

**WASTE PROBLEM IN UZBEKISTAN AND MEASURES FOR ITS ELIMINATION****B.B. Umarov**

*Andijan Institute of Agriculture and Agrotechnologies Assistant  
Mushtariy Kholdorova, Yulduzkhon Iminova  
Student of Andijan Institute of Agriculture and Agrotechnologies*

**Annotation:** This article raises the issue of waste, which has become a major problem today and poses a threat to humanity and the environment, as a pressing issue. What measures are being taken in our republic and developed countries in the field of waste disposal and neutralization.

**Keywords:** Harbology, waste, household waste, industrial waste, radioactive waste, plastic, glass, "useful waste," chemical substances, heavy metals.

**Аннотация:** В данной статье поднята актуальная проблема отходов, которая в настоящее время стала большой проблемой и представляет угрозу для человечества и окружающей среды. Обсуждаются меры, принимаемые в нашей республике и развитых странах по утилизации и обезвреживанию отходов.

**Ключевые слова:** Гарбология, отходы, бытовые отходы, промышленные отходы, радиоактивные отходы, пластмассы, стекло, "полезные отходы," химические вещества, тяжелые металлы.

Approved by the Resolution of the President of the Republic of Uzbekistan dated April 17, 2019 No. PP-4291. A Strategy for Solid Waste Management in the Republic of Uzbekistan for 2019-2028 has been developed. This Strategy is approved by the Constitution of the Republic of Uzbekistan, the Laws of the Republic of Uzbekistan "On Environmental Protection" and "On Waste," as well as the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. UP-4947. The strategy provides for the closure and reclamation of 167 landfills with a total area of 1108.6 hectares, the creation of 54 modernized landfills with a total area of 693.3 hectares and the construction of 5 landfills with a total area of 80 hectares on the site of existing landfills.

The greatest external factor affecting people is nature. The cleaner the environment, the healthier a person is mentally and physically, but if changes occur in the environment, its impact on human life will be enormous. The incurable and viral diseases that occur in humans are also a consequence of the negative changes occurring in nature. However, there is another issue: people are the main cause of such negative changes in nature. The problem of waste is becoming one of the most pressing environmental issues on a global scale. According to the analysis, the annual increase in household and industrial waste in recent years has had a negative impact on the ecological stability of the planet. According to the data, about 900 types of waste are currently registered, and the volume of waste in the world increases by 3% every year. Protection of the environment from production and consumption waste is inextricably linked with the problems of rational use of natural resources and the introduction of environmentally friendly technologies into practice. For many centuries, improper waste management has led to changes in natural resources and disruption of natural

phenomena. Today, the ever-increasing number of electronic waste poses a threat to humanity. Every year, about 2 million tons of electronic waste are generated on Earth. For example, a single mobile communication device consists of 500 to 1000 different parts. Most of them contain harmful heavy metals such as lead, mercury, cadmium, and other hazardous chemicals. Some harmful substances in spilled waste, disease-causing microbes, enter water through air or rainwater and can even enter groundwater. This also contributes to the rapid spread of diseases.

There is a lot of historical evidence about this. For example, in the Middle Ages, many European countries developed, and new cities began to appear. Multi-story buildings built in cities did not receive enough sunlight on narrow streets, many houses did not get enough air, and there were no special devices (structures) for waste disposal. People who moved from villages kept such animals as chickens, ducks, and pigs in such houses. Domestic animals walked through the streets and squares of the city, polluting these places with their own garbage. People also often dumped garbage and sewage from their homes onto the streets. As a result, the city streets became so polluted that it was difficult even for people to walk on such streets. In cities with such unsanitary conditions, rats, various insects, and other animals also multiplied. Flea, by rapidly breeding and sucking the blood of sick people, transmitted the plague microbe to healthy people and caused their death.

Thus, at that time, in many countries of Europe, Africa, and Asia, diseases such as plague and cholera spread rapidly due to dumped waste and claimed the lives of thousands of people. Subsequently, the construction of wide and smooth streets in European cities began, and strict adherence to the sanitary and hygienic conditions of residential buildings was established. As a result, the spread of cholera and other diseases was prevented. As the world develops, as the number of people increases, the amount of waste also increases. Harbology is the science that specifically deals with waste. All waste is mainly divided into 2 groups: liquid and solid waste.

Liquid wastewater: wastewater from household, industrial enterprises, structures; wastewater generated during bathing, room floors and laundry; wastewater from toilets.

Solid waste: household waste, street debris, garbage from public catering establishments, garbage from industrial enterprises, garbage from trade facilities, dead animal carcasses, construction waste.

Currently, one of the pollutions causing many problems is soil contamination as a result of chemical influences. Such contaminated soil has low fertility, and the products obtained from it contain many harmful substances, which can negatively affect the human body when consuming these products. The dangerous harmful properties of chemically contaminated soils are divided into several types based on their chemical composition and total quantity.

1. Radioactive contamination
2. Contamination with heavy metals and chemicals.
3. Pollution by various wastes.



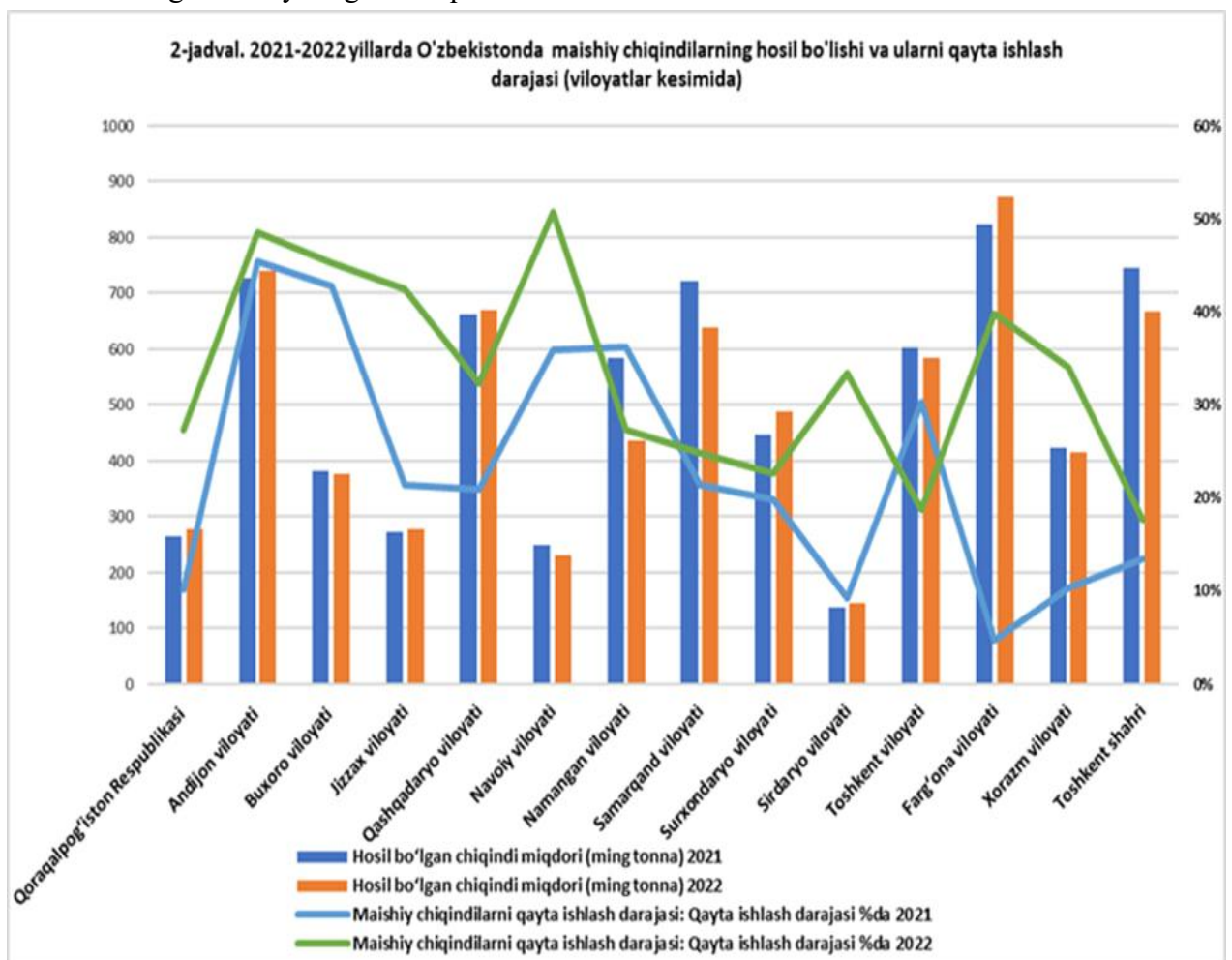
According to the analysis, radioactive contamination occupies the most dangerous place, since in radioactive contamination, the biological world initially suffers serious damage and has the property of affecting even within a very large radius, and most unfortunately, it has a very dangerous effect on human health and differs from other types of contamination in that it affects future generations through genes.

In our republic, the problem of industrial waste has not yet been solved. An average of 30 million tons of industrial waste is emitted annually, and about 1.0 billion tons of waste has accumulated in all regions. Waste is raw material. Waste contains waste paper, food waste, plastics, rags, and other items. If we also establish their recycling, the waste will turn into finished raw materials. How much profit would have been made without destroying the environment. It's time for us to organize waste and recycle it to get useful products. The "Mehnat" enterprise in Yangiyul has begun this work and is producing buttons, containers, and various items from plastic waste. In 2012, an experiment on separate waste collection

was conducted in Moscow. In the courtyards of apartment buildings, transparent mesh containers for "Useful Waste" were installed for paper, plastic, glass, and metal waste. The experiment yielded good results, and it was decided to expand its scope.

Now almost every house in this city has its own transparent garbage bins. Japan is one of the world leaders in plastic recycling, and in the Land of the Rising Sun, according to the law adopted in 1997, the separation of industrial and household polymers from other categories of waste is mandatory. For this reason, the share of plastics used in production increased from 39% (1996) to 83% (2014). Industrial waste is used there as a building material. Artificial islands built from decomposed industrial waste have been constructed at an international airport near Nagoya, in Tubu and Kansai (osaka). The widespread use of technology that allows reducing the amount of waste and maximizing the reduction of waste recycling serves to prevent their harmful impact on the environment.

Waste sorting and recycling is a requirement of the times.



References:

1. Presidential decrees and resolutions; 2019 PQ-4291
2. "City and Industrial Ecology" by Kh. Khushvaktova; D.Yormatova T-2021



3. "Fundamentals of Industrial Waste Treatment Technology" M.N.Musaev T-2011
4. Methodological guidelines for conducting practical classes in the subject "Ecology and Environmental Protection" Andijan-2024
5. M.M. Mirzakarimova's article "Study and Elimination of Waste Recycling Problems in Uzbekistan"; Andijan-2023
6. The article "Sorting and Recycling Waste - A Requirement of the Time" by J.A.Abdusattorov
7. Google uznature\_uz website.