OVERVIEW
OF EMERGENCY SITUATIONS IN
THE REPUBLIC OF TAJIKISTAN
FOR 2021
....” Our country makes a significant contribution to solving global and regional problems, including on issues related to water and climate change, the fight against terrorism and extremism, drug trafficking, and transnational organized crime.

At the same time, the issue of global climate change and the need for joint efforts to eliminate its consequences as serious problems of the modern world remains at the center stage of our country. I emphasize that only a strong will, the faith in a good future, and dedicated work for the benefit of the Motherland and the state can lead us to our cherished goals.

An excerpt from the Message of the President of the Republic of Tajikistan, Leader of the Nation, respected Emomali Rahmon «On the republic’s main directions of the domestic and foreign policy»

Dushanbe city, 21 December 2021
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Opening statement by the Chairman of the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan, Colonel-General of Militia, R. Nazarzoda

Dear Reader!

We bring to your attention the “Overview of Emergency Situations in the Republic of Tajikistan for 2021”, prepared by the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan. The review contains detailed information on the activities of the Committee in the field of prevention of emergencies and disaster response, civil defense, search and rescue operations, international cooperation, as well as other directions of the Committee’s activities.

Dear Readers, Colleagues! Analysis of the situation shows that disasters have become more frequent on our planet in recent years. Scientists and researchers have established that there is a direct relationship between global warming and an increase in the number of natural calamities and disasters, which is also being observed in our country.

Climate change not only has a significant impact on the main climatic characteristics but also on the intensity of dangerous hydro-meteorological phenomena manifestations.

Tajikistan is already now facing serious consequences of global climate change. Active melting of glaciers is observed. So, out of 14,000 glaciers in Tajikistan more than 1,000 have melted over the past 30 years, also it is registered that average annual temperatures increase, precipitation quantities change, the number of extreme weather events increases, as well as an increase in disasters often caused by climatic conditions.

All this can significantly affect natural resources, human health, and the overall development of the Tajik economy.

Many devastating natural disasters were registered in the Republic of Tajikistan in 2021, such as floods, mudflows, earthquakes, and landslides that caused significant damage to the population and the country’s economy. They also took human tolls.

For the Government of the Republic of Tajikistan, climate change adaptation is a priority activity direction in the sphere of disaster mitigation, prevention, and response.

The Government of Tajikistan and the authorized bodies of the country, in cooperation with foreign partners and international organizations, continue to
consistently take concrete steps to prevent and reduce the impact of disasters, as well as to provide comprehensive assistance to citizens affected as a result of emergencies.

To implement the state policy in the field of emergency situations, in 2021 the Committee carried out a set of measures aimed at disaster risk reduction, mitigation, prevention, and response, continued to utilize the regulatory documents ensuring the work of the Committee and coordinate its activities with the ministries and institutions of the country, conduct planned activities on the professional development of its staff, improve informational and analytical activities, strengthen the material and technical capacity of the Committee, and also enhance the international cooperation.

Taking this opportunity, I express my gratitude to all colleagues, donor countries, as well as international organizations for their support in the implementation of the initiatives of the Republic of Tajikistan and the implementation of tasks assigned to the Committee.

Also, I express my gratitude to you for your interest in the materials of the Overview of emergency situations and civil defense in the Republic of Tajikistan for 2021.

The Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan hopes that the information provided in the Overview of Emergency Situations and Civil Defense in the Republic of Tajikistan for 2021 will be useful not only to government officials but also to members of the public and the mass media.

Yours sincerely,

Chairman of the Committee
Colonel-General of Militia

R. Nazarzoda
II. PROTECTION OF THE POPULATION AND THE TERRITORY OF TAJIKISTAN FROM EMERGENCIES

Analysis of dangerous incidents and emergency situations registered on the territory of the Republic of Tajikistan in 2021

An emergency – is a reality in a certain territory that has evolved as a result of a natural hazard event, an accident, a catastrophe, an elemental, or another disaster that entails human casualties, damage to people’s health or the environment, extensive material losses and disruption of people's way of life. An emergency can evolve as a result of a natural hazard event, an accident or a dangerous technogenic fault / man-made incident, or a massive spread of infectious disease among people and/or farm animals or plants, as well as following the utilization of modern means of destruction, all of which may be or become the source of this emergency.

In 2021, 3128 emergencies and dangerous incidents were registered in the Republic of Tajikistan, which is 2.5% more than in 2020 (3052). These include:

<table>
<thead>
<tr>
<th>Types of disasters</th>
<th>2020</th>
<th>2021</th>
<th>Decrease Increase(+-)%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of dangerous incidents and natural hazard emergencies</td>
<td>213</td>
<td>359</td>
<td>+ 68,5 %</td>
</tr>
<tr>
<td>Number of situations of technogenic cause</td>
<td>2676</td>
<td>2564</td>
<td>- 2,9 %</td>
</tr>
<tr>
<td>Accidents</td>
<td>163</td>
<td>205</td>
<td>+ 25,8 %</td>
</tr>
<tr>
<td>Total:</td>
<td>3052</td>
<td>3128</td>
<td>+ 2,5 %</td>
</tr>
</tbody>
</table>

In 2021, similar to the previous years, the largest death tolls were recorded in man-made/technogenic accidents.
Disasters

Ecologists note that the Earth is increasingly experiencing sudden changes in weather, storm winds, hurricanes, tornadoes, extreme snowfalls, and prolonged heavy rains, abnormally high and abnormally low temperatures. According to experts, the cause of these phenomena is global climate change.

Scientists believe that an increase in average temperature contributes to the occurrence of such dangerous phenomena as mudflows and floods, snow avalanches, and others. It is noted that half of the major weather anomalies occur under the influence of climate change.

Dangerous natural phenomena – are severe and extreme hydro-meteorological and geological events. Although they occur in all parts of the world, some regions are more vulnerable to certain hazards than other regions.

According to the World Bank and other international organizations, Tajikistan is the most vulnerable country to climate change in the region. A large number of disasters occur in Tajikistan annually, causing significant damage to the country's economy, and resulting in human casualties.
Casualties in Disasters in Tajikistan in 2016-2021

In 2021, 359 disasters were recorded on the territory of the Republic of Tajikistan, comprising: 153 avalanches, 53 mudflows, 42 rockfalls, 40 windstorms, 33 earthquakes, 19 inundation/water level rises in reservoirs, 8 cases of torrential rains, 7 landslides, 1 case of soil erosion with a collapse. This is 68.5% more than in 2020 (213).

Disaster Casualties in Tajikistan in 2020-2021:
Disasters in Tajikistan (2020-2021):

<table>
<thead>
<tr>
<th>Disaster Types</th>
<th>2020</th>
<th>2021</th>
<th>Decrease / Increase (+/-) %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Events</td>
<td>Deceased</td>
<td>Rescued</td>
</tr>
<tr>
<td>Earthquakes</td>
<td>30</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>Avalanches</td>
<td>95</td>
<td>153</td>
<td>7</td>
</tr>
<tr>
<td>Landslides</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Rockfalls</td>
<td>9</td>
<td>42</td>
<td>2</td>
</tr>
<tr>
<td>Strong winds</td>
<td>21</td>
<td>40</td>
<td>9</td>
</tr>
<tr>
<td>Heavy snowfalls</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Heavy torrential rains</td>
<td>9</td>
<td>8</td>
<td>- 11.1 %</td>
</tr>
<tr>
<td>Inundation/waterlevel rise</td>
<td>4</td>
<td>19</td>
<td>+ 4.8 times</td>
</tr>
<tr>
<td>Thunderstorm</td>
<td>2</td>
<td>1</td>
<td>- 2 times</td>
</tr>
<tr>
<td>Mudflows</td>
<td>36</td>
<td>53</td>
<td>22</td>
</tr>
<tr>
<td>Soil erosion with collapses</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Severe frost</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td>213</td>
<td>359</td>
<td>42</td>
</tr>
</tbody>
</table>

In 2021, compared to the last year, the number of such natural hazards as snow avalanches, mudflows, rockfalls, landslides, earthquakes, windstorms, and inundation cases increased.

**Major Disaster Types Occurred in Tajikistan (2020-2021):**

Avalanches remain prevailing among natural hazards, which in 2021 made up 43% of the total number of disasters, and this indicator for 2020 was 45%. Avalanche formation processes in the high-mountain regions of Tajikistan are divided into three
scales of hazards: strong, moderate, and weak. The first includes the Zarafshon and Hisor ranges, the axial part of the Turke斯坦 Range, and the river basins of Obikhingou, Obikhumbo, Vanj, and Yazghulom in the western part of the Pamirs. Certain sections of Anzob pass on the Dushanbe-Khujand highway are particularly dangerous, where, due to avalanches traffic may be stopped for long times.

**Disaster Types in Tajikistan, by Percentage Ratio:**

During the reporting year, the number of avalanches increased by 68.5% compared to the previous year. The largest number of avalanches in 2021 was registered in GBAO - 86.3%. Avalanches were also recorded in Sughd province (Aini district) and Districts of Republican Subordination (Varzob, Sangvor, Laksh, and Vahdat). As a result of avalanches, 7 people died in the districts of Vahdat (2), Aini (3), Rushon (1), and Murghob (1).

Avalanches usually occur because of:
- sudden changes in weather (including changes in atmospheric pressure, humidity);
- torrential rains;
- heavy snowfall;
- mechanical impact on the snow mass, including the impact of rockfalls, earthquakes, etc.
The Map of Avalanches in Tajikistan in 2021

In 2021, compared to the previous year, the number of mudflows increased by 47.2%. Mudflows were registered in all regions of the country. The largest number of mudflows was recorded in the Districts of Republican Subordination and Khatlon Province.

As a result of mudflows, 22 people died in Shohin district (3), Kushoniyon district [formerly Bokhtar district] (1), Kulob city (3), Vakhsh district (1), Hisor district (1), Aini district (1), Panjakent district (12). 52.4% of all the people who died as a result of disasters in 2021, deceased during mudflows.

In Tajikistan, the most common cause of mudflows is heavy rains. Mudflows can also be caused by snowmelt, earthquakes, and dam breaks.
The Map of Mudflows in Tajikistan in 2021

Tajikistan is located in a seismically hazardous zone; earthquakes constantly occur here, and weak tremors are recorded about 5-6 times a day. There are two main causes of earthquakes in Tajikistan. The first reason is the active processes of mountain formation. Mountains cover 93% of the country. And the second reason is that there are faults in the earth's crust on the territory of Tajikistan. The entire territory of the country is part of the so-called Alpine-Himalayan seismic belt. Earthquake epicenters periodically appear within this line.
In 2021, the number of earthquakes in the country increased by 10% compared to the previous year. The largest number of earthquakes was registered in the Districts of Republican Subordination. As a result of an earthquake in Tojikobod district on July 10, 2021, 5 people died.

Earthquakes caused enormous material damage in Tojikobod and Rasht districts.

In the Tojikobod district, as a result of earthquakes in July and August 2021, 289 houses (of which 58 were destroyed) and 4 schools were damaged.

In Rasht district, as a result of an earthquake on July 10, 2021, 35 houses (of which 4 were destroyed) and 2 schools were damaged.
In 2021, the number of cases of rising water levels increased 4.8 times in Tajikistan compared to the previous year. During the reporting year, an increase in water levels was observed in all regions of the country. The largest number of cases of water level rise was registered in the Districts of Republican Subordination, Khatlon, and Sughd provinces.

This natural phenomenon was the most detrimental in Rasht district and Dushanbe.

The reasons for rising water levels are usually: heavy rainfall, snowmelt, groundwater rises, and incorrect installation of gutters.
In 2021, the number of windstorm cases increased by 90.5% in our country, compared to the last year. Windstorms were registered in GBAO, as well as in Districts of Republican Subordination (Hisor district, Tojikobod district, and Lakhsh district), Khatlon and Sughd provinces, and Dushanbe city.

The main cause of storm winds is the high-temperature contrast and strong vertical movement of air currents, which leads to the formation of heavy clouds, resulting in the occurrence of windstorms.

Windstorms and Casualties in 2021, per region:

- DRS: 3
- Dushanbe city: 0
- GBAO: 24
- Khatlon Province: 3
- Sughd Province: 3

Deceased | Storm winds registered
In 2021, the number of rockfalls increased 4.7 times in Tajikistan, compared to last year. The largest number of rockfalls was registered in GBAO. Also, rockfalls were observed in the Districts of Republican Subordination (Sangvor, Lakhsh, and Roghun), Sughd province (Aini, Panjakent), and Khatlon province (Shohin). As a result of rockfalls, 2 people died (1 in Roshtqala district, 1 in Shughnon district).

The causes of rockfalls lie in the processes of rock destruction, unified by the general concept of weathering. Physical weathering is associated with temperature fluctuations. Meanwhile, a periodic change in the volume of rocks, as well as the impact of water freezing in the cracks leads in most cases to the formation of rockfalls and earthquakes.
Rockfalls and Casualties in 2021, per region:

The Map of Occurred Rockfalls in Tajikistan in 2021

In 2021, similar to 2019 (207), the largest number of disasters in the territory of the Republic of Tajikistan was registered in the month of March.
Disaster Events in 2020-2021, per month:

During the reporting year, 42 people died as a result of disasters in the territory of the Republic of Tajikistan (8 deaths in 2020).

Disaster Casualties in 2020-2021, by types of Natural Hazards

- **Rockfalls**: 2 (2021), 0 (2020)
- **Earthquakes**: 5 (2021), 0 (2020)
- **Landslides**: 5 (2021), 0 (2020)
- **Lightning Strikes**: 2 (2021), 0 (2020)
- **Mudflows**: 4 (2021), 0 (2020)
- **Avalanches**: 7 (2021), 2 (2020)
In 2021, during natural hazard events, most casualties were in Sughd province - 21 people died during mudflows and landslides.

**Disaster Casualties in 2021 compared to 2020, per region:**
INFORMATION
On Disasters Occurred in Tajikistan in 2021
(per affected region and inflicted damages):

The largest number of disasters in a section of regions occurred in GBAO in 2021 (58%), and in 2020 - in the Districts of Republican Subordination (57%).

Disaster Events Occurred in 2021 compared to 2020, per region:
In 2021, out of 359 disasters registered in the Republic of Tajikistan, 52 caused significant material damage to the population and the economy of the country.

**Disaster Types that Caused Major Damages in 2021:**

- Erosion with collapses: 1
- Windstorms: 2
- Inundations: 2
- Landslides: 3
- Extreme cold: 1
- Heavy Snowfall: 1
- Mudflows: 27
- Rockfalls: 3
- Earthquakes: 3
- Avalanches: 9
In 2021, the largest number of emergencies with material damage was recorded in Khatlon Province.

**Disaster Events in 2021 that Caused Major Damages, per region:**

From 2012 to 2021, the downward trend in the number of natural hazard emergencies that result in economic damages continues.

**Disaster Events and Casualties in 2010-2021:**
In recent years, a lot of work has been done in the Republic of Tajikistan to increase the country's capacity in the field of disaster risk management and fulfill its obligations under the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR).

The country developed and adopted the National Strategy for Disaster Risk Reduction in 2019, which sets out a vision and commitment to disaster risk reduction for the next decade. The National Platform for Disaster Risk Reduction is functioning successfully, and international cooperation is developing positively in this area, including with partners of the REACT group (a rapid assessment and coordination team/group in emergencies created by the UN OCHA).

According to the Decrees of the State Commission for Emergency Situations, the Government of the Republic of Tajikistan annually allocates significant funds for preventive measures to prepare for emergencies.

The State Commission for Emergency Situations is also responsible for assisting the commissions for emergency situations of the functional and territorial sub-systems of the Unified System [for emergencies] in solving issues regarding the provision of necessary social and other assistance to citizens who suffered in emergencies.

Under the Decree of the State Commission for Emergency Situations of the Government of the Republic of Tajikistan dated June 30, 2021, the families affected by disasters in March-April 2021 in Vanj, Rushon, and Shughnon districts of GBAO were provided with a lump sum material aid from the Contingency Fund of the Government of the Republic of Tajikistan.

Under the Decree of the State Commission for Emergency Situations of the Government of the Republic of Tajikistan dated August 11, 2021, humanitarian assistance from the state reserve was provided to the families affected by disasters in the districts of Tojikobod, Rasht, and Sangvor.

According to the Decree of the State Commission for emergencies of the Government of the Republic of Tajikistan, the families of 42 citizens who died as a result of disasters were provided with one-time material aid.

Despite the reduction in the number of natural hazard emergencies, the material damage to the country's economy caused by disasters remains large-scale. During the period from 2010 to 2021, the country's economy incurred damages from disasters in the amount of 1 billion 490 million 179 thousand 500 Somoni – that makes a sum of US 253 million 727 thousand 027 dollars.

In 2021, compared to the year 2020, material damages from disasters (in dollars) increased 2.4 times.
Material Damage from Disasters in 2021 compared to 2020, in US Dollars:

![Graph showing material damage comparison between 2020 and 2021]

According to the conclusions of the commissions for emergencies of the provinces, cities, and districts in 2021, disasters caused significant material damage in Khatlon Province, which amounted to 66.4%. Sughd province follows next in line, where the damage amount made to 19.3%.

Property Damage from Disasters in 2021 (in Somoni), per region:

![Bar chart showing property damage per region]

In 2021, 73.7% of the total amount of material damage caused by disasters falls on the effects of mudflows across all regions of the country (damage equaled 104 million 672 thousand Somoni).

As a result of earthquakes in the Districts of Republican Subordination of Rasht, Tojikobod, and Sangvor, the damage was inflicted in the amount of 12 million 288 thousand 600 Somoni. In May 2021, as a result of soil erosion followed by a land collapse in Jomi district of Khatlon Province, 22 houses were damaged (21 of them destroyed completely), the total damage here amounted to 4 million 211 thousand 800 Somoni.
As noted above, the main share of economic damage falls on mudflows, which may have an impact on increased water erosion, the formation of landslides, and floods.

The fight against mudflows has been going on in Tajikistan for a long time. Forecasts of mudflow formation areas are carried out using qualitative assessments (earthquakes, terrain complexity, steepness of mountain slopes, branching and nature of the channel network, etc.) and quantitative assessments of climatic and hydro-meteorological conditions (climatic anomalies, prolonged rains or snowfalls, etc.). The most important in predicting the formation of mudflows are climatic factors.

The classic and effective way of combating mudflows is a complex set of measures with various organizational-economic and hydraulic engineering components.

Organizational measures include measures aimed at reducing the level of mudflow risk by ensuring the correct placement of economic facilities, maintaining the reliability of the automatic system for early warning of the population, and carrying out mitigation works.

Special technical measures include the construction of protective hydraulic structures - mudflow-retaining, mudflow-through, and mudflow-diversion dams, shafts, etc., special pits for trapping mudflows; devices for artificial dilution of mudflow with water, etc.

According to the CoES 2021 data, the number of hazardous zones on the territory of the Republic of Tajikistan, where there are high forecasts of avalanches, rockfalls, and mudflows, decreased by 17.8% compared to 2020 and went as low as 1209, of which 515 zones are the most dangerous.

**Dangerous and Extra Dangerous Zones on the territory of the Republic of Tajikistan in 2021:**
The number of people living in dangerous areas of Tajikistan prone to natural hazards decreased 2.2 times in 2021. According to the Decree of the Government of the Republic of Tajikistan under No. 648 dated November 28, 2020 «On the resettlement of environmental migrants in the period 2021-2023» 664 people will be resettled to safe areas, of which 176 people were resettled in 2021. Earlier in the period 2017-2020, 1,173 people were resettled.

**Technogenic Emergencies**

An emergency of a technogenic character or a man-made disaster is an unfavorable situation in a certain territory that has evolved as a result of an accident, catastrophe or other disasters that may involve or have caused human casualties, damage to human health, the environment, significant material losses and disruption of people's livelihoods. Mankind faced man-made emergencies much later than nature-caused disasters.

Dangerous man-made incidents arise in the process of human activity. To meet its vital needs, man has created and is constantly improving the production industry, and developing the economy. All this is connected with the work of various machinery and mechanisms, with the transformation of various types of energy and substances that a person undertakes. As a result of this activity, various dangerous man-made phenomena (accidents and catastrophes) arise in the technosphere, which is the cause and origin of man-made disasters.

In 2021, 2564 technogenic incidents were registered on the territory of the Republic of Tajikistan, which is 4.2% less than in 2020 (2676). (Indicators for road traffic accidents and fires have been taken from the data of the Ministry of Internal Affairs of the Republic of Tajikistan).

Of these: 1189 fires; 1102 motor vehicle accidents; 214 forced opening of entrance doors; 17 collapse accidents; 14 utility accidents; 14 forced opening of elevators; 5 explosions; 5 cases of detection and clearance of ammunition, 3 cases with the release of poisonous gas, 1 aircraft accident.

As a result of man-made disasters and accidents, 418 people died and 1525 people were rescued. In 2021, the number of deaths increased by 1.5% compared to 2020, while the number of rescued people decreased by 4.8%.
Man-made Disasters in 2021 compared to 2020:

INFORMATION on Man-made Disasters in 2020-2021:

<table>
<thead>
<tr>
<th>Event Type</th>
<th>In 2020</th>
<th>In 2021</th>
<th>Decrease Increase (±/−) %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events</td>
<td>Deceased</td>
<td>Rescued</td>
</tr>
<tr>
<td>Road/Automobile Accidents</td>
<td>1109</td>
<td>376</td>
<td>1263</td>
</tr>
<tr>
<td>Fires</td>
<td>1300</td>
<td>25</td>
<td>229</td>
</tr>
<tr>
<td>Elevator Forced Opening</td>
<td>9</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Entrance Door Forced Opening</td>
<td>218</td>
<td>7</td>
<td>76</td>
</tr>
<tr>
<td>Accident with carbon monoxide burst</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Explosions</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Detection of Ordnance</td>
<td>2</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Collapses of buildings, structures, rocks</td>
<td>8</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Accidents on public utility networks</td>
<td>25</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Aircraft Accidents</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total:</td>
<td>2676</td>
<td>412</td>
<td>1602</td>
</tr>
</tbody>
</table>

The level of road traffic accidents and fires remains to be high among man-made disasters in the territory of the country. In 2021, motor vehicle accidents accounted for
43% of the total number of technogenic emergencies, and in 2020 - 41%. The number of road accidents in 2021 is 0.6% less than in the last year.

**Technogenic Emergencies in 2020-2021, by Percentage Ratio:**

Death tolls in road traffic accidents in 2021 accounted for 94.5% of the total number of man-made disaster casualties, and in the last year was 91.3%.

The largest number of traffic accidents in 2021, like last year, was registered in Khatlon Province and districts of republican subordination.

**Automobile/Road Accidents in 2020-2021, per region:**

Also, a large share of man-made emergencies in 2021 as in the previous years was made up of fires - 46%. In the context of the regions of the country, most fires were registered in Sughd and Khatlon Provinces.
The main causes of fires in the home settings are careless handling of fire, failure of electrical equipment, and violation of fire safety rules when using stoves and electric heaters.

In 2021, 39% of fires occurred due to non-compliance with the rules for the operation of electrical equipment, and in 2020 - 40%.

Fires cause great material damage, and in some cases lead to people’s deaths. In 2021, fires inflicted significant material damage in Sughd province, which amounted to 84.9%.

**Material Damage from Fires in 2020-2021 (in Somoni), per region:**

In 2021, compared to 2020 the material damage from fires (in Somoni) increased 4.1 times.
**Accidents**

An accident is an unforeseen event, an unexpected set of circumstances that resulted in the bodily injury or death of a person.

In 2021, 205 accidents were registered on the territory of the Republic of Tajikistan, which by 25.8% more than in 2020 (163). 180 people died as a result of accidents, while in 2020 - 132 people.

**INFORMATION**

**On Accidents in 2020-2021:**

<table>
<thead>
<tr>
<th>Accident Types</th>
<th>2020</th>
<th>2021</th>
<th>Decrease / Increase (+/-) %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Events</td>
<td>Deceased</td>
<td>Rescued</td>
</tr>
<tr>
<td>Drowning cases</td>
<td>123</td>
<td>107</td>
<td>36</td>
</tr>
<tr>
<td>Accidents, not related to water</td>
<td>34</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Found unidentified corpses</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Missing persons</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>163</strong></td>
<td><strong>132</strong></td>
<td><strong>55</strong></td>
</tr>
</tbody>
</table>

77.6% of the total number of accidents in the reporting year are cases of drowning, in 2020 - 75.5%. During the analyzed period, 155 people drowned, which is 44.8% more than in 2020.

In 2021, the largest number of drowned people was registered in Khatlon Province (30.3%) and the Districts of Republican Subordination (22%).
Number of Drowned Persons in 2020 - 2021

52.3% of those rescued from water were residents of Sughd province.

Number of People Rescued from Drowning in 2020 – 2021:
50% of the total number of drownings in 2021 falls on the age group under 17 – these were children. 23.2% of the drowned people were women (36 people).

**Drowned Persons in 2021, by age groups:**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of Drownings</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 35 year old</td>
<td>34</td>
</tr>
<tr>
<td>17 - 35 year old</td>
<td>44</td>
</tr>
<tr>
<td>11 - 16 year old</td>
<td>42</td>
</tr>
<tr>
<td>5 - 10 year old</td>
<td>22</td>
</tr>
<tr>
<td>&lt; 4 year old</td>
<td>13</td>
</tr>
</tbody>
</table>

In our country, the major number of accidents on water falls on the summertime season. The analysis shows that the main causes of drowning in 2021 were: lack of parental control - 37.4%, negligence - 20%, traffic accidents - 11.6%, violation of bathing rules - 10.3%, suicides - 7.7%, under alcohol intoxication - 1.9%.

**Causes of Drowning in 2020, by percentage ratio:**

- Lack of Parental Control: 37.4%
- Road Accident: 11.6%
- Bathing rules violation: 10.3%
- Negligence: 20%
- Alcohol intoxication: 1.9%
- Unknown Causes: 10.3%
- Suicides: 7.7%

Reservoirs are dangerous at any time of the year. In summer, they are dangerous when swimming and using swimming facilities. The danger is most often represented by a strong current (including underwater), deep pools, and underwater cold springs.
We want to remind our readers that during the swimming season on the waters, certain rules of safe behavior should be observed.

Firstly, you should avoid swimming in places that are unfamiliar and/or not specially equipped for bathing purposes.

Secondly, when bathing it is prohibited to:
- leave children without adult supervision;
- swim outside the bathing area;
- swim up to moving boats, motorboats, catamarans, jet skis;
- dive and stay underwater for a long time;
- jump into the water in unfamiliar places, from structures that are not adapted for these purposes;
- stay in cold water for a long time;
- go swimming while being hungry;
- play games in the water involving diving and capturing each other;
- swim on boards, deck chairs, logs, air mattresses, and tubes (outside the authorized swimming area);
- give false alarms;
- swim in drunken condition.

**Post-Disaster** reconstruction works in Kulob and Panjakent cities, Jomi, Vakhsh, Tojikobod, Rasht, Sangvor, and Aini districts

As a result of natural calamities - strong winds, earthquakes, heavy rains, mudflows and soil collapses (erosion), landslides, avalanches, and border conflict in 2021, huge economic damage was caused to residential buildings, economic facilities, the agriculture, and livestock sector of the cities and districts of the republic.

Altogether 1274 residential buildings were damaged, of which 257 houses were destroyed completely, 346 houses and 3813 auxiliary structures incurred partial damage.

It should be noted that disasters caused the greatest damage to the population and economy in the cities of Kulob and Panjakent, in the districts of Jomi, Vakhsh, Tojikobod, and Rasht.

Based on the instructions of the Founder of Peace and National Unity - the Leader of the Nation, the President of the Republic of Tajikistan, respected Emomali Rahmon, to eliminate the consequences of disasters and carry out reconstruction work in Khatlon Province, Tojikobod, and Rasht districts, a Disaster Response Command Staff was formed under the leadership of the CoES Chairman.

On the part of this Headquarters, working groups were created in the cities and districts affected by disasters from among the employees of ministries and departments, executive bodies of state power and rescue operations were carried out on time, the amount of incurred damage was identified, humanitarian assistance was provided, rehabilitation and reconstruction work was carried out, as well as the construction designs of new residential buildings for disaster victims were put together.
Thanks to the effective and well-coordinated work of the Republican Disaster Response Command Staff with the ministries, departments, international organizations, the consequences of disasters in the affected cities and districts were eliminated in the soonest time, and new residential buildings with a full set of necessary assets and utilities were built and handed over to the home-owners.

<table>
<thead>
<tr>
<th></th>
<th>Destroyed houses 2021</th>
<th>Family Composition</th>
<th>Damaged Houses 2021</th>
<th>Family Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GBAO</td>
<td>5</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Sugd province</td>
<td>23</td>
<td>125</td>
<td>37</td>
</tr>
<tr>
<td>3</td>
<td>Khatlon Province</td>
<td>158</td>
<td>733</td>
<td>701</td>
</tr>
<tr>
<td>4</td>
<td>Rasht region</td>
<td>64</td>
<td>482</td>
<td>263</td>
</tr>
<tr>
<td>5</td>
<td>Hisor region</td>
<td>7</td>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Dushanbe city</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>257</strong></td>
<td><strong>1375</strong></td>
<td><strong>1017</strong></td>
<td><strong>3370</strong></td>
</tr>
</tbody>
</table>

Table 1

Based on the instructions of the President of the Republic of Tajikistan, the affected population was promptly allocated one-time material assistance in the form of building materials, kitchen and hygiene kits, food and non-food commodities at the expense of the state material reserves, the CoES, the local executive bodies of the state government of the provinces, cities, and districts, and international organizations.

At the same time, with the direct support of the Government of the Republic of Tajikistan, based on orders of the State Commission for Emergency Situations of the Government of the Republic of Tajikistan, at the expense of the Contingency Fund of the Government of the Republic of Tajikistan, residential houses were built for the affected families, and one-time material assistance was issued, and for the affected families in the city of Kulob, Jomi, Vakhsh, Tojikobod, Rasht and Sangvor districts were allocated building materials and essentials.

At the expense of the Government of the Republic of Tajikistan, according to the Order of the State Commission for emergencies of the Government of the Republic of Tajikistan, lumber, slate, cement, rebar, gravel, flour, sugar, rice, pasta, and vegetable oil were allocated for the restoration of destroyed and partially damaged houses.

Also, assistance was provided by the local executive bodies of state government, institutions, organizations, and entrepreneurs for the affected population of the cities of Kulob and Panjakent, the districts of Jomi, Vakhsh, Tojikobod, Rasht, and Sangvor.

*Kulob city*

As a result of heavy rains and mudflows on May 11, 2021, 145 residential buildings were damaged, of which 43 houses were destroyed and 102 houses were partially damaged, 606 auxiliary structures, buildings of four secondary educational and
preschool institutions, 6 km of roads, 10 bridges, 24.5 km of power lines, 65 reinforced concrete poles, 7 pieces of electric power transformers, 35 km of communication lines, about 14 km of bank protection structures.

At the same time, 128.4 hectares of crops were damaged, including 31.75 hectares of cotton, 37.6 hectares of cereals, 36.1 hectares of vegetables, and 23 hectares of potatoes.

The disaster killed 128 livestock, including 79 large cattle, 49 small cattle, as well as 6,500 poultry, 20 honey beehives, and 17,200 fries.

Three people died as a result of disasters in the city of Kulob.

The total amount of damage according to the information received by the Commission for Emergency Situations in the city of Kulob amounted to 45 million 975 thousand 500 Somoni (4,061,439 US dollars).
Based on the order of the State Commission for emergencies of the Government of the Republic of Tajikistan, 102 tons of cement, 10,200 sheets of slate, and 202 m$^3$ of sawn timber were allocated through humanitarian assistance.

In the shortest possible time, construction works were completed and 43 residential buildings were put into use.
Panjaket city

As a result of heavy rains and mudflows on August 2-5, 2021, one residential building was destroyed. The main roads, irrigation networks, canals, tens of kilometers of rural settlements, water supply, and sewerage networks were damaged.
Damage was also caused to about 140 hectares of crops, including damage to cereals, livestock fodder, and lands for vegetable crops, as well as orchards.

As a result of this disaster, 148 heads of livestock, including about 60 heads of large cattle and 90 heads of small cattle, as well as hundreds of heads of poultry, and 40 honey bee hives were lost. This disaster claimed the life of one person. The total amount of damage, according to the information received from the Commission for Emergency Situations in the city of Panjakent, amounted to 5 million 377 thousand 200 Somoni (475,017 US dollars).

As a result of heavy rains and mudflows that occurred on July 19, 2021, three residential buildings were damaged in the city of Panjakent, two of which were destroyed. Also, auxiliary structures, roads, power lines, irrigation networks and canals, mudflows, and other objects of the national economy were damaged. Sadly 12 people died as a result of this calamity.

As a result of this disaster, 144 heads of livestock died, including about 60 heads of large cattle and over 80 heads of small ruminants. The total amount of damage, according to the information received from the Commission for Emergency Situations in the city of Panjakent, amounted to 3 million 423 thousand 400 Somoni (302 421 US dollars).

On May 5, 2021, on the territory of Moghiyon Jamoat, the settlement of Gezani Poyon, on the site “Chuqurak” in the southern part of this village, there was a collapse of rocks and rockfalls. On May 6, 2021, the Emergency Commission urgently evacuated 29 families to safe places, a total of 112 residents.

In the settlement of Kishtudaki Poyon, the local executive body of state power of Panjakent city assisted three families in the construction of residential buildings in a safe area.

With the involvement of engineering equipment of organizations and institutions, joint ventures, and entrepreneurs, the areas affected by the disaster were completely cleared of dirt and sediments in the shortest possible time, and irrigation and drinking water lines, power lines, and roads were restored.
On the part of the executive body of state power of Sughd province, five families of disaster victims were assisted in the form of building materials, slates, sawn timber, cement, and food commodities.

It should be noted that as a result of mudflows, two residential buildings were destroyed in the settlement of Veshist and one residential building in the settlement of Kishtudaki Bolo of Yoree Jamoat. With the support of the executive body of state power of Panjakent city, residential buildings were built for disaster victims that were set into use.

**Vakhsh district**

As a result of heavy rains and mudflows on May 11, 2021, 74 residential buildings were damaged, of which 41 houses were destroyed, and 33 houses were partially damaged. 137 auxiliary structures, 10 km of roads, 8 bridges, 20 km of power lines, 191 reinforced concrete and wooden poles, 4 transformers, 12 km of irrigation and 8 km of drainage networks, one pumping station, and a hydro-technical structure were damaged.

Damage was also caused to 1,933 hectares of crops, including 1,051 hectares of re-sown cotton, 411 hectares of cereals, 70 hectares of oats, 111 hectares of cucurbits crop, 14.4 hectares of potatoes, and 9.4 hectares of onions, 137 hectares of fodder for livestock, 21 hectares of household plots and 25.4 hectares of auxiliary structures.
As a result of the natural disaster, 300 heads of livestock died, including 49 large cattle, 248 small cattle, 3 donkeys, and 306 heads of poultry. One person died as a result of the disaster.

The total amount of damage, according to the information received by the Commission for Emergency Situations in the Vakhsh region, amounted to 22 million 710 thousand 700 Somoni (2,006,246 US dollars).
Based on the order of the State Commission for emergencies of the Government of the Republic of Tajikistan, 200 tons of cement, 82 tons of rebar, 1108 pieces of asbestos, and galvanized sheets were allocated through international humanitarian aid.

In the shortest possible time, construction works of 40 residential buildings for families affected by the disaster in Vakhsh district were fully completed and homes were put into use for the affected families with all the necessary conveniences.
As a result of heavy rain showers, mudflows, groundwater level rise, and soil erosion (soil erosion), on May 6-7, 2021, 22 residential buildings were damaged in the settlement of Navobod of Iftikhor Jamoat, Jomi district (21 houses were destroyed). 22 auxiliary structures, 32 km of roads, 2 bridges, 6.8 km of power lines, and 6.1 km of irrigation and drainage networks were damaged.

Damage was also caused to 81.6 hectares of crops, including 22.5 hectares of cotton, 36.6 hectares of cereals, 1.0 hectares of vegetable crops, 1.9 hectares of potatoes, 19.6 hectares of fodder for livestock, and 0.024 hectares of household plots.

The total amount of damage according to the information received by the Commission for Emergency Situations in the Jomi district amounted to 4 million 211 thousand 800 Somoni.

Based on the order of the State Commission for emergencies of the Government of the Republic of Tajikistan, 300 m³ of sawn timber, 3000 galvanized sheets, 60 tons of rebar, and 300 tons of cement were allocated through international humanitarian aid.

In the shortest possible time, the construction works of 20 residential buildings for families affected by the disaster in Jomi district were fully completed and put into operation with all necessary conveniences.
Tojikobod district

As a result of an earthquake on July 10, 2021, 268 residential buildings were damaged (58 houses were destroyed and 210 houses were partially damaged). 806 auxiliary structures, three secondary educational institutions, 5 medical institutions, one cultural and community facility, 3.6 km of roads, 3.9 km of power lines, 3.6 km of bank protection structures, and 8 km of vehicle roads were damaged.

As a result of the disaster, 209 heads of livestock died, including 162 large cattle and 47 small cattle, as well as 306 heads of poultry and 5 honey bee hives. Sadly, 5 people died as a result of the disaster.

The total amount of damage, according to the information received from the Commission for Emergency Situations in the Tojikobod district amounted to 10 million 117 thousand 300 Somoni (893,754 US dollars).
Based on the order of the State Commission for emergencies of the Government of the Republic of Tajikistan, 100 shovels, 50 picks, 72 hand carts, 2 tents for 40 people, 12.5 tons of first-grade flour, 1.25 tons of sugar, 1250 kg of rice, 2.5 tons of pasta, 1250 liters of vegetable oil, 326 tons of rebar, 30 m³ of sawn timber, 1640 tons of cement, 5760 m³ of gravel, 1218 m³ of sawn timber and 16,300 pieces of galvanized sheets, 5,000 pieces of protective masks, 2,000 disinfecting (0.5 l.) solutions, 2 tons of drinking water (in 1 l. bottles), 2,850 pieces of 1.5 l. drinking water bottles.
**Rasht district**

As a result of an earthquake that occurred on July 10, 2021, 35 residential buildings were damaged (4 houses were destroyed and 31 houses were partially damaged), 143 were slightly damaged 23 auxiliary structures, and buildings of two secondary educational institutions were damaged.
The total damage amounted to 1 million 714 thousand Somoni (151,413 US dollars).
Based on the order of the State Commission for emergencies of the Government of the Republic of Tajikistan, several tons of first-grade flour, sugar, rice, pasta, liters of vegetable oil, cement, gravel, lumber, and galvanized sheets were allocated through humanitarian aid.

In the shortest possible time, the construction works of 4 residential buildings for affected families and 31 residential buildings for partially affected families from the disaster in Rasht district were completed and handed over to the affected families.

**Sangvor district**

As a result of an earthquake, which also occurred on July 10, 2021, one residential building in the settlement of Darai Khairon Jamoat of Sangvor district was destroyed. The construction of a residential building and its lining with necessary assets for the affected family was fully completed in the shortest possible time.
Expanding the early warning monitoring system for Sarez Lake

The problem of Lake Sarez, which belongs to rock-dammed lakes, remains relevant. It arose as a result of a catastrophic earthquake that occurred on February 18, 1911, and subsequently, the bed of the Murghob River was completely blocked. As a result of a large collapse, the front of about 4.5 km buried the village of Usoy. This rock dam was named Usoy after the village name, having the following parameters: volume - 2.2 km³, weight - 6 billion tons, length - 5 km, width - 3.2 km, area - 10.8 km², height - 567 m. Consequently, Lake Sarez was formed.

The length of Lake Sarez is about 70 km, the maximum measured depth is about 500 m, the level of the lake is about 3,255 m above sea level, and the volume of water is more than 17 km³.

Intensive filling process completed in 1926 and since 1942 the level of water stabilized with seasonal fluctuations.

At a meeting with the leadership of the Asian Development Bank (ADB), which was held on October 26, 2017, the Government of the Republic of Tajikistan raised and discussed the issue of assisting in the modernization of the monitoring and early warning system of Lake Sarez. This would enable in the event of a failure of the Usoy Dam of Sarez Lake to timely notify the population living in the Bartang Valley of GBAO and settlements located along Panj River, which fall into the zone of possible flooding. The Committee proposed a joint project to implement the set tasks, which was supported by ADB in 2019.
On July 2, 2021, to implement the set tasks within the framework of the National Disaster Risk Management Project, the Committee held a presentation ceremony of the Sarez Lake monitoring and early warning system, which was successfully installed on the lake in August 2021. During the installation, the following monitoring and warning devices were installed: hydrometric stations on the lake, on the tributary upstream and downstream of the dam, an automatic weather station, high displacement accelerometer (HDA) stations, a Monitoring Center, and 30 sirens controllers.

To carry out continuous hydrological, seismological, and geological monitoring over Sarez Lake condition, the installed technical means and equipment notify of an impending threat through the established means of communication in the event of a potential emergency.

**Pressure/level sensors of Sarez Lake**

These pressure sensors are designed to measure the water level of Sarez Lake. Both sensors monitor the water level every 5 minutes and this data is stored in the data logger. A warning alert is sent out if the water level changes by 0.2 m in a 5-minute data interval.

**HDA (high displacement accelerometer)**
Acceleration data is recorded every (1) minute and saved on a flash drive. A warning alert is sent out via satellite signal if HDA exceeds a pre-set ground motion threshold. The threshold is 0.03 g.
A water level gauge is installed near the hydrological station that functions with a radar sensor. The radar sensor monitors the water level every hour. Water level values are transmitted every hour via satellite.

![A water level gauge downstream of the dam](image1)

The hydrological station downstream of the dam has a sensor for gauging the water level in this river. A radar sensor monitors the water level every hour. Also, water level values are transmitted via satellite every hour.

![Automatic weather station (referred to as AWS).](image2)

AWS monitors wind speed, wind direction, precipitation volume, snow depth, air temperature, humidity, solar radiation, and atmospheric pressure, which are transmitted via satellite every hour.
**HDA (high displacement accelerometer)**

Acceleration data is recorded every minute and stored on a flash drive. An alert is sent out via satellite if the HDA exceeds a pre-set ground motion threshold. The threshold is 0.03 g. HDA data (HDA measures the ground acceleration associated with earthquakes) stored on a local flash drive must be extracted/downloaded here on the site (during visits every three months).

Also, within the framework of the project, 30 early warning sirens were installed to give alerts in an emergency. 18 sirens were installed in Bartang and 12 in Panj valley.
With a possible breakthrough of the Usoy dam, safety islands with supplies of essential goods have been created for the population of Bartang Valley, who cannot be evacuated, due to their proximity to a possible emergency scene. Simulation exercises are held annually to prepare the population of Bartang Valley for emergencies.

Modern devices will certainly expand the monitoring and early warning system of Sarez Lake, as well as areas of possible flooding in case of emergency, which helps build the capacity of Tajikistan to manage disaster risks and reduce social and environmental vulnerabilities.

The Map of Lake Sarez Monitoring and Early Warning System
Modernization of anti-hail system and new opportunities for protecting crops from hail

To modernize the CoES Anti-hail Service in 2021, modern machinery and equipment were purchased as part of the implementation of the National Project on Natural Disaster Risk Management, to improve the work of anti-hail teams.

Within the framework of this project, a remote meteorological radar station of the “ДМРЛ-С” type was purchased with the financial assistance of the Asian Development Bank, which was installed on the territory of the Hisor anti-hail detachment.

A major renovation of a two-story building was also carried out of the modern radar station “ДМРЛ-С”, in which modern equipment was installed, and auxiliary facilities were repaired.

The official ceremony of commissioning the CoES Anti-hail Service Detachment located in Hisor town was held on August 3, 2021, with the participation of the Prime Minister of the Republic of Tajikistan Mr. Kohir Rasulzoda.

The main purpose of installing an additional modern radar station “ДМРЛ-С” was to increase the efficiency of anti-hail activities, as well as reduce disaster risks and prevent hail impacts in the republic.
Also, in 2021, as part of the implementation of the paragraphs of the “Development Program of the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan for the period 2018-2022”, the Anti-hail Service purchased 17 sets of modern anti-hail installations of the “Элия-Р” type.

Currently, 7 anti-hail detachments located on the territory of our country are equipped with these installations and protect crops from hail damage.

In addition, spare parts were purchased to maintain the functioning of four radar stations of the “МРЛ-5” type: a thyatron ТГИ 500/16, LNA (low noise amplifier), magnetrons, which will be used for repair purposes in case of failure of these radar stations.

In 2021, more than 600,000 hectares of farmland across the country were saved from hail damage thanks to the good efforts of the Anti-Hail Service staff.
Further development plans for the Anti-Hail Service include increasing coverage areas for hail protection, increasing the number of impact points, and improvement of the performance and functioning of the existing equipment to reduce the risks and prevent hail damage in the Republic of Tajikistan.

**Events dedicated to the International Disaster Reduction Day**

As part of the International Day for Disaster Risk Reduction on October 9, 2021, the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan, together with the Executive Authority of Dushanbe, the UN Office for Disaster Risk Reduction, with the financial support of the European Union, held a competition for the best drawing among children and teenagers.

The event was held in the capital's park named after Alisher Navoi, which was attended by 115 children and adolescents from 7 to 16 years of age. In their paintings, children reflected daily life of rescuers, their views on emergencies, safety rules in disasters, and coronavirus prevention measures.

The main goal of the event was to promote the culture of life safety among the younger generation, inform the population about the importance of preventive measures, and carry out awareness-raising and explanatory work with the public on disasters and the ways to mitigate and reduce risks.
The winners and participants were awarded memorable gifts and letters of appreciation from the Committee.

The event was recorded by the State Television Institution for Children and Youth «Bahoriston» and the full program was broadcast to the audience on October 13.

As part of the Committee’s planned activities dedicated to the International Disaster Risk Reduction Day an Open Doors Day and a sporting event were organized on October 12, 2021, with the support of the United Nations Children's Fund (UNICEF) at the Republican Educational and Methodological Center with the participation of pupils of the Lyceum No. 1 for gifted students of Dushanbe and children with disabilities from the NGO «Iroda» – An initiative of parents of children with autism, which was attended by more than 150 people.

During the opening speech, responsible persons informed the participants about the history of establishing this day, the activities of the Committee of Emergency Situations, and the importance of observing safety rules in all life situations.

In addition, children and adolescents were informed about measures to protect against coronavirus infection and the use of personal protective equipment.

The children were given detailed information about the activities of the Committee, special rescue equipment, and machinery, as well as actions to rescue victims from disasters were demonstrated to them. They were also informed about how to render first aid and modern medical equipment was demonstrated.
The participants especially enjoyed the work of unmanned aerial vehicles, which rescuers use to assess natural areas and identify hazards in emergencies.

Then the participants were introduced to the rules and requirements of the sporting event. Together they participated in the following sports: overcoming obstacles, tug of war, throwing balls into the basket, running, as well as providing assistance and transporting «injured», timely and quick dressing of personal protective gear.

During the event, children and teenagers demonstrated dexterity, good physical fitness, and the ability to work in teams. But most importantly, they got an idea about the work of rescuers and carried out their actions, which put a positive impression on them. Many said they would like to become a rescuer in the future.

At the end of the event, all participants were awarded diplomas and souvenirs.

It should be noted that to increase public awareness of potential hazards and their preparedness to act in emergencies, as well as to reduce disaster risks, the CoES regularly conducts live dialogues on television and radio broadcasts.
On October 13, 2021, Radio Vatan hosted a live dialogue between the Committee staff and the audience, which lasted two hours, during which the Committee staff and specialists answered the audience’s questions.

Also, the listeners were told about the correct behavior and compliance with safety rules in emergencies and prevention measures, as well as about several domestic and international disaster risk reduction programs.

A radio quiz was also held with the support of the Aga Khan Agency for Habitat, in which radio listeners took an active part, and winners were awarded memorable gifts and diplomas.

It should be noted that for the first time in Dushanbe videos were shown on LED monitors in crowded places in Tajik, Russian and English languages dedicated to the subject “Only together we can save our planet”. This initiative was part of planned events dedicated to DRR day and videos were shown more than 200 times that day.

At the same time, two more countrywide competitions were announced among all populations, one of which was the best video contest, and the other was the exact answers to a virtual questionnaire. Civilians, visiting the website of the Committee and the websites of other public and international organizations, answered this questionnaire.
From among the authors of the videos, 3 best were selected, who were awarded valuable gifts and certificates from the development partner - the United Nations Office for Disaster Risk Reduction.

In continuation of the planned activities, on October 14, 2021, a seminar on the topic “Assessing and strengthening the capacity of disaster risk management system in the country” was organized and held with the support of the UN Office for Disaster Risk Reduction with the participation of more than 50 people.

The event was attended by members of the National Platform, representatives of relevant ministries and departments, and international organizations working in the field of disaster risk reduction.

Timed to coincide with this significant date in the international arena, events were organized and held in all regions, cities, and districts of the country in line with local conditions and possibilities, with the involvement of students from secondary educational institutions, universities, public and international organizations.

In honor of the International Disaster Risk Reduction Day, the CoES Directorate for Dushanbe city held several events in secondary schools of Dushanbe city from September 28 to October 5, 2021.

A wide range of students and teachers took part in these events. Rescuers and other specialists spoke to the students and demonstrated special rescue operations. During these meetings, useful discussions also took place on ways to prevent coronavirus and other infectious diseases, as well as on road safety, correct behavior on water, and much more.
During the event, the Specialized Rapid Response Rescue Squad held an open day among students of secondary schools in Dushanbe where special emergency rescue equipment and search and rescue operations were demonstrated to students and teachers.

The CoES Directorate for Sughd Province held an awareness-raising campaign in the Central Cultural Park named after Kamoli Khujandi. The event was attended by heads and employees of departments and subdivisions of the Committee for Sughd province, 40 staff and volunteers of the Branch of the Red Crescent Society of Tajikistan for Sughd province, teachers and students of the Faculty of Fine Arts of Khujand State University named after Bobojon Ghafurov and children's art institutions.

It should be noted that the event was held under the framework of the Project “Forecast Based Action” implemented by the Red Crescent Society of Tajikistan under financial support of the German Red Cross and the German Federal Bank in several cities and regions of Tajikistan. During the event, officials informed the participants about the International Disaster Risk Reduction Day being organized across the country and about the related ongoing events. A competition for the best drawing was held in continuation of this event. At the same time, the provision of first aid to affected people and rescue operations on possible disaster victims were demonstrated in practice during the event. Leaflets were disseminated where information was provided on methods and ways of warning the population in case of disasters, and how to provide first aid to affected persons. In such a way, the results of the competition were summed up and evaluated by the teachers of the Department of Fine Arts of Khujand State University named after Bobojon Ghafurov, and the authors of the best paintings were awarded memorable gifts by the organizers.

At the same time, an Open Doors Day was held on the territory of the Directorate (of CoES for Sughd Province) in which high school students of secondary educational institutions of Bobojon Ghafurov district took part.

On October 13, 2021, the Committee’s Directorate in Khatlon Province organized and held events dedicated to the International Disaster Risk Reduction Day at the Kokhi Vatan complex in Bokhtar city. The event was attended by students of the Bokhtar State University named after Nosir Khusrav, pedagogical and medical colleges, students of the city's secondary education schools, children's art school, fire department, medical service, and the city's culture department. In the courtyard of the Kokhi Vatan building of Bokhtar city, the subdivisions of the CoES Directorate for Khatlon Province displayed the means

At the second stage of the event, competitions were organized and held for the best drawing on the topic of emergencies, quizzes, and poems with the participation of students and schoolchildren. The event was also attended by representatives of the State Executive Body of Khatlon Province and the Tajik Red Crescent Society Branch in Khatlon Province, the UN World Food Program Office in Khatlon Province, and the USAID GLOBAL Project. At the end of the event, the leadership of the Committee and the representative of the Executive body of state power of Khatlon Province presented the participants with gifts and letters of appreciation on behalf of the CoES Directorate for Khatlon Province. These were for their active participation in the painting, poem reciting, and quizzes competitions.

On the occasion of the International Day for Disaster Risk Reduction, the CoES Directorate in GBAO held several events with the support of development partners. For example, training on the topic “Peaceful life without emergencies” was held in general education schools in the city of Khorog with the participation of employees of the CoES Directorate in GBAO and the representatives of the Aga Khan Agency for Habitat. During the classes, students learned about the types of disasters and the ways to save people in emergencies, first aid to victims, methods of artificial respiration, and much more.

Events dedicated to this significant date were organized and held in other cities and regions of the country tailored to available capacities and conditions.
The Republican Militarized Mine Rescue Services in the Context of Mining Industry Development and Construction of Hydroelectric Power Plants

The Republic of Tajikistan has adopted an accelerated industrialization initiative as its fourth strategic goal, which lays a firm basis for ensuring economic stability, creating new jobs, and increasing the country's export potential and competitiveness.

In this regard, the creation of new mining enterprises in the country and the development of minerals are steadily growing, which requires ensuring safety for underground workers.

To fulfill the requirements of the Decree of the Government of the Republic of Tajikistan dated May 27, 2020 “On the Program for Accelerated Industrialization of the Republic of Tajikistan for 2020-2025” an interdepartmental body has been established under the Ministry of Industry and New Technologies of the Republic of Tajikistan, which also includes a responsible representative of the CoES.

One of the most important responsibilities of the Committee is also the provision of emergency rescue and mining operations in the underground facilities.

When accidents happen in the underground structures, the related CoES structures carry out emergency rescue operations to save people, material and cultural assets, protect the environment, as well as eliminate the consequences and reduce and mitigate the impact of explosives and natural gases, fires, gas contamination, rockfalls, floods and other types of hazardous phenomena in an underground setting.

According to the CoES Regulation, the system of its organizations comprises the Republican Militarized Mountain Rescue Service, which has teams in the cities of Khujand, Norak, and Roghun (hereinafter referred to as RMMRS), which perform the tasks of providing emergency rescue operations in underground facilities.

RMMRS staff provides services in two types of underground settings, as in the explosive natural gas, as in dust and gas hazardous facilities.

It should be noted that explosive gas objects have the highest level of danger due to the release of harmful gases as a result of the processing of minerals, and there is also a high probability of fire and explosion.

Following the current legislation of the Republic of Tajikistan and for safety reasons, users of underground facilities engaged in mining should be serviced by professional rescuers – i.e. the RMMRS.

RMMRS in Khujand, located to provide emergency rescue operations in the north of the country, ensures the safety of miners in underground settings. RMMRS in Norak and RMMRS in Roghun ensure safety during the construction and operation of underground hydraulic, hydropower, and transport facilities.

In 2021, to implement the «Committee Development Program for 2018-2022» and take into account the further development of the mining industry, development of oil and gas fields, and construction of new hydroelectric power plants, the RMMRS Services were provided with the necessary machinery and equipment that can always ensure the
work safety in mines. In particular, 2 units of FOTON and NISSAN vehicles were handed over to the Republican militarized mountain rescue service of the city of Khujand and 1 FOTON car and 1 motorboat to the Republican militarized mountain rescue service of the city of Norak.

Work is underway to equip and strengthen the material and technical base of the Committee’s Republican Militarized Mountain Rescue Services.

In the city of Konsoy, in the training center, at a separate militarized mountain rescue platoon in 2020-2021 major repairs were carried out at the expense of contractual funds of the RMMRS and geared with the necessary equipment, which is now ready for the training of highly qualified rescuers.

In 2021, several platoons and paramilitary rescue and mountain posts were created in new underground structures, and services were provided. In particular, in the transport tunnels of the Roghun hydroelectric power station in the city of Roghun and at the Kumarghi Bolo gold deposit, located in the Aini district.
Map of the location of the Republican paramilitary and mountain rescue services and their units in the cities of Khujand, Norak, and Roghun
**RMMRS in the city of Khujand**

The RMMRS in Khujand is responsible for rescuing miners in case of accidents, and for extinguishing fires in underground and above-ground structures that threaten the lives of workers.

RMMRS in the city of Khujand provides services at processing plants and mines in Shurob, Konsoy, Anzob, Taror, Zarnisor, Fon-Yagnob, Gabirud, Panchoche, Moghiyon, and Takoba, and seven separate platoons and three mountain rescue points are located in Panjakent, Isfara, Guliston, Aini, Varzob and Mastchoh districts.

In 2021, the RMMRS in Khujand, based on the plan, carried out 625 preventive inspections, and 1023 Acts were issued to the management of underground structures - instructions to eliminate deficiencies under the requirements of safety regulations in mines.

According to the recommendations presented, deficiencies in the supply of oxygen through ventilation pipes and firefighting were eliminated, as well as 990 technical violations were eliminated.

During this period, 274 blasting operations were carried out in underground mine structures and employees of the RMMRS in Khujand checked the level of underground gases and the safety of workplaces and allowed permission to continue work in the mines. On the part of the platoon leaders, 398 underground workers were instructed in accident prevention and safety, and 11 mining operations in the mines were suspended.

Based on the requirements of the RMMRS in Khujand, warnings were given to 29 underground workers for violating safety regulations.

**RMMRS service in the city of Norak**

Considering the high importance of carrying out preventive measures in the strategically important facilities of Norak city, an RMMRS team operates also in the city of Norak. On a contractual basis, the RMMRS in Norak provides mine rescue services for the construction and operation of hydraulic structures and transport tunnels.
In connection with the expansion of activities, the RMMRS in the city of Norak provides services at the underground facilities of the Norak HPP, the Sangtuda HPP-1, and the Danghara water conduit has a separate platoon and a mountain rescue point, which are located in the Danghara district of Khatlon Province.

To prevent and eliminate possible accidents, and carry out preventive work and other urgent work following the approved Preventive Research Schedule for 2021, 12 preventive inspections were carried out in 36 underground hydraulic structures of the Norak HPP.
During the inspections, 48 violations of inter-industry safety rules were revealed, and an act of preventive inspection and an act on the appointment of tunnel maintenance were drawn up. The management of underground facilities was issued instructions to eliminate deficiencies following the requirements of mine safety regulations. According to the presented recommendations, shortcomings, as well as technical violations were eliminated promptly.

For the period of 2021, according to the approved sampling schedule for analysis, samples were taken and 432 pilot analyzes were carried out to determine air velocity, temperature, and humidity of the underground structures of the Norak HPP. A full survey of the complex of the Norak HPP underground structures was also carried out with the development of a document and a proposal to the OJSC «Barki Tojik» to eliminate identified shortcomings.

The training of the personnel of the RMMRS in the city of Norak was carried out under the curriculum for the training of ordinary and middle command personnel, and following the training program, newly recruited specialists (trainees) were trained within 3 months.

In 2021, the personnel of the Norak platoon, with the participation of representatives of the hydro department, using breathing apparatus, conducted 12 exercises at the underground facilities of the Norak HPP and 24 exercises at the RMMRS base.

Due to the small number of personnel and a small number of underground structures at the Sangtuda HPP-1 and the Danghara water conduit, a Voluntary Paramilitary Mountain Rescue Team (VMMRT) was created, the commander of which is a member of the RMMRS, and the members of the VMMRT are HPP service staff. In the event of an accident at an underground facility, they will begin to respond to the accident before the rescuers arrive.

In 2021, 12 preventive examinations and 96 express tests and measurements of microclimate parameters were carried out in the underground structures at Sangtuda HPP-1.
The training was conducted with the personnel of Sangtuda-1 HPP following the training plan and the action plan for the preparation of the Volunteer Rescue Team (VRT) for 2021.

In 2021, to prevent and eliminate possible accidents at the Danghara hydro tunnel, 9 preventive studies and 18 operational sampling and microclimate measurements were carried out.

To prevent the spread of the COVID-19 coronavirus infection, the RMMRS in the city of Norak also carried out preventive measures. Offices, production buildings, corridors of the Norak HPP, as well as vehicles for transporting workers were treated with a chlorine disinfectant solution.

**RMMRS in the city of Roghun**

The RMMRS was established in the city of Roghun by the requirement of the Decree of the Government of the Republic of Tajikistan dated November 29, 2017, No. 547, and began its contract service activities in the underground facilities of Roghun on a contractual basis from May 2021.

In 2021, following the RMMRS plan, 6 preventive inspections were carried out in the city of Roghun, and based on preventive examinations and instructions, acts-orders, and notices recommendations were passed to the management of the Roghun HPP OJSC.
to eliminate shortcomings, air pollution, humidity and dust content of structures. All shortcomings and technical violations were eliminated promptly in line with the presented recommendations.

In 2021, no accidents were registered in the underground facilities of the Roghun HPP serviced by the RMMRS in the city of Roghun.
III. CIVIL DEFENSE ACTIVITIES

The state of affairs on civil defense in the ministries and departments of the Republic of Tajikistan

The sphere of civil defense is one of the most important directions of the unified state policy of the Government of the Republic of Tajikistan, the main task of which is to protect the population, national and territorial values of the country from the consequences of emergencies.

The Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan is the coordinating body for promoting state policy in the field of civil defense.

Under Article 10 of the Law of the Republic of Tajikistan “On Civil Defense”, the mandates of the ministries and departments of the Republic of Tajikistan in the field of civil defense include:

- management of the civil defense industry;
- planning civil defense activities and conducting them in their structural subdivisions;
- creation of a command and control body, forces, and means of civil defense, keeping them in a state of constant readiness, as well as their full and irrevocable provision with necessary property and assets.

Every year, the Committee develops a Plan of the main measures of the Republic of Tajikistan for civil defense, response, prevention, and liquidation of emergencies, which is approved by the head of civil defense - the Chairman of the Government of the Republic of Tajikistan and submitted for implementation to ministries and departments.

Following the requirements of regulatory legal acts in the field of civil defense and this plan, many sectoral events are organized and carried out in all ministries and departments of the country to train the leadership of civil defense, train workers, employees of the economy, and the population.

In 2021, to increase the level of knowledge of the leadership, heads of civil defense of ministries and departments, as well as training on leadership abilities, management of forces, and means of civil defense, courses were held for more than 600 students at the Committee’s Republican Training and Methodological Center.

To determine the level of readiness and preparation of the country’s economic sectors for civil defense activities, exercises were held with ministries and departments.
Civil defense exercises are one of the forms of education and training for all strata (levels) of the population and determine the level of knowledge of the leadership of forces and means for managing civil defense.

During the exercises, the level of readiness of civil defense forces and means was increased, and above all, procedures for management, the correct use of capabilities, organized and planned action of civil defense forces and means were worked out, and practical actions were worked out.

To this end, in 2021, 2 comprehensive exercises, 13 command and staff exercises, 7 facility-based trainings, 6 tactical-special exercises, and 10 staff exercises were held with the ministries and departments of the country in which more than 1900 people of the civil defense leadership, workers and employees participated.
At the same time, in 2021, the specialists of the Committee provided practical assistance in the ministries of economic development and trade, justice, health, and social protection of the population of the Republic of Tajikistan, the State Committee for Land Management and Geodesy, the Tax Committee, the Committee for Youth and Sports, the Customs Service, the Agency for Land Reclamation and irrigation, the State Unitary Enterprise «Tajik Railway» and the Republican Association «Tojikmatlubot» in the development of documentation on civil defense, organization and conducting of exercises.

To implement the regulatory legal acts, the instructions of the Government of the Republic of Tajikistan on civil defense in 2021, the CoES specialists carried out inspections in the Ministry of Transport, the National Academy of Sciences of the
Republic of Tajikistan, the Ministry of Energy and Water Resources of the Republic of Tajikistan, the Service for State Supervision of Safe Work in Industry and Mining Supervision under the Government of the Republic of Tajikistan and gave out specific recommendations to the heads of bodies on existing shortcomings.

The analysis shows that the sphere of civil defense in ministries and departments is developing year after year taking into account that the economic situation in the country gradually improves, various industries develop, and the number of qualified and highly qualified personnel increases, as well as modern forces and means, are more effectively utilized.

**Population Civil Defense Training**

Training of the population in the field of civil defense, protection of the population and territories from emergencies of a natural and man-made nature in the territory of the Republic of Tajikistan is part of a unified system of training the population in the field of civil defense, protection of the population and territories from emergencies, operating in the territory of the Republic of Tajikistan.

The main objectives of the training system for officials of ministries, departments, organizations, institutions, and the population of the Republic of Tajikistan in the field of civil defense, protection of the population and territories from natural and man-made emergencies are teaching the rules of conduct, the main methods of protection and action in emergencies.

The Republican Educational and Methodological Center of the CoES (REMC) and its structural subdivisions in the regions are permanent educational institutions that provide training and education on issues of emergency situations and civil defense. They cover professional personnel, advanced training of management and command staff, employees in the field of emergency situations and civil defense, ministries, departments, and local executive public authorities, organizations, enterprises, and institutions.

In 2021, the REMC and its regional divisions organized training for the leadership of ministries and departments, institutions, organizations, local
executive bodies of state power, representatives of higher educational institutions, colleges, and lyceums, as well as in school and preschool educational institutions.

According to the educational and methodological plans of the CoES REMC and its regional centers and zonal courses, over 8,000 people were trained in 2021.

Students who pass the test are awarded a certificate of advanced qualification or training participation.

In 2021, the specialists of the Center developed some instructions, programs, and teaching aid that are used in the educational processes. In particular, the “Program for the preparation of the leadership of civil defense for actions in emergency situations” and the “Program for retraining and advanced training of the leadership and employees of the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan”.

For use in the educational process, with the financial support of international organizations, more than 62,000 sets of teaching materials, instructions, booklets, and brochures were printed in agreement with the Ministry of Education and Science of the Republic of Tajikistan.
Training sessions with the leadership of the governing bodies and heads of organizations and economic entities

To implement the set tasks, the REMC organized and conducted classes for the leadership of government bodies, representatives of ministries and departments, local executive authorities, organizations, enterprises, and institutions of the country.

Retraining of the management and personnel of the central office, as well as personnel of the rescue units of the CoES based on the Republican Training and Methodological Center

Along with the training of leadership on civil defense and training courses for young officers, classes were organized and conducted for representatives of ministries and departments of the country during 2021.
Also in 2021, based on the REMC training courses continued as part of international cooperation with our development partners.

Thus, within the framework of the Committee’s cooperation with the OSCE and the Aga Khan Branch for Habitat, training courses were held to improve the skills and capacity of rescue units, which were attended by 107 employees of regional, city, and district departments and branches, rescue and medical units, as well as 17 officers of the Border Troops of the State Committee for National Security of the Republic of Tajikistan and 87 representatives of voluntary rescue units, economic facilities and students of secondary educational institutions.
In 2021, more than 100 specialists of educational centers of cities and regions, 31 junior officers, warrant officers from among those newly recruited to the Committee, more than 200 representatives and specialists of ministries and departments, about 100 students of secondary schools in Dushanbe and students of medical college of Hisor city were trained based on the RMC.
Cities and Districts Preparedness for Civil Defense

The Law of the Republic of Tajikistan “On Civil Defense” defines and regulates the organization and conducting of civil defense activities, main and legal functions, and competencies of public authorities, organizations, and institutions regardless of their organizational and legal forms, officials, and citizens, as well as forces and means of civil defense on the territory of the Republic of Tajikistan.

Training of population and economic facilities, forces, and means of local self-governing bodies were carried out under the relevant decisions of the Heads of Civil Defense of the Gorno-Badakhshan Autonomous Region, Khatlon and Sughd provinces, Dushanbe city, cities, and districts. This was to implement the Plan of the main measures of the Republic of Tajikistan for civil defense and disaster mitigation and response in 2021.

Carrying out civil defense activities in cities and regions of the republic in 2021

Relevant orders and resolutions of the chairmen of the regions, cities, and districts were developed and approved with the assistance of the specialists of the Committee to implement the action plans for civil defense and emergency preparedness.

On this basis, training sessions and drills were held with all segments of the population following the civil defense training programs, which improved the readiness of the authorities and the population.

In such a way, in 2021, the specialists of the Committee in many cities and regions of the country conducted comprehensive civil defense exercises, such as the city of Vahdat, the Ismoili Somoni district of Dushanbe, and the Jaihun district of Khatlon
Province, and in the districts of Sh. Shohin, Temurmalik, and in the city of Kulob of Khatlon Province, a regional command and staff exercise was held on the topic «Actions of the authorities, the commission for emergencies, the forces, and means of the units of the Unified Regional and Territorial System of Emergency Situations in the elimination of emergencies».

The course of the regional command and staff exercise in the areas of Vose, Sh. Shohin, Temurmalik and the city of Kulob

In 2021, 26 complex, 93 command staff, 126 special tactical, and 86 staff civil defense exercises were held on the territory of the Republic of Tajikistan.

In the educational institutions of the education system 2924 events dedicated to the «Civil Defense Day» were held. In general, more than 1.5 million citizens of the country took part in all the above events.

When organizing and conducting training and exercises, special attention was paid to improving the skills of management staff, forces, and means, the procedures for documenting, responsibilities of officials, methods for proper operation of civil defense forces, and population in emergencies.
Integrated exercise in Vose area, implementation of bank protection works (strengthening with gabion nets) on Hukumat canal, and cleaning in the village of Guliston.

In Shughnon district of GBAO, Baljuvon, Yovon, and Bokhtar districts of Khatlon Province, Konibodom city, Spitamen and Asht districts of Sughd province, Varzob, and Rasht districts, a command-staff exercise was held on the topic: «Actions of the leadership, forces and means of functional and territorial units of the Unified System for disaster prevention, mitigation and response». 
Comprehensive exercise in Ismoili Somoni district of Dushanbe, October 19-21, 2021

At the same time, the specialists of the Committee checked the state of readiness, organized and conducted a comprehensive training on civil defense on the topic: «Actions of the leadership in the transition from peacetime to wartime» with the participation of the leadership, commissions, and civil defense services of the executive body of state power of the city of Norak, Khatlon Province and Bobojon Ghafurov district, Sughd province.

The Committee and its divisions in regions, cities, and districts, as an authorized body for coordinating the implementation of state policy in the field of civil defense, provide practical and methodological assistance in the preparation of civil defense forces and means and assists in the implementation of planned activities.
By the decision of the meeting of the Board of the Committee, since the beginning of 2021, to prevent and avoid losses of the population from disasters, in addition to the approved plan of main events, more than 30 unscheduled simulation exercises were held in the most dangerous areas of the country, in which took part about 4,000 citizens of the country living in dangerous zones.

In August 2021, with the participation of officials of the commissions for emergencies and the evacuation of the population in the Rushon, Vanj, and Darvoz regions of GBAO, a training session was held on the topic: «Warning of the population in Rushon, Vanj and Darvoz districts of GBAO in the event of Sarez Lake dam break».

Also, in 2021, meetings of the Commissions for Emergency Situations were held in the regions, cities, and districts of the country following the results of activities in the field of emergency situations and civil defense of regions, cities, and districts with the participation of responsible persons of the Committee. The meetings summed up the results of activities concerning disaster preparedness, achievements in the area of emergency situations and civil defense, and the tasks for the next years were identified.
In 2021, the staff of the Committee held more than 100 meetings and discussions with heads and officials of the executive bodies of state power of regions, cities, and districts to promote and develop the country in the field of civil defense.
The Committee takes effective measures to improve and develop the sphere of civil defense, and implements in practice planned activities related to the preparation of all sectors of the economy for prevention and elimination of the consequences of emergencies.

**Participation of Civil Defense Troops in Disaster Response and Recovery Works**

In 2021, the personnel of the military units of the Committee was mobilized to eliminate the consequences of disasters in the city of Kulob, Vakhsh and Jomi districts of Khatlon Province, as well as in Tojikobod and Rasht districts, where practical assistance was provided in unloading and distributing humanitarian aid to the population affected by the disaster as well as for construction and repairs of houses.
The personnel of the Civil Defense Troops traveled to Tojikobod, Rasht, and Sangvor districts to assist earthquake victims and took part in the construction of 62 houses.

In addition, military personnel was mobilized to eliminate the consequences of the emergency in Jomi and Vakhsh districts of Khatlon Province and carried out the following work:

- removing assets and property of the affected population from mud;
- preparation of tents in camps for the affected population;
- cleaning the interior of residential premises from dirt;
- roof dismantling;
- laying of foundations for walls;
- cleaning of channels and drainage systems;
- unloading building materials, food, and non-food products.

In 2021, military personnel of military units was involved in basic mine training and demining courses for theoretical and practical activities. After completing the course, in cooperation with the Tajik National Demining Center, they were deployed to participate in demining operations in the districts of Shamsiddin Shohin, Darvoz, and Rasht. Minefields were cleared of mines and unexploded ordnance and transferred to the Tajik National Demining Center.

In 2021, about 400,000 square meters of mines and unexploded ordnance were cleared by mine detector personnel.

Approximately 900 mines and UXO were collected, of which 786 were anti-personnel mines and 92 were UXO.
At the same time, on behalf of the Government of the Republic of Tajikistan, the personnel of the civil defense troops was involved in the collection of agricultural products in the Kansk section of the Romit Jamoat in the city of Vahdat.

**Improvement of Military Service Conditions and Reprofiling of Civil Defense Troops**

The civil defense troops consist of military units and other paramilitary formations. Their activities are aimed at eliminating the consequences of emergencies.

Under the provisions of the regulatory legal acts in the field of civil defense of the Republic of Tajikistan, the civil defense forces are a key component of the Armed Forces of the Republic of Tajikistan, its personnel is called up for military service under the Law of the Republic of Tajikistan «On military and duty service» and enjoy all the rights, norms of social and legal protection adopted for military personnel of the Republic of Tajikistan.
Under the Article 5 of the Law of the Republic of Tajikistan “On Civil Defense”, the activity of the civil defense forces begins from the moment of the outbreak of hostilities or the introduction of martial law by the President of the Republic of Tajikistan on the territory of the Republic of Tajikistan or in certain areas, as well as in peacetime during disasters, epidemics, epizootics, epiphytosis, major accidents and tragedies that endanger public health and require rescue and other urgent works.

Every year, based on decrees of the Supreme Commander-in-Chief of the Armed Forces - the President of the Republic of Tajikistan «On discharge of military personnel who completed the established period of military service” and “On the next call-up of citizens of the Republic of Tajikistan», a certain number of conscripts are called up for duty military service.

In 2021, a course under the «Young Soldier» program was held in the military units of the Committee with recruits. Upon completion of this course for the military units of the Dushanbe garrison, a solemn ceremony of taking the Military oath was held in the Victory Park of Rudaki district with the participation of the CoES leadership, parents of recruits, veterans of the rescue service, and school students.
The Committee, with the direct support of the Government of the Republic of Tajikistan, takes all necessary measures to improve the conditions for officers and soldiers to perform military service in the Civil Defense Forces.

In 2021, at the Republican Training and Methodological Center for Officers, and the Training Center for Conscripts, training programs were developed and approved to improve their qualifications and professionalism, as well as prepare them for service.

All necessary conditions were created for taking a course of study at the Committee's Training Center for the Training of Junior Commanders, where 50 military personnel from the Committee's military units were trained in 2021. After completing the courses, they were awarded the rank of junior sergeant and sent to continue their service in military units.
To maintain the civil defense forces in a state of constant readiness during 2021, the personnel of the Committee’s officers and soldiers of the military units, in cooperation with other forces, law enforcement agencies, and other countries, repeatedly participated in joint exercises.

These exercises make it possible to improve the professional skills of the Committee’s officers and soldiers; they utilize them to the maximum of all their skills and abilities.

Under the instructions of the Supreme Commander-in-Chief of the Armed Forces of the Republic of Tajikistan “On organization and conduct of drills for the military parade dedicated to the 30th anniversary of the State Independence of the Republic of Tajikistan”, about 600 officers and soldiers of the Committee took an active part in the Military Parade, and more than 300 military personnel of military units participated in a theatrical event called «Thirty Bright Stars».

To improve the conditions of service, under instructions of the Head of State in the military units of the Committee premises with all the conditions are gradually being built and put into use for family servicemen undergoing military service.

In addition, in 2021, to further implement the Development Program of the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan for 2018-2022, work was carried out in the military units of the Committee to create favorable working conditions and form material and technical base, as well as build administrative, educational, residential and utility buildings.
The main corps of the military unit administrative building located in Sughd province was repaired; repairs of the bathhouse are ongoing. It is envisaged that separate rooms will be built for soldiers to meet with their families, and a network for central heating will be laid.

Construction was completed and summer classrooms were commissioned in the military unit located on the territory of Vakhsh district of Khatlon Province.
Construction of the command staff building at the CoES Training Center located in Rudaki district was also completed, in which necessary conditions were created for officers and soldiers’ full-fledged work.
The Committee regularly organizes meetings with various renowned representatives of society, including intellectuals, veterans, scientists, poets, writers, and singers to instill in the military personnel of the civil defense forces a sense of high duty, and devotion to the Fatherland and patriotism.

The Committee pays constant attention to the servicemen’s health condition and mental and emotional state. Parents and relatives of servicemen can have conversations about the conditions of military service.
On national holidays various cultural and sports events are organized in all military units, as well as festive dinners offered for military personnel.

To increase the feeling of patriotism and national self-consciousness in 2021, military personnel of the civil defense troops repeatedly visited the National Museum and theaters of the Republic of Tajikistan.
IV. SEARCH AND RESCUE SERVICE

Search and Rescue Operations in Emergencies

One of the CoES’ main areas of activity is conducting search and rescue works and organization of rescue operations in areas of natural hazards and man-made emergencies.

Daily activities of the rescuers of the Committee are all subordinated to the main goal – maintain all forces and means in full-time preparedness mode ready to advance to an emergency zone and carry out response works to eliminate consequences, carry out search and rescue of people, and property. Rescuers risk their lives and provide first aid to victims of disasters and man-made accidents in the most difficult conditions.

In 2021, mobile security posts were created from among the employees of the search and rescue units of the Committee to prevent and quickly respond to disasters of natural and man-made causes on the highways of republican significance in the directions of Dushanbe-Khujand, in the Maikhura section (62 km), Istiqlol tunnel (72 km) and Dushanbe-Khorog highway in Vanj district of GBAO (457) km.

The mobile posts included 6-8 experienced rescuers equipped with rescue vehicles, equipment sets, and hydraulic rescue tools designed to search and rescue people during avalanches and enable them to eliminate the consequences of road accidents.

In 2021, 126 people were evacuated from snow traps formed due to avalanches.

In 2021, the Committee's search and rescue teams made over 700 operational trips to emergency zones to conduct search and rescue operations. 188 people were rescued thanks to search and rescue activities carried out in 2021.

In addition, the Committee’s search and rescue teams evacuated more than 2,000 people from dangerous areas to safe places during disaster response activities. Also, major duty visits comprised force opening of doors in residential premises, response to road accidents, elimination of disaster consequences, helping extinguish fires, rescuing animals, and others.
At the same time, in the course of search and rescue activities with the participation of the Committee rescue services, 164 bodies deceased in disasters and other circumstances were found and retrieved.

A lot of work is being done by the diving service staff. In 2021, they discovered and raised 126 bodies that drowned under various circumstances and rescued 28 people from the water.

After the crash of the MI-8 helicopter, which took place in 2021 at an altitude of 5300 meters in the area of the Fedchenko glacier, the Committee’s rescuers carried out search and evacuation works.
Work is constantly underway to train and retrain the department's staff. In 2021, 13 training courses were conducted on:

- winter specialization
- strengthening field operations capacities
- diving training
- water rescue
- mountain training
- mountain rescue operations
- first aid
- disaster management system

Interaction of operational units of the CoES and Border Troops of the State Committee for National Security of the Republic of Tajikistan during cross-border search and rescue operations on the border zone territories

These courses were organized with the support of the OSCE, the French Embassy, the United States, and the Aga Khan Agency for Habitat. 217 rescuers attended these courses.

**Upgrading of Rescue Service with Modern Emergency Machinery and Equipment**

Following the Program for Development of the CoES and Civil Defense approved by the Government of the Republic of Tajikistan, high attention is given to bettering and upgrading disaster prevention & response systems and equipping the Committee’s higher-readiness forces with up-to-date rescue machinery and equipment.

Within the framework of the state procurement program, the bilateral and multilateral agreements and projects of international organizations purposeful work was carried out in 2021 to strengthen the material and technical base of the search and rescue services of the CoES.

In 2021, search and rescue services of the Committee were provided with modern rescue machinery, equipment, and gears necessary for water rescue, particularly, underwater cameras, boat motors, and diving equipment.

**Participation of Rescuers in Exercises**

The personnel of the Committee’s Directorate for Specialized Search and Rescue Services and its Rapid Rescue Response Teams subdivisions constantly improve their professional skills and abilities through regular training and competitions. Rescue drills and exercises are regularly held at the Committee's training grounds on annual basis, during which all tasks related to rescue activities are practiced.

In 2021, rescuers took part in the international military medical all-around competition «Military Medical Relay Race» as part of the International Army Games-2021 in the Republic of Uzbekistan
Within the framework of the Collective Security Treaty Organization (CSTO), rescuers participated in exercises GROM through the Ministry of Defense of the RT and COBALT through the MIA of the RT.
V. TRAINING AND PROFESSIONAL DEVELOPMENT OF THE CoES EMPLOYEES

Training of Personnel in Universities Abroad

Effective fulfillment of tasks assigned to the Committee primarily depends on the level of qualifications, and the correct selection and placement of personnel.

In this regard, special attention is paid to the issues of training, retraining, and advanced training of employees based on the Republican Training and Methodological Center of the Committee, as well as outside the country.

In this way, to train personnel, the CoES employees have been sent to Russia for 23 years, as well as school graduates for the last 5 years. This takes place within the cooperation framework based on the «Agreement between the Government of the Russian Federation and the Government of the Republic of Tajikistan in culture, science, technology, education, health, information, sports and tourism» at the base of the Academy of Civil Protection of the Ministry of Emergency Situations of the Russian Federation.

So, based on this document, in 2021, 2 people were sent as students for training, 2 people as cadets. For more than 23 years, 55 officers have graduated from this Academy. At the moment, graduates continue to serve in leadership and other positions of the CoES units. Since 1998, officers have been trained in the specialty «Command-staff,
operational-tactical civilian training», and since 2011 in «Management of military units and formations». The training period is 2 years.

The CoES Officers were trained at the mentioned Academy in the specialties of «Command-staff, operational-tactical civilian training» and «Management of military units and formations».

In 2017, the first group of cadets were selected on a competitive basis and sent to study at the Academy of Civil Protection of the Ministry of Emergency Situations of Russia. They completed a course in the specialty of «Technospheric Safety under the profile of Protection in Emergency Situations». In 2021, 7 cadets graduated from the Russian Academy of Civil Protection and were appointed to positions. To date, 18 cadets and 4 officers are studying at the Russian Academy of Civil Protection.

To oversee students’ progress and to get acquainted with their living conditions the Committee’s leadership regularly visits this Academy.

Tajik students and cadets, along with successful studies, take an active part in the sports life of the Academy, as well as in academic competitions.

So, a sophomore cadet Sirojiddin won 1st place at the open boxing championship and was awarded a gold medal. A 4th-year cadet Saymudinov took 2nd place and was awarded a silver medal.

For active participation in sports events at the Academy, Tajik cadets were awarded diplomas.

It should be noted that 3 CoES officers graduated from the Combined Arms Academy of the Ministry of Defense of the Russian Federation. Currently, 2 officers of the Committee are studying at this Academy.

In 2021, 7 cadets who graduated from the Faculty of Disaster Prevention and Response of the MIA Academy of the RT were appointed to positions. At the moment, 7 officers and 9 cadets of the Committee are studying at the Tajik Academy of the MIA.

In 2021, 10 cadets who graduated from the Military Institute of the Ministry of Defense of the Republic of Tajikistan were appointed to positions in the Committee.
Advanced Training of the CoES Employees

Special attention is given to improving the professional knowledge and skills of the Committee's specialists. Many seminars, training, and conferences were held in 2021 for these purposes, as on the territory of the Republic of Tajikistan as abroad, which were supported by the Government of the Republic of Tajikistan and international organizations.

In 2021, 26 meetings of the Central Attestation Commission (Personnel Review Board) were held at the CoES.

![Participation of the CoES Staff in Training and Conferences](image)

In 2021, 16 officers of the Committee improved their professional knowledge and skills at seminars, training, and conferences held outside the country. 173 officers were trained within the country in personnel training and retraining courses.

Russian language courses are established in the CoES for senior staff and basic computer user training for recruits.

The analysis of the Committee’s military personnel age category shows that the number of officers under 45 years old is 72%, under 50 is 11%, and over 50 years old - 17%. Of the total number of the Committee’s military personnel, 15% are women of which 8% are in leadership roles.
At present, the number of officers in the Committee with higher military education is 10%, with higher civilian education - 52%, with higher incomplete education - 3%, with secondary specialized education - 17%, with technical education - 6%, and with secondary education - 12%.

To further improve the Committee employees’ skills and competencies, the following activities are planned for 2022:

- send as students to study at the Academy of Civil Protection of the Ministry of Emergency Situations of the Russian Federation from among the current employees of the CoES, and as cadets from among graduates of secondary educational institutions, on a competitive basis;
- organization of a series of seminars and training courses for retraining and advanced training of the Committee officers;
- preparation of methodological instructions, programs, and action plans for the prevention of corruption offenses;
- extending cooperation between republican and international structures in personnel training;
- development of a mentoring institute for transferring knowledge and professional experience of the CoES veterans.

An analysis of the last 5 years shows that due to the improvement of the material and technical base, educational work among young people, and their involvement in rescue activities, the number of young employees in the CoES has increased by 73%.
VI. AWARENESS-RAISING OF THE POPULATION ON DISASTER PREPAREDNESS AND RESPONSE

Sensitization Campaigns in 2021

Against the backdrop of climate change and the increase of natural hazards, sensitization and promotion are important areas of the CoES activities in Tajikistan, since issues of early warning and awareness-raising of population, training on correct behavior in disasters are key to rescue and wellbeing of people in critical situations.

They are designed to optimize interaction with the population to carry out preventive work on preparation, mitigation, and response to disasters, and ultimately contribute to the formation of a positive image of rescuers.

Information support tasks for the CoES activities in 2021 comprised the following:

— informing state executive bodies, local authorities, and citizens about the CoES activities, providing alerts and early warnings to the population;
— placement in media and communication materials about the activities of CoES subdivisions;

— monitoring mass media, Internet information, and telecommunications networks and responding to materials containing information about critical and problematic matters, as well as tackling unreliable information on the activities of rescue establishment;

— involvement of citizens, representatives of mass media, and civil society institutions to assist in the prevention and mitigation of possible disasters;

— formation of a positive image of rescuers.
To solve these problems, the Committee maintained firm cooperation in 2021 with the state governing bodies that are part of the Unified State System for Disaster Preparedness and Response, the international organizations, and public associations.

When carrying out explanatory and awareness-raising activities among the population, attention was given to the reliability, perceptibility, and operational efficiency of the provided information.

Thus, during the reporting period with the use of a special campaign vehicle more than 100 trips were organized and conducted in cities and regions of the country and 54 videos were shown on safety rules in emergencies, disasters, and about the CoES activities.
In 2021, to raise awareness of the population in emergencies, the Committee also continued to use such technical media as street information signs, billboards, stands, signs, posters, banners, radio broadcasting networks, and information posters. In addition, several videos in Tajik and Russian languages were prepared and demonstrated in crowded places.

The Committee also gives special attention to working with children and adolescents, who are the most vulnerable during disasters. Campaign activities among children and adolescents were carried out with a focus on developing their creativity, for example, through their drawings.

For instance, with the financial support of the United Nations Office for Disaster Risk Reduction, the European Union, the United Nations Children's Fund (UNICEF), and the United Nations World Food Program in the Republic of Tajikistan on the eve of the International Children's Day and the International Day for Disaster Reduction, the
Committee together with the Dushanbe City Mayor’s Office organized and conducted competitions for the best children's drawing.

More than 200 children and adolescents aged 6-16 took part in the competitions. The jury members of the competition from among the representatives of the Union of Artists of the Republic of Tajikistan and international organizations noted the individuality and peculiarity of competition works, as children put in their souls, inspiration, and good energy into their creations. According to the results of the competitions, winners were awarded memorable gifts and all participants with certificates of the CoES and Civil Defense.

Also, sports-game events were organized with the participation of this category of children and adolescents. Also, dedicated to this day a television competition was organized together with the State Television Institution for Children and Youth «TV Bahoriston» on children's drawings under the title of «Only together we can save our planet».

The Committee actively uses the resources and the capabilities of mass media in matters of population awareness-raising on disaster preparedness, mitigation, and response.
Cooperation with mass media in 2021

Covering Disaster Preparedness and Response Issues

Working with mass media is one of the priorities for the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan. This has a positive effect on the formation of public opinion about the activities of the CoES, promotes the development of a safe lifestyle, attracting citizens and the public to participate in disaster preparedness and response efforts.

Also, the CoES continued close cooperation with all mass media in 2021 to organize interaction between ministries, departments, state executive authorities, and other interesting structures on forecasted and occurring disasters, and on the course of response operations and measures taken to ensure the life safety of the population.

Employees of the CoES are interested in close, constructive cooperation with mass media and are constantly working to expand contacts with the editors of newspapers and magazines, radio and television, and news agencies. In 2021, the Committee continued the policy of «open doors» with mass media.

As a result, the number of materials on the activities of the rescue department was constantly growing, and the journalistic pool participating in the coverage of this topic expanded.
In this way, in 2021, in cooperation with mass media, over three thousand materials were prepared for the activities of the Committee. During the year, 318 articles and essays were published in the print media, 1,524 materials were broadcast on the radio, 1,204 television stories and programs were broadcast on the issues of accident prevention, warnings, informing the population, especially children, adolescents, and young people about possible threats and dangers.

In 2021, the website of the CoES and Civil Defense (http://www.khf.tj) posted 1,712 messages, analytical articles, interviews, as well as recommendations to the public on issues of relevant competence to the Committee.

Feedback from social media users (such as Telegram, YouTube, Facebook, and Instagram) indicates the relevance of the CoES site. The statistics show that in 2021 the site was visited by over 252 thousand people. In 2021, on the open YouTube channel, 54 videos were prepared and posted from disaster sites, the CoES events, and international cooperation.

The possibilities of print media are also widely and actively being used, with more than two hundred articles published annually on issues covering the CoES activities.
VII. SECTOR DEVELOPMENT TRENDS


In 2021, on the basis and further implementation of the «Committee Development Program for 2018-2022» to create good working conditions, the Committee and its structural divisions continued the construction and repairs of administrative, educational, residential, and utility buildings and structures.

In the military units of the Committee, located in the districts of Rudaki and Rasht, a checkpoint and a visiting house for family conscripts were completed and put into operation.
In connection with the need to repair the roof of the main building of the CoES military unit located in Sughd province, construction of the roof of the building at the first stage was completed using budgetary funds and the facade of the administrative building was repaired. Reconstruction of the bathroom of the military unit is underway, and in the future, it is planned to build a rendezvous premises for family conscripts and establish a central heating network.

In 2019, at the expense of centralized budgetary funds, the first stage of construction of the CoES military unit headquarters in Rudaki district began, and underground work and its basement were completed.
In 2021, the second stage of construction works was completed, and internal and external reconstruction of the building was completed. Currently, only partial works and landscaping work around the building are planned for the third stage.

In the CoES military unit located in Rudaki district repairs were carried out at the expense of the UNDP, and construction materials were provided, with the involvement of conscripts from the military unit.

To improve the conditions of military service for conscripts of the military unit located in Vakhsh district of Khatlon Province, summer classes were built and put into operation.

The military unit of the Committee located in Shahrinav district is repairing and reconstructing three buildings of the National Rescue Training Center with the financial support of the European Union and the OSCE. In 2022, the repairs of three buildings, landscaping, and installation of external networks will be completed; the second stage of repair works will begin in the remaining buildings of this facility.
At the expense of funds allocated for repairs this year, the facade of the building of the Central Office of the Committee, the sanitary room, and the crossing checkpoint was repaired; its entrance gates were reconstructed and installed.

In the administrative building of the Department of Logistics of the Committee, a major renovation of the administrative building was carried out at the expense of budgetary funds, as well as a warehouse for storing agricultural products and food and non-food warehouses were repaired with financing from the international organization Caritas.

To create favorable conditions for the servicemen and employees of the Sarez Lake Authority, office premises, a canteen with entrances on both sides of the building were completely renovated.
In cooperation with the UNDP, warehouses for non-food products were built and put into operation in Kushoniyon district of Khatlon Province and on the territory of the Committee's Office in the Gorno-Badakhshan Autonomous Region.

The second building of the Department of Specialized Search and Rescue Services of the Committee was repaired and put into operation with funds from the UN Development Program.

As part of the “Strengthening Critical Infrastructure for Resilience to Disasters” Project supported by the World Bank, construction works on the building of the Committee’s National Crisis Management Center began in 2021 and are currently ongoing.

Within the framework of the joint project of the Committee and the Asian Development Bank in Tajikistan, buildings, and structures of the Hail Combat Service in Hisor were repaired and put into operation.
To provide for the population of the most vulnerable areas in 2021, the Committee together with the Aga Khan Agency for Habitat built a disaster shelter for victims in Roghun and Sangvor districts and lined it with the necessary equipment. Construction of such shelters is underway in Rasht and Faizobod districts.

To create favorable conditions for undergoing service in the Committee and its structural divisions, the construction and repairs of administrative, educational, residential, and utility buildings and structures continue in 2022, and the following is planned:

- continue the second stage of construction of the National Rescue Training Center in Shahrinav district;
- complete construction of the Refugee Reception Center in J. Balkhi district;
- continue construction of the Committee's Crisis Management Center.

In 2021, the Committee implemented “The CoES Development Program for 2018-2022” with the support of international organizations and development partners when many important facilities were built, and in 2022 cooperation in this area will continue.

**The CoES Personnel Medical Care in 2021**

To prevent and treat diseases, including infectious diseases, and to protect the CoES personnel's health, medical service organized activities to eliminate the causes of diseases and the conditions for their manifestation and development.

The CoES medical service consists of a Medical Directorate, a Military Hospital, and military unit medical centers, which are ready to assist around the clock.

The military hospital carries out a complex of medical and other therapeutic measures aimed at protecting the health of officers, warrant officers, sergeants, soldiers, and servicemen of the Committee and their families.

Every year, medical examinations of personnel are carried out to monitor the health of personnel, timely diagnose diseases, and study the conditions of service of
military personnel, the causes of diseases that adversely affect their health, identify dispensary groups, and chronic diseases.

In 2021, 589 employees of the CoES and members of their families addressed the specialists of the Medical Directorate and the Military Hospital of the Committee.

It should be noted that out of the total number of applicants in 2021, 342 (in 2020, 304) employees of the Committee and members of their families were hospitalized with various diagnoses, of which 31 people were operated on by the department's doctors.

The Military Medical Commission organizes and conducts examinations of the state of health of citizens who voluntarily continue to serve in the structural divisions of the Committee and enter military educational institutions, as well as medical examinations of spring and autumn recruits.

It should be noted that based on the Department of Specialized Search and Rescue Services of the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan, a department of professional training and medical and psychological assistance was created, which provides prompt psychological assistance to victims of nature-caused and man-made emergencies.

In 2021, taking into account the implementation of the Action Plan of the Republican Headquarters to strengthen anti-epidemic measures to prevent the spread of the COVID-19 infection in the Republic of Tajikistan, the Medical Department took measures to ensure the sanitary and epidemiological safety and health of military personnel, such as conducting educational activities and conducting full vaccination and revaccination of the Committee staff.
To improve the level of medical care, the Military Hospital of the Committee is provided with modern medical equipment and technology, including ambulances, artificial respiratory ventilation (ARV), oxygen generators, an audiogram, an ultrasound machine, an ophthalmoscope, an ECG, a gastroduodenal scope, an EEG electroencephalogram, heart monitor, defibrillators, and other equipment. Delivery of modern medical equipment is envisaged following the Development Program of the Committee for 2018-2022 and with the support of the Government of Japan and the United Nations Development Program «To reduce the risk of disasters and strengthen the response capacity».

The Medical Department of the CoES and Civil Defense takes all necessary measures to provide first medical, sanitary, and epidemiological assistance and treatment to officers, warrant officers, sergeants, and soldiers of the Committee.
VII. THE INTERNATIONAL COOPERATION

Extending and Strengthening International Cooperation and Interaction in Disaster Preparedness and Relief Aid

Guided by the laws of the Republic of Tajikistan and international legal acts ratified by Tajikistan, the Committee actively carries out organizational, legal, and practical measures to strengthen and develop bilateral and multilateral cooperation with partner countries, international organizations, the diplomatic corps, and non-governmental organizations accredited in the Republic of Tajikistan in the area of disaster preparedness and response.

In particular, on June 2, 2021, an Agreement was signed between the Government of the Republic of Tajikistan and the Government of the Islamic Republic of Pakistan on disaster prevention and response. The agreement was signed by the Committee Chairman Rustam Nazarzoda and Chairman of the National Disaster Management Authority of the Islamic Republic of Pakistan Akhtar Nawaz. The document covers many issues of cooperation between the two countries in the field of prevention of disasters, as well as the provision of mutual assistance in response and early recovery efforts.

In 2021, a draft Memorandum of Understanding between the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan and the National Security Council of the National Directorate for Emergency
Situations, Crises and Natural Disasters of the United Arab Emirates was developed and presented in the field of emergency management and response.

On June 18, 2021, as part of the further development of international cooperation between the Committee of Emergency Situations and Civil Defense under the Government of the Republic of Tajikistan and the United Nations Children's Fund (UNICEF) in the Republic of Tajikistan, a joint working Plan to strengthen preparedness and response to emergencies, promote disaster risk reduction disasters and adaptation to climate change for 2021-2022 was signed taking into account the interests of children in the Republic of Tajikistan.

**International and Regional Events on Disaster Prevention and Response**

To further develop cooperation in the field of disaster prevention and response, increase the efficiency of the Committee's activities in 2021, the CoES leadership held 43 meetings with representatives and heads of international organizations and the diplomatic corps to strengthen bilateral and multilateral cooperation in the field of prevention and elimination of consequences of disasters, increase the technical potential of rescue formations.

On February 19, 2021, the Chairman of the Committee met with the new head of the Representative Office of the World Health Organization (WHO) in the Republic of Tajikistan, Mr. Victor Olsavsky. During the meeting, the Committee was given medical equipment.
On the same day, the Chairman of the Committee met with the Ambassador of the European Union to the Republic of Tajikistan, Ms. Marilyn Yosefson, the Ambassador Extraordinary and Plenipotentiary of the Federal Republic of Germany to the Republic of Tajikistan, Mr. Andreas Prothmann, and the Charge d'Affaires of the European Union in Tajikistan, Ms. Petra Gasparova. The parties discussed issues of further construction of the National training ground for the training and education of rescuers from neighboring countries based on the training ground, training, and retraining of the Committee's rescue service staff.

On February 24, 2021, the Committee held a meeting between the Chairman and the delegation of the Aga Khan Development Network (AKDN). The meeting provided information on the activities of the AKDN in the Republic of Tajikistan. The Committee proposed to consider the inclusion of three projects in the Medium-Term Development Program of the Republic of Tajikistan for the period 2021-2030: the creation of a National Center for the training of rescuers – divers, the construction of simulators for the training ground of the National Center for the training of rescuers, as well as construction of buildings for inter-district departments in Vanj district of GBAO, Aini district of Sughd province and Varzob district.
On March 4, 2021, the Committee held a meeting of the Chairman with a delegation of the international organization «Ensuring Law Enforcement in Central Asia» (LEICA). The purpose of the meeting was to establish working contacts and consider ways of cooperation in the field of combating international terrorism. The parties exchanged views on possible common aspects and measures to establish practical cooperation.

On March 17, 2021, the delegation of the Committee, headed by the Chairman of the Committee, took part in the VIII Ministerial Conference of International Economic Cooperation (ECO) on disaster risk management, which was held in the format of a videoconference. Also, the heads and representatives of the rescue departments of Azerbaijan, Afghanistan, Iran, Turkey, Kazakhstan, Kyrgyzstan, Pakistan, and Turkmenistan took part in the conference. The main goal of the conference was the adoption of the ECO regional framework program for disaster risk reduction and a roadmap for its implementation (2021-2025).

On the same day, the Chairman of the Committee received the delegation of the UN Development Program in the Republic of Tajikistan, headed by the UN Resident Representative in Tajikistan, Ms. Pratibhi Mehta. The meeting discussed issues of further cooperation between UNDP and the Committee in the field of disaster risk reduction, including the extension of the project “Strengthening Disaster Risk Reduction and Response Capacity” signed between the Committee, the Government of Japan, and the UN Development Program.
On April 5, 2021, the Chairman of the Committee met with the Head of the OSCE Program Office in Dushanbe, Mr. Valeriu Chiver. The purpose of the meeting was to discuss issues on the implementation of joint projects in 2021 and coordination of further cooperation in 2022. During the meeting, the Head of the CoES spoke about the implementation of a construction project at the National Center for Training of Rescuers, about the ongoing training courses for rescuers, medical staff, and specialists of the Committee's training courses, which were supported by the OSCE Program Office in Dushanbe.

On May 6, 2021, within the framework of the implementation of international cooperation in disaster prevention and response, as well as joint coordination in the event of an emergency, the Committee held an online headquarters exercise on the topic “Occurrence of possible earthquakes in Sakhalin Region of the Russian Federation”. The exercise was attended by representatives of the Crisis Management Centers of the Ministry of Emergency Situations of Armenia, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation, Uzbekistan, and the CoES of Tajikistan.

On May 18, 2021, the Committee, together with the United Nations Office for Disaster Risk Reduction held a seminar with the participation of interested departments in the field of disaster risk reduction. The event was held within the framework of the UNDRR Initiative “Building Resilience to Disasters and Accelerating the Implementation of the Sendai Framework for Disaster Risk Reduction in Central Asia”, funded by the European Union.
On June 23, 2021, the Chairman of the Committee held a meeting with the Head of the Office of the UN High Commissioner for Refugees in the Republic of Tajikistan, Mr. Mulugeta Zewdi. During the conversation, the topic of the current situation on the Tajik-Afghan border was touched upon. In this regard, issues of conducting exercises related to a possible influx of refugees, as well as the signing of a Work Plan between the CoES and UNHCR, the purchase of non-food products for warehouses in the border regions of GBAO and Khatlon Province were discussed.

On August 17, 2021, the Chairman of the Committee held a meeting with the Head of the International Committee of Red Cross Representation in Tajikistan, Ms. Angelika Schopp, where issues of organizing training courses for trainers for further training of employees of the rescue and medical units of the Committee were discussed.
On the same day, the Committee held a meeting of the Chairman of the Committee with the Ambassador Extraordinary and Plenipotentiary of Turkey to the Republic of Tajikistan, Mr. Emre Zeki Karagöl. The parties discussed the signing of regulatory documents in possible areas of cooperation.

On November 1, 2021, the Committee held a meeting between the Chairman of the Committee and the Head of the Regional Office of the United Nations Office for Disaster Risk Reduction in Europe and Central Asia, Mr. Octavian Bivol. During the meeting, the parties considered issues of building up cooperation and implementing joint projects between the two departments on disaster response, education, training, and retraining of specialists, as well as other issues.

On November 15, 2021, the Committee held a meeting between the Chairman of the Committee and the Ambassador Extraordinary and Plenipotentiary of the Kingdom of Saudi Arabia to the Republic of Tajikistan, Mr. Walid ibn Abdulrahman Al-Reshaidan.
At the meeting, the parties discussed issues of cooperation in the field of disaster risk reduction, as well as training and retraining of the Committee's employees, improving the material and technical base of the Committee.

On November 22, 2021, the Chairman of the Committee held a meeting with the Head of the UN High Commissioner for Refugees in Central Asia, Mr. Hans Friedrich Schodder. During the meeting, the topic of the current situation on the Tajik-Afghan border was touched upon. The issues of building up cooperation and further implementation of joint projects, disaster response, interaction in informing and early warning of the population about dangers and threats, training rescue specialists, and providing technical assistance were also considered.

On the same day, the Committee held a meeting with a delegation of the European Union headed by the EU High Representative for Foreign Affairs and Security Policy, Mr. Joseppe Borrell. The parties exchanged views on possible common aspects and
measures to establish practical cooperation. Mutual work will continue in this direction to ensure joint measures on strengthening the capacity of the Committee.

From November 4 to November 6, 2021, the Regional Forum, a meeting of the heads of emergency departments of Central Asian countries was held in the capital of the Republic of Uzbekistan, the city of Tashkent. The delegation of the Republic of Tajikistan headed by the Chairman of the Committee took part in the work of the Forum. During the event, the participants discussed several important projects, the implementation of which will increase the efficiency of work to prevent transboundary emergencies. Among the promising initiatives is the introduction of innovative technologies in the protection of territories and the population from natural disasters. As a result of the Forum, the parties signed a protocol that reflects all the mechanisms of regional cooperation between emergency departments of the countries of the region. It was decided to hold the next Forum in Dushanbe in 2022.

From 24 to 26 November 2021, the European Forum on Disaster Risk Reduction 2021 was held in the city of Matosinhos, Portugal. The delegation of the Republic of Tajikistan headed by the Chairman of the Committee took part in the work of the Forum. The Forum, an important mechanism for addressing European disaster risk issues, serves
as a platform for stakeholders to take shared responsibility and make practical commitments to disaster risk reduction. During the Forum, emphasis was placed on the need to eliminate the systemic, growing, and compound nature of risks, especially in the issue of the Covid-19 pandemic and climate emergencies. The event was a multi-stakeholder activity within the framework of the Sendai Framework for Disaster Risk Reduction.

From December 14 to 16, 2021, the Chairman of the Committee took part in the Asian Conference on Disaster Risk Reduction (ACDR) - 2021 via videoconference. The Republic of Tajikistan was the co-chair of the Conference, where more than 150 participants took part.

The following issues were discussed during the event:
- development of DRR technologies;
- enhancing preparedness for natural hazards;
- investing in disaster risk reduction for a sustainable society.

The Chairman of the Committee during the high-level round table made a report on the achievements of Tajikistan in the field of disaster risk reduction.

In particular, it was noted that “to accelerate the achievement of the main priorities of the Sendai Framework Program and the National Strategy, several major international projects in the field of disaster risk management were being successfully implemented in the Republic of Tajikistan.”
This includes:
- the World Bank project for the construction of a new modern building of the Crisis Situations Management Center;
- an Asian Development Bank project to strengthen the capacity of the hail combat service, including the installation of a new Doppler radar, as well as the expansion of the early warning and monitoring system of Sarez Lake;
- an OSCE project with the financial support of the European Union for the construction of the National Rescue Training Center focused on the elimination of the consequences of nature-caused emergencies.

The Role of the Rapid Emergency Assessment and Coordination Team in 2021

In 2001, the Committee and the Representative Office of the United Nations Office for the Coordination of Humanitarian Affairs established the Group for Rapid Assessment and Coordination in Emergency Situations (widely known as the REACT group).

The REACT group in Tajikistan coordinates the work of governmental and international organizations in the aftermath of disasters.

In 2021, the REACT group approved plans and implemented several activities to improve disaster risk management in Tajikistan. The chairmanship of the REACT Group at the national level is entrusted to the Committee and the Office of the UN Resident Coordinator in Tajikistan. In 2021, three meetings of the REACT Group were held under the chairmanship of the head of the Committee and the UN Resident Coordinator in Tajikistan.

On April 19, 2021, a regular meeting of the REACT Group was held at the Republican Training and Methodological Center of the Committee with the participation
of representatives of many international organizations. The meeting format comprised physical and online participation.

Discussed issues related to:
- completion of the Humanitarian Response Strategy for “COVID-19”;
- interagency preparedness of the REACT to disaster response;
- Global Logistics Cluster Project for Local Preparedness, creating a separate REACT link on the CoES website.

On May 14, 2021, to coordinate and conduct effective joint actions to eliminate the consequences of disasters that occurred in the territory of Khatlon Province and DRS, an off-site meeting of the REACT Group was held in Kulob, Khatlon Province.

During the meeting, the following issues were discussed:
- improving the implementation of the National DRR Strategy and the State Program for Protection of Population and Territories from Emergencies for 2022-2024;
- expansion and improvement of cooperation with international partners in the field of disaster preparedness and response;
- strengthening the technical capacity of the Committee for Search and Rescue of Victims in Emergency Situations;
- creation of a training center for rescuers, divers, and cynologists;
- establishment of a National Crisis Management Center and modernization of regional Crisis Management Centers in the regions.

The issues of the construction of refugee reception centers in the districts of Balkhi, Vakhsh, Shahrinav, and Hamadoni were also considered.

A field meeting of the REACT was held on July 16, 2021, to coordinate and conduct effective joint actions to eliminate the consequences of disasters that occurred in Rasht and Tojikobod districts.
As a result of the off-site meeting, the following proposals were adopted:
- creation of a reserve stock of fuel and lubricants, gabion networks for bank protection works;
- setting up emergency supplies, medicines, food, and tents to ensure immediate and timely response in case of emergencies;
- providing building materials to the population affected by natural disasters.

The Committee takes an active part in all regional events and carries out purposeful work on the further development of mutually beneficial bilateral and multilateral cooperation with neighboring states in the field of disaster preparedness and response.