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Theoretical and Scientific Concepts Regarding Geoecology

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Annotatsiya:

Ushbu maqolada geoekologiya fanining bugungi kundagi ahamiyati, bu fanning metodologik asoslari hamda yurtimizda bu fanga qaratilgan e'tibor haqida so'z boradi. Bundan tashqari, geoekologiya fanining maqsadi, vazifasi hamda jahon tajribasida bu fanning rivojlanish uslublari haqida ham bayon etib o`tilgan.

Kalit so'zlar: geoekologiya, atrof-muhit, geotizim, chora-tadbirlar, fanning maqsadi.

INTRODUCTION

Since the early days of independence, Uzbekistan has paid a lot of attention to the environmental protection, environmental science, education, culture and the nature. The only way to achieve sustainable development in the Republic, which has become an active part of the international community, is to create a secure and sustainable, environmentally friendly, economically viable and united life society. In addition, events and phenomena that are going on in the rapidly changing nature have involved the attentions of the administrative boundaries.

Therefore, environmental security and the rational use of natural resources indicate that it should be carried out within the framework of certain natural geo-systems, not by district, region and republic. The solution to this problem is consistent with geographical ecology, that is, the purpose and mission of geoecological research. Because this science studies the changes occurring in nature as a result of the influence of human activity on certain geo-systems and develops appropriate measures. The essence of this is to protect the environment, rational use of its resources, and the restoration of disturbed natural complexes. In the five priority areas of development of the Republic of Uzbekistan for 2017-2021, paragraph 5.1 and paragraph 4 of the Action Strategy have been raised to the level of public policy as the issue of "Prevention of ecological problems that threaten the environment, population health and gene fone". To achieve this goal, the task of further improving the education and training system of geo-ecological aspects of sustainable development universally recognized by the whole world community and the wide dissemination of geo-ecological knowledge are extremely important.

LITERATURE REVIEW

Before moving to our topic, we should define the term geoecology. Different sources give diverse definitions of this concept.Geoecology is an integrated approach to environmental science and targets environmental issues. The term "Geoecology" signals an interdisciplinary approach and coincides with "Earth System Science". Geoecologists aim at a deeper and complex understanding of environmental and planetary functions and processes, particularly related to finding solutions for anthropogenically-induced challenges.

Geoecologists are "specialists for complex issues". To cater to the intricacies if this field, geoecology study programs have been setup at various German universities since 1978. Every one of these programs has its individual profile and specialisations, which are relevant for your career decision as of the Master level. [5]

Another source gives different definition, as geology plays a fundamental role in shaping the biotic world around us. Geologic history (plate tectonics and orogenic or mountain-building activity), landforms (geomorphology), and lithology (parent material and substrate) influence ecological and evolutionary processes and contribute to both macro- and micro-scale patterns of biogeography.[6]

However, we consider that geoecology is an interdisciplinary and multidisciplinary science that integrates the geosciences with the life sciences, focusing on the myriad influences of geological processes on historical and contemporary patterns of biogeography, including the causes and consequences of geoedaphics on biota at all temporal and spatial scales. At the same time, geoecology examines the role biota play in a range of geoedaphic processes, including in weathering and pedogenesis, thereby altering the chemical and physical composition of the Earth's surface and its patterns of biodiversity. Geobiology (geobotany and geozoology), biogeography, and biogeochemistry are important subfields within geoecology. [7]

RESEARCH METHODOLOGY

As in other subjects, Geoecology also puts forward a specific goal. The goal is to get it from the definition given to it. The goal of geo-technology is to provide environmental safety in certain geo-systems, to optimize the relationships between the organisms and the surrounding elements, which are derived from the relationship between nature and society. Optimization is the most viable alternative to personality activities by holding or bringing it to the same state.

Depending on the purpose of Geoecology, it puts the following tasks:

- Development of scientific and theoretical foundations of Geoecology and bringing it into a universally recognized state;
- Creation of scientific, methodological and legal foundations of geoecological assessment, cadastral, monitoring and examination;
- Explains the peculiarities of practical geo-ecology and its introduction into the economy;
- geoecological training and retraining;
- Definition and application of geoecological education content and essence;
- Geochemical, global, regional and national scale
- zoning and cartography;
- Identification and popularization of geo-ecological features of sustainable development;
- Development and legalization of tactical plans and strategic programs of states and international community on Geoecology;
- Expanding research on Geoecological spirituality and enlightenment, etc.

At present, one of the main tasks of Geoecology is to develop its scientific and theoretical foundations and bring it to the universally recognized status. Because many studies in geographical and ecological disciplines still return geoecological research or conduct close research to it. There is such parallelism in Geoecology and "General Ecology". For example: geoecological monitoring and ecological monitoring, geoecological assessment and ecological assessment, geoecological forecasting and ecological forecasting, geo-ecological observation and environmental observation, etc.

ANALYSIS AND RESULTS

Before clarifying these issues, it is important to emphasize the following aspects of Geoecology as its independent science. In geo-technology, geo-systems are regarded as living organisms. Therefore, the object of geo-technology is geosystems. It is desirable for geographical research to be studied within these geo-systems.

The main difference between geographical research and geoecological research is that. For geo-ecological complexes, objects of natural geographical zoning, as well as smaller taxonomic units - to the region, landscape, area, land, and fats are very crucial. However, the development of science and technology necessitates the study of geo-ecological objects into smaller geographical areas rather than regions. The organisms are divided not only to the flora and fauna, but also to humans, microorganisms and nanotubes (10 to 9 and smaller).

CONCLUSION

Geoecology is the study of the multifaceted relationships that exist between substrate and biota. Parent materials, climate, topography, and time determine the kind of substrate that becomes available for colonization by biota, and their habitation further influences the nature of the substrate upon which plants grow and animals and microbes dwell. Humans have long observed the special associations between organisms and their substrate, and such knowledge has served as the foundation of biogeoprospecting, the use of organisms as indicators of minerals and chemical elements found within geologic material.[3]

All in all we can conclude that the development of geoecology is closely dependent on today's science innovations, mutual relationships between the countries and social reforms. Because, all the living people are bounded to each other in the way they live, they breath the same air, they eat the same things, therefore, the today's state of the environment is of great importance for all the people in the world.

In this direction, the State Committee for Ecology and Nature Protection of the Republic of Uzbekistan is responsible for energy saving, renewable sources, waste technology. Moreover, short-term and long-term state programs on the development and implementation of new methods of energy production and on the basis of secondary resources and wastes have been adopted and are being implemented.

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