

## ECONOMIC ANALYSIS OF THE IMPLEMENTATION OF SPACE MONITORING IN THE INVENTORY OF WASTE ZONES AND FORESTS

Kamoliddin Madrakhimov,  
Researcher

**Abstract:** *This article presents directions for the implementation of a space monitoring system to identify violations of the limits of permitted waste disposal areas, water pollution, environmentally hazardous objects and new zones of illegal waste disposal, as well as to identify conditions that negatively affect the natural environment in protected areas.*

**Key words:** *space monitoring, remote sensing, aerospace technologies, geographic information systems, space services, economic sectors.*

**Introduction.** Today, a number of environmental problems are emerging in the world due to the non-use of Natural Resources, negative anthropogenic impact on the environment. In particular, the waste generated in the process of human life activity at the same time poses a serious threat to the life and health of citizens, as well as to the mole of legal entities and individuals, in addition to polluting the environment.

In almost all countries of the world, the amount of solid household waste is increasing by 1 percent per capita every year. In the world, only household waste alone costs about 6 billion a year. yield up to tons.

As a result of human economic activity, several hundred different types of waste are released into the environment. The issue of the implementation of waste-related work in Uzbekistan is as relevant as in the whole world.

Solid household waste — organic, formed as a result of the life and work of individuals and the activities of legal entities

and inorganic waste, as well as waste generated by natural processes in their territory and landscaping facilities (food and plant waste, textile products, packaging (packaging) materials, glass, rubber, paper, plastic, wood waste, household items that have lost their use properties, swept away, as well as household waste generated by the use of heating stoves and heating steam boilers working in solid fuel);

An environmentally hazardous object is an object of economic and other activity that has a detrimental effect on the environment and the health of the population, is important in terms of scale and duration and threatens the life and health of the population.

2022 of the Cabinet of Ministers of the Republic of Uzbekistan On the projects carried out by the decree of May 20 "on measures to further improve the activities of the agency for Space Research and technology" No. 274 "road map" listed in paragraphs 17 and 18" violation of the boundaries of allowed waste storage places in the cross-section of the Tashkent region, water pollution, the task is to introduce a space monitoring system for the detection of environmentally hazardous objects and new illegal waste zones, as well as to introduce a space monitoring system for the detection of conditions that negatively affect the natural environment in protected zones.

The total area of the 20 permitted waste storage sites available in the Tashkent region cross section was determined to be 214. Of the 20 licensed waste storage sites, there are 13 border breach cases, with a total area of.

It amounted to 48.53, space monitoring of Natural Protected Areas was carried out in the cross-section of the Tashkent region, and a total of 164 potentially illegal objects were identified in the existing 3 Natural Protected Areas.



*Picture 1*

*Picture 2*

The agency for Space Research and technology under the Cabinet of Ministers

of the Republic of Uzbekistan Resolution of the Cabinet of Ministers of August 6, 2021 No. 499 "on complex measures aimed at preventing shrinkage of vegetation cover

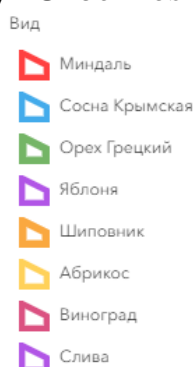
in the mountain and mountainous areas around the livestock reservoir and with paragraph 12 of Annex 1 approved by this decision, targeted tasks such as the detection of illegal construction objects by remote sensing of the Earth and the introduction of a space monitoring system using satellite devices, as well as the introduction of a geoengineering technology (GAT) monitoring platform are assigned.

Ultra-high-resolution space shots were downloaded by the uzbekkosmos Agency via satellite apparatus and the GAT monitoring platform was launched.

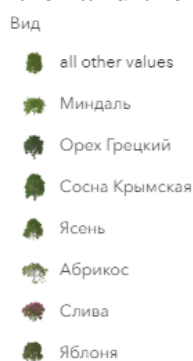
All types of accommodation, private, located in the territory of the Chorvak reservoir and the surrounding mountain and mountain areas, provided by the cadastral agency under the state tax committee of the Republic of Uzbekistan and cadastral data of high-rise buildings was downloaded to the GAT monitoring platform, so far more than 12,000 objects have been analyzed.

With paragraphs 4 and 5 of this decision, it is necessary to determine the species composition of forests, to determine illegal logging by introducing a space monitoring system and a geoaxborot technologies (GAT) monitoring platform for the purpose of control, to monitor forest restoration processes and on December 9, 2021,

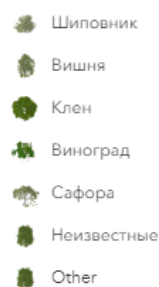
the contours of 2411 hectares of cultural forests included in the forest fund located in the Boestnliq district were digitized and analyzed by The Specialists of the agency "Uzbekkosmos" for control and the state committee for forestry.



*Picture 3*



*Picture 4*



*Picture 5*



Picture 6

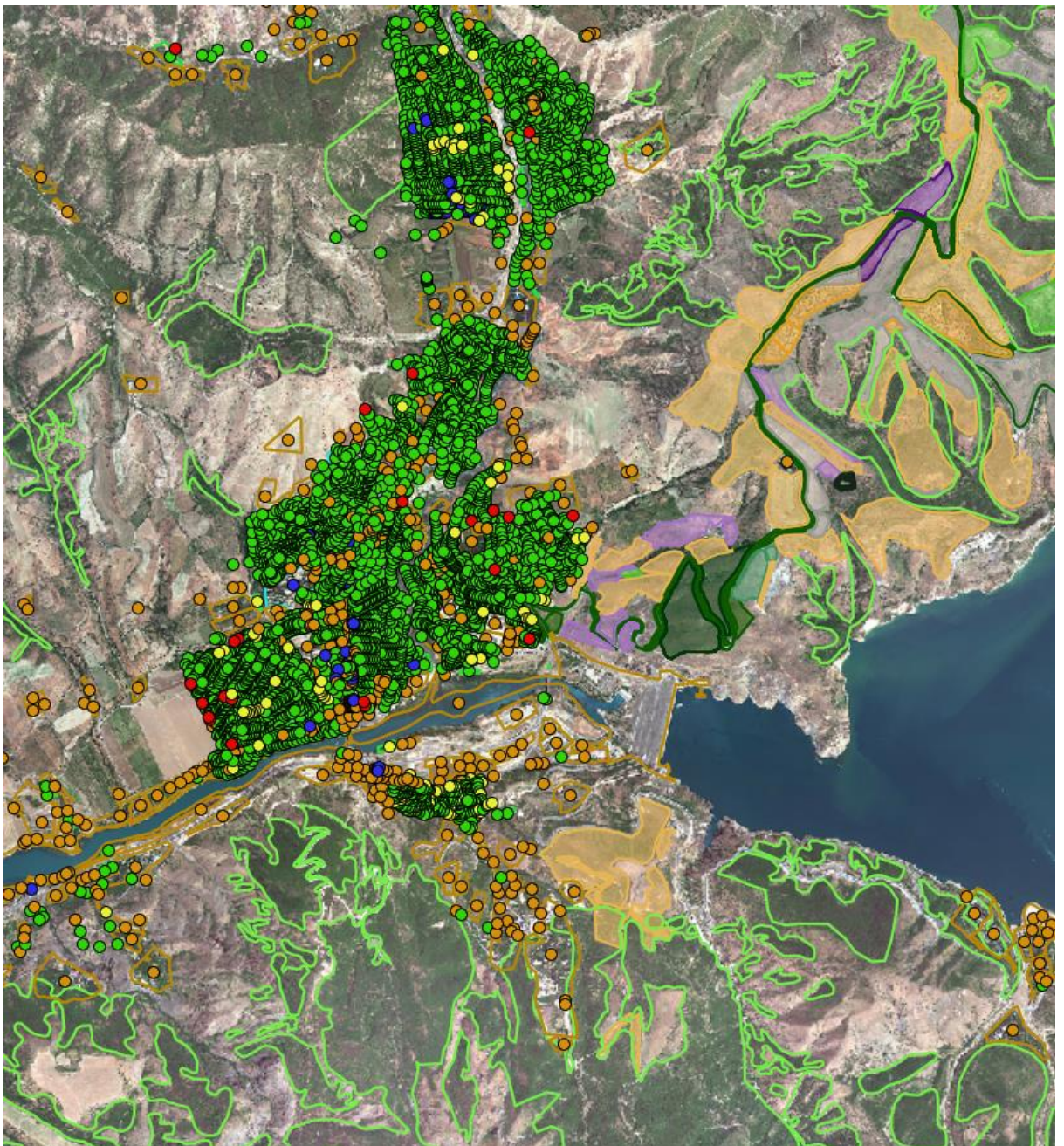


Picture 7



Picture 8

Picture 9



*Picture 10*

**Results of space monitoring carried out in landfills with lisenziase  
in the cross section of the Tashkent region**

№	Location	Name	Separated land plot, ga	Territory occupied beyond borders, ga
1	Tashkent region	Чиноз тумани марказий чиқиндихонаси	7.3	2,22

2	Tashkent region	Янгиёл тумани марказий чиқиндихонаси	37	1,16
3	Tashkent region	Оққўрғон тумани марказий чиқиндихонаси	4,4	0,3
4	Tashkent region	Бўка тумани марказий чиқиндихонаси	2,8	-
5	Tashkent region	Охангарон тумани марказий чиқиндихонаси, “Янгиҳаёт” МФЙ	52,2	7
6	Tashkent region	Бекобод тумани марказий чиқиндихонаси, Хос кишлоғи	9,44	3,3
7	Tashkent region	Бекобод тумани марказий чиқиндихонаси, “Фарход” МФЙ	3,4	2,9
8	Tashkent region	Ангрен шаҳар марказий чиқиндихонаси, Қизилтоғ қўрғони	1,1	0,67
9	Tashkent region	Бўстонлиқ тумани марказий чиқиндихонаси	6,2	-
10	Tashkent region	Пискент тумани марказий чиқиндихонаси	1,15	0,8
11	Tashkent region	Чирчиқ шаҳар марказий чиқиндихонаси	10,3	-
12	Tashkent region	Охангарон тумани марказий чиқиндихонаси, “Убайд” МФЙ	19,5	-
13	Tashkent region	Ангрен шаҳар марказий чиқиндихонаси, “Эски боғу Сурх” МФЙ	23,3	5,6
14	Tashkent region	Қибрай тумани марказий чиқиндихонаси	4,5	5,1
15	Tashkent region	Тошкент тумани, марказий чиқиндихонаси	7,3	18
16	Tashkent region	Паркент тумани, марказий чиқиндихонаси, “Самсарак” МФЙ	3,09	0,03
17	Tashkent region	Юкори Чирчиқ тумани марказий чиқиндихонаси	5,5	1,45
18	Tashkent region	Кўйи Чирчиқ тумани марказий чиқиндихонаси	4,45	-
19	Tashkent region	Ўрта Чирчиқ тумани марказий чиқиндихонаси	7	-
20	Tashkent region	Паркент тумани марказий чиқиндихонаси, “Самсарак” МФЙ	4,2	-
<b>Total:</b>			<b>214,13</b>	<b>48,53</b>

### List of literature used

1. Resolution of the president of the Republic of Uzbekistan dated November 12, 2022 “on additional measures for the further development of the Space Network” No. 429. <https://lex.uz/docs/6291454>

2. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan of May 20, 2022 “on measures to further improve the activities of the Space Research and Technology Agency” No. 274. <https://lex.uz/docs/6026003>

3. Resources of Maxar technologies LLC. <https://resources.maxar.com/>

4. Resources of HEAD LLC. <https://www.head-aerospace.eu/satellite-imagery>