

Causes And Consequences Of Floods And Floods In The Safety Of Life, Measures To Protect The Population And The Territory

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Abstract – This article is aimed at improving the existing system for preventing floods and landslides in Uzbekistan, increasing its efficiency using modern information technologies based on innovative approaches, protecting the life and health of the population from possible emergencies.

Keywords – Floods, mudslides, floods, material damage, danger, human casualties, damage to the environment, destruction.

I. INTRODUCTION

One of the urgent tasks in the country is to protect against the risk of floods. Therefore, potentially dangerous areas have been surveyed, special maps and legal regulations have been developed. The number of people living in dangerous areas is being determined and measures are being taken to relocate them temporarily and permanently. Floods and floods leading to natural disasters are one of the most frequent events in the country. Flooding refers to the flooding of a river, lake, canal, or sea as a result of rising water levels. They are more often observed in the spring and pose a high risk not only to human life, but also to housing, production facilities. Therefore, it is advisable to take measures to prevent floods and reduce their impact.

In order to ensure the timely implementation of such measures in the country, legal and regulatory documents have been adopted.

The history of human development is associated with natural disasters and man-made disasters. The interests of man, his dignity, health and safety - are relevant, priority and important in all aspects of our daily lives.

Various emergencies lead to human casualties, damage to their health or the environment, serious material damage, and disruption of people's living conditions.

Of the possible natural disasters in our country, we pay special attention to floods, mudslides, avalanches and landslides, as the geographical location and climatic conditions of the territory of Uzbekistan create the basis for floods, avalanches, mudflows and floods.

II. THE MAIN PART

Since the dawn of humankind, natural disasters have always threatened his life. Man and nature are inextricably linked.

The floods have always caused panic among people living in mountainous and foothill areas. In the past, people have interpreted it as the work of magicians, the evil deeds of ghosts, the wrath of the gods. They also knew that an earthquake, a volcanic eruption, a torrential downpour in the mountains, or a sudden melting of snow in the summer months would signal the beginning of muddy currents coming from the mountains. The flood passes at the speed of a herd of wild wild horses, destroying everything in its path — fields, pastures, villages, and entire cities. Where the flood passes, only the desert remains.

Arabic flood, tuberculosis, seilyun - heavy mountain stream, English mudflow, mudavalanche, roc mudflow - mud stream, rock mud stream, French torrents, mure - mountain stream, German - wildbach, mure - wild stream, mud stream, Japanese yamatsunami - mountain This type of natural disaster, which means a wave, is not alien to our republic.

On Earth, such events are repeated every year, leading to many devastations and human deaths.

Almost all mountainous and foothill areas of the Republic of Uzbekistan are at risk of flooding. Floods are more frequent in Tashkent, Surkhandarya, Jizzakh, Fergana and Namangan regions than elsewhere.

According to the Center for Emergency Monitoring and Forecasting, 27% of flood activity occurred in April, compared to 33% in May and 17% in June. In the Fergana Valley, even in August, there is a risk of flooding.

Specialists of the Uzhydromet Center have studied and developed special maps of dangerous areas in the country, which are likely to be flooded. From this map we can see that such risks are high in Andijan, Jizzakh, Kashkadarya, Surkhandarya, Navoi, Syrdarya, Namangan, Samarkand, Fergana and Tashkent regions. Therefore, in order to prevent and safely prevent floods and mudflows that may occur in these regions, every year the work is carried out to clean the banks of rivers and streams and strengthen their banks.

When the time comes, it can be said that there should be maps with a large ratio of 1: 5000 and 1: 10000 in areas where there is a risk of flooding, especially in small economy facilities. Through these maps, it is necessary to develop measures to combat, prevent, predict and mitigate floods, and to conduct advocacy work among all segments of the population.

No matter where in the country floods occur, their composition, direction and damage are almost identical.

Therefore, it is time for all citizens to take an active part in the positive measures taken by our government, to implement them as soon as possible and to be responsible for the implementation of security measures. not until it rises from the memory of our compatriots. At that time, a sharp rise in temperature caused the snow to melt quickly, followed by a flood of 200 m³ per second. The floods killed 104 people prematurely. 15 km of gas mains, 14 km of roads, 4 bridges, 3 km of drinking water, 3 km of power transmission lines, 34,741 m of telephone lines were out of order. 14,200 people had to be relocated to safer areas.

Areas where floods occur or are likely to occur are referred to as floodplains. The main indicator of the occurrence of floods is the hydrometeorological conditions. As a result of long-term rains and short-term rapid melting of glaciers, the amount of water in river basins will increase sharply. Many destructions occur in the lower parts of the field as a result of the occurrence of a large force current. For this reason, floods are divided into two groups

Flood currents are divided into turbulent and structural types according to the nature of the movement.

Turbulent floods occur in the direction of the valley along the river, as a result of an increase in the amount of water in rivers and streams, according to the law of flow movement [3].

Structural floods occur as a result of massive infiltration of various rock fragments across the entire slope across the area.

Unlike normal currents, a flood acts not as a continuous flow but as separate waves. It also brings with it hundreds of tons, in some cases millions of cubic meters of sticky mass. The size of some stone fragments reaches 3-4 meters in cross section. Once the floodwaters hit the barrier, they overflow and become stronger [5].

Causes of floods. Heavy and continuous rainfall, active melting of snow and glaciers as a result of temperature rise, large-scale landslides in riverbeds, earthquakes and human activities are the causes of floods. (Table 1)

Table 1. Causes of floods

Type	The primary reason	Distribution and occurrence
It's raining	Rain, heavy rain	It is associated with the washing of rocks and the formation of landslides
Icy	Sudden melting of snow and ice	It is associated with melting glacial waters in high mountainous areas
Seismogen	Strong earthquakes	In highly seismically active areas
The direct effect of man	Accumulation of man-made rocks, poorly constructed dams	Washing and displacement of man-made rocks, destruction of dams
Indirect human impact	Deterioration of soil, vegetation	In areas where forests, meadows are joined, rocks and streams are washed away

Protective measures. The sheer number of factors involved in flood formation makes it difficult to predict in a timely manner. Nevertheless, the timing of the onset of the flood season can be predicted. Almost all flood-prone areas are well known to experts and indigenous peoples. Each region has its own statistics on the causes of floods. For example, floods in mountainous areas are caused by rain and rain (85%), melting snow (6%), flooding of mountain lakes (5%), and bursting of natural dams (4%) [3].

Population movement. As noted above, since floods are a seasonal process, it is important to adhere to certain requirements for operating in areas at high risk of flooding during these times. In many cases, a certain part of the population tries to spend their leisure time in mountainous areas, along rivers. This is not in vain, of course. But before setting up a temporary tent on the river, it is necessary to think about the natural conditions of the place, the relief, the structure of the environment, and then determine the place of stopping. This is the first sign that the location of the gradual increase in precipitation needs to be changed immediately. This is because the increase in the amount of water in rivers and streams is of great concern to vacationers. In such a case, if the sign of flood currents is noticeable, it is necessary to quickly climb as far as possible from the riverbed to a higher slope.

Currently, two main methods are used to strengthen the banks of water bodies in the country:

- Reinforced concrete construction;
- Gabion construction.

Reinforced concrete construction has a special place in shore protection.

Physico-mechanical properties, frost resistance and other operational properties of concrete are directly related to the micro and macrocomposite structure. Reinforced concrete is divided into monolithic and prefabricated structures according to the method of preparation. Monolithic reinforced concrete structures are made directly on the construction site, while precast concrete is brought and laid. This provides quality and reliable durability of the coast, but makes it economically valuable [2]. According to UNESCO, floods have dried up the pillows of nearly 9 million people in the last hundred years. The material damage they caused is also enormous. It is natural for people to avoid this disaster. For effective protection against floods, it is necessary to accurately predict them in a timely manner. According to our scientists, the accuracy of this prediction is now close to 100 percent. Flood protection can be active (construction of dams, dams, diversion canals, reservoirs, regulation of riverbeds) or weak (informing and evacuating the population, occupying areas where they are unlikely to be flooded). Information about the rules of behavior of people in such situations, which give an idea of this type of natural disaster, should be widely disseminated [4].

Of course, if precautionary measures are taken in an organized manner, the losses and damages from any tragedy can be reduced. However, in most cases, negligence is tolerated by the population.

It is very important that people know these rules, follow the recommendations of experts in a timely manner after receiving a warning of an impending disaster.

Natural disasters, especially floods, can cause certain casualties in a short period of time. Therefore, appropriate measures should be taken in the flood zone.

In particular, a flood report usually provides information on the expected time of the emergency, its boundaries, recommendations to the population and evacuation, and if a person living in the area is likely to fall into the flood zone, then:

- Shutdown of gas, electricity, water networks;
- Transportation of valuables to the upper floors;
- Close windows and doors and cover with boards or plywood;
- If evacuation is announced, documents, money and securities, three-day food and medical aid box should be prepared

[1].

In the event of a sudden rise in water, it is necessary to quickly climb to the top. You have to stay on the upper floors, on the trees, or on the hills until help arrives. If you have to go into the water, then you can use barrels, barrels, planks, doors, pieces of wood, car cameras. Without these, plastic bottles, even balls, can keep you afloat.

First of all, any unsanitary situation in the area and the area where any natural disaster occurs. As a result, humans, living organisms can be affected by infectious diseases. To get out of this situation, it is advisable to limit yourself to consuming only boiled water and dry foods for a certain period of time. If necessary, when moving to another place, and then return, it is necessary to carefully examine the condition of the house, the surrounding corridors. Never rush into the house. Due to the flood, the walls of the houses are eroded, the tolerance of the structures exceeds the norm, and as a result, the buildings may collapse under the influence of a small external force. It is necessary to create walkways by creating separate corridors from the places where water collects [2].

III. CONCLUSION

It should be noted that without a full solution to the problems listed above, it is impossible to prevent floods and landslides in a timely manner, to minimize the negative consequences.

Therefore, taking into account the experience of foreign countries, it is necessary to improve the existing system of prevention of floods and landslides in Uzbekistan, to increase its efficiency using modern information technologies based on innovative approaches, to improve the lives and health of the population. for protection purposes are as follows

IV. SUGGESTIONS

Continuous organization and strengthening of control over the cleaning of rivers, canals, streams and shore protection of rivers and canals, which are on the balance of regional and district khokimiyats.

In cooperation with the Ministry of Emergency Situations, ministries, agencies and other non-governmental organizations to protect the population and territories from emergencies, to take preventive measures to prevent them and to ensure regular training exercises in all regions.

Based on the experience of European countries, the creation of a 3D format of floods and their introduction in the protection of the population and the region from emergencies.

Improving the notification system (Equipping with communication facilities).

In the period of possible floods, to organize the broadcasting of videos, advertisements and presentations on the protection and warning of the population from flood-related emergencies through the media on all television channels.

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