

Gat Technologies on The Basis of The Environmental Situation in The Region is Zoned According to the Level of the Sea Geoecological

Bakhtiyorjon Ikhtiyorjonovich Nosirov*

National university of Uzbekistan

Student doctor of the department of Geoinformatics

E-mail: articletiyornosirov10leo@gmail.com

Phone: 91 33 91 147

Farkhod Normamatovich Kuziyev

Academy of science of the republic of Uzbekistan

Research of the institute of Seismology

E-mail: farhod_gis@mail.ru

Phone: 978 90 15 17

** Corresponding Author*

Abstract

In the article on the basis of the territory of the sea and surrounding islands gat technologies geoecological zoned according to the level of the ecological situation in the aral sea and the region is zoned geoecological drawing a card and create his map information on the basis of the modern system geoaxborot aerospace GAT were used to investigate the complex ways from without, and to solve the issues of the aral sea problem and current situation in this area to improve the situation on the review of major projects i.e. xalqoro geoecological planting organizations.

Keywords: *drained part of the aral sea ecological status, "Green space", geoecological processes, environmental zoned, geoecological map, GAT technologies, "Orolqum" powder and salt of the desert.*

INTRODUCTION

Geoinformation technologies in various regions, in particular in the region of the aral sea level is the most effective tool in the analysis and evaluation of environmental conditions. For several years, environmental problems, which are associated with saline soils, and biodiversity of the aral sea in order to assess the threat of construction remain the cooperation between geoecological zoned sea region in the field of studies being conducted.

One of the works by important scientific and Kireev Shipilnikov "sea region inits nest geoecological zoned, methodology, results, problems and perspectives on the theme of" working. This research will be held in the year 2015, the Aral sea region on the large-scale environmental problems, including soil salting, water pollution, climate change, salinity and cover of plants.

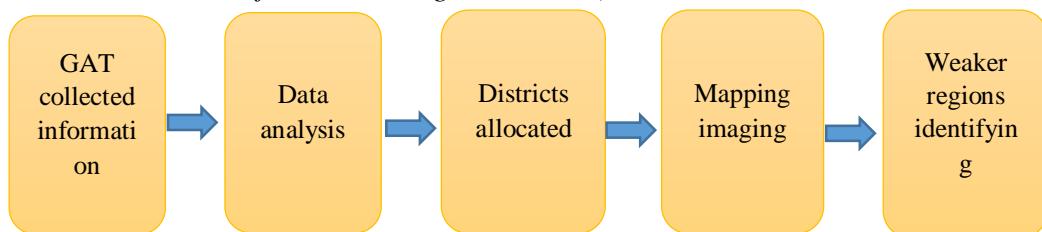
Another important research, this one – Kulikov V. Yu. by morozov and g. t. s in the "aral sea environmental condition of the region on the basis of technology assessment geoinformasian" work. In this work the authors using the method of assessing the condition of the aral sea region gat in environmental technologies, in particular, land cover, water resources and has a description of methods for the analysis of air pollution.

Also, the environmental problems on the island scientific-research works should also be noted that the practical was conducted by the center. In their work, the effects of the environment and land use and biodiversity of the aral sea dry related problems have been studied. The authors (g. k. Sharipova, s. mirzaev of rap.) "The island of salt and the rice in the zone of conservation of the soil resources and land use modern problems" in the soil to plants and their effects and problems game one salting discuss the environmental situation in the black sea region. The authors describe the method of the control, saline, land use and protection of resources and recommendations to improve it brought.

"Aral - sea ecology and economy" program within the framework of preparation and significant research has been conducted by his colleagues another n. f. "The island of the sea and the areas adjacent to it geoecological zoning and environmental monitoring" will analyze the work on the theme. According to him aral sea region, the methods of this research geoecological zoning and environmental monitoring, in particular, land cover, water resources, atmospheric pollution and other parameters of the analysis of the environment described.

In general, the GAT in the black sea region and further environmental technologies play an important role in studying the situation more accurate and comprehensive allows you to conduct studies. In the works outlined above general information about the work to be performed by scientists on this issue and analysis provides further improvement of the method of the aral sea region and geoecological zoned in improving the environmental condition is used.

GAT technologies on the basis of the ecological situation of the region according to the level of the sea is carried out in the following sequence zoned geoecological (1-picture). (*the following is carried out on the basis of the technological scheme*)



1-picture. GAT technologies on the basis of the environmental situation in the black sea region according to the level of geoecological card zoned compilation

GAT collection and processing of data, satellite image, and using the relief of the distance from earth and other technologies gat, landscape, soil, plant, water resources and other data on environmental parameters is obtained.

Data analysis the data obtained on the basis of the analysis of the ecological situation in the territory of the environment will determine the level of each.

Data analysis after zoned of the territory allocated to the districts depending on the degree of the condition of the environment.

Mapping the territory on the basis of imaging methods are described on the card.

The results of the evaluation of the zoned after the completion of the process of evaluating the results was to identify the most vulnerable areas and environmental conditions.

This card can be used in the development of improvement plans resulting from geoecological environment.

So, on the basis of technologies GAT aral sea region and identify areas zoned geoecological the most severe environmental condition will help in the development of appropriate measures to improve the situation. Air and water pollution of the aral sea region is zoned for more geoecological, sanoatlashtirish level, you can use additional parameters, and the presence of toxic substances like others. These parameters be included in the data analysis can be used further to determine the level of condition and environment.

In addition, technologies GAT drought, fire and floods and other natural disasters, such as various environmental risk for concluding the threat of the card is applied. This card and the prevention of such threats will help in the planning and implementation of measures to reduce damage.

The direction of the aral sea region is zoned geoecological important to the local population and the needs of the economy are taking. For example, in determining the availability of water resources for the development of agricultural areas, soil level, and other factors that can affect the productivity of the crop sho'rliги it is necessary to consider.

In general, GAT sea region zoned technology to preserve the environment and natural geoecological be very useful for the development of measures to improve the environmental situation in the region and will assist in.

In the field of ecology and environmental protection in the republic of the potential use of the natural resources of the territory on a scientific basis, land reclamation, the fight against desertification, salinity and they of the people live in an environment environmentally safe a number of measures are being implemented to ensure that (1-picture). " 2022 — 2026 designed to uzbekistan's new development strategy"ecology and environment protection, improve the environmental situation in the city and the district, "Green space" on the implementation of the national project for the purpose of important tasks that have been identified. In this regard, in particular, the environmental situation through the power of focused research position zoned to optimize the environmental geoecological sea region plays an important role. The president of the republic of uzbekistan "planting work in the republic of speeding up, the organization more effective measures on the protection of the trees" in the year 2021 December 30, pf-46-number and decree "on measures for further improvement of the management system work, household and construction waste associated with the year 2020" on September 29 PP-4845-ensure the implementation of the resolution, the environment and the protection of material cultural heritage objects and their use in the field of further improvement of state control, as well as modern information and communication technologies in order to introduce this process in the coming years, the natural environment surrounding the monitoring program in the republic of uzbekistan"on the activity of the decree and other normative legal acts on the implementation of the tasks specified in this scientific research work serves at a certain level.



2-picture. In the part of the sea-drained geoecological works 2022 y.

The violation of the ecological balance in the area and the ecological condition of the environment in many ways is determined by the negative features of the atmosphere from anthropogenic effects. In Uzbekistan, more than 35 thousand bulg'ayotgan are a constant source of air, and only half of them are close to the toxic dust and gas ushlagichlar equipped with a device not equipped with the grip of 1.5 thousand dust sources. The average productivity of available devices will also 60-70%, which does not exceed. Also, the pollution of the atmosphere by cars, especially in large cities as it has. In the Republic each year, and constant pollutants from the atmosphere contribute in the amount of waste produced moving sources consists of 1.8 million tons. The total amount of waste produced in the atmosphere of sectors in the industry share (%as) distributed as follows: 40 in the heating industry, 28 in the electrical energy, 14 in the metallurgy, 5 in the construction sector, 3 in the chemical industry. Persistent pollutants into the atmosphere from more than 150 different sources are removed. Located close to the industrial zone of the most poisonous substances on air (or those esganda the side from the wind) residential districts, the amount specified in the standard is observed to be much higher here. Almalyk, Chirchik, Navoi, Samarkand and Fergana chemical and metallurgical industry in the city of atmospheric air pollution is the level of most of the chemicals. This city is polluting the air of the main factors of transport in major cities. For example, the pollution of the atmosphere of Tashkent city of the contribution of transport from 80% increases. In general, pollutants out of the atmosphere used 53% of the contribution of road transport to come to her directly (0,98 million t). Permanent emitted from the source of the waste of the Republic of 84%, Tashkent, Kashkadarya, Bukhara, Fergana, comes on region Navoi to contribute. Kyzylkum desert to a number of sources of pollutants and natural Karakul, the island of the sea that arise due to the construction going of "Orolqum" the desert consists of powder and salt. The atmosphere pleasing and implementation of environmental pollution control over the source of their loss should pay particular attention to the examination of the implementation of the following measures:

- to throw out the waste into the atmosphere by most major enterprises ifloslantiruchi the maximum reduction;
- regularly vehicle including the fight against the burning gas production;
- the improvement of technology in the processes of the enterprise, the use of modern and perfectly clean air devices;
- to strengthen the control over the purity of atmospheric air.

From the perspective of the ecological situation in the regions of Uzbekistan makes a big difference. These environmental zoned environmental criteria to assess the situation and

development of science-based environmental zoned taqazo exercising the will. A position zoned environmental assessment scale was developed for environmental purposes. The 18 units of the ecological situation in the region and the republic of the district by the environmental indicator rated. Beyond the allocated group them according to the following:

- 1) satisfactory (who poured out the way) an environmental condition in the district;
- 2) the district in harsh environmental condition;
- 3) emergency ecological status of the district.

Based on these criteria and environmental is an average of points assessed the situation. Average price points beyond the environmental situation are dangerous and extremely dangerous mapping according to the districts.

The environmental situation in the region and beyond depends on the difference in the index of economic points calculated according to the following types of points identified.

- 1) dramatically emergency;
- 2) very sharp;
- 3) dramatically average;
- 4) little harsh;
- 5) is decisive.

They are shown to take into account the directions in the examination environment. Drying of the aral sea ecological and social condition of negative anthropogenic effects of the economic crisis which is coming to in a bright example. The ecological destruction of the island scale, the analysis of causes and effects allows us to work out a way out of the crisis. A comprehensive examination of the use of in Uzbekistan is important to take into account ecological geotizimlaridagi tog'va plane. The desert, the anthropogenic plains, tog'geotizimlari o'zxiga have distinctive features. International environmental expertise from experience in uzbekistan, especially the usa and european countries is carried out in the event of the use of the environmental examination practice it is important to also complex landscape for the landscape category of the three types of sfera, natural geographic land also tog'oralig'i] and also for people from river valleys for both concerns. The same in terms of the emergence of complex regional aspect as a whole, and the individual has a character space in takrorlanmaydigan landscape is complex. Taksonomik landshaftshunoslik of complex regional system of units developed by the region they mainland-land-zone-provintsiyasida-districts it comprises. Tipologik the complex landscape of the complex of the second category will be the same in morphological respects, different from the genetic aspect comprises a natural complex. Their areal different from the regional complex, occurs in the case of separated from one another. In the first series of the complex landscape Tipologik Milkov f. n. (1954, 1959) by the survey taksonomik using the unit in the following: landscape type, and location type the type of urochisha. Coming out of the us and contiguous to each other yondosh mineral complex reciprocal link comprises different colors or in common with complex regional taksonomik tipologik whole system. You in any geographical or certain components in the complex landscape change as a result of the effects of external and internal forces, if only given away the effects of such change did not remain within the landscape, but is observed in the neighboring landscape. Therefore, mineral, complex landscape, the study of complex natural and anthropogenic them geographical survey-landscape in solving scientific and practical problems of forecasting has great importance. In the following table according to the level of the territory of the strain and environmental zoned location indicators, quotes (1,2,3-statements).

The strain of the territory according to the level of environmental zoned

Points	of strain level
and 400 more points	is extraordinary
points 205-400	a strong strain
of 150-250 points	, the average strain
120-150 points	stagnant strain
120 points	normal (do not strain).

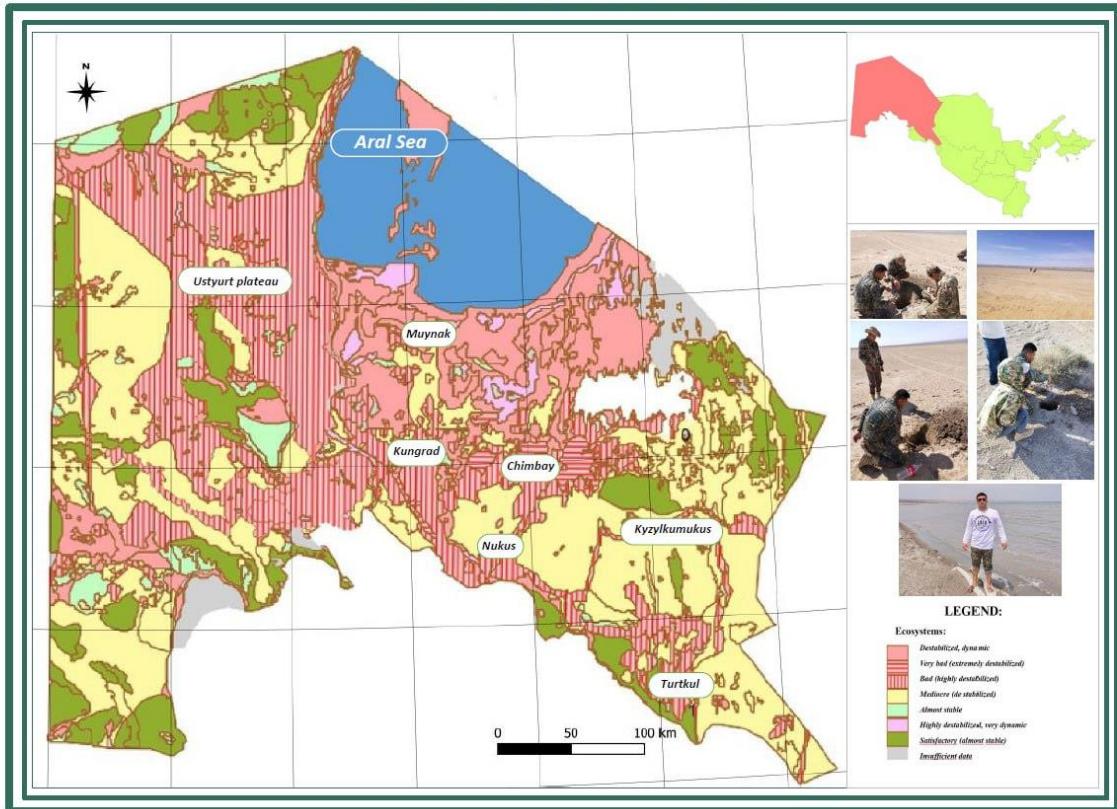
The territory of the environmental strain level location

Condition level	Areas
in case of emergency is the environmental situation in	the republic of karakalpakstan
in the strain strong	Architecture, and the province of fergana
the average strain in	the region of samarkand and bukhara
stagnant strain in	Surkhandarya, tashkent, syrdarya and andijan regions
ma'yoriy conditions in	Samarkand, Jizzakh, kashkadarya and tashkent city

Factors in the formation of districts Geoeological

Beyond Geoeological type	Tebi landscape	historical and cultural	Texnogen	Ijtimoiy respects geoecological
Natural	—	—	—	—
Historical-tsivilizasiyavyiy	—	—	—	—
anthropogenic industrial	—	—	—	—
Social	—	—	—	—

MAP OF DESTABILIZATION OF ECOSYSTEMS OF THE SOUTH ARAL REGION



3-Paint. GAT created on the basis of technologies to make sustainable ecosystem map of the southern aral sea.

SUMMARY

Place in the future in conclusion, note that g iszoned natural environment taking into account the importance of eokologik global transformations in the interaction of nature and society in the context of the universal means of studying any territory. This not only identify the areas that have similar effects to the effects of anthropogenic, but also to solve problems on a global inter-account creates the opportunity to identify the interaction of fields. Type geoecological of them active regions that can be associated with anthropogenic development and the comparison with the field of the development of the industry is the most sad. It should be noted that that particular, in such areas that may play an important role in the development of such a significant narrow for the economy, both for the natural environment in order to avoid the negative effects of ongoing climate change the purpose of the formation of a regional response to a very worthwhile set them to do more analysis. Frankly, to maintain the space environment, which make geoecological natural areas natural type a should be included in the territory of the desert. Especially, historical and cultural type geoecological a particular need to identify areas is significant.

REFERENCES

1. Irrigated lands of uzbekistanand the world scientific and practical recommendations to improve the condition of the treasury on them. – Tashkent: "The university" in 2018, y.

2. Prenov. Sh. M. J. Finance S. Fayziev Sh.Sh. Aral sea ecological condition of the area and concluding geoecological studying aerospace use of the information card. Republic scientific-practical materials konfrentsiya package, Tashkent 2015.
3. Abdullaev, s. a., l. t. Tursunov, Komilova D., M. some problems of protection of the soil of the lower amudarya flow Faxruttinova // from the soil to the rational use of environmental aspects: knowledge-practical konf. report. thesis. 18-20 June 1997. - Tashkent, 1997. – S. 21-22.
4. Abdulkasimov A.A., Abdullaev S.I. Some theories of geoecology and methodological problems // At the crossroads of science. Geography. – Samarkand: SamDU, 2013.
5. Alexandrova T.D. and others. Geoecological foundations territorial design and planning. – M.: Nauka, 1989. – 144 With.
6. Alimkulov N.R. Principles of assessment of landscape-ecological conditions and methods // Materials of UzGJ VII. - T., 2006.
7. Allayorov R.Kh. Geological and geographical of southwestern Hisar history of study // Current issues of geography and its teaching. Proceedings of the republican online scientific-practical conference. – Nukus, 2020.

Internet sources

- 4.120. <https://blog.onesoil.ai/ru/what-is-ndvi>
- 5.121. <https://medium.com/story-maps-developers-corner/using-story-mapurl-parameters-93b80bc6b306>
- 6.122. <https://arcg.is/my8u9>
- 7.123. <https://www.esri.com/arcgis-blog/products/arcgisdesktop/analytics/what-is-arcpy/>