Water and Sanitation situation in the Republic of Tajikistan

Head of the State Sanitary – Hygienic Surveillance Department,
The Ministry of Health
Of the Republic of Tajikistan

Pirnazar Shodmonov
Data on ownership of water supply pipes for 2008
(721 water-pipe lines in total)
Proportion of the drinking water samples not complying with sanitary requirements for 2008

Environment and Health of the Population

Microbiology expert

Physics-chemistry expert
Environment and Health of the Population

Number of water-pipe lines not complying with the sanitary requirements for 1992-2008 period (as %)

- 1992: 37%
- 1998: 38.4%
- 2000: 41.1%
- 2004: 56%
- 2008: 65.3%
Water supply of the population in the Republic from different forms of water resources for 2008 (as %)

- Водопроводная: 55.2%
- Скваж без развод: 2.5%
- Родники: 10.2%
- Колодцы: 1.8%
- Река: 3.1%
- Канал, арыки, хаузы: 22.3%
- Ручные насосы: 1.8%
- Привозная вода: 3%
- Дождевая вода: 0.1%
Access of the Population of the Republic to the Sewage System

- Urban: 0.3
- Rural: 0.007
Morbidity of the water-borne diseases among Tajikistan population for 2003-2008 (per 100 thousand of the population)

- Typhoid
- Hepatitis A
- Bacterial dysentery
- Total acute intestine infections

### Summary

- **2003:** Typhoid 1031, Hepatitis A 83.7, Bacterial dysentery 28.6, Total acute intestine infections 1206.3
- **2004:** Typhoid 921.9, Hepatitis A 38.7, Bacterial dysentery 42.3, Total acute intestine infections 1206.3
- **2005:** Typhoid 159.2, Hepatitis A 37.7, Bacterial dysentery 174.6, Total acute intestine infections 78.2
- **2006:** Typhoid 36.8, Hepatitis A 29.9, Bacterial dysentery 29.9, Total acute intestine infections 25.7
- **2007:** Typhoid 111.8, Hepatitis A 21.0, Bacterial dysentery 21.0, Total acute intestine infections 30.2
- **2008:** Typhoid 156.9, Hepatitis A 17.8, Bacterial dysentery 23.3, Total acute intestine infections 17.5
• In order to supply the population of the Republic with the water of the household – drinking quality there are 721 centralized water-pipe systems and over 1400 sources of the decentralized water supply (springs, wheels, etc);
• The source of water for 105 water pipes are the open –air reservoirs that are exposed to massive pollution by the waste waters, 66 (62.9%) out of them do not comply with sanitary requirements due to lack of zones for sanitary protection, required complex of treatment and disinfection facilities;
• Due to limited power supply, especially in rural areas the population is forced to use the water from open-air reservoirs, which are massively polluted with waste water of the sewage - treatment facilities, agricultural – household and industrial discharges;
• Water-pipe lines belonging to the former kolkhozes/collective and joint farms and enterprises are in extremely unsatisfactory conditions;
• Due to deteriorated state of the water-pipe lines in the Republic every year there are up to 10 thousand registered outbreaks at the water-pipe nets and facilities, which are not liquidated in time.
• Disinfection of water – piped water is maintained only in water – pipe line in Dushanbe, Kulyab, Khujand, Istaravshan, Kanibadam, Isfara;
• Production control for the water quality is kept only in Dushanbe and Khujand;
• In rural water-pipe lines the water disinfection and production control for water quality is not maintained due to lack of laboratories and trained staff;
• The Republic does not practice other methods for the water disinfection (physical methods);
• The Republic has no any sanitary fills, which comply with requirements of sanitary norms and rules;
• Over half from available sewage - treatment facilities in the Republic do not function;
• All functioning sewage-treatment facilities work ineffectively, sometimes waste waters are discharged to the open - air reservoirs and soils without proper treatment and disinfection.
Main factors affecting the drinking water supply and quality:

- Inadequate treatment of the raw water (disinfection and filtration);
- Irregular disinfection due to lack of chlorine-containing products and disinfection facilities;
- Corrosion and leaking water supply due to outdated water supply networks;
- Stoppage of the power supply, which causes negative pressing that causes a mix of the polluted water to the water-supply net;
- Lack of trained staff and others.
In order to improve the situation it is required to:

• Develop and improve regulatory and legislative acts, adopt the Law “On the Drinking Water”;

• Ensure continuous cooperation among the various sectors at the national and local levels in issues of the planning and implementation of the programs for development of the population’s access to the safe drinking water;

• Develop investments for supply of the quality drinking water, waste water disposal, for treatment facilities, protection of the water supply sources from different pollutions;

• Reconstruct and rehabilitate water collection facilities and urban and rural water-pipe lines.
• Improvement of system for waste water disposal, including its collection, processing and discharge;
• Development of resources of the laboratory services at the state sanitary – epidemiological surveillance centers and production laboratories for ensuring the quality of drinking water and open-air reservoirs;
• Supply of safe drinking water for inhabitants of the localities, which have no water-piped systems through construction of water pipes or establishment of alternative systems;
• Wider introduction of physical methods of water disinfection into the practice;
• Development of education and information on safe drinking water and environment;
• Rehabilitation and capacity building of the enterprises for disinfection of water-piped water supplied to the population, construction of new facilities and waste water treatment.
• Development of requirements towards expertise of the projects (schemes) for sanitary treatment of the cities, rayon centers and settlements from household, agricultural and industrial wastages causing to pollution of reservoirs and soils;

• Strengthening the public information – explanatory, educative hygienic campaigns and improvement of the sanitary conditions;

• Participation in international projects and development of international cooperation on improvement of the drinking water quality, access to the safe drinking water and improvement of the sanitary conditions;

• Achieving the social mobilization on settlement of issue with the safe collection of the natural discharges;

• Development of monitoring system for water and soil pollution
Thank you for attention