Country Report 1

Annually on the territory of our republic occur a lot of disasters, prejudicial to economy of the country, sometimes with loss of lives. The great majority of disasters are connected with the intensification of geological and hydro-meteorological processes, such as earthquakes, earth falls, mudflows and floods, erosion processes and etc.

Tajikistan territory concerns to be one of most active seismic regions of Central Asia and world as well. Within Tajikistan the zone of contact of two largest mountain structures, Pamir and Tien Shan is located. There is an opinion, what exactly here occurs collisions of the Indian and Asian plates. Zones of intratelluric Pamir-Gindukushskih earthquakes are possible to be considered as the result of this collision. Extending up to depths 400 kilometers and distances a little some of thousand kilometers. Annually in this zone, which is taking place in immediate proximity from Tajikistan border, on Islam republic Afghanistan territory, occur 1500 earthquakes. Strongest of them are felt by measured 6-7 on the Richter scale on southwest Pamir and 4-5 measured in all territory of Central Asia. Such earthquakes occur, on the average, 1 time a year; and rather weak, but appreciable, some times in one year. Actually by force of the intratelluricness of these earthquakes the destructive consequences from them, are not so appreciably even in epicenter. The inhabited localities, Ishkashim,
Shugnan and Rushan regions and GBAO suffer most from massive earthquakes.

In Tajikistan territory annually occur 600 earthquakes 2-3 measures on the Richter scale that makes 80 % from total number of all earthquakes of Central Asia.

Last century on territory of republic there were three catastrophic earthquakes, they are - Karatag earthquake in 1907, Sarez earthquake in 1911, Hait earthquake in 1948. Under fragments of clumps (Sarez earthquake landslide hamlet Usoi was completely destroyed with all inhabitants. Partitioned off by a landslip, Murgab River soon has flooded large hamlet - Sarez. In result was formed the Sarez lake, the question of which interests the experts from all ends of our planet. A landslip appeared in result of Hait earthquake, moving with huge speed has devastated a plenty villages, buried under itself 28 thousand human life.

Last destructive earthquakes of the XX century were Isfara earthquake in 1977, Djirgital earthquake in 1984, Kayrakum earthquake in 1985 and Hissar earthquake in 1989, as the consequence - large economic damage was put to the country and hundreds of human lives were lost. Large landslip appeared as the result of Hissar earthquake, became the reason of 274 deaths and 30 men were made homeless.

During 1998-2000 years, in territory of republic of earthquake by force up to 7 measures have taken place in Dangara (September 3, 1998), Hissar (March 27, 1999), Farhor (October 31, 2000) and Rogun (January 9, 2002). Though the intensity of earthquakes was not high, the destructions were significant. Were completely destroyed 372
private houses, and 2500 are partly damaged. Without any loss of life, fortunately.

The catastrophic earthquakes in Hait (Tajikistan) and Ashkhabad (Turkmenistan) were an incitement to the beginning of active researches of a circle of questions connected to a nature of earthquakes occurrence and an opportunity of their prediction.

One of the most dangerous hydro-meteorological phenomena by its consequences is excess rainfall. The average number of cases with strong rainfalls on republic territory is insignificant and halts between 0,1 and 6 days. But at the same time maximum amount of days with strong rainfall is necessary, mainly, for spring months, and in high-mountainous areas - for summer.

Mudflows are observed in foothill and mountain areas of Tajikistan at heights up to 2000 meters. The risk of mudflows exists on 84 % of the republic territory. Annually these phenomena destroy the irrigation structures, bridges, highways and inhabited localities, covers whole ground alluvial deposits.

The presence of abrupt slopes, running soil in combination to high seismological activity make landslips the widespread phenomenon in the country. The most active zones of earth fall activity are located at height from 700 up to 2000 meters above a sea level. In the country is registered about 50 thousand earth fall places, 1200 of which represent threat for the population of republic.

During the ten years’ period 1991-2000 more than 90% of the population became victims of the dangerous natural phenomena, was lost in result of severe meteo and hydrological phenomena.
According to prognostic evaluation, nearest 10-20 years in such acts of nature as the floods and droughts, will become more frequent phenomena.

For the period 1996-2002 the economic damage put by a drought 2000-2001 years has made almost 50 % of total damage from all acts of nature. For the same period the material damage from mud flows and floods has made 33 %, and from earthquakes - 90 %. The significant material damage from acts of nature was observed in 1993, 1997 and 1998.

Only for 9 months of year 2003 the acts of nature put damage at rate of 35 000,000 of US dollars. 8418 apartment houses have suffered, 836 are destroyed completely.

As more than 90 % of territory of Tajikistan is covered with mountains, development and effective utilization of unfitted areas, population safety of cities and industrial objects from acts of nature is an extremely urgent task. The acts of nature are dangerous by their suddenness, however their consequences can be prevented or are considerably reduced at the beforehand-accepted measures. For this purpose it is necessary to associate the existing efforts in one uniform system. Presently the measures of prevention and liquidation of consequences of nature acts are not prepared because of bad organization and sometimes-bad management. Besides the especially branch interests complicate the interaction of regulatory bodies at liquidation of emergency situations, that has negative influence for realization of measures.

In realization of questions connected with protection of the population and territories from emergency situations of natural and technogen
character, there is a state body, especially authorized on the decision concerning liquidation of consequences of emergency situations on behalf of the Ministry on emergency situations and civil defense of Republic of Tajikistan, to which is allotted a task of:

- realization of uniform state policy in the field of the prevention and liquidation of emergency situations;
- realization of the state target programs of protection against extreme situations;
- providing of high readiness of bodies and items of management systems of communication and notification, forces and means to actions in emergency situations, realization of works on their liquidation, forecasting and rating of socio economic consequences of emergency situations;
- realization of the international cooperation in the field of the prevention and liquidation of emergency situations;
- organization and delivery of the humanitarian help, injured of acts of nature to the population.

Forces and means directly subordinated to Ministry of emergency situations of Tajikistan had participated in liquidation, of disasters, in Ayni region, in area of Baypaz Hydroelectric power station (2002), in Pendjikent region area (2003).

Besides as part of international coalition on rendering the humanitarian help to the population of Afghanistan by the power of Ministry of emergency situations of Tajikistan, Russia and Kirgizia per 2001-2002 years delivered more than 16 thousand tons of the humanitarian help as the foodstuffs, clothes, tents.

More then 300 lories were used for this operation.
The cooperation is organized by the conclusion of the contracts and other international acts, creation of joint legal base on mutual or collective interest, work within the largest specialized international organizations.

The notification of the population and bodies of state authority on the dangerous phenomena is indissolubly connected to the system of Ministry of emergency situations monitoring. The republican Centre on disasters and civil defence management taking place in the Ministry of emergency situations and civil defense and is a link of reception and distribution of the information on disasters. The center has constant radio, telephone and telegraphic connection with all regions of Tajikistan and CIS countries and far foreign countries. Daily this Center receive the information from all regions of republic.

There are three basic modes of warning and liquidation system: daily activity, high readiness and extreme regime. All regional staffs of the Ministry of emergency situations and civil defense of Republic of Tajikistan have radio or telephone connection with the republican Centre and appropriate regional staffs. Unfortunately intra-regional and intra-farms connection now is almost paralyzed. Exception is Sogdiyski area, where such connection partially exists. The additional difficulties in notification and communication system annually arise because of limit submission of the electric power; therefore communication exists only some hours a day. Especially painfully it is felt in Karategin valley and separate areas GBAO.

All measures on preparation for nature acts will be carried out under the direction of Government of Republic of Tajikistan through state commissions on emergency situations, evacuation and steady functioning of objects of a national republic economy in extreme
situations of peacetime. The chairmen of these commissions are Deputies of Premier - Minister of Republic of Tajikistan, and members are chiefs of the appropriate ministries and departments. All these organizations concern to emergency situations services. Emergency situation services (there are 14 of them) are formed by the special Governmental order in all regions (areas, cities, areas), ministries, departments and enterprises numbering the personnel more of 50 men. In Government of Republic of Tajikistan there is a department of ecology and emergency situations, coordinating all measure on questions concerning activity on disasters.

The chiefs of the ministries and departments simultaneously are the chiefs Civil defense staff, and one of their assistants is the chief of civil defense staff of objects. The general management of a Civil defense control system is carried out by the President of the country. The chief of Civil defense staff of Republic of Tajikistan is Prime-Minister and his assistant is Minister of emergency situations and civil defense of Republic of Tajikistan. With the purpose of realization of a management of preparation to disaster in areas and cities, and also in the ministries, departments and enterprises, are created regular and not regular (depending on category and amount of the personnel) bodies of management (staffs).

Ministry carries out a direct disaster management and development of measures under the warning, prevention, reduction and liquidation of consequences of nature acts.

In case of occurrence of significant emergency situations, on a place of incident immediately arrive all governmental commissions and appropriate services on civil defense. The commissions on disaster, where the representatives of local authorities (areas, cities and areas),
Ministry of emergency situations and civil defense (or representatives of its staffs on places) and other appropriate organizations enter, participate in a rating of damage and preparation of the appropriate documents in Government of Republic of Tajikistan. The financing of measures on liquidation of disasters consequences is carried out at the expense of means of the republican budget, at the expense of the budgets of administratively territorial formations and budgets of the ministries of departments, depending on a kind disaster.

Simultaneously, on a place of incident arrive the special groups of the rescuers of "Centrispas" Department, appropriate military formation of ministry (if necessary and military formation of the Ministry of defense of Republic of Tajikistan) and local nonmilitary formation of Civil defense staff arrive also.

The "Centrispas" service carries out emergency and urgent measures in conditions of technogen and natural disasters character on objects of manufacture, enterprises, establishments and territories with the purpose of rescue of the people, protection of material assets and territories, localization and liquidation of consequences emergency situation, realizing of other works, required special saving equipment and appropriate qualification.

It is necessary to note, that the members of saving groups of "Centrospas" Department have passed a complete rate of training and have skills of realization of saving operations on diving, fire-prevention, anti-radiation, chemical, airborne and other measures. So a level of preparation of the rescuer is rather high. Problem is in unsufficient manning of saving groups with individual special outfit and necessary equipment.
What tasks face Ministry of emergency situations and civil defense as the state body responsible for solving questions of the warning and liquidation of extreme situations? On my sight, they consist in the following:

• to renew system of mudflow forecasting and regular inspection of mudflow dangerous areas;
• restoration of hydraulic engineering protective structures (mudflow passes and taps, dam);
• forestation of slopes;
• setting of slopes-strengthening terraces;
• resettlement of the inhabitants in more safe areas;
• a waterproofing of structures and infrastructure objects;
• preparation of reserve drifts of products of a feed and means in case of extreme situations.

The prime tasks, listed by me, will help us at early stages to reduce risk from emergency situations up to a minimum.
Country Report 2

"Disaster Management in Tajikistan"

General Information

Ninety-three percent of Tajikistan's territory is mountainous, and the mountain glaciers are the source of its rivers. Tajikistan is an earthquake-prone area. The republic is bounded by China in the east, Afghanistan to the south, Uzbekistan and Kyrgyzstan to the west and
north. The central Asian republic also includes the Gorno-Badakh Shan Autonomous region.

The Tajiks, whose language is nearly identical with Persian, were part of the ancient Persian Empire that was ruled by Darius.

In the 7th and 8th centuries, Arabs conquered the region and brought Islam. The Tajiks were successively ruled by Uzbeks and then Afghans until claimed by Russia in the 1860s. In 1924, Tajikistan was consolidated into a newly formed Tajik Autonomous Soviet Socialist Republic, which was administratively part of the Uzbek SSR until the Tajik ASSR gained full-fledged republic status in 1929.

The history of the Tajiks extends well over a 1000 year into the past, though there was never a formal state called Tajikistan until 9 September 1991. Having gained its independence in 1991, Tajikistan experienced a five-year civil war and several changes in government between 1992-1997.

The signature of the "General Agreement of the Establishment of Peace and National Accord" through a process of successful negotiations conducted under UN auspices, put an end to the fighting. Since that time, Tajikistan has come a long way in consolidating peace and stability. The process of its implementation has opened a new page in the development of the country. Despite numerous obstacles, Tajikistan has demonstrated a firm commitment to stability and has made substantial progress in peace building. Adopted in 1994, the Constitution of the Republic of Tajikistan received amendments following a Peoples' Referendum to ensure the implementation of the
General Agreement. In 1999 Tajiks marked the 1100 anniversary of Samanid Empire, which became a symbol of cohesion for public and political forces. In September 2001, Tajikistan marked 10 years of independence with celebrations, concerts, national conferences, and speeches from political leaders in Dushanbe and throughout the country.

Area:
Total: 143,100 sq km; water: 400 sq km; land: 142,700 sq km

Land boundaries:
Total: 3,651 km; border countries: Afghanistan 1,206 km, China 414 km, Kyrgyzstan 870 km, Uzbekistan 1,161 km

Population (2003 est.):
6,863,752 (growth rate: 2.4%); birth rate: 32.8/1000; infant mortality rate: 113.4/1000; density per sq mi: 124
Dushanbe, 817,100 (metro. area), 590,300 (city proper)
Khodzhent (Leninabad), 156,500

Language:
Tajik

Ethnicity/race:
Tajik 64.9%, Uzbek 25%, Russian 3.5% (declining because of emigration), other 6.6%
Religion:
Sunní Muslim 85%

Economic summary: GDP/PPP
(2001 est.): $7.5 billion; per capita $1,140

Real growth rate:
8.3%

Inflation:
33%

Unemployment:
20%

Arable land:
5%. Agriculture: cotton, grain, fruits, grapes, vegetables; cattle, sheep, goats.

Labor force:
3.187 million (2000); agriculture 67%, industry 8%, services 25%
(2000 est.)

Industries:
aluminum, zinc, lead, chemicals and fertilizers, cement, vegetable oil,
metal-cutting machine tools, refrigerators and freezers.

Natural resources:
hydropower, some petroleum, uranium, mercury, brown coal, lead, zinc,
antimony, tungsten, silver, gold

Exports:
$640 million (f.o.b., 2001 est.): aluminum, electricity, cotton, fruits,
vegetable oil, textiles

Imports:
$700 million (f.o.b., 2001 est.): electricity, petroleum products,
aluminum oxide, machinery and equipment, foodstuffs

Major trading partners:
Europe, Russia, Uzbekistan
Communications:

Telephones:
main lines in use: 363,000 (1997); mobile cellular: 2,500 (1997).

Radio broadcast stations:
AM 8, FM 7, shortwave 2 (2001).
Radios:

Television broadcast stations:

Televisions:
820,000 (1997).

Internet Service Providers (ISPs):

Internet users:
2,000 (2000).

**Transportation:**

Railways:
total: 482 km in common carrier service; does not include industrial lines (2001).

Highways:
total: 29,900 km; paved: 21,400 km (these roads are said to be hard-surfaced, meaning that some are paved and some are all-weather gravel surfaced); unpaved: 8,500 km (1990).

Ports and harbors:
none.

Airports:

International disputes:
the undemarcated northern and western border with Uzbekistan is mined in many sections; continues to maintain a territorial dispute with Kyrgyzstan in Isfara Valley area; ongoing talks with China have failed to resolve the longstanding dispute over the indefinite boundary; Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan wrestle with sharing limited water resources and the regional environmental
degradation caused by the shrinking of the Aral Sea.

Politics:
Administratively the country is divided into four regions: Gorno-adakhshan Autonomous Oblast in the east, Khatlon Oblast in the south, Leninabad Oblast in the north and the Regions of Republican Subordination in the centre. The capital of Tajikistan is Dushanbe with over 600,000 habitants.

Modelled on the Presidential form of governance, Tajikistan has three branches of state power: legislative, executive and judicial. The legislative body is made up of a two-chambered Majlisi Oli (Parliament), which consists of the Majlisi Namoyandagon, a professional chamber, which functions on a regular basis, and the Majlisi Milli, which meets less frequently and functions on a convening basis. The present parliament formed after elections in February-March 2000, marking the first multiparty elections since the end of civil war and helped to further consolidate the peace process. The next Parliamentary elections are scheduled for the 2005.

The following five political parties are registered and represented in the Majlisi Namoyandagon and Majlisi Milli: People's Democratic Party, Communist Party, Islamic Renaissance Party, the Socialist Party and Democratic Party.

President Emomali Rakhmonov heads the executive branch of power and was first elected in 1994, and again re-elected in 1999 for a seven-year term. The president appoints and dismisses the Prime Minister and other heads of the government ministries, chairmen and deputies of the National Bank, judges of the Constitutional Court, Supreme Court, Prosecutor General, signs laws, formulates foreign policy and signs international treaties.

The constitutional Court, Supreme Court, Higher Economic Court and regional courts represent the judicial branch of power.
Education:

Secondary school education is compulsory in the country and the completion rate is above 90 percent. The average number of enrolled for all levels (age between 6-23) is 62.1 percent. Estimated adult literacy rate is 99.5 percent. Although the government boasts an average literacy rate of nearly 100 percent, Tajikistan's education system has suffered greatly since independence. Thus, Tajikistan ranked 112 out of 173 countries on the UN Development Program's Human Development Index for 2002.

Holidays

Tajikistan's main public holidays are as follows:

- January 1  New Year's Day
- March 8  International Women's Day
- March 21  Navruz (Persian New Year)
- May 1  International Labour Day
- May 9  Victory Day
- September 9  Independence Day
- November 6  Constitution Day
- November 9  National Reconciliation Day

The two Islamic holidays Eid-i-Ramazon (Ramadan or Eid Al Fitr) and Eid-i-Kurbon (Eid Al Adha) are celebrated annually and, as these holidays follow the lunar calendar, the dates move back ten days every year.
Climate

In general, Tajikistan's climate is continental, subtropical, and semiarid, with some desert areas. However, the climate changes drastically according to elevation. Tajikistan's subtropical southwestern corner experiences some of the highest temperatures in the country, on average 35°C to 42°C in the summer. At Tajikistan's lower elevations, the average temperature range is 25°C to 30°C in July and -1°C to 3°C in January. Although rainfall can be sporadic, as the drought of 1999-2001 has shown, most precipitation occurs in the winter and spring.

Source from http://www.adrc.or.jp/ 2003