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CURRENT ENVIRONMENTAL PROBLEMS: PLASTIC POLLUTION

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This article discusses the current level of plastic pollution in the world. Nowadays international organizations are trying to find solutions to prevent environmental disasters. This scientific project aims to find out how much the local population is aware of environmental issues and how plastic is harmful to flora and fauna. The article presents an ecological project that can

partially reduce the consumption of disposable paper cups. The main purpose of the article is to educate as many people as possible about current environmental issues.

We are forced to admit today that a disturbing environmental situation has developed in many regions of our world. Our planet suffers from environmental disasters: pollution of the oceans by garbage, air pollution by toxic substances, lack of resources, drying up of seas, rivers and lakes, nuclear weapons, greenhouse effect and so on. The importance of nature conservation as an unacceptable condition for the survival of mankind is now recognized by our society. However, unfortunately, it is not ready for a consistent implementation of environmental measures. The reasons are lack of necessary funds, lack of ecological culture of population and neglect of the consequences that lead to environmental disasters. Today, the main purpose to save our Home depends on the formulation of environmental education and upbringing of younger generations. People who entering into working life should have a clear idea that natural resources are not infinite and the technology of production of any product must satisfy such a requirement, from ecological point of view, as the minimum consumption of materials and energy.

I was interested in the study "The practice of food retailers to reduce sales and eliminate disposable plastic goods, containers and packaging in favor of reusable alternatives". This work was carried out by the Russian University Higher School of Economics in Moscow. As the analysis shows, in the world there are various practices for reducing plastic waste and encouraging customers to switch to reusable alternatives. Many large retailers, such as Walmart, Tesco, Amazon, Sainsbury's, Kaufland, and Carrefour work with suppliers to reduce packaging. Many retailers made voluntary commitments to reduce plastic sales. Plastic straws and disposable cups are the most popular in the sales market. Such light and soft plastic is difficult to collect and recycle, so often it ends up in landfills or in the ocean, from where it can get into food chains [1]. Some replace disposable plastics with other disposable alternatives that are more ecological friendly. However, this step is very controversial. The results of scientific research indicate that for the production of paper bags, despite the image of more environmentally friendly packaging, more energy and water is spent than the production of a similar-sized plastic bag. The problem of disposable plastic is becoming increasingly urgent on all continents, which brings it to the current level of the news agenda. For example, Amazon is the largest online retailer in the world, with sales of \$ 178 billion in 2017. In 2017, it was possible to reduce the amount of garbage from packaging by 16%, and emissions of household waste by 181 thousand tons. The largest retailers are making efforts to switch from a one-time consumption model to a reusable one, not because of altruism, but as a result of a strategic calculation that takes into account changes in global consumer behavior, tougher environmental laws and benefits from increasing brand value [2].

Annually different forums are created where experts analyze environmental problems and propose their solutions. On the other hand, we have hundreds of ideas and inventions that scientists have proposed to us, but not every one of them has a positive effect on the world around us. Reducing the negative impact of toxic waste in the atmosphere, in water and on land requires complex solutions. When making decisions, it is necessary to be guided by the main thing - respect for human health and its right to a clean environment.

The main question is how ordinary people can reduce plastic consumption and waste.

My research is divided into 2 parts. First of all, it is very important to find out how much the local population is informed about plastic pollution and how it affects the environment, as well as how often people use disposable plastic in everyday life.

The methodology of scientific research consists in conducting a survey using an individual questionnaire.

The questionnaire in its structure consists of closed questions. During the study, 20 respondents were interviewed. The survey involved 20 people who are students of L.N.Gumilyov Eurasian National University.

1. "Do you consume disposable plastic products (paper cups, plastic bags, and plastic straws) daily at home?"

85% (17 people) - yes; 15% (3 people) - no

2. "Do you know the environmental impact of discarded plastic waste?"

40% (8 people) - no; 60% (12 people) - yes

3. "Do you take anything to reduce plastic consumption and reduce your environmental footprint?"

85% (17 people) - no; 15% (3 people) - yes

4. Do you use disposable paper cups for drinks?

85% (17 people) - yes; 15% (3 people) - no

5. Are you ready to switch to reusable alternatives?

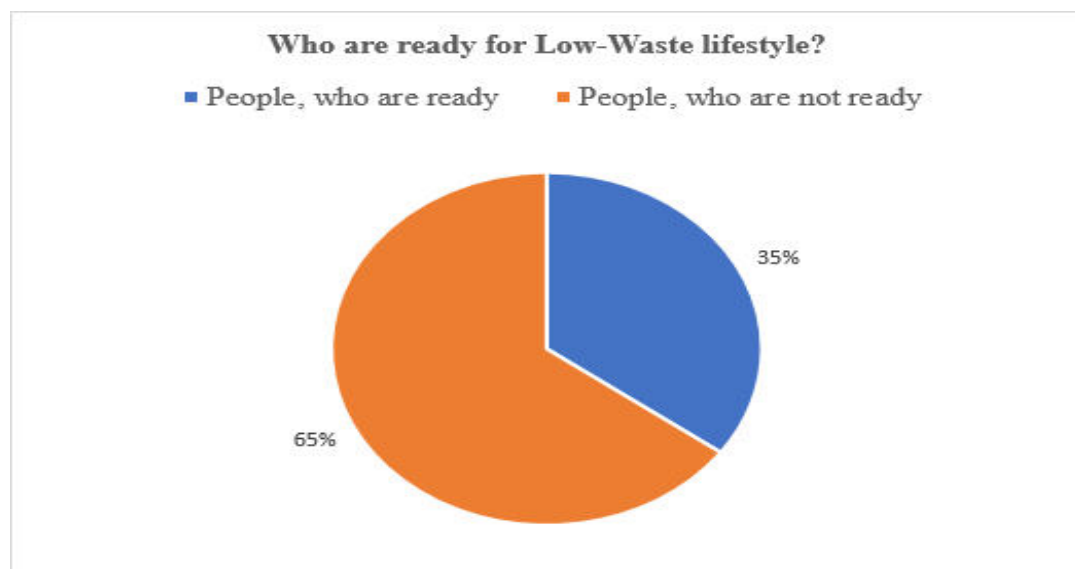
50% (10 people) - yes; 50% (10 people) - no

We cannot ignore the fact that there are a large number of coffee lovers in the world today. Coffee houses have come up with a very convenient function - take-away coffee. People can buy a takeaway hot drink in a paper cup and go about their business. Major part of people continues to consider that paper cups are eco-friendly, because it seems that it is made of paper. To prevent paper from leaking, manufacturers cover the inside - and sometimes the outside - walls of the cup with a special polypropylene film or apply an LDPE coating. On average, a small metropolitan cafe spends between 1.5 thousand and 3 thousand disposable cups each month, for the production of which one tree is destroyed per year [3].

In August 2019, my friend and me created an ecological project called "My Cup, Please". The origins of this project have been taken from Belarus since 2015.

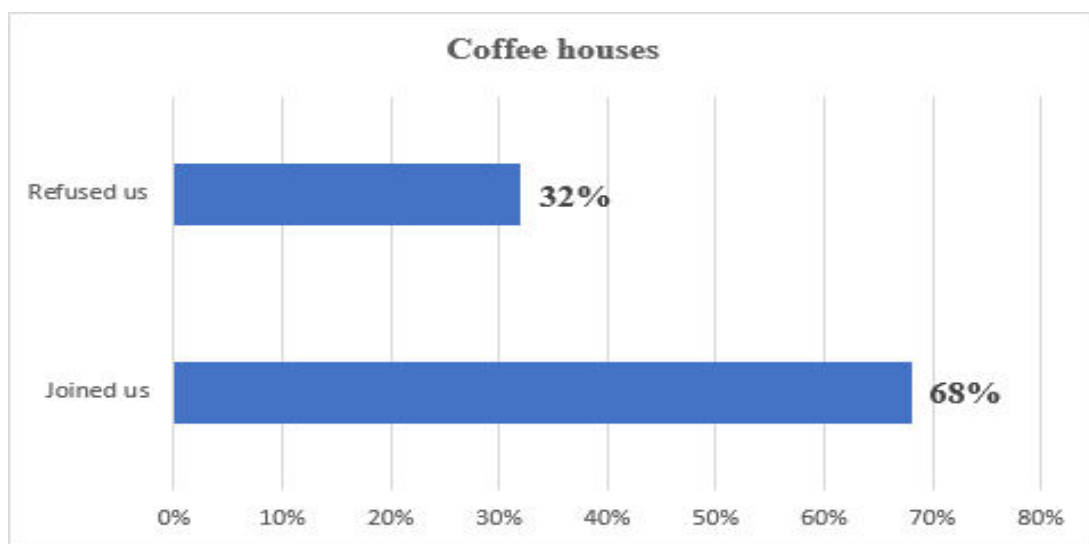
The goal of our project is to reduce the consumption of disposable paper cups. The first step is that we agree with coffee houses to provide discounts to customers who buy take-away drinks not in a paper cup, but in reusable containers. Today, there are many alternatives to disposable dishes: Tumbler, Thermos, Keepcups. The main purpose is to motivate people to start living like low-impact lifestyle. The discounts offered by coffee houses motivate customers to invest their money in a reusable alternative, rather than in the constant purchase of paper cups. Discounts can be from 5% to 20% or coffee houses can provide any dessert for free, it depends on the decision of the coffee house itself. Moreover, this is a volunteer work and we cannot earn money from it. Coffee houses that agree to cooperate with us help with the design of the stickers and banners that they stick at their place. Due to this, customers will find out information about the discount that the enterprise provides if the customer buys a drink or food in their reusable cups.

Summing up, unfortunately, our society is not ready for active action against environmental pollutants. The main reasons for this should be called low activity and inability to show their desires. It should be noted that the authorities and law enforcement agencies do not provide adequate support to the population in those cases when it acts as a defender of nature.



The results of the ecological movement "My Cup, Please" over 7 months of working 10

coffee houses joined us: Sosedi Kitchen - 20%; Saladbar - 10%; Coffeedays - 10%; Mamma Mia - 20%; Photobar - 10%; Tchibo - 10%; Ma Famille - 20%; Dolce - 10%; Vigorous day - 50 tenge; One more burger - 20%; 359 subscribers subscribed to our blog on Instagram; 7 coffee houses are getting ready to join the project; more than 10 blogging friends who vividly support our project joined our movement. In addition, we achieved cooperation with NIS in Nur-Sultan city, where 2 eco-events took place, where we highlighted the environmental problem for young students; the opening of the movement in the cities of Atyrau, Karaganda and Almaty. After 7 months of work we offered joint work to 25 coffee houses, 17 of them agreed, the rest refused to us because of misunderstanding or reluctance to join the ecological movement.



To conclude, we can already observe the prerequisites of an ecological disaster. If the principles of waste disposal are not improved and systematized, additional energy sources are not found and nuclear weapons are eliminated, we cannot talk about further peaceful and healthy life on the Earth planet. On the other hand, it can be noted that every year there are more and more eco-supporters and people who cover the environmental problem on the Internet and television.

To ensure the environmental safety of mankind, three areas of its activity are possible: preservation and maintenance of expanded reproduction of natural ecosystems; implementation of environmental clean technologies that eliminate the effects of economic activity unfavorable for the human biosphere.

List of References

1. Muthu, SS; Li, Y; Hu, JY; Mok, PY; Liao, XA. An Exploratory Comparative Life Cycle Assessment Study of Grocery Bags - Plastic, Paper, Non-woven and Woven Shopping bags // TEXTILE BIOENGINEERING AND INFORMATICS SYMPOSIUM PROCEEDINGS, VOLS 1–3, page. 1603-1609, 2010.
2. United Nations (2018). Global Assessment of Environmental-Economic Accounting and Supporting
3. Ocean Leadership Staff, *The Ocean Plastic Pollution Problem: Solvable with Science, Innovation, and Education*. (2018) Statistics 2017. <https://unstats.un.org/unsd/statcom/49th-session/documents/BG-Item3h-2017-Global->
4. See Patricia L. Corcoran, Charles J. Moore & Kelly Jazvac, *An Anthropogenic Marker Horizon in the Future Rock Record*, 24(6) GSA Today 4, 4–8 (2014)