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# ***UZBEKISTAN***

# ***COUNTRY REPORT***

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**REPUBLIC OF UZBEKISTAN ON**  
**GEOLOGY AND MINERAL**  
**RESOURCES**

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## **1. General Information.**

### **1.1. Geography.**

**Uzbekistan** – a country located in the central part of Central Asia.

Name of the State "**Republic of Uzbekistan**".

Uzbekistan has an area of 447,400 square kilometers. It is the 56th largest country in the world by area and the 42nd by population. Among the [CIS](#) countries, it is the 5th largest by area and the 3rd largest by population.

Bordering [Kazakhstan](#) and the [Aral Sea](#) to the north and northwest, [Turkmenistan](#) to the southwest, [Tajikistan](#) to the southeast, and [Kyrgyzstan](#) to the northeast, Uzbekistan is one of the largest [Central Asian](#) states and the only Central Asian state to border all the other four. Uzbekistan also shares a short border (less than 150 km) with [Afghanistan](#) to the south.



**Landscape.** The main part of Uzbekistan is occupied with plains (about four fifth of the total area). And one of the main ones is Turanian plain. To the East and to the North-East of the country are located mountain ranges of the Than-Shang and Pamir, with the highest top of the country 4,643 m. To the North of the Central part of Uzbekistan is located one the largest deserts in the world – Qyzylqum.

## 1.2. Administrative Divisions.



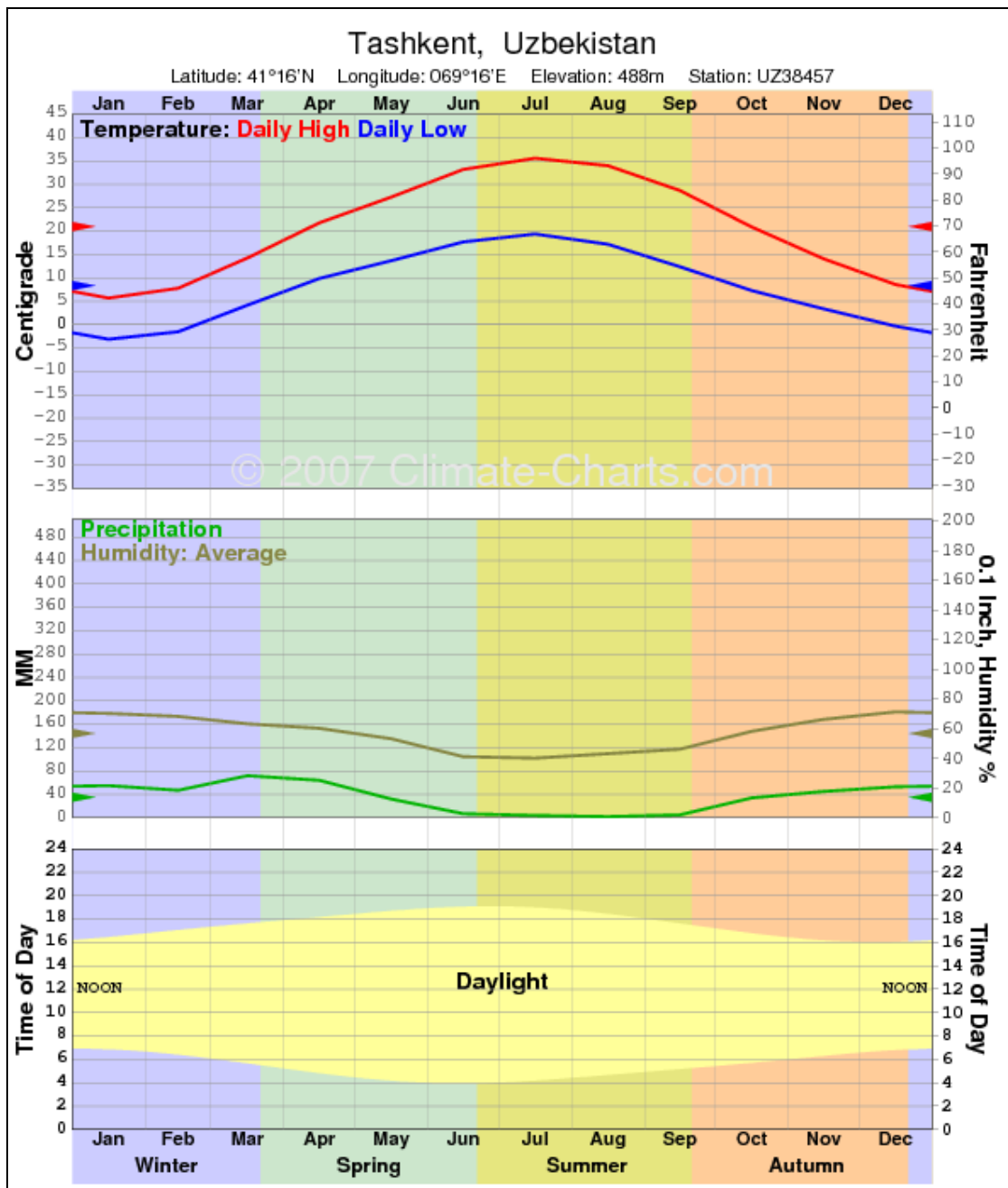
Uzbekistan is divided into 12 provinces (viloyatlar, singular viloyat, compound noun viloyati e.g., Toshkent viloyati, Samarqand viloyati, etc.), one autonomous republic (respublika, compound noun respublikasi e.g. Qaraqalpaqstan Avtonom Respublikasi, Karakalpakstan Autonomous Republic, etc.), and one independent city (shahar. compound noun shahri, e.g., Toshkent shahri).



Division	Capital City	Area (km <sup>2</sup> )	Population	Key
<b>Andijan Region</b>	Andijan	4,200	2,477,900	<b>2</b>
<b>Bukhara Region</b>	Bukhara	39,400	1,576,800	<b>3</b>
<b>Fergana Region</b>	Fergana	6,800	2,997,400	<b>4</b>
<b>Jizzakh Region</b>	Jizzakh	20,500	1,090,900	<b>5</b>
<b>Karakalpakstan Republic</b>	Nukus	160,000	1,612,300	<b>14</b>
<b>Kashkadarya Region</b>	Karshi	28,400	2,537,600	<b>8</b>
<b>Khorezm Region</b>	Urgench	6,300	1,517,600	<b>13</b>
<b>Namangan Region</b>	Namangan	7,900	2,196,200	<b>6</b>
<b>Navoiy Region</b>	Navoiy	110,800	834,100	<b>7</b>
<b>Samarkand Region</b>	Samarkand	16,400	3,032,000	<b>9</b>
<b>Surkhandarya Region</b>	Termez	20,800	2,012,600	<b>11</b>
<b>Syrdarya Region</b>	Gulistan	5,100	698,100	<b>10</b>
<b>Tashkent City</b>	Tashkent	335	2,352,900	<b>1</b>
<b>Tashkent Region</b>	Tashkent	15,300	2,537,500	<b>12</b>

### 1.3. Climate.

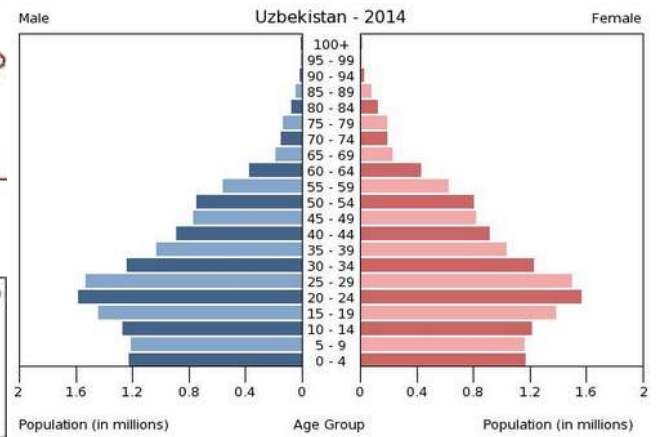
Climate is mainly desert-continental. Seasonal temperature difference is significant. Average winter temperature is lower than 6 degrees Centigrade below zero, while average temperature in July is higher than 35 degrees above zero. Number of precipitations is rather small. It's therefore, that the agriculture mainly depends on irrigation.



## 1.4. Demographics.

Uzbekistan is Central Asia's most populous country. Its 31,025,500 citizens comprise nearly half the region's total population. The population of Uzbekistan is very young: 34.1% of its people are younger than 14. According to official sources, [Uzbeks](#) comprise a majority (80%) of the total population. Other ethnic groups include [Russians](#) 5.5%, [Tajiks](#) 5% (official estimate and disputed), [Kazakhs](#) 3%, [Karakalpaks](#) 2.5% and [Tatars](#) 1.5%.





### 1.5. Nature.

Nature of Uzbekistan consists of combination of sub-tropical features with moderate zones. Land, air, water and fire (sun) have been respected in Central Asia from the times of Zoroastrians calling people in ancient times to care for purity of rivers and abundance of soils.



### 1.6. Environment.

#### Global problem of the Aral Sea

Uzbekistan has rich and diverse natural environment. The Aral Sea used to be the fourth-largest inland sea on Earth, acting as an influencing

factor in the air moisture and arid land use. Since the 1960s, the decade when the misuse of the Aral Sea water began, it has shrunk to less than 50% of its former area and decreased in volume threefold.

Due to the Aral Sea problem, high salinity and contamination of the soil with heavy elements are especially widespread in Karakalpakstan, the region of Uzbekistan adjacent to the Aral Sea. The bulk of the nation's water resources is used for farming, which accounts for nearly 84% of the water usage and contributes to high soil salinity. Heavy use of pesticides and fertilizers for cotton growing further aggravates soil pollution.

**The dried bottom of the  
Aral Sea photos**



**July – September, 1989**



**August 16, 2009**



# THE DRIED BOTTOM OF THE ARAL SEA

photos



## 1.7. Water Resources.

People that lived in the Asian region had always cherish the water. There is a saying in the Orient: «There is life in places with water». Since olden days settled population had chosen places for inhabitation near to rivers and canals. Two large rivers flow through the territory of Uzbekistan: Amudarya and Sirdarya that spring from the outside of the country. However, Amudarya in its lower part of flow (1,415 km) is within borders of Uzbekistan, and Sirdarya being the second river by water-bearing is within borders of our country in its middle part of the flow (2,212 km). There are few lake on the territory of



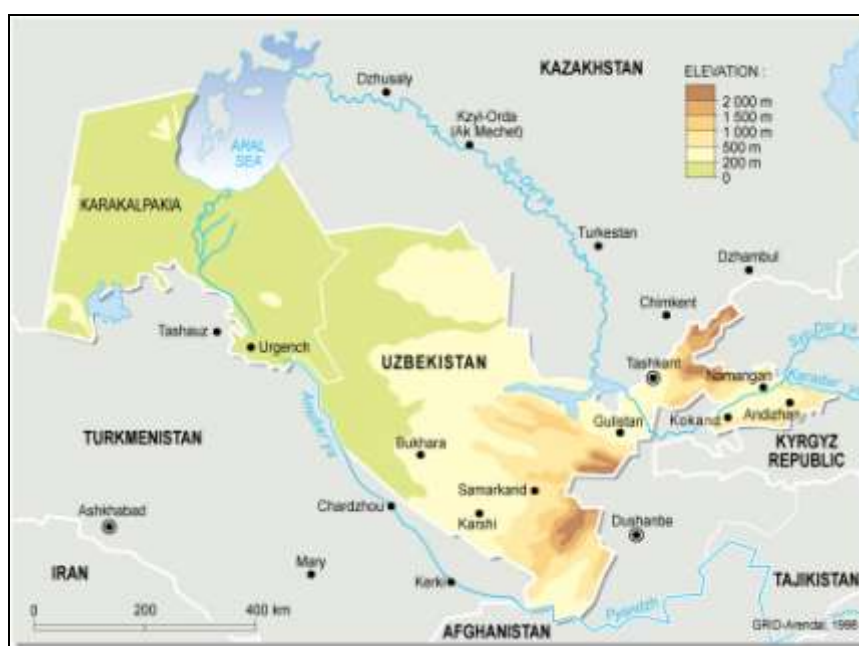
There are few lake on the territory of



our republic. The most number of lakes are situated in mountainous area at the height of 2,000-3,000 meters. Large lakes include the Sudochye Lake in Amudarya' delta and Arnasay Lakes. There are also a great number of artificial reservoirs in Uzbekistan among which the largest one are Kattakurgan, Chardara, Tuyabuguz and Charvak reservoirs. The largest lake - Aral Sea had significantly decreased its level in recent years and its shores left by tens of kilometers.

## 1.8. Mountain system.

Mountains and foothills comprise about one fifth of the country's area. In the East, mid and high mountain reliefs prevail: the boundaries of Uzbekistan embrace the slopes or ends of mountain ranges of the Western Than-Shang (Ugam, Pskem, Chotqol, Kurama) and Pamir-Oloy (Zarafshon, Turkiston, Gissar, Kugitangtau, Baysuntau). To the South and West, they gradually descend and change to plains. Among the mountains span quite large trough: Qashqadaryo, Surhondaryo, Zarafshon, Samarqand. The biggest intermountain trough is Farghona hollow (valley) – 370 km, and the width reaches 190 km. It's framed by the mountain ridges from three sides, and is open only from the West. On the border with Afghanistan is located vast Amudaryo basin.



## 1.9. Natural resources.

The Republic of Uzbekistan possesses large production and mineral resource potential, unique agricultural resources, significant volumes of prepared raw materials (semi-finished products), derived as a result of processing, rich natural resources, developed infrastructure. Modern level of prospecting minerals is connected with development of richest deposits

of precious, non-ferrous and rare metals, all types of organic fuel – oil, natural gas and gas condensate, brown and low temperature coking coal, oil shale, uranium, many types of resources for construction materials.

On the territory of the Republic of Uzbekistan was found broad range of treasures of the soil, which includes more than 100 minerals, out of which 60 are already used in the economy.



According to confirmed reserves of such minerals as gold, uranium, copper, natural gas, tungsten, potassium salts, phosphorus, kaolin, Uzbekistan ranks leadership positions not only in CIS, but in the entire world. Thus, Uzbekistan is the 4th largest on gold reserves, and is the 7th largest on mining hereof, 10th-11th – on copper reserves; uranium – 7th-8th, on mining – 11th–12th.

Available reserves of mineral resources in majority not only supply mining complexes for the long perspective, but also allow to raise the capacities to set up new mining of a number of the most important minerals such as gold, uranium, copper, lead, silver, lithium, phosphorus, potassium salts, fluorspar, wollastonite, agrochemical ores and others.

#### 1.10. The State symbols.

##### **The State FLAG of the Republic Of Uzbekistan.**

The law about "The State Flag of the Republic of Uzbekistan" was adopted on November 18 in 1991 in the 8th session of the Supreme Council of Uzbekistan. The flag of our country is a symbol of the sovereignty of the Republic. The national flag of the Republic



represents the country internationally when official delegations from Uzbekistan visit foreign countries, as well as at conferences, world

exhibition, and sports competitions. The national flag of the Republic is a right-angled colored cloth of three horizontal stripes: blue, white and green

### **The State Emblem.**

The law about "The State Emblem" was approved by the 10-th session of the Supreme Council of the Republic of Uzbekistan on July 2, 1992. The new state emblem of the Republic of Uzbekistan was created to reflect the many centuries of experience of the Uzbek people. The state emblem of the Republic presents the image of the rising sun over a flourishing valley. Two rivers run through the valley, representing the Syrdarya and Amudarya.



### **1.11. Holidays.**

- **January 1 – New Year** "Yangi Yil Bayrami"
- **January 14 – Vatan Himoyachilari kuni**
- **March 8 – International Women's Day** – "Xalqaro Xotin-Qizlar kuni"
- **March 21 – Navrooz** – "Navro'z Bayrami"
- **May 9 – Remembrance Day** – "Xotira va Qadirlash kuni"
- **September 1 – Independence Day** – "Mustaqillik kuni"
- **October 1 – Teacher's Day** – "O'qituvchi va Murabbiylar"
- **December 8 – "Constitution Day"** – "Konstitutsiya kuni"

#### ***Variable date***

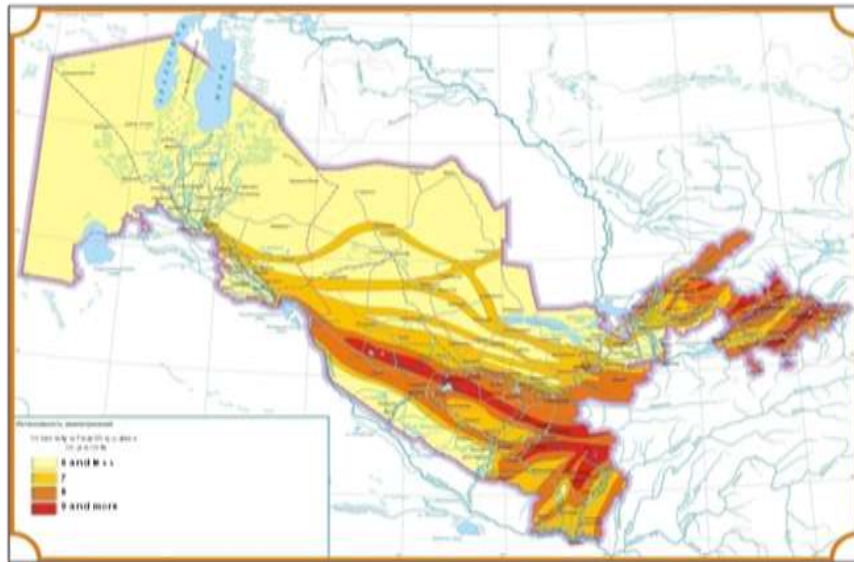
- End of Ramazon Ramazon Hayit Eid al-Fitr
- 70 days later Qurbon Hayit Eid al-Adha



## 2. Natural Hazards in the Country.

### 2-1. Natural Hazards Likely to Affect the (features, tendency).

Uzbekistan ranks high among countries that have endured significant loss of life and property due to earthquakes and other natural disasters. As one of the most seismic active regions in Central Asia, Uzbekistan is struck by earthquakes in the eight to ten point ranges. In addition to its seismic vulnerability, Uzbekistan is affected by hydro-meteorological hazards affecting the agricultural sector with seasonal floods and periods of drought. Other threats from landslides, locust invasions and avalanche have been reported to affect the lives and livelihood of Uzbekistan's population.



MAP OF SEISMIC RISK ZONING OF THE REPUBLIC OF UZBEKISTAN

#### In Uzbekistan

- 21,3% (90,0 thousand km<sup>2</sup>) - of the total area is mountainous;
  - 10-11% (2,6-3,0 mln. people.) - population live in the mountainous area;
  - 40% - mountainous area susceptible to landslides, avalanches, mud flows and debris processes;
  - 17% - mountainous area at risk of landslides;
  - 2,0 - thousand landslides;
  - 8,3 thousand - landslide displacements recorded in 50 years:
1. 65% of the landslides caused by snowmelt, precipitation and groundwater
  2. 15-20% of the historical and contemporary earthquakes
  3. 20-25% of man-made factors

### 2.2. Recent Major Disasters.



**Tashkent earthquake** happened at 5:23 am April 26, 1966 At the relatively small magnitude ( $M = 5.2$  on the Richter scale), but because of the shallow (3 to 8 km) of occurrence of the hearth, it caused a 8-9 -point (on a 12-point scale MSK-64), shake the earth's surface and substantial damage of buildings in the city centre. At Tashkent, 10 were killed, 1,000 were injured, and about 100,000 were left homeless. 28,000 buildings were destroyed, including 200 hospitals and clinics, and 180 schools, in the Old Quarter of Tashkent, the principal damage area. Thousands of the ancient, one-story adobe dwellings were flattened. Additional damage was sustained from the hundreds of aftershocks which followed.



**Andijan earthquake** – the catastrophic earthquake that occurred two (16) December 1902 in the city of Andijan Fergana region. The death toll of about 4000. The earthquake consisted of three roughly equal strength shocks. The first of which, a magnitude 8.9, occurred at 10:00 am. 1-1.5 minutes there was a second, the most powerful force on the push-magnitude 9-9.5. After 30 minutes, after the first two followed by a third push, magnitude 8. The earthquake had destroyed 11,000 buildings and 161 types of local building the "European style". Survived only three buildings of European architecture: urban Orthodox Church, Prison and City Bank. Material losses, net of government agencies accounted for 12 million rubles. The death toll was 4602 people, which is about 9 per cent of the residents of the city in 1902.



### 3. DISASTER MANAGEMENT SYSTEM.

#### 3.1. Administrative system.

The State system of prevention and emergency response consists of controls and capabilities of the Council of Ministers of the Republic of Karakalpakstan, 12 regions, districts and municipalities, ministries and departments, enterprises, institutions and organizations.

The structure and functioning of the state system of prevention and emergency action by the Cabinet of Ministers of the Republic of Uzbekistan.

#### **The Cabinet of Ministers of the Republic of Uzbekistan:**

- ensures the creation of state reserves of financial and material resources for disaster management, as well as the procedure for its use;
- responsible for financial and resource support capabilities for the prevention and liquidation of emergency situations, equip them special appliances and other material and technical means;
- classification of states of emergency situations and determines the degree of involvement of the executive power to eliminate them;
- monitors the activities of ministries, departments, local authorities in the protection of population and territories from emergency situations;

Specially authorized state body for the protection of the **Ministry of Emergency Situations** for Emergency Situations of the Republic of Uzbekistan.

#### 3.1.1. Ministry of Emergency Situations:

- develop and adopt action to prevent emergency situations save lives and preserve health, protect the material and cultural values, as well as the recovery and reduce damages in emergency situations;
- organizes the development and implementation of targeted programs and research in the field of population and territories from emergency situations;

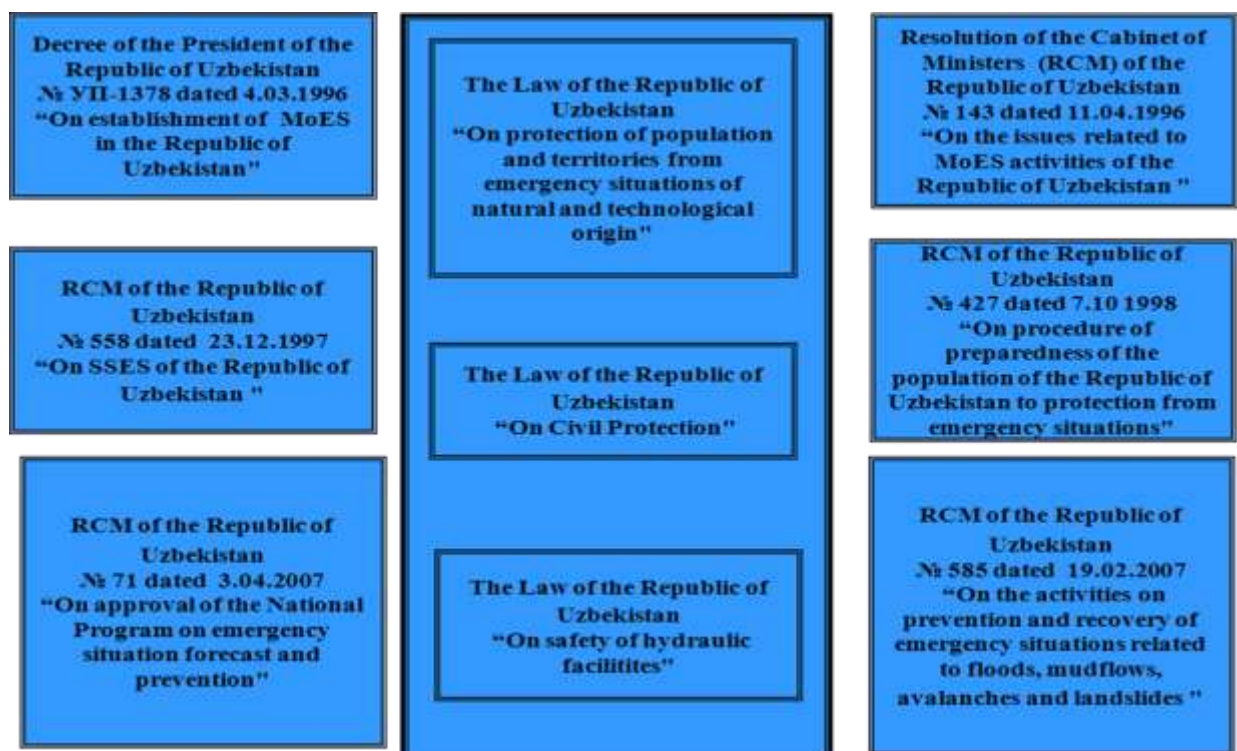


- takes within their jurisdiction, obligatory for execution by ministries, departments, enterprises, institutions and organizations, officials and citizens;
- organize the preparation of controls, forces and protection frames the population and territories for actions in emergency situations;
- controls the forces and means for dealing with emergencies, creates a control posts, warning systems and communications;
- organizes the emergency rescue and other emergency operations in emergency situations;
- carries out state control over the implementation protection measures the population and territories from emergency situations;

### 3.2. Legal System and Framework.

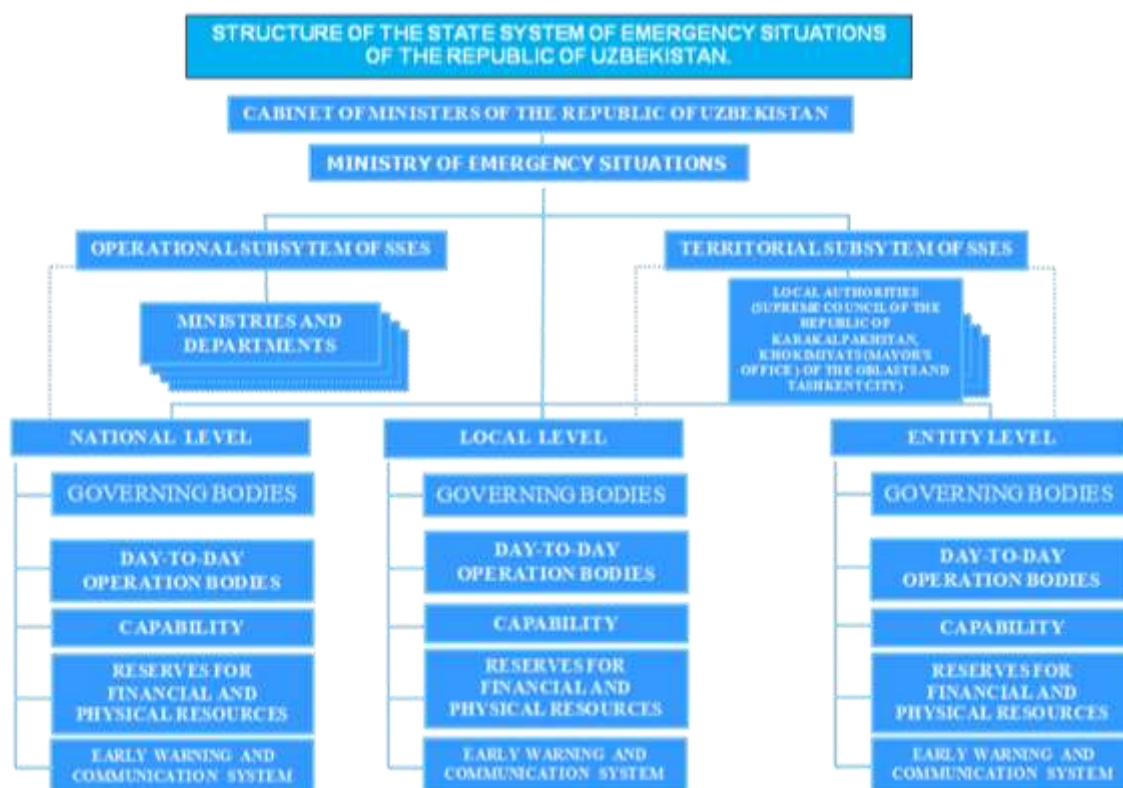
The Ministry of Emergency Situations of the Republic of Uzbekistan is a central government body responsible for directing and coordinating activities in the field of civil protection, prevention and response to emergency situations caused by accidents, catastrophes and natural disasters.

Ministry of Emergency situations has few documents for disaster management of the Republic of Uzbekistan. There are:



### 3.3. Structure of Disaster Management.

#### a) National platform for Disaster Risk Reduction.



#### MAIN TASKS OF THE MINISTRY OF EMERGENCY SITUATIONS OF THE REPUBLIC OF UZBEKISTAN ARE:

- development and implementation of state policy in the field of disaster prevention, the protection of life and health of the population, material and cultural values, as well as the recovery and reduce the damage in case of emergencies in peacetime and wartime;
- creation and maintenance governance of the State system of Prevention and emergency response;
- manual of civil protection of the Republic of Uzbekistan;
- organization development and implementation in the territory of the Republic of Uzbekistan measures to protect the population of the country, objects are a national treasure of the Republic, as well as the prevention and liquidation of emergency situations;
- guide to work on the liquidation a major emergency, development and preparedness of forces and resources required for this purpose;



- organization development and realization of target scientific and technical programs aimed at the prevention of emergency situations, the protection of the population of the country and to increase the stability of functioning of objects of national economy as they arise;
- organization of preparation of the population, officials and formations of the SSES to act in emergency situations;

## **RESPONSIBILITIES OF MINISTRIES AND AGENCIES IN THE AREA OF PROTECTION FROM EMERGENCIES:**

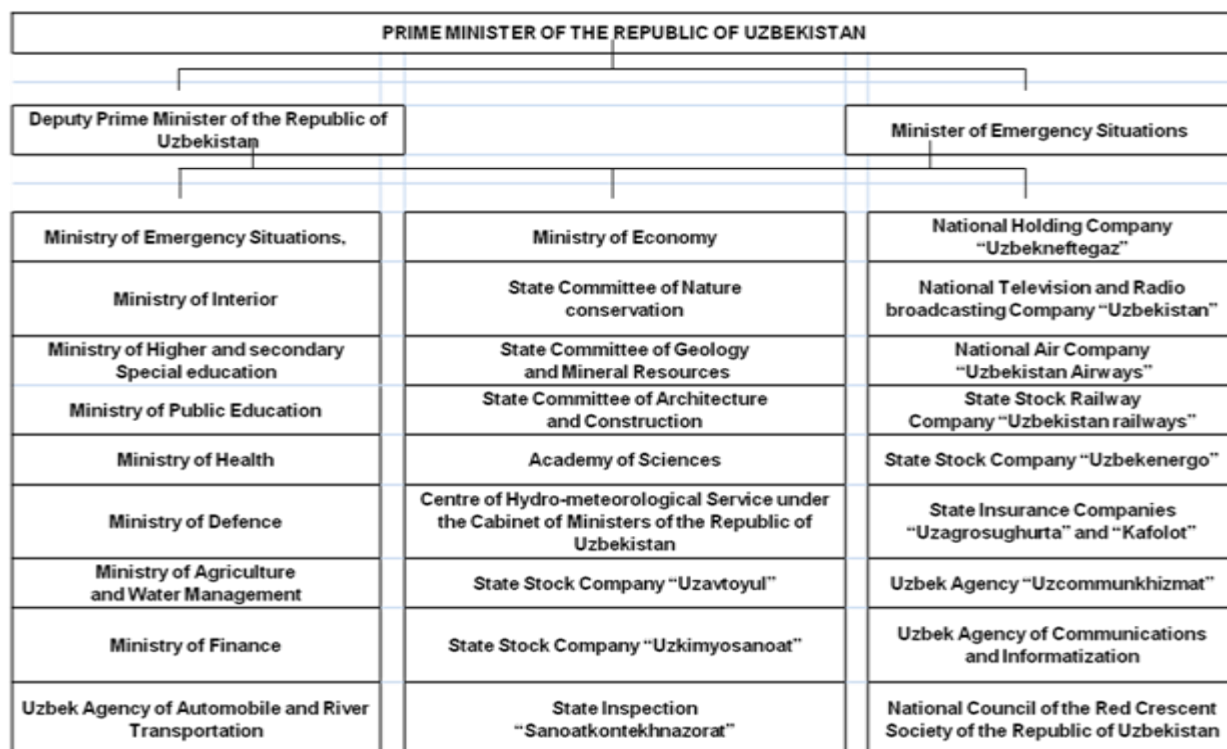
- ensure the readiness of the subordinate enterprises, institutions and organizations to actions in emergency situations;
- develop and conduct measures to improve the sustainability performance of the industry and its subordinate objects in emergency situations;
- submit for coordination to the Ministry of Emergency Situations of the Republic of Uzbekistan action plan, regulations, rules and instructions for the protection of emergency;
- train workers on ways of protection subordinate objects and actions in emergency situations in the saving services and rescue teams;
- create local systems of emergency warning and keep them in constant readiness;
- provide in the prescribed manner on the status of population and territory, as well as notify the workers in the industry about the threat of an emergency;
- create reserves of material and financial resources;
- provide for the organization, financing and implementation of emergency, rescue and other emergency operations to subordinate objects of production and social facilities and adjacent areas in accordance with the plans of prevention and liquidation of emergency situations;
- implement measures for the evacuation of critical facilities and their personnel in the items to ensure the continuation of their work in emergency situations;
- ensure the creation, preparation and maintenance of preparedness of special forces and means of prevention and liquidation of emergency situations;
- monitor compliance with the requirements for the protection

## **CREDENTIALS OF LOCAL AUTHORITIES TO PROTECT FROM EMERGENCY SITUATIONS:**

- develop a plan of action to protect the population and territory in emergency situations;
- carried out in the prescribed manner the collection and exchange of information for the protection of the population and territories, as well as a timely warning and informing the population about the threat or occurrence of an emergency situation;
- promote improve the sustainability of enterprises, institutions and organizations in emergency situations, regardless of their affiliation;
- carry out control over forces and resources of enterprises, institutions and organizations for the prevention and liquidation of emergency situations;
- organize the constant readiness of rescue forces special forces to carry out rescue and other emergency operations in the areas of accidents, natural disasters;
- organize and carry out rescue and other immediate work and keep law and order in their realization;

### **b) National Organizations for Disaster Risk Reduction.**

There are sector oriented concepts and target programmers on natural disaster risk reductions which are specified depending on the area of activity and nature of disasters. The SSES functional and territorial subsystems' action plans have been developed, approved and are systematically adjusted based on the Decrees of the President of the Republic of Uzbekistan, the Laws of the Republic of Uzbekistan and resolutions of the Cabinet of Ministers of the Republic of Uzbekistan which govern the functioning of the SSES and those of the following bodies:



#### 4. Disaster Management Strategy, Policy, and Plan.

For the implementation of the state policy in the field of vital interests of the individual, society and the state act legal framework regulating the activities the state authorities and enterprises and organizations, as well as civil self in the area of civil protection. The Laws of the Republic of Uzbekistan "On protection of population and territories from emergency situations of natural and man-made" and "Civil Protection", and a number of resolutions of the Cabinet of Ministers.

The world practice shows that timely prevention of hazards of natural and man-made hazards, the priority realization of measures to prevent and reduce their negative impacts are much more economical and more effective than emergency response.

In order to realize these tasks, the Ministry of Emergency Situations together with the interested ministries and departments of the Republic of Uzbekistan, the Council of Ministers of the Republic of Karakalpakstan, regional and Tashkent city State program is designed to forecast and prevention of emergency situations (hereinafter - the State program).

The purpose of this state program is to provide a guaranteed level of protection of the population and territories from emergency situations, risk reduction and mitigation of accidents and natural disasters in the country, taking into account achievements of the national science and technology, as well as international experience in this field.

## **The State Program included the following:**

### **A. Natural disaster risk reduction**

1. Risk reduction program for the effects of earthquake
2. Program on prevention of floods, mudflows, avalanches and landslides
3. Program on prevention of epidemics, epizootic outbreak, epiphytoses

### **B. Technological disaster risk reduction**

4. Program on prevention of chemical emergency
5. Program on prevention of accidents at explosive and fire hazardous sites
6. Program on prevention of accidents at the sites and power network
7. Program on prevention of transport accidents and disaster (motor transport, railway, aircraft, the Metro)
8. Program on prevention of disaster at hydraulic engineering structures

### **C. Early warning of population**

9. Program on creation of territorial and local systems and early warning

### **D. Improvement of emergency rescue services**

10. Program on equipping the Center on training and advanced training of rescue workers of MoES with rescue gear, equipment, outfit and on construction of training centers

### **E. Training of the population on disaster preparedness**

11. Program on training of population

## **5. Budget Size on National Level.**

Every year, the Ministry of Finance of the Republic of Uzbekistan devotes about 9 mln. dollars to the introduction of monitoring of hazardous geological processes.

## **6. Progress of the Implementation of Hyogo Framework for Action (HFA)**

(Please click on the link below on the Government of the Uzbekistan National Progress Report on the Implementation of the Hyogo Framework for Action (HFA), as of 20 March 2009.

[http://www.preventionweb.net/files/9814\\_Uzbekistan.pdf](http://www.preventionweb.net/files/9814_Uzbekistan.pdf)

## **7. Recent Major Project on Disaster Risk Reduction**

The joint project of UNDP in Uzbekistan and the Ministry of Emergency Situations of the Republic of Uzbekistan "**Strengthening the**



## **potential of the Republic of Uzbekistan for Disaster Risk Management".**

### **Information about the project**

Strengthening the potential of the Republic of Uzbekistan for the prevention and mitigation of natural disasters is part of the Framework Programmer of the United Nations Development Assistance for 2010-2015. In this regard, in order to build capacity in the Republic of disaster risk management in July 2010, United Nations Development Programmer in Uzbekistan and the Ministry of Emergency Situations of the Republic of Uzbekistan initiated and signed the joint project "Strengthening the potential of the Republic of Uzbekistan for Disaster Risk Management".

### **The purpose of the project**

The purpose of this project is to create a sustainable mechanism for disaster risk reduction, according to the Hyogo Framework for Action for 2010-2015. This project also aims to improve the training of personnel, material and technical potential of the Ministry of Emergency Situations, the Academy of Sciences of the Republic of Uzbekistan and the public in the area disaster risk reduction.

### **The direction of the project**

Strengthening the capacity of Ministry of Emergency Situations of the Republic of Uzbekistan and the risks involved in the management of natural disasters and climate sides, in order to mitigate and reduce the risk of natural disasters, as well as timely and strategic response to any event of a catastrophic scale, threatening the lives of people in Tashkent and, at a later stage, other areas of the Republic, located in the high-risk areas.

Ensuring public awareness of about natural disasters and promoting a culture of behavior in emergencies.

Strengthening the capacity of the UN system in Uzbekistan to develop a common strategy for disaster risk reduction needed to assist the Republic of Uzbekistan in the event of a catastrophic disaster.

In 2012, the project is headed for the support of the initiatives of the Government of the Republic of Uzbekistan to raise public awareness about earthquakes and building a culture of people's behavior during earthquakes, as part of which included the following:

- Seismic stability of individual houses;
- Formation of culture of behavior of preschool children in the earthquake;

- The documentary educational film;
- Application for Mobile Phones;
- Mobile Team preparing the population for emergency situations;
- Seismic zoning map of Tashkent;
- International Day for Disaster Risk Reduction.

## **8. ADRC Counterpart.**

### **1) Ministry of Emergency Situations of the Republic of Uzbekistan**

100084, Uzbekistan, Tashkent, 4, Kichik khalka yoli str.

Phone: +998 (71) 239-1685

Fax: +998 (71) 150-6299

Web-site: [www.mchs.gov.uz](http://www.mchs.gov.uz)

E-Mail: [it@mchs.gov.uz](mailto:it@mchs.gov.uz)

### **2) State Committee of the Republic of Uzbekistan on Geology and Mineral Resources**

100060, Uzbekistan, Tashkent, 11 Shevchenko str.

Phone: (99871) 256-86-53

Fax: (99871) 256-22-75

Web-site: [www.uzgeolcom.uz](http://www.uzgeolcom.uz)

E-Mail: [geolcom@bcc.com.uz](mailto:geolcom@bcc.com.uz)