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The Efficiency of the Additive of Plant Origin in the Bakery Products Manufacturing

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Abstract

The environmental crisis, which so suddenly struck the human habitat, made significant adjustments to the relationship between nature and man, forced to review all significant developments of human civilization and extremely actualized today the socio-environmental problems at all levels: regional, national, and global (1-3). In this regard, environmental problems, as a result of the human consumer relationship to the entire natural system, are today one of the most discussed topics in scientific publications, in the media space, and in scientific discourse. It is not accidental at all. The thoughtless, unlimited satisfaction of the growing needs of people has led to an irreversible change in the properties of landscapes, the depletion and loss of minerals, and the disappearance of many species of the animal and plant world. Unresolved environmental problems, at the moment, reflect the reality of the XXI century. The solution of the environmental problems that have arisen depends not so much on the level of development of production, science and technology but on the ecological culture of the population, on understanding the sources, essence and ways of overcoming the current crisis situation, on everyone's participation in the conservation of natural resources and minimizing consumption wastes. Based on a study of the state of environmental consciousness of students, the article examines the role of environmental education as a factor in the formation of culture, moral standards in relations with nature, and overcoming the environmental crisis. The data obtained made it possible to substantiate conclusions about the need for fundamental changes in educational programs, toughening of legislative norms in the field of nature management as a mechanism to counter the extinction and death of civilization.

Keywords: Environmental policy, socio-environmental problems, environmental culture, students

1 Introduction

Environmental problems have become all-pervasive and avalanche-like since the XX century, putting mankind on the brink of an ecological catastrophe that threatens the existence of civilization. It is no coincidence that over the past 30 years, the international community has not only recognized and actively discussed issues related to environmental degradation, but also many national states are intensifying their efforts in environmental safety and are joining forces to eliminate the damage done to nature.

The key position determining the survival of the planet is to urgently solve the existing problems in the environment. In this connection, it is meaningful to use all possible channels for the formation of a man's civilized approach to the environment, his personal responsibility for preserving the habitat, available natural resources by deliberately limiting material needs.

Modern environmental problems are closely related to problems in the social sphere that continuously arise in the public environment. For example, progressively growing human diseases are largely associated with worsening changes in the ecological space of the planet. Thus, global greenhouse gas emissions over the past two decades have almost doubled, and carbon dioxide contributes most to the increase in ozone holes, which has led to an increase in the temperature of the earth's surface and sea level rise. In this regard, the need for a significant reduction in greenhouse gas emissions is becoming increasingly urgent for each country. To reduce the flow of greenhouse gases, government and non-profit organizations in recent years have been actively developing programs to reduce energy efficiency and reduce carbon emissions (4, 18, 19). Environmental degradation is also associated with food, pollution of soil and land, reduction of fresh water, pollution of the oceans, epidemics, environmental disasters and the emergence of areas of environmental disasters, and many other problems (12, 13,

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16, 17).

One way to overcome the environmental crisis is associated with eco-culture as a perception and attitude of the individual to the world. In this regard, the sustainable and safe development of any state is largely determined by the effectiveness of environmental education of all population groups, and especially the younger generation (5, 11, 14, 15, 20).

2 Materials and methods.

In 2019, we conducted a study at Kazan Federal University. Its purpose was to determine the needs of students for environmental information. The study used the questionnaire method. The experimental base of the study was the respondents of Kazan (Volga region) Federal University. The survey was conducted in March 2019. The total sample size was 240 people in the quota sample and represented various categories of youth, based on the age, demographic characteristics and the nature of the professional training. The main part of the respondents was the 2nd and 4th-year students in humanitarian and socio-economic areas, of which 35% were boys, and 65% - girls. The age composition of respondents is presented in Table No. 1:

Table 1: Analysis of the students' needs for environmental information.

No.	Age	Number of Respondents	%
1.	Year II (18-20)	120	50
2.	Year IV (21-23)	120	50
	Total	240	100

The processing of the results was carried out using the Microsoft Excel software package. The methodological base consisted of monographic and complex sociological studies that that gave a full insight in the formation of the currently existing type of environmental culture in student youth.

3 Results

An important objective of the study was to determine the level of student interest in environmental issues. According to the results, only 9% of respondents are not interested in environmental problems. The concern of young people with the situation prevailing in their environment is largely due to their health status. Every second respondent (52%) noted that he was interested in the environmental impact on human health. These data, apparently, are largely due to the environmental situation in the Republic of Tatarstan. The significance of health in the youth consciousness of the region is also confirmed by another result: 41% of those surveyed emphasized that they are interested in the problem of covering a healthy lifestyle in the media.

One of the objectives of the study was to identify the level of environmental literacy of students, which was determined using the questions: "What are your sources of information that highlight environmental issues?", "Do you have enough information about the environment published in socio-political publications?" and "Would you like to know more about the state of the environment in the region?" According to the data, the largest number of students surveyed - more than two-thirds (67%) receive information from electronic versions of periodicals in the media, 17% of respondents noted such source as television, and 7% - radio (Table 2).

Satisfaction with the information received was revealed using the question "Do you get enough environmental information from the media?" The results indicate that there are problems in the awareness of students about the current environmental situation. Almost two-thirds of the respondents (64%) noted that they were only occasionally satisfied with published environmental information, while 26% replied that "there was no necessary information," and only 12% of those participating in the study expressed their satisfaction, emphasizing the answer option "often".

Table 2: Answers to the question: "What are you sources of information that deal with environmental problems?"

No.	Answers	Number of answers	%
1.	TV	41	17
2.	Radio	17	7
3.	On-line mass-media periodicals	161	67
4.	Not interested in environmental problems	21	9
	Total	240	100

The level of environmental culture and literacy of students was also controlled with the help of the question: "What publications, which reflect ecological problems on their pages, do the students read?" The data obtained make it possible to assert that students do not often refer to publications of environmental content. The greatest interest of the respondents is caused by "GEO" magazines – 29%, and "National Geographic" – 22%.

Thus, the survey results allow us to conclude that most students are not interested in using specialized publications devoted to environmental issues but are content with journalistic information. However, according to the results obtained, students are not indifferent to the situation in the environmental sphere. Answering the question: "Who, in your opinion, should first of all deal with environmental problems?", 69% answered "Everyone", 28% – "government", and 3% answered "environmental specialists".

4 Discussion

The majority of student youth find it difficult to determine the meaning of the term "ecology", which indicates a low level of environmental literacy of students. In part, it is due to unsatisfactory youth awareness of the environmental situation. This conclusion is confirmed by the data that the majority of students are content with environmental information that covers environmental issues and problems.

At the same time, according to the results obtained, the students are not indifferent to the current environmental situation. They are concerned about the occurring ecological situation in human habitat, which was noted by the absolute majority of those participating in the study, are interested in the environmental effect on health, on the conditions necessary for a healthy lifestyle. Recognizing the importance of student awareness of problems in the development of the environment, it is equally important to form in the student minds the attitudes toward their own participation in the conservation of natural resources and in solving environmental problems.

5 Conclusions

The study shows that most students are concerned about the changes taking place on the planet, but few people are ready to take measures and take part in restoring the ecological balance caused to the nature of the damage. To promote pro-ecological behaviour, the formation of appropriate models of human activity, many studies focus on identifying factors that can effectively stimulate an environmentally balanced attitude of people to nature. The results consistently demonstrate that environmental beliefs, values, and human attitudes are a factor that effectively affects people's environmental behaviour.

The effective use of the media can play a decisive role in the adoption and implementation of measures aimed at solving environmental problems. Most people get climate change information through the media. The survey data show the pattern that people primarily rely on the media to obtain information on global environmental issues.

The influence of the media on the audience plays a very important role, which is important to use in solving environmental problems and in eliminating the damage caused to it. At the same time, the practice of using the media confirms the indirect impact on environmental behaviour through social norms, since recycling coverage can represent social pressure and strengthen the intentions of the population. A significant influence is exerted by television news on government affairs and documentaries on the ecological state of the environment. Recent advances in environmental knowledge predict policy support to reduce pollution through the perceived risk of a global crisis.

The impact of environmental messages from traditional media and the Internet has a positive impact on public attitudes towards the environment through mechanisms of environmental value, people's orientations and intentions. The effective use of various types of media can positively influence the adoption of timely environmental measures.

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