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The proceedings are the papers of students, undergraduates, doctoral students and young researchers on topical issues of natural and technical sciences and humanities.

В сборник вошли доклады студентов, магистрантов, докторантов и молодых ученых по актуальным вопросам естественно-технических и гуманитарных наук.

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facilities have been damaged, and 1.4 million people have lost access to safe water. The war has led to the displacement of more than 4.3 million children, with over half of the child population affected. About 1.8 million children have fled to neighboring countries as refugees, while 2.5 million are now internally displaced in Ukraine. Ukrainian authorities estimate that Russia has transferred about 300,000 children to its territory and occupied territories of Ukraine. In response, a conference was held in Paris to address the issue of illegal deportation and adoption of Ukrainian children by Russia, which could be considered a form of genocide according to the Genocide Convention. [6]

The EU has taken steps to enhance the safeguarding of children during times of armed conflict, in response to the situation in Ukraine where the Russian occupiers have been committing severe and consistent breaches of children's rights. A document posted on the European Council's website acknowledges that children are among the most vulnerable populations during times of armed conflict. The EU Council urges member states to improve the protection of children in emergencies, combat child trafficking, establish measures to detect trafficking victims, and raise awareness among families and children of the dangers of exploitation. Additionally, the council members emphasized that emergencies should not be utilized for personal gain in regards to child custody, and adoptions should not be allowed during military conflicts. Various countries are willing to admit refugee children and provide them with necessary humanitarian support, such as lodging, food, healthcare, and education.

In conclusion, the protection of children's rights during armed conflicts is a critical issue that needs to be addressed. International law, child protection policies, psychosocial support, and education are all important measures that can be taken to protect the rights of children during times of conflict. Governments and international organizations have a responsibility to ensure that these measures are implemented effectively to protect the rights of children and promote their well-being. Only by ensuring that children's rights are respected and protected can we create a safer and more just world for future generations.

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THE PROBLEM OF GLOBAL WATER SCARCITY

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Water occupies 70% of the planet's surface, but almost all of it is salty – 97.5%. At the same time, fresh water – the remaining 2.5% of all water resources – is concentrated mainly in glaciers and therefore is mostly inaccessible. Only 1% of the planet's water resources are suitable for direct human use. At the same time, over the centuries, the volume of available water resources in the world has practically not changed in the direction of increase.

The real shortage of water is provoked by increased demand, associated, according to experts and international organizations, with a demographic boom, changes in the diet of large groups of the population, the development of industry and energy, urbanization, and the popularization of biofuels.

Factors that reduce available water resources include inefficient/predatory water use, water pollution and, increasingly, climate change. The main characteristics of interactions between states in the water sphere are determined by the unique features of the water resources themselves.

The main of these features, which determines the political specificity of the role of water resources, is connected, according to F. Frey, with the fact that “water is a vital and at the same time scarce commodity, distributed unevenly, and a significant part of water resources is located in international water basins ".

Indeed, one cannot ignore the special value of water for life and the absence of substitutes. This in extreme cases (drought, drop in water level during the irrigation season) makes its value almost infinitely high, despite the fact that under relatively normal conditions, the value of fresh water drops sharply. It seems to us that although the above definition of Frey is absolutely correct, it is incomplete, since it does not reflect a number of the most important features of fresh water as a subject of state and interstate regulation and competition.

These features are determined by the human right to water, the place of fresh water in ensuring national security, transboundary regulation and, finally, the special role of water in ethics and religion [1].

In this new world, water has become regarded by States as a valuable resource, and competition for it has shifted from the regional to the global level. The influence of the water factor has already created new forms of international interactions: technology markets have emerged that allow increasing or redistributing water reserves; the concept of trading virtual water, or water–intensive products, has been formed when it became clear that accounting for water invested in the production of a particular product is an effective tool for both economic development and improving international security. The lease of lands on other continents by China, India, South Korea, Saudi Arabia and other countries experiencing a local shortage of fresh water for access to water and arable land, which developed already in the 2000s, the so-called "quasi-colonization" is also one of the manifestations of the influence of global water scarcity on international relations.

Humanity is increasingly experiencing a shortage of fresh water. Here are the three main causes of global thirst:

1. Urbanization and industrialization. Clean water is polluted by pesticides and fertilizers from farms, untreated wastewater, and industrial waste. They even get into the groundwater, and as a result, the water becomes undrinkable. Oil spills also cause serious damage to the planet's water resources.

The problem of water pollution is aggravated by urbanization in different countries. It is expected that by 2050 70% of the world's population will live in cities. Rapid urbanization requires significant investments in wastewater treatment infrastructure. Many cities cannot afford it, and the volumes of uncontrolled industrial waste and untreated wastewater are growing.

2. Agriculture. Agriculture uses 70% of the fresh water available in the world, but about 60% of it is wasted due to leaky irrigation systems, as well as due to the cultivation of crops that absorb a lot of water resources.

Wasteful use of water leads to the drying up of rivers, lakes, and even underground springs. In addition, agriculture pollutes water with fertilizers and pesticides.

3. Population growth. Over the past 50 years, the world's population has more than doubled. Previously, people consumed less food, so less water was needed to produce food — a third of the volume that is used today.

In the future, even more, water will be needed for food production, as the world's population is projected to grow to 9 billion people by 2050. However, today more than 40% of the world's population lives in places where there is a lack of water resources to one degree or another [2].

According to UN estimates, by 2050, another 2.5 billion people will live in developing countries that are already suffering from water shortages. This means that the shortage of fresh water will become one of the main problems in the coming decades.

Water scarcity and climate change are inextricably linked. One of the main proofs of this connection is, for example, the fact that as a result of climate change, the precipitation regime is disrupted. In general, due to climate change, there are both immediate negative consequences (increased drought, more frequent floods, rising temperatures) and systemic (an increase in the amount of water vapor in the atmosphere increases precipitation and, ultimately, soil erosion).

Credit Suisse notes that the actual availability of water depends on the projected increase in both flooding and drought in the future. By 2050, increased flooding will put 1.6 billion people at risk. However, compared to the irregular effects of floods, drought is a longer-term, chronic problem and perhaps the most detrimental result of climate change. Meanwhile, since 1950, the number of cases of drought has increased fivefold.

The problem of lack of water resources has negative consequences for humanity. The lack of sufficient water leads to unsanitary conditions and, as a result, to health problems.

Diseases caused by lack of sanitation and hygiene are one of the main causes of mortality in the world. For children under the age of five, waterborne diseases — cholera, typhoid fever, dysentery — are the main cause of death. According to the World Bank, 88% of all waterborne diseases are caused by unsafe drinking water, inadequate sanitation and poor hygiene.

Food shortage. According to UN estimates, by 2030 half of the world's population will live in areas where fresh water is unavailable for industrial, agricultural and individual use. Arid regions that depend on irrigation are particularly vulnerable. Humanity must learn to use water rationally in agriculture, otherwise the shortage of water resources will lead to a food crisis.

The shortage of food together with the lack of fresh water will contribute to the growth of international conflicts. So, Yemen may soon become the first country in the world to run out of water. This will give impetus to mass migration and may lead to armed conflict. The same will happen in other regions of the planet where water and food resources are in short supply.

Perhaps the main solution to the problem of shortage of fresh water is its economy. Industry, agriculture and each of us must learn to consume water more intelligently. Especially in the developed world, where fresh water is often taken for granted.

Farmers should receive effective support to implement sustainable farming methods that use less water. International organizations such as the UN, the International Committee of the Red Cross, and the World Wildlife Fund should initiate appropriate programs for the agricultural industry in the poorest countries.

Although fresh water is a limited resource, there is enough of it on Earth to meet all our needs for centuries to come, provided that we take measures to preserve, protect and save it. Water scarcity can lead to global international conflicts and wars [3].

According to a WWF report, about 2.7 billion people worldwide face water shortages. The scale of the problem will soon become catastrophic. Fortunately, there is still time to prevent this.

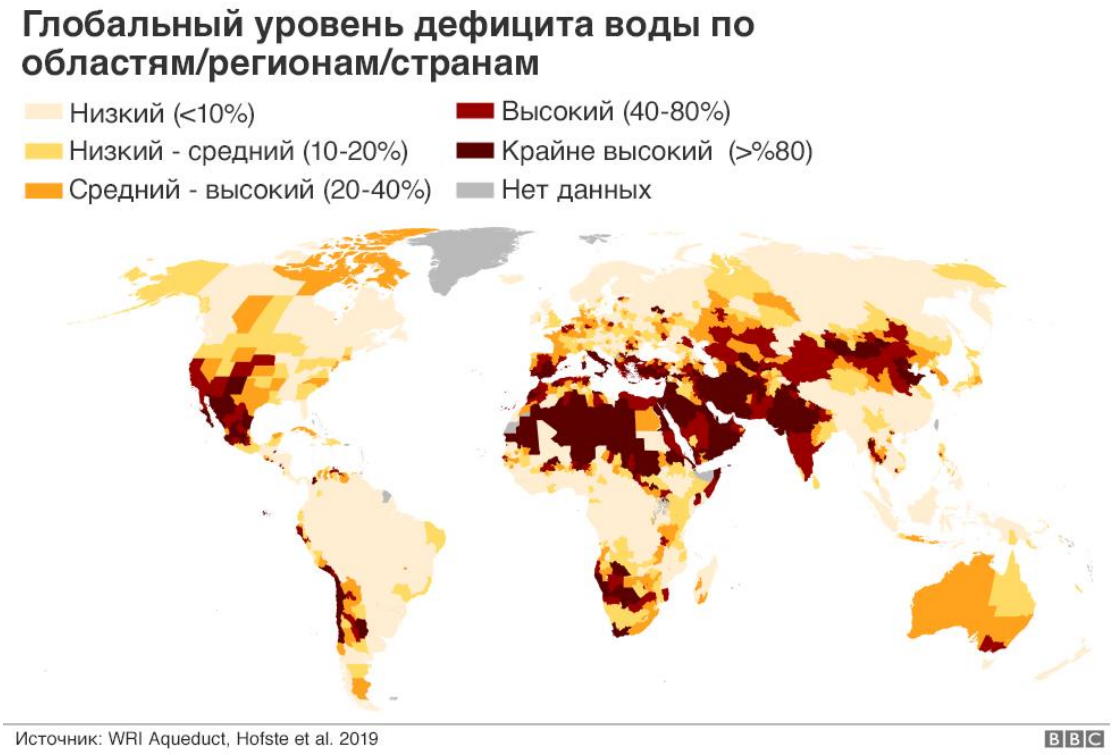
Lack of water resources can lead to conflicts and migration of millions of people, as well as destabilize the political situation, scientists warn.

About a third of the world's population - about 2.6 billion people - live in countries with "severe water scarcity," and 1.7 billion people in 17 countries face "extreme water scarcity," according to the World Resources Institute.

About a dozen countries in the arid regions of the Middle East are experiencing the most acute shortage of water, and in India "water shortage has reached a critical level due to water consumption and water management. This can lead to serious consequences in all areas - from economic development and the health of its population."

Pakistan, Eritrea, Turkmenistan and Botswana are also experiencing extreme water scarcity.

Areas where the ratio exceeds 80% are considered to experience an "extremely high level of water scarcity", in second place is a high level of water scarcity (a ratio of 40 to 80%).



India is ranked 13th in the world in terms of water scarcity.

Nine of the country's 36 states and territories are experiencing extreme water scarcity, and Chennai (formerly Madras), the capital of the southern state of Tamil Nadu, has recently been suffering from floods and droughts in equal amounts.

The ongoing water crisis in such a megacity as Chennai demonstrates the challenges that a significant part of India will face in the coming years, multiplied by inefficient water resources management and the growing demand for water for industry and the needs of ordinary people.

According to a report by the World Resources Institute, Mexico will find itself in the same difficult situation as India if urgent measures are not taken. 15 of Mexico's 32 states are experiencing extreme water scarcity. Hofste notes that Mexico City's water supply system is "extremely vulnerable."

Ten of Chile's 16 regions are also experiencing acute water shortages, including the country's capital, Santiago.

Moscow and Beijing are also classified in the report as "experiencing acute water scarcity", although Russia and China as a whole do not fall into this category.

In Italy and Spain, tourism increases the demand for water during the driest months of the year, Hofste said.

More than half of Italy's regions are experiencing water shortages, as well as a third of Turkey's provinces (27 out of 81).

The Western Cape Province of South Africa, 10 of the 17 districts of Botswana, and parts of Namibia and Angola are also experiencing an "acute water shortage".

Hofste, however, notes that the volume of water for irrigation of forage crops fed by livestock is 12% of the total cost of water for irrigation, according to a 2012 study by the Netherlands University of Twente.

The demand for animal products is expected to continue to grow, but Hofste is confident that reducing the proportion of meat in the diet can reduce the burden on the world's water resources.

"It seems to me that this is one of the most effective ways to solve the global problem of water scarcity," he explains.

"We use a huge amount of agricultural land for animal feed crops," Hofste said. "It's not the most efficient way to convert resources into calories."

According to a university study, the production of animal products takes more water than plant products with similar nutritional value.

The United Nations warns that climate change will make access to water less reliable in a number of regions.

Rising temperatures and volatile rainfall levels in tropical regions may lead to a drop in harvests in developing countries where food security problems already exist, the World Health Organization warns.

Based on current trends, the UN Convention to Combat Desertification predicts that by 2030, water shortages in arid and semi-arid areas could lead to the resettlement of 24 to 700 million people.

According to the World Resources Institute, extreme water scarcity is observed in a number of "hot spots", and the struggle for this resource may be an additional factor in the conflict. This also applies to Israel and Libya. Yemen, Afghanistan, Syria and Iraq.

Many countries hosting large numbers of refugees also suffer from water shortages. Jordan and Turkey are among them.

Even countries where there is currently no increased demand for water resources may become vulnerable due to droughts, experts say.

For example, Ukraine and Moldova may experience severe consequences in case of droughts. In regions where water scarcity is associated with socio-economic factors, risks can be reduced if water resources are effectively managed, data from the Aqueduct project show.

An example is given of the Singapore "Four Taps" system - a system of sustainable collection and distribution of water created by the government of an Asian city-state.

This name means that Singapore uses water from four sources: imported, salt-free sea water, processed water that has passed a multi-stage purification system, known as NEWater, and rainwater collected on the territory of the city.

Israel is also among the world leaders in the field of technologies for the extraction and distribution of water resources.

According to Hofste, countries with water scarcity, such as India, could focus on similar examples to solve their problems.

"Everything depends on the management in the country, there are examples of successful solutions to extreme water shortages in the world," the scientist added.

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MAIN ASPECTS OF REGIONAL PROCESSES OF UZBEKISTAN'S FOREIGN POLICY

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Abstract. In this article, the author highlights the main aspects that determine the need for regional collaboration of the Republic of Uzbekistan to enhance interaction, to develop timely initiatives and new approaches to solve pressing problems. The author specifies that for the past few years the Uzbekistan's foreign policy has undergone significant changes. First, Tashkent's approach to interaction with its closest neighbors in the region of Central Asia has changed. These