reduced by 25 %. The region also ranks second among all developing regions in terms of the intensity of the gender gap. The lowest among developing regions is the coefficient of economic activity of women, at 21 %.
- East Asia and the Pacific. This region ranks second in terms of HDI growth over the period 1990-2020 – 41.8 percent. However, its HDI, when adjusted for inequality, fell 15.6 %. Although the gender gap between men and women is 4.3 %.
- Europe and Central Asia. The average HDI for this region is 0.771, the highest among developing regions. The region also shows a low HDI loss when adjusted for inequality, at 11.7 percent, similar to that of the



OECD countries (11.9 %). It also has the lowest level of inequality between men and women among developing regions. However, the labor force participation rate for women is still much lower than for men (45.5 per cent versus 70.3).

- Latin America and the Caribbean. This region has achieved a high level of human development, the second after Europe and Central Asia. However, after adjusting for inequality, the regional HDI loses 21.8 % due to the unequal distribution of human development gains, especially in terms of income. The region has the lowest gender gap, at 2%. The labor force participation rate for women is significantly lower than for men (51.6 %t versus 77.5).

- South Asia. South Asia has experienced the fastest growth in the HDI among developing countries - by 45.3 % - since 1990. Life expectancy at birth increased by 10.8 years and expected length of schooling by 21 %. The HDI loss after inequality adjustment is about 26 %.

- Africa. The region has recorded a 35% increase in the HDI since 1990. Twelve countries in the region are now in the middle human development group, and four – Botswana, Gabon, Mauritius and Seychelles – n the high human development group.

Significant differences remain between Ukraine and other countries when it comes to the well-being of the population, life expectancy and attitude to the environment. A child born now in Norway - the country with the highest HDI - will probably live over 82 years and study for almost 18 years. At the same time, a child born in Ukraine is likely to live 71 years and devote 15 years to education. Although significant inequalities occur in many countries, including some of the richest countries, on average, countries such as Ukraine, suffer greater losses. One of the problems that requires an immediate solution is the creation of an effective system for monitoring the environment, the organization of a system for observing, collecting, processing, transferring, storing and analyzing information about the state of the environment, predicting its changes and making decisions on preventing negative changes in the state of the environment, its impact on public health and compliance with environmental safety requirements. One of the main directions of international activity in the field of environmental protection is the search and development of projects aimed at solving common environmental problems.

By 2020, Ukraine received an HDI value of 0.779, which is below the average for countries in the group with a high Human Development Index, below the average for Europe and Central Asia (Table 1). Between 1990 and 2020, life expectancy at birth in Ukraine increased by 2.3 years, and the average number of years of schooling increased by 2.2 years. Recently, the standard of living in Ukraine, which is determined by the gross national income (GNI) per capita, has slightly increased: by about 9% over the period of 2015-2020.

Table 1. HDI indicator and its components for Ukraine and for CIS countries as of 2020

Rank	Country	Human Development Index HDI	Life expectancy at birth, years	Expected years of schooling, years	Mean years of schooling, years	Gross national income (GNI) per capita, \$
49	Russian Federation	0,816	71,2	15,5	12,0	24,233
58	Kazakhstan	0,800	70,0	15,1	11,8	22,626
39	Latvia	0.854	75.2	16.0	12.8	26.301
88	Ukraine	0,750	72,1	15,0	11,3	8,130

Source: developed by the authors according to the data (Human development indices and indicators 2020 statistical update)

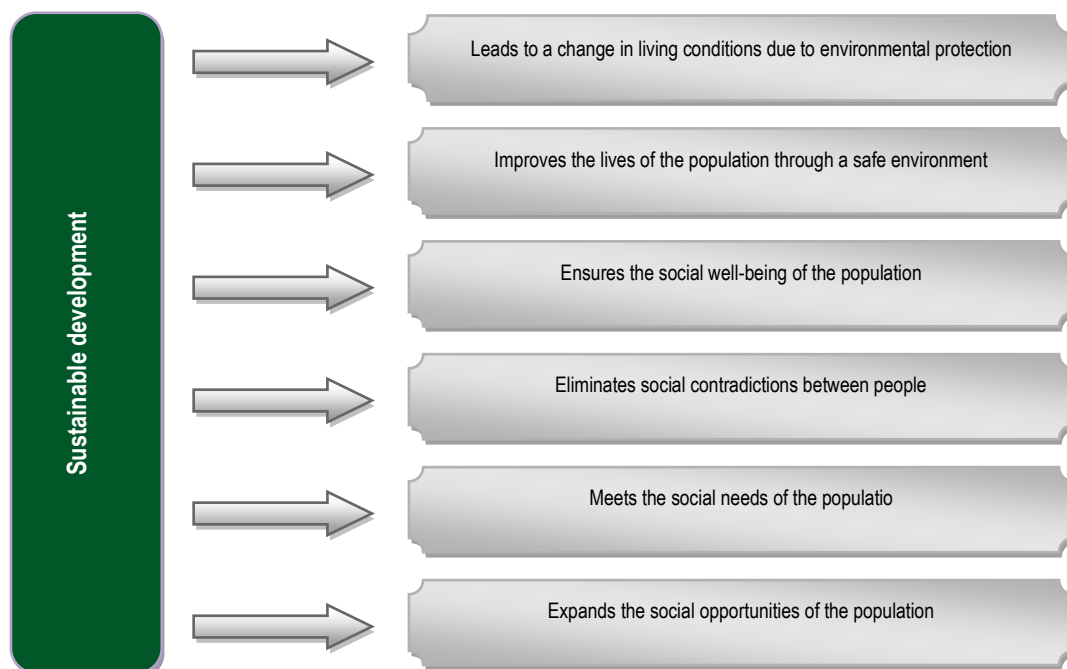
Like all averages, the HDI hides inequalities in the distribution of human development among the population at the country level. For this reason, in 2010, UNDP introduced the Human Development Index for Socio-Economic Inequality (IHDI), which takes into account inequality in all three HDI planes by “calculating” the average value of each plane according to its level of inequality (Human development indices and indicators 2020 statistical update).

Ukraine on this indicator in 2020 lost 6.6%. Inequality losses for Kazakhstan and the Russian Federation were 7.9% and 9.5%, respectively. At the same time, the coefficient of human development taking into account irregularities for Ukraine amounted to 6.5%, and the Human Development Index taking into account socio-economic inequality decreased to 0.721. However, manifestations of inequality in Ukraine were observed less than in other countries, in particular in Kazakhstan and the Russian Federation there was a gap of 7.9% and 9.5%, respectively. Thus, the HDI adjusted for socio-economic inequality (HDI) for Ukraine shows fewer irregularities regarding gross national income (GNI), life expectancy and the level of knowledge, compared to some richer countries. In 2010, the Human Development Report used for the first time the Gender Inequality Index (GII), which measures gender inequality in areas such as reproductive health, empowerment and economic

activity. Ukraine has a GII index of 0.285, ranking 61st among 160 countries according to the 2019 index. In Ukraine, women hold 12.3% of parliamentary seats, and 94.5% of adult women have at least secondary education, compared to 95.6% of men. For every 100,000 live births, 24 women die because of problems during pregnancy; the birth rate for adolescent girls is almost 24 births per 1000 women aged 15-19. The participation of women in the labor market is 46.9% versus 63.0% among men. For comparison, according to this indicator, Kazakhstan and the Russian Federation occupy 43rd and 53rd positions, respectively. For young people, the gender gap is decreasing, but inequality persists in adulthood (Human development indices and indicators 2020 statistical update).

The study to determine the relationship between the conceptual provisions of human and sustainable development proves that Ukraine has not yet achieved significant success in either human or sustainable development. Thus, human and sustainable development in the world, provides for various ways of interaction and forms of uniting people, which expresses their comprehensive dependence on each other (Figure 2).

Figure 2 - The result of human and sustainable development



Source:formed by the authors

Proceeding from this, in Ukraine, the economic policy should also become new, being based on the principles of innovation and sustainability, fair distribution of benefits, and a person, the disclosure of his capabilities must become the goal of economic development. Therefore, it is advisable to propose a model for ensuring human and sustainable development for Ukraine (Figure 3).

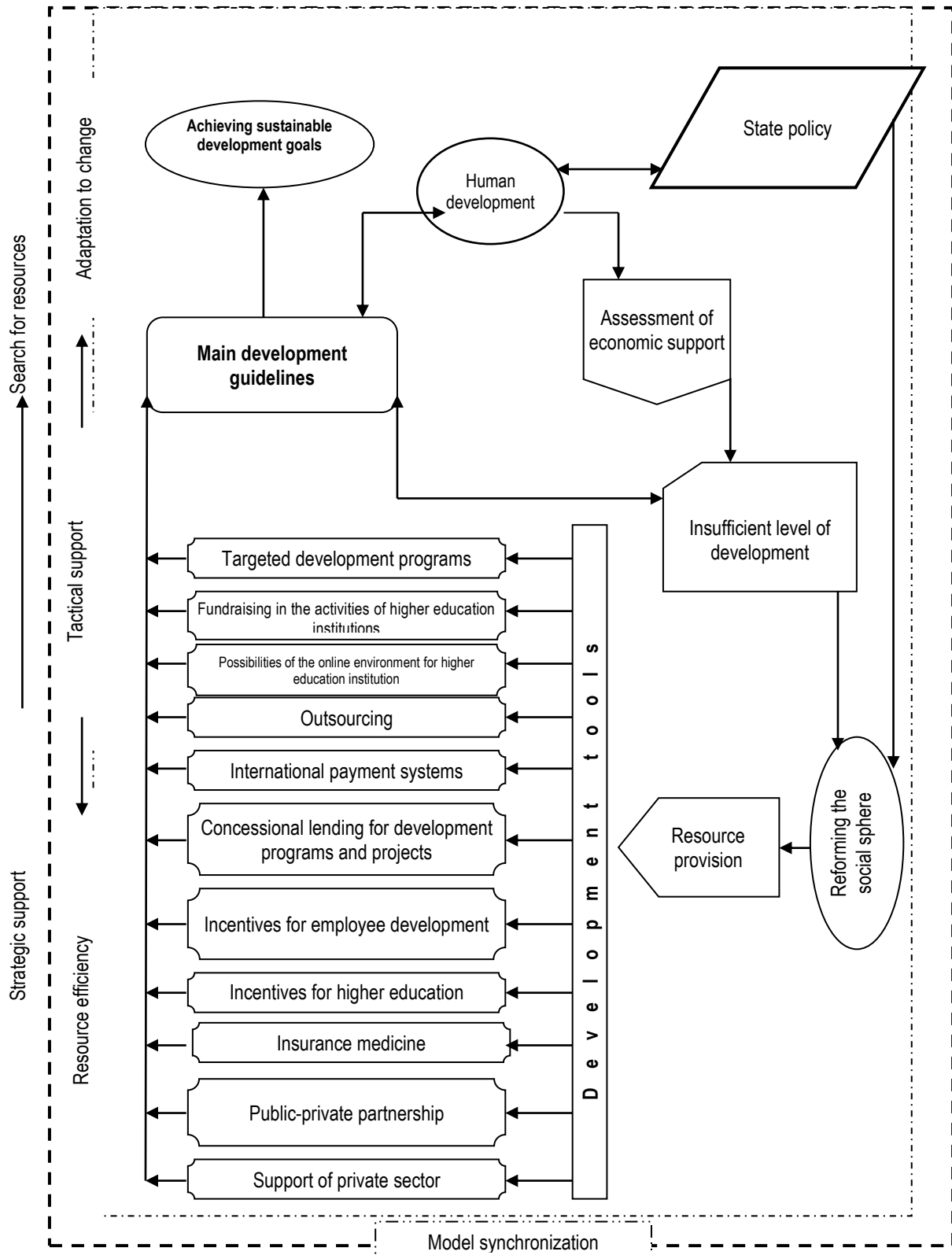
The main directions of development should be the use of innovative approaches to environmental, demographic, educational and social components through the implementation of targeted regional development programs, outsourcing, insurance medicine, public-private partnerships, international educational online environment, international environmental projects.

Thus, the achievement of sustainable development goals in Ukraine provides for the effective use of all resources, including methodical and methodological support and adaptation of human resources to changes.

We should not forget about the urgent problems of today, such as the global environmental crisis. This is due to the fact that almost all types of human social activity, unfortunately, have an anti-environmental orientation.

Therefore, the main problem of our time is the formation of such a lifestyle that would be long-lasting and economical. Remember that the use of nanotechnology and advances in science and technology alone cannot overcome the threat of environmental catastrophe looming over humanity. This requires a new philosophy, a new policy, new moral imperatives – the commitment of each person and humanity as a whole.

Figure 3. Model of ensuring human and sustainable development of Ukraine



Source: formed by the authors

### Conclusion

According to the results of the study, it can be argued that the existing inequality in any of its manifestations limits the choice of people, narrows the range of opportunities, slowing down progress. The Human Development Index analysis predicts that people living in very high human development countries will live 19 years longer and study

7 years longer than those living in low human development countries. And the main reason for this is not only well-being and material wealth. The ecological factor has a colossal influence here. The result of the predatory use of natural resources for mankind turns into an irreversible decrease in life expectancy, epidemics, disasters, hunger, and the like. Therefore, further research on sustainable development should not be limited only to the Human Development Index, because it hides the inequality in the distribution of human development among the population at the country level. That is why it is important to take into account socio-economic inequalities in all three dimensions of the HDI, defining the IHD, as well as to differentiate the HDI by gender and the comprehensive index of sustainable development of the country.

Today, global human development is deteriorating due to numerous shocks, vulnerabilities and risks such as epidemics, economic and financial crises, and food and energy insecurity. A new challenge for humanity was Covid 19 and its consequences.

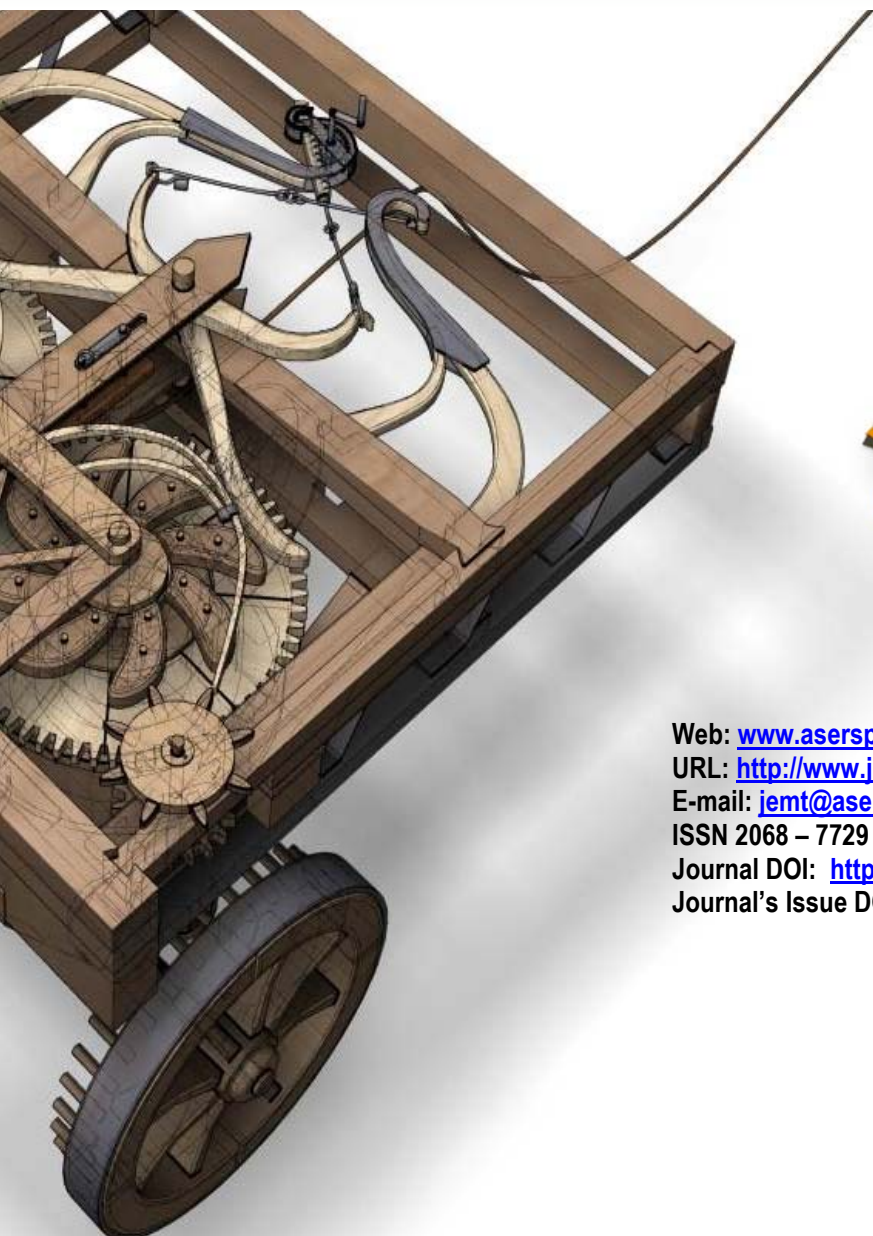
Global problems lead to an increasing role of social and environmental factors, the complex interaction of which with economic growth is designed to ensure the sustainable development of mankind in the historical perspective. The need for a political response to new risks arising in a rapidly changing world increases the relevance of further study of theoretical approaches to sustainable development. Taking this into account, the prospects for further scientific research are aimed at analyzing modern risks and priorities for ensuring sustainable development in Ukraine in the context of developing an appropriate mechanism, which will help to determine the tasks of a safe and high-quality life of the country's citizens.

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ISSN 2068 – 7729

Journal DOI: <https://doi.org/10.14505/jemt>

Journal's Issue DOI: [https://doi.org/10.14505/jemt.v12.5\(53\).00](https://doi.org/10.14505/jemt.v12.5(53).00)