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ECOLOGIC AND ECONOMIC ASPECTS OF SOLVING THE WASTE PROBLEM

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ABSTRACT

It is no secret that the weight of anthropogenic factors increases from year to year, depending on the level of human civilization, types and amounts of various waste elements in the environment, and the impact on nature is increasing day by day. However, it should be noted that before the rapid development of science and technology in the past, they did not feel the influence of environmental problems. This is because the waste from the Earth's environment undergoes natural self-cleaning processes. As a result, ecological harmony and balance in nature are not very disturbed. Basically, this was the case until the 19th century, when a "scientific and technological revolution" was observed in the development of human life and production. This article scientifically investigates the environmental and economic aspects of solving the waste problem.

KEYWORDS: *Ecology, Nature, Waste, Technology, Ecological Problem, Environmental Protection, Natural Resource.*

INTRODUCTION

Nature is a complex system that people and societies are its product. It exists and develops in exchange for nature. Man satisfies his needs at the expense of nature. It takes air, water, food, minerals and fuel from nature and influences nature throughout its life. As a result, new memorable objects for nature are being created. These include towns and villages, factories, roads, mines, reservoirs, agricultural land, and more. Such man-made landscapes, created by human intelligence and labor, have an impact on the environment. The rapid growth of the world population, the rapid development of science and technology, the uneven distribution of natural

resources on the territory of countries require the maximum use of available natural resources and thereby accelerate the development of society. As a result, the laws between nature and humanity are destroyed. Violation of these laws will sooner or later lead to an ecological crisis.

Main part

Today, many people around the world are concerned about the state of the environment. An ecological catastrophe is taking place before our eyes. The issues of environmental protection and efficient use of available natural resources remain relevant. It became clear that man is the cause of the current ecological crisis and the one who can save him from this crisis with his own intellect. Protection of the environment from pollution and the use of natural resources largely depends on the level of environmental literacy and environmental culture of people, regardless of the society in which they live. Improving the environmental awareness of the population is one of the priority directions for solving environmental problems in our independent republic. It is especially important to teach the subject "Fundamentals of Ecology and Environmental Protection" at all stages of the education system.

Due to anthropogenic factors, especially at the later stages of the development of society, the quality and quantity of all living resources in the environment and on Earth change. Due to the growth in the production of semi-finished products, frozen and canned foods, they have recently been sold in special boxes, boxes, special containers, paper and cellophane bags. The packaging consists mainly of paper, glass, metal, cellophane and plastic. Most importantly, they cannot be reused. The population disposes of this waste in public landfills, especially in some areas where there are densely populated apartment buildings. This increases the amount of household waste. It is necessary to develop measures to correct this negative situation and change it for the better.

In this regard, the Decree of the President of the Republic of Uzbekistan dated April 21, 2017 No. PP 2916 "On measures to radically improve and develop the system for performing work related to household waste in 2017-2021." This decision is aimed at improving the sanitary and epidemiological situation in the regions and cities of the country, cardinal improvement and further development of the waste management system in 2017-2021.

DISCUSSION

According to experts, the world's population consumes 1 ton of industrial and household waste per capita per year. In the Tashkent region, this figure is twice as high. Currently, the Almalyk Chemical Combine alone has accumulated over 60 million tons of waste. Of these, only 1% is spent on processing.

Solid waste formation in Uzbekistan

- Up to 10 - 12 thousand. tons of solid waste per day, 4.4 million tons per year.
- No. 45 - formed in Tashkent, Fergana and Samarkand regions.
- It is predicted that an additional 100 million tons will be formed in 2015-2030, which will reach 7 million tons per year by 2030.

Recycling solid waste

- ▶ There are 235 businesses. Capacity - 500.0 thousand tons per year. (11.2%)

- ▶ Processing of 88 polymers - 155.2 thousand tons.
- ▶ Processing 96 waste paper - 141.6 thousand tons.
- ▶ Recycling of 8 windows - 200.9 thousand tons.
- ▶ Processing of 23 tires - 0.9 thousand tons.
- ▶ 20 other waste

The Law of the Republic of Uzbekistan "On Waste" In the field of waste management on the territory of the Republic of Uzbekistan, prevention of harmful effects of waste on the life and health of citizens, the environment, waste generation and their rational use in economic activities.

The introduction of waste-free technological processes is a socio-economic problem, especially in chemical technology. This requires the selection and manufacture of the most optimal technological process available.

It is known that each household consumes different food items and a certain amount of waste (husks, seeds, etc.) is released from them. In rural areas, especially in households where pets (animals, birds, etc.) are kept, this waste is not disposed of, i.e. are passed on to pets for food. This, firstly, will save the environment, secondly, it will take care of pets, and thirdly, it will create additional funds in the family budget.

Unfortunately, in some areas where there are densely populated apartment buildings, the population dumps this waste in public landfills. In addition, the following measures can be taken to improve and reverse this negative situation in high-density areas. If we take the example of a single housing company, then about 20 apartment buildings will be connected to it. If each house has an average of 40 to 60 apartments, then the company will have 800-1200 apartments. Each household has an average of 3 people. A family consumes on average 2 kg of potatoes, 2 kg of carrots, 1 kg of onions and other products (melons, fruits, etc.) per week. Although these products produce an average of 0.5 kg of animal feed, it would be prudent to develop livestock farming as a subsidiary farm under the Homeowners' Association for efficient waste management. To do this, the homeowner's association will have to submit a business plan to the bank with which it has an account. A business plan may include the purchase of 10 or 20 head of cattle, the construction of buildings for their feeding and care, as well as the purchase of the necessary equipment, their distribution and distribution of various handouts. The Homeowners Association can take out a loan or loan based on this business plan and use the funds for their intended purpose. The Homeowners Association encourages each family and its members to actively participate in the implementation of the business plan.

If 0.5 kg of feed waste per household is 400 kg or 600 kg per week (0.5×800 or 1200), this feed waste is fed to livestock on a ration basis. Food waste is packed in special plastic containers, which the company distributes to each family and sends it to the Food Waste Collection Center. The representative of this center regularly organizes the collection of food waste. At the same time, as an additional feed, the enterprise can allocate the necessary land, plant alfalfa and corn, collect a certain amount of hay and grass. This event will contribute to the life and health of all types of waste, improve the environment, prevent waste generation, use it wisely in economic

activities, achieve economic efficiency and, most importantly, further improve the spiritual, economic and environmental education of our people.

It was determined that for every 1000 kg of solid waste, thermal combustion is generated, which is generated by burning 250 kg of fuel oil. In terms of thermal capacity, 10.5 tons of municipal solid waste is equivalent to 1 ton of oil. Extraction of aluminum from recycled material saves only 5% of energy costs, 4 tons of bauxite ore from 1 ton of aluminum, saves 700 kg of coking coal, less than 35 kg of waste is emitted into the air, glass products from residues save 1.2 tons of primary product, energy savings 2,5%.

The main purpose of waste management is to increase the responsibility of producers and consumers. In this regard, the experts explained the role of waste management: "The production and disposal of waste should be regulated in such a way that they do not harm human health and do not restrict ecological products that are acceptable for use." It is based on preventive principles of environmental protection.

CONCLUSION

All waste that affects the environment and entails economic costs must be recycled or disposed of. The more important it is to conserve resources through health and environmental protection and recycling, the higher the demand for its quality. Disposal of untreated waste is the lowest cost. This can have a significant impact later on.

In order to preserve the environment, toxic gases and emissions must be reduced and eliminated through the use of environmental protection measures and methods, rather than their generation.

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