iScience® Poland

MODERN SCIENTIFIC CHALLENGES AND TRENDS

COLLECTION OF SCIENTIFIC WORKS
OF THE INTERNATIONAL SCIENTIFIC CONFERENCE

Issue 2(66)

Warsaw
2024

iScience® Poland

MODERN SCIENTIFIC CHALLENGES AND TRENDS

ISSUE 2(66)

February 2024

Collection of Scientific Works

WARSAW, POLAND
Wydawnictwo Naukowe "iScience"
28-29 February 2024

SCIENCECENTRUM.PL ISSUE 2(66) ISBN 978-83-949403-3-1

ISBN 978-83-949403-3-1

MODERN SCIENTIFIC CHALLENGES AND TRENDS: a collection scientific works of the International scientific conference (28-29 February, 2024) - Warsaw: Sp. z o. o. "iScience", 2024 - 51 p.

Languages of publication: українська, русский, english, polski, беларуская, казақша, o'zbek, limba română, кыргыз тили, Հայերեն

The compilation consists of scientific researches of scientists, post-graduate students and students who participated International Scientific Conference "MODERN SCIENTIFIC CHALLENGES AND TRENDS". Which took place in Warsaw on 28-29 February, 2024.

Conference proceedings are recomanded for scientits and teachers in higher education esteblishments. They can be used in education, including the process of post - graduate teaching, preparation for obtain bachelors' and masters' degrees.
The review of all articles was accomplished by experts, materials are according to authors copyright. The authors are responsible for content, researches results and errors.

ISBN 978-83-949403-3-1

SCIENCECENTRUM.PL ISSUE 2(66) ISBN 978-83-949403-3-1

TABLE OF CONTENTS

SECTION: HISTORY SCIENCE

SECTION: EARTH SCIENCE

SECTION: MEDICAL SCIENCE

SECTION: PEDAGOGY

SECTION: PHILOLOGY AND LINGUISTICS

SCIENCECENTRUM.PL ISSUE 2(66) ISBN 978-83-949403-3-1

SECTION: EARTH SCIENCE

Donets Iryna
Candidate of Geographical Sciences, Associate Professor,
Nepsha Oleksandr
Senior Lecturer,
Khomotiuk Yurii
3rd year student majoring in 014.07 Secondary Education (Geography),
Koval Dmytro
1rd year student majoring in 014.07 Secondary Education (Geography),
Vinnichenko Olena
1rd year student majoring in 014.07 Secondary Education (Geography),
Bogdan Khmelnitsky Melitopol State Pedagogical University
(Zaporizhzhia, Ukraine)

GEOGRAPHICAL ASPECTS OF SUSTAINABLE DEVELOPMENT

Annotation. *The origins of the strategy of «sustainable development» are connected with the genesis of ideas in the most different branches of science: philosophy, sociology, as well as in natural science disciplines, including geography.*

Key words: *sustainable development, concept of sustainable development, principles of sustainable development, geography, geographers.*

Back in the 80s of the XX century many countries of the world, including Ukraine, adopted the principle of sustainable development, which provides for the responsibility of the state and society in ensuring the possibility of meeting the needs of both present and future generations. At that time, a new concept of «sustainable development» was applied, which implied the development of a society where human living conditions are improved and the impact on the environment remains within the economic capacity of the biosphere; thus, the natural basis for the functioning of mankind is not destroyed.

The concept of sustainable development was adopted at the World Conference on Environment and Development in Rio de Janeiro under the auspices of the United Nations. This event demonstrates the final recognition by the international community of the importance of sustainable development and socially responsible behaviour by society, the state and the business community, and the consolidation of the concept of sustainable development (principles) in the UN Conference Declaration [1]. A new tool was introduced – the sustainable development strategy (the need to develop it taking into account economic, social and environmental perspectives), based on the document «Agenda 21» [2] adopted at the conference. At present, it is the most widespread «global model of the future of civilization».

SCIENCECENTRUM.PL ISSUE 2(66) ISBN 978-83-949403-3-1

The concept of sustainable development proposes four basic principles on the basis of which it is necessary to build a sustainable development policy.

1. Principle of equity. The most important principle of sustainable development. It focuses on ensuring a high quality of life for all people on the planet, including future generations. The moral obligation of modern humanity is to preserve sufficient conditions and resources for future generations to meet their own needs.

2. The principle of preserving the natural environment. It implies such an organisation of life processes that would not lead to irreversible changes in the biosphere and would not violate its ability to self-repair. This can be achieved by reducing the anthropogenic impact on nature, purposeful work to maintain the stability of the biosphere, striving for harmonious balanced development of all three aspects of the environment - environmental, economic and social security.

3. Principle of integrity of thinking. This principle draws attention to the fact that sustainable improvement of the quality of life of present and future generations, the solution of global problems of our time is possible only if mankind understands the complexity of the structure of the economic and socio-ecological system, the interconnectedness of its elements. In other words, according to this principle, only such a development of society will be sustainable, in which environmental, economic and social problems will be solved in a complex.

4. The principle «think globally - act locally». It can also be considered in the temporal dimension. In this case it will sound as follows: «think about the future - act now». This principle implies that in the process of solving immediate, urgent problems it is important to keep in mind and act in accordance with the long-term perspective, as well as to analyse past experience for a holistic view of the causes of problems and possible solutions [3, 4].

Geography, as well as a number of other sciences, is actively involved in the science of sustainable development strategy. Along with other specialists, geographers also implement a number of international scientific programmes, such as the International Climate and Disaster Programmes, the International Geosphere-Biosphere Programme (IGBP) [5] and so on. All of them are carried out by scientists from Japan, USA, France, and other countries.

The programme "Humanity and Global Change" is being implemented to study the relationship between the human and the environment. Geographers, unlike natural scientists, are approaching the problem from a comprehensive perspective – from the point of view of both physical and socio-economic geography.

They look at the changes taking place from the point of view of human impact on nature: desertification; afforestation; human health; population explosion; urbanisation; the global community; world economy.

Economic and political geography play the most effective role in the implementation of sustainable development, as they are close to human society. Geographers, using their knowledge and data, can create a concept for the development of the region, taking into account the natural and territorial conditions and the needs of the population. After all, geography combines three components of sustainable development - ecological, social and economic. It is impossible to realise sustainable development and solve global problems without justifying the foundations of the culture of nature management. Modern geography and its achievements provide an opportunity to develop a view of the modern picture of the

SCIENCECENTRUM.PL ISSUE 2(66) ISBN 978-83-949403-3-1

world and the need for sustainable development of society. Global problems are, first of all, social problems. In the world scale and scientific and technological revolution, when managing development strategies, human beings are not threatened with death from overpopulation, lack of resources and environmental pollution.

Thus, a transition from the modern society, called industrial-consumer society, to a noospheric civilisation is necessary. An important condition for the transition from the currently polluted biotechnosphere to a clean and reasonable noosphere is the preservation and further development of the biosphere and its sustainability. In general, sustainable development means harmonious development of society with its natural environment, the biosphere [6].

REFERENCES

1. Rio Declaration on Environment and Development Rio de Janeiro, 14 June 1992. URL: https://legal.un.org/avl/ha/dunche/dunche.html (дата звернення: 12.02.2024)
2. United Nations, «Agenda for the XXI Century», 1992. URL: https://sustainabledevelopment.un.org/outcomedocuments/agenda21 (дата звернення: 12.02.2024)
3. Чабанюк О.М., Лобода Н.О. Основні принципи концепції сталого розвитку. Тези Всеукраїнської науково-практичної конференції здобувачів вищої освіти і молодих учених «Сталий розвиток країни в рамках Європейської інтеграції», 7 листопада 2019 року. Житомир: «Житомирська політехніка», 2019. С. 64- 65.
4. Зайцева Л. О. Складові концепції сталого розвитку. Ефективна економіка. 2019. № 11. URL: http://www.economy.nayka.com.ua/?op=1&z=7401 (дата звернення: 15.02.2024). DOI: 10.32702/2307-2105-2019.11.55
5. International Geosphere-Biosphere Program URL: http://www.igbp.net/ (дата звернення: 12.02.2024)
6. Donets Iryna, Nepsha Oleksandr, Khomotiuk Yurii, Koval Dmytro, Vinnichenko Olena. Natural resources and environmental management as an aspect of sustainable development of mankind. MODERN SCIENTIFIC CHALLENGES AND TRENDS: a collection scientific works of the International scientific conference (31 January, 2024). Warsaw: Sp. z o. o. «iScience», 2024. pp. 4-6.

iScience® Poland

MODERN SCIENTIFIC CHALLENGES AND TRENDS

Executive Editor-in-Chief: PhD Oleh M. Vodianyi

February 2024

ISSUE 2(66)

The results of scientific researches, errors or omissions are the authors` responsiblity

Founder: “iScience” Sp. z o. o.,
NIP 5272815428

Subscribe to print 04/03/2024. Format 60×90/16.
Edition of 100 copies.
Printed by “iScience” Sp. z o. o.
Warsaw, Poland
08-444, str. Grzybowska, 87
info@sciencecentrum.pl, https://sciencecentrum.pl

ISBN 978-83-949403-3-1