DOI: https://doi.org/10.37547/supsci-jgnr-03-06-07 Pages: 51-57

Journal of Geography and Natural Resources

JOURNAL OF GEOGRAPHY AND NATURAL RESOURCES

journal homepage:
https://topjournals.uz/index.php/jgnr

GEOECOLOGICAL INDICATORS AND THEIR ROLE IN THE SUSTAINABLE DEVELOPMENT OF GEOSYSTEMS

Anvar Bakhodirovich Rasulov
Head of the Department of geography and methodology, PhD
Tashkent State Pedagogical University named after Nizami
Tashkent, Uzbekistan

ABOUT ARTICLE

Key words: ecological indicator, territorial complexes, local, regional, sustainable development, natural territorial unit, Geosystems.

Received: 21.11.23
Accepted: 23.11.23
Published: 25.11.23

Abstract: This article analyzes complex indicators of sustainable development. Geoisms and their morphological units are revealed. The geoecological indicators used in the assessment of the process of sustainable development of Geosystems were considered.

ГЕОЭКОЛОГИК ИНДИКАТОРЛАР ВА УЛАРНИНГ ГЕОТИЗИМЛАР БАРҚАРОР РИВОЖЛАНИШИДАГИ ЎРНИ

Анвар Баходирович Расулов
География ва уни ўқитиш методикаси кафедраси мудири, PhD.
Тошкент давлат педагогика университети
Тошкент, Ўзбекистон

МАҚОЛА ҲАҚИДА

Калит сўзлар: экологик индикатор, ҳудудий мажмуалар, локал, регионал, барқарор ривожланиш, табиий ҳудудий бирлик, геотизимлар.

Аннотация: Мазкур мақолада барқарор ривожланишнинг комплекс индикаторлари таҳлил қилинган. Геотизимлар ва уларнинг морфологик бирликлари очиб берилган. Геотизимларнинг барқарор ривожланиш жараёнини баҳолашда қўлланиладиган геоэкологик индикаторлар хусусида фикр юритилган.

ГЕОЭКОЛОГИЧЕСКИЕ ИНДИКАТОРЫ И ИХ РОЛЬ В УСТОЙЧИВОМ РАЗВИТИИ ГЕОСИСТЕМ

Анвар Баходирович Расулов
Заведующий кафедрой географии и методики ее преподавания, кандидат географических наук.
Ташкентского государственного педагогического университета имени Низами

Ташкент, Узбекистан

О СТАТЬЕ

Ключевые слова: экологический показатель, территориальные комплексы, местное, региональное, устойчивое развитие, природно-территориальная единица, геосистемы.

Аннотация: В данной статье анализируются комплексные показатели устойчивого развития. Выявлены геоизмы и их морфологические единицы. Рассмотрены геоэкологические показатели, используемые при оценке процесса устойчивого развития геосистем.

INTRODUCTION

Sustainable development, its indicators and their cross-sectional analysis D. Harvey, J. Picson, J. Beckes, K. Hamilton, E. Neef, B. Kennedy, G. Haase, Y. Demek, T. Nakano, G. White researched by scientists from foreign countries.

Impact of sustainable development on human resources of ecological stability by CIS scientists I.V. May, N.V. Zaitseva, climate-ecological characteristics V.I. Danilov-Danilyan, K.S. Losev, complex indicators C.N. Bobylov, P.A. Makenko, socio-economic, institutional aspects E.A. Tretyakova, T.V. Aferova, regional geoecological indicators T.V. Shikhotarova, application of indicators at the regional level V.M. Zakharova, connection with environmental policy G.E. Mekush, economic aspects O.V. Kudryavtseva, indicators and indices N.P. Tarasova, conceptual-A.D. Ursul and others have conducted scientific research on methodological foundations.

THE MAIN RESULTS AND FINDINGS

Theoretical issues of sustainable development in Uzbekistan, indicators and stability of geosystems A.N. Nigmatov, A. Rakhmatullaev, R.A. Kulmatov and its natural geographic aspects A.A. Abulqosimov, L.A. Alibekov, P. Baratov, N.I. Sabitova, S.B.Abbasov, I.Q.Nazarov, A.Hojimatov, Kh.Toshev, socio-economic aspects are reflected in the researches of A.S.Soliev, N.Komilova and others.

International experience in the development of indicators of sustainable development relies on two different approaches: on different (economic, social, ecological and institutional) aspects of sustainable development; aggregated or integral, i.e. by complex features.

In most cases, economic, social and ecological (including environmental protection) indicators of sustainable development are obtained. But in the current process of globalization, institutional indicators are also gaining importance.

In the development of indicators of sustainable development, aggregated or integral, that is, grouping according to complex characteristics is carried out as follows - economic-ecological, economic-social-ecological, ecological. In each group of such a classification, ecological indicators are necessarily involved.

The results of the experiment show that the indicators of this type and scale are redundant and it was very difficult to implement them at the national level. In the "Indicators of Sustainable Development" organization of the UN, this scheme of indicators is interpreted in the system of "subject - subject - indicator". According to this scheme, first of all, a key topic is identified, they are detailed by sub-topics, and then a minimum set of indicators is compiled. It will focus on making political decisions. Only "economic structure" and "production" remained from economic indicators at the stage of classification of systematized indicators. At the level of the topic, the economic structure is divided into types of economy, trade and finance. Production is divided into indicators of consumption of material resources, energy consumption, education and waste disposal.

The World Bank takes a leading position in determining and ensuring periodicity of indicators of sustainable development. Its annual report on the theme of World Development Indicators (The World Development Indicators) identifies countries and regions that are working towards the goals of Sustainable Development through 550 indicators. The report is divided into 6 sections - general, population, environment, economy, state and market (since 1980) and analyzed against the existing database. This allows for the development of long-term strategic global international programs. Based on the report, "The Little Green Data Book" has been published since 2000.

The rapid development of science techniques has led to the formation of several global, regional and local geoecological problems on the planet. As a modern outline of the development of measures to identify, research, systematize and eliminate these geoecological situations that are composed of. research on environmental indicators has become widespread and has been studied in more than 30 developed countries of the World (USA, Austria, Belgium, Great Britain, Germany, Denmark, etc.k.) are widely used in assessing environmental situations. Member states of the organization for Economic Cooperation and development (IHRT) have been operating since 1990 on the following indicators of environmental indicators: determination of terminological and conceptual boundaries for a member state; relevance of political current practice, determination of indicators for measuring indicators, environmental studies and criteria for regulating the use of analytical data, typical for most states.

On the basis of IHRT environmental indicators lies the "pressure-state-reaction (Echo) model. Therefore, its practical current mechanism is manifested in a convenient form (Figure 2). Sustainable development indicators are being determined in its economic, social, environmental and institutional aspects. Simplified and 3-step systematized data can be used to create their number and detection capability. At this point, it is recommended to use the World Bank's many years of sustainable development indicators.

At a summit in New York City, United States, in September 2000, the UN's "Millennium Development declaration" was announced. This Declaration, adopted by UN member states, sought an answer to the question of how humanity can reach the level of sustainable development over the coming thousand years. For this purpose, indicators were proposed to study the foliation of states in decisive directions and conduct its monitoring. After exactly 15 years (2015), the heads of state and government once again returned to the same issue.

The UN Millennium Development declaration has identified 8 areas of activity, 18 tasks and 48 indicator indicators. Most of the tasks assigned to the agenda were evaluated in terms of the situation that occurred in the world and their impact on development. But it is worth noting again that these indicators also have the property of periodic change over time.

Within the framework of the Millennium Development global Goals, countries can determine their goals aimed at solving their national problems. At the moment, the Millennium Development Goals require appropriate measures to be taken not only on the side of developing countries, but also by developed countries. It is envisaged that developed countries will contribute to the achievement of the set global goals.

Monitoring the periodic change of Millennium Development Goals Based on indicators is carried out both under the UN system and at the level of certain states. At a general level, it is mandatory for the UN secretary-general to make annual accounts of the Millennium Development Goal and fulfillment of its tasks in the General Assemblies. The Millennium Development Goals Report is presented by countries every 5 years. The summit in 2015 is no exception, of course.

The selection, development and implementation of sustainable development indicators in accordance with the conditions on a global, regional, national and local (local) scale requires the fulfillment of certain methodological tasks. One of the main requirements for all disciplines is what research methodology it has. After all, the main issue of the idea of sustainable development lies in its methodology. That is why at the center of the discussion of environmentalists it is precisely this issue that is transversal and, unfortunately, there is still no single opinion about it until it is reached.

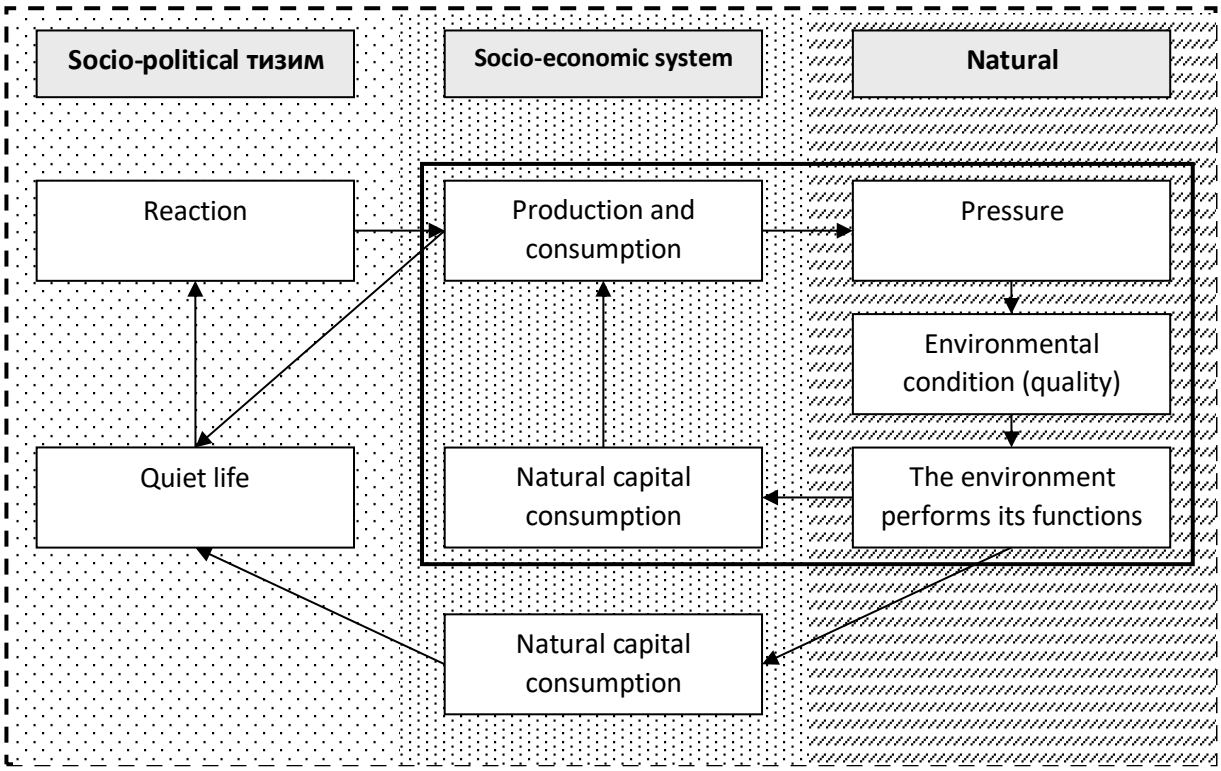

Figure 1. "Pressure-state-reaction (Echo)" model of environmental indicators of the organization for Economic Cooperation and development [1] .

From the point of view of philosophical doctrine, the methodology of environmental indicators of sustainable development means the selection and systematization of methods aimed at determining the scientific practical indicators of natural, socio-natural and natural-social status, processes and phenomena occurring in a Real social, economic, political, spiritual-educational, legal, environmental situation (ecosystems)of a global, regional and local scale. More approach to the broader philosophical meaning of methodology and systematized requirements in the ecological methodology of sustainable development can be distinguished.

CONCLUSION

The Five Principles of the national model of socio-economic development of Uzbekistan are the priority of the economy from politics; the fact that the state is the chief reformer and initiator of democratic changes; the rule of law; the priority of strong social policy; it is enough to list the priority of the gradual transition to market relations [4]. Now it will be necessary to carry out the ecological methodology of sustainable development in accordance with the concept of sustainable development of our independent state. It is fundamentally different from the domestic policy of the Uzbek SSR, which relied on the idea of Marxism-Leninism, was socialistic, closed, planned, ideologized. Now, denying the principle of using the lower Zarafshan district as a "resource country", it encourages it to be viewed as a "space of sustainable development" by the local population.

• In the scientific knowledge of natural, socio-natural and natural-social events, processes and phenomena, it is necessary to study the comparison of natural, atropogenic-natural processes taking place in the geosphere without human activity and as a result of human activity.

• It is necessary to select and systematize the field-expedition, chamber-laboratory, informational-communication methods, which are considered necessary for scientific knowledge of the requirements listed above. After all, research methods are not self-selected. First of all, it is necessary to take into account the methods of Environmental Sciences of the indicators of sustainable development in a universal way – the legal basis, economic opportunity, social conditions, spiritual and educational level and the environmental situation.

The correct selection of the modern methodological basis of Sustainable Development Indicators and its application in research work increase the validity, justification and practical significance of the results obtained.

REFERENCES

1. Encyclopedia of Life Support Systems (EOLSS), 2002, Oxford, UK, www.eolss.net.
2. Человек, общество и окружающая среда. Географические аспекты использования естественных ресурсов и сохранения окружающей среды. – М.: Мысль, 1973. – С.10–11.
3. Фалсафа. Қомусий луғат. –Т.: Шарқ, 2004. – Б.147.
4. Холбоев С.. Тарихнинг методологик асослари ва тамойиллари масаласи (И.Каримов асарлари мисолида) // Ижтимоий фикр, инсон ҳуқуқлари, 11-сон, 2004. – Б.140–146.
5. Rasulov, A., Madjitova, J., & Islomova, D. (2022). PRINCIPLES OF TOURISM DEVELOPMENT IN DOWNSTREAM ZARAFSHAN DISTRICT. *American Journal Of Social Sciences And Humanity Research*, *2*(05), 11-16.
6. Rasulov, A. B., Hasanov, E. M., & Khayruddinova, Z. R. STATE OF ENT ORGANS OF ELDERLY AND SENILE PEOPLE AS AN EXAMPLE OF JIZZAKH REGION OF UZBEKISTAN. ЎЗБЕКИСТОН РЕСПУБЛИКАСИ ОТОРИНОЛАРИНГОЛОГЛАРНИНГ IY СЪЕЗДИГА БАҒИШЛАНГАН МАҲСУС СОН, 22.
7. Расулов, А. Б., & Расулова, Н. А. (2013). Опыт периодизации географических взглядов. *Молодой ученый*, (7), 121-123.
8. Nigmatov, A. N., Abdireimov, S. J., Rasulov, A., & Bekaeva, M. E. (2021). Experience of using gis technology in the development of geoecological maps. International Journal of Engineering Research and Technology, 13(12), 4835-4838.
9. Rasulov, A., Saparov, K., & Nizamov, A. (2021). THE IMPORTANCE OF THE STRATIGRAPHIC LAYER IN TOPONYMICS. *CURRENT RESEARCH JOURNAL OF PEDAGOGICS*, *2*(12), 61-67.

10. Nizomov, A., Rasulov, A., Nasiba, H., & Sitora, E. (2022, December). THE SIGNIFICANCE OF MAHMUD KOSHGARI'S HERITAGE IN STUDYING CERTAIN ECONOMIC GEOGRAPHICAL CONCEPTS. In Conference Zone (pp. 704-709).

11. Rasulov, A., Alimkulov, N., & Safarov, U. (2022). THE ROLE OF GEOECOLOGICAL INDICATORS IN THE SUSTAINABLE DEVELOPMENT OF AREAS. *Journal of Pharmaceutical Negative Results*, 6498-6501.

12. Nizomov, A., & Rasulov, A. B. (2022). GEOGRAPHICAL SIGNIFICANCE OF THE SCIENTIFIC HERITAGE OF MAHMUD KASHGARI. Journal of Geography and Natural Resources, 2(05), 13-21.

13. Rasulov, A. (2021). The current situation in the district of lower zarafshan plant species-eco-indicator. *ASIAN JOURNAL OF MULTIDIMENSIONAL RESEARCH*, *10*(4), 304-307.

14. Sadikova, S., & Abdusabirova, L. (2022). MAKTABGACHA TA'LIM TASHKILOTLARIDA TASVIRIY FAOLIYAT TURLARI VA MAZMUNI. *Science and innovation*, *1*(B8), 760-764.

15. Sadikova, S., & Sultanmuratova, Y. (2022). THE IMPORTANCE OF TEACHING STREET SAFETY TO CHILDREN IN PRESCHOOL EDUCATIONAL INSTUTIONS. *Science and innovation*, *1*(B7), 1519-1521.