WATER SUPPLY AND SANITATION IN TAJIKISTAN

Development trends and recommendations

August 2010
Water Supply and Sanitation Study in Tajikistan

This study is focused on assessing development trends in the sub-sector, and provides recommendations in following areas:

- Existing legislative and institutional basis for water supply and sanitation sector in RT;
- Ownership and sustainability of water supply systems;
- Roles and opportunities for the participation of communities and private sector in managing water supply and sanitation systems;
- Water tariffs: justification, cost recovery and efficiency;
- Analysis of strengths, weaknesses, opportunities and threats (SWOT) of stakeholders in water supply and sanitation sub-sector.

This report was prepared by Jienshoh Bukhoriev, an independent expert, who was contracted by the office of “Oxfam GB” Association in Tajikistan.

The content of this report does not necessarily reflect the opinion of “Oxfam GB” or Swiss Agency for Development and Cooperation.

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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACA</td>
<td>Agency for Construction and Architecture of the Government of RT</td>
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<td>ACTED</td>
<td>Agency for Technical Cooperation and Development (France)</td>
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<td>ADB</td>
<td>Asian Development Bank</td>
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<td>AKF</td>
<td>Aga Khan Foundation</td>
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<td>CA</td>
<td>Central Asia</td>
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<td>CBO</td>
<td>Community-based Organizations</td>
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<td>CEP</td>
<td>Committee for Environment Protection of the Government of RT</td>
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<td>CIDA</td>
<td>Canadian International Development Agency</td>
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<td>CSO</td>
<td>Civil Society Organizations</td>
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<td>DFID</td>
<td>Department for International Development, UK</td>
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<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
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<td>EC</td>
<td>European Commission</td>
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<td>ECHO</td>
<td>Humanitarian Office of the European Commission</td>
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<td>EEC</td>
<td>European Economic Community</td>
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<td>ETM</td>
<td>Exploitation and Technical Maintenance</td>
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<td>GAA</td>
<td>German Agro Action</td>
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<td>GEF</td>
<td>Global Environmental Facility</td>
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<td>GOT</td>
<td>Government of the Republic of Tajikistan</td>
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<td>HLSC</td>
<td>Health Life Style Center</td>
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<td>IDA</td>
<td>International Development Association</td>
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<td>IEC</td>
<td>Information, Education and Communication Materials</td>
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<td>IFI</td>
<td>International Financial Institutions</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>(I) NGO</td>
<td>(International) Non-Governmental Organization</td>
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<td>ISW</td>
<td>International Secretariat for Water</td>
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<tr>
<td>KJKP</td>
<td>Cooperative Housing and Communal Services Enterprise</td>
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<td>KMK</td>
<td>State Unitary Enterprise for Housing Services</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>MEDT</td>
<td>Ministry of Economic Development and Trade of RT</td>
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<td>MMWR</td>
<td>Ministry of Melioration and Water Resources of RT</td>
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<td>MOA</td>
<td>Ministry of Agriculture of RT</td>
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<td>MOE</td>
<td>Ministry of Education of RT</td>
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<td>MOH</td>
<td>Ministry of Health of RT</td>
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<td>MSDSP</td>
<td>Mountain Societies Development Support Programme</td>
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<td>RDC</td>
<td>Rural Development Committee</td>
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<td>Acronym</td>
<td>Description</td>
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<tr>
<td>RT</td>
<td>Republic of Tajikistan</td>
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<td>SDC</td>
<td>Swiss Agency for Development and Cooperation</td>
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<td>SECO</td>
<td>State Secretariat for Economic Affairs, Switzerland</td>
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<td>SES</td>
<td>Sanitary and Epidemiological Service</td>
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<td>SIDA</td>
<td>Swedish International Development Agency</td>
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<td>SIPC</td>
<td>State Investment and Property Committee of RT</td>
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<td>SWI</td>
<td>State Water Inspection</td>
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<tr>
<td>TJS</td>
<td>Tajik Somoni (national currency)</td>
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<td>TOD</td>
<td>“TojikObDekhot” – agency for design, construction and maintenance of drinking water systems in rural areas of Tajikistan</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNICEF</td>
<td>United Nations Children’ Fund</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>WB</td>
<td>World Bank</td>
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<td>WSS</td>
<td>Water Sector Strategy of RT for 2006-2015</td>
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<td>WUA</td>
<td>Water Users Association</td>
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<td>WUC</td>
<td>Water Users Committees</td>
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Foreword

Water resources play significant role in sustainable development of every country, including environmental sustainability, poverty reduction, food security, health and livelihoods of all citizens. Therefore, water related issues receive significant attention at the global level. For example, UN General Assembly has adopted Resolution № 5/196 as of 20 December, 2000, which announced the year of 2003 as the International Year of Fresh Water, as well as the Resolution № 58/217 as of 23 December, 2003 on the International Decade “Water for Life” for 2005-2015. Remarkably, these resolutions were adopted by the initiative of Tajikistan.

The number of international initiatives and documents are focused on water related issues, including UN Millennium Development Goals, Johannesburg Plan of Implementation of the World Summit on Sustainable Development, world water forums and summits, etc.

“64 billion cubic meters of water resources or 60% of river flows of Aral Sea basin are accumulated in Tajikistan, which makes Tajikistan one of the richest country with water resources…” “However, despite this wealth of water resources, more than 40% of the population of Tajikistan does not have access to safe drinking water, while provision of water in rural areas remains a critical challenge”1.

This, in part, is related to deteriorated water supply system, which requires urgent attention.

Water supply, especially drinking water supply, is undeveloped with only 90% of urban and 41% of rural population having access to the centralized safe drinking water supply.2.

Existing water supply systems require significant reconstruction and rehabilitation. This issue has been raised many times, so this report is neither first nor the last one in the overall process of collaboration and dialogue between different stakeholders.

I would like to use this opportunity and to express my sincere gratitude to the participants of this dialogue aimed at assessing and addressing water supply issues in Tajikistan. I hope that this dialogue will serve as a basis for further expansion of collaboration and coordination of activities, and will also help in addressing some of the challenges related to the provision of quality, safe and sustainable drinking water supply.

I would like to express my special gratitude to representatives of government and non-government agencies and the donor community for their time and efforts, and also their comments, recommendations and feedback on this assessment.

We will gratefully accept all comments, recommendations and feedback, which will foster the dialogue process and our collaboration, and will also improve the overall management, accountability and efficiency of water supply system through effective implementation of recommendations of this report.

Jienshoh Bukhoriev,
Independent Expert

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2 ibid.
GLOSSARY OF TERMS USED IN WATER SECTOR

**Autonomous Water Supply System** - Structures and facilities for water intake, preparation of the supply to the users without water supply for common use and closed for the common use.

**Centralized Water Supply System** - Complex of engineering structures and facilities which are used for intake and treatment of water, its storage and transportation to consumers, and which are open for public use in prescribed order.

**Drinking Water** - Quality of water in its natural state or after treatment (purification, disinfection, adding of missing substances), which meets defined standards and is used for drinking and domestic purposes, or food production.

**Emergency** - The disabling or break down of a water supply system, sewage or separate structures, equipment and machinery, which can lead to the termination or significant reduction of water delivery volume, quality of water or can cause the damage to the environment, property and public health.

**General (regular) water use** - use of water without use of structures or technical means.

**Health Risk Assessment** - Probability analysis of developments and characteristics of negative impact of poor water quality on public health.

**Hygiene Norms for the Quality of Water from Water Supply Sources** - System of organoleptic indicators of water and acceptable level of concentration of chemical, biological materials, bacterium and level of radiation, which is prescribed by sanitary regulations and ensures that water can be used for drinking and basic domestic needs with and without relevant water treatment.

**License** - Permission to use water objects, which issued by the authorized state body to regulate the use and protection of water.

**Monitoring** - observance, assessment and forecasting of condition of water.

**Non-centralized System of Water Supply** - Complex of engineering structures and facilities for water intake and treatment, which are open for public use, or designated for individual use without the provision of water supply to consumers.

**Operator of Water Supply and Sanitation System** - person with legal status, involved in the operation of water supply and sanitation systems, which are open for use by physical and legal bodies.

**Owner of Water Supply and Sanitation Systems** - Owner who uses and manages his/her own property. The owner has the right to commit any actions to his/her property, which do not contradict existing laws or violate rights of other owners and physical persons. Property use is allowed for any economic and other activities, which do not contradict existing legislation.

**Preparation of Water** - Technological process that aimed at giving water the adequate characteristics of quality, which meet defined standards and requirements of consumers.

**Primary water users** - Physical and legal bodies, which have been provided with water objects for individual use.

**Quality Standards for Drinking Water (regulative requirements)** - Set of indicators of chemical and microbiological composition of drinking water, which defined by scientific and research methods and prescribed by sanitary regulations, and which ensure that drinking water is safe for public health.

**Quality of Water** - Condition of water in the water source and water supply system, which meets the set of standards and requirements demanded by consumers.

**Reliability of Water Supply System** - Ability of the system to provide a particular regime (uninterrupted, per hour schedule) of water supply to consumers in accordance with the set standards for quality drinking water.

**Risk for Health** - Probability of threat to public health, or threat to future generations, as a consequence of poor water quality.

**Sanitary and technical activities** - disinfection and processing of waste waters in water objects, and sanitary protection and improvement of off-shore areas, used for economic activities.

**Secondary water users** - physical and legal bodies, which are allowed to use water objects by the
permission of primary water users based on the contractual agreement or through the agreement with the designated state authority, which regulates water use and protection.

**Schemes of Integrated Use and Protection of Water** - These schemes define main water management and other activities, which are required to satisfy the needs of the population and the national economy in water, to protect waters and predict their negative impact.

**Special water use** - use of water using special structures and technical means.

**Stakeholders** - Government of RT, relevant ministries, agencies and other structures involved directly and indirectly in water supply process; international and local donors, sponsors, investors, public, humanitarian, charitable and other organizations, which has been working, currently working or would like to work in water supply and sanitation sector in Tajikistan.

**State Water Cadastre** - Set of systemized official data on the condition, use and protection of water objects.

**State Register of Water Management Structures** - Set of systemized data on registration of water management structures, which have complex characteristics including economic purpose, as well as legal, physical and geographical, hydrological, technical and economical and other indicators.

**State Support** - Adoption and implementation of national and local programs, which provide support (in the form of subsidies, subventions, soft loans and budget and custom privileges) to owners of centralized systems, organizations operating these systems, and organizations manufacturing equipment, machinery and reagents drinking water supply.

**Surface Water Supply Sources** - Surface water objects (reservoirs and passages), suitable for water supply.

**Tapping** - Collection and direction of water to a defined riverbed for its full usage and protection from pollution.

**Underground Water Supply Sources** - Underground water objects, suitable for water supply.

**User** - Physical and legal body, which receive water in a prescribed order, to satisfy its needs.

**Waste Waters** - Water released into water objects in accordance with defined standards after its use or after it is received from polluted area.

**Water Body (object)** - Concentration of water on the surface of the earth repeating its relief, or subsoil that have the borders, volume and features of a water regime.

**Water Intake Facility** - Hydro technical structure used to channel water to the water passage from the surface water body (reservoir or waterway) or underground water body.

**Water Management Activity** - Activity of citizens and legal bodies linked with use, rehabilitation and protection of water objects.

**Water Passage** - Hydro technical structure used to supply and withdraw water in necessary direction.

**Water Resources** - Water stock from surface and ground waters, which is stored in water bodies, and which are used or can be used.

**Water Supply** - Activity on provision of water to consumers (physical and legal bodies) related to determination of water supply source; design, construction, reconstruction and operation of water supply systems; intake, preparation, storage and provision of water to consumers.

**Water Supply Organizations** - legal bodies operating and using water supply system in accordance with the defined order for water acquisition for their own needs or for its transfer to other persons.

**Water Supply Rate** - Estimated quantity of drinking water required to satisfy physiological and domestic needs of a user during 24-hour period in a particular settlement and particular object in cases of regular functioning of water supply system, its breakdowns and emergency situations.

**Water Supply Sources** - Water bodies or their parts, which contain water with characteristics that are in compliance with prescribed hygiene norms for water quality, and which are used or can be used for water intake in water supply system with or without relevant treatment procedures.

**Water Supply System** - System of pipes and adjoined structures required for water supply.

**Water Pipe** - Complex of structures including water intake, water pumping stations, water purification or preparation stations, water pipe networks and reservoirs which ensure provision of water of
acceptable quality.

**Water Protection Lines (Zones)** - Territory directly adjoining the river-bed, channels of various purposes, water reservoirs and other water bodies with a special water consumption regime to protect these bodies from pollution, silting by products of erosion, blinding from driftwood and other negative effects, and also to create a favorable water regime.

**Water User** - Physical or legal body, who has gained the legal right to use a water object for the centralized, non-centralized or autonomous water supply.

**Zone of Sanitary Control (ZSC)** - area designated for sanitary protection from pollution of water supply sources and water pipe structures, as well as territories of their location.
1. THE GOAL AND METHODOLOGY OF THE ASSESSMENT

The study on “Water supply and sanitation in Tajikistan” was conducted in the framework of the project “Water supply and sanitation in Tajikistan” financed by the Swiss Cooperation and Development Agency (SDC) in Tajikistan.

“Water supply and sanitation in Tajikistan” is a qualitative analysis of the legislative and institutional basis in Tajikistan, and is based on the previous Water Management Study in Tajikistan prepared by “Oxfam GB” Association in 2007.

Analysis of current legislation, institutional challenges at all management levels and statistical data collected through meetings with representatives of state structures of all levels, water users and their representatives, was conducted in the framework of this assessment.

Concrete recommendations were made based on the findings of this assessment, which take into account the current situation, principles of market economy, existing instructional structures and their responsibilities, prescribed in the legislation.

The goal of this study is to assess development trends in the sub-sector, and to provide recommendations for all stakeholders on further improvement of the situation in the following areas:

- Existing legislative and institutional basis for water supply and sanitation sector in RT;
- Challenges of rural drinking water supply:
  a) Construction of new and rehabilitation of existing systems;
  b) Management and maintenance of existing systems
  c) Drinking water tariffs, cost recovery and efficiency;
  d) Role of Private Sector in management the water supply systems;
  e) SWOT analysis (strengths, weaknesses, opportunities and treats) of stakeholders in sub-sector: state bodies (as a regulator and operator), donors, international organizations, civil society organizations (as owners of water supply systems), private sector and water users (rural population, in particular).

Outcomes of this assessment are intended for the Government of RT, line ministries and agencies, local authorities, as well as local and international investors and donors.

The following methods of data collection and analysis were used for this assessment:

- Collection, review, analysis and interpretation of statistical data;
- Analysis of legislation, state programmes and concept papers;
- Review of programmes, projects, reports and publications of different organizations/institutions;
- Follow-up on publications and news in mass media;
- Field visits to villages, where water supply systems has been built;
- Individual meetings and interviews with representatives of stakeholders (state structures, civil society, international and local NGOs, donors, financial institutions, rural drinking water supply project implementers and water users.

This assessment was conducted by the independent expert, who has extensive experience in conducting such studies.

Overall, this assessment was completed in 39 working days.

The study consisted of the following stages:

1. Inception phase:

- Meetings with representatives of Oxfam’ Project on drinking water supply and sanitation in Tajikistan in order to develop and agree upon the plan of actions, methodology, potential contacts, organization of meetings, and on the focus and results of the assessment;
- Statistical assessment: collection and review of the relevant documentation (project reports, legislation documents, resolutions, and other related documents, publications, etc.);
- Organizations of meetings with relevant representatives of stakeholders (state structures,
donors, agencies, international and local NGOs, committees on water resource management, civil society organizations, and resource centers in the field - based on the list agreed with Oxfam).

2. **Assessment phase:**
   - Continuation of meetings with relevant representatives of stakeholders;
   - Individual discussions with main stakeholders (representatives of government structures, donors, international and local NGOs, and other main counterparts);
   - Discussions of the preliminary findings with representatives of Oxfam’ Project on drinking water supply and sanitation in Tajikistan;
   - Observations, analysis and interpretation of collected data.

3. **Consolidation phase:**
   - Processing of collected data: review and consolidation of collected data, comments and recommendations and other related information for the final report;
   - Preparation of the first draft of the report (summary of the introduction, chapters, conclusions and recommendations), its presentation to the team of Oxfam’ Project on drinking water supply and sanitation in Tajikistan, and expectation of comments, proposals and recommendations of the project team for the report improvement;
   - Report editing based on received comments, proposals and recommendations;
   - Preparation of the second draft of the report (executive summary, main findings and recommendations).

4. **Finalization phase:**
   - Final discussion with the Oxfam’ Project on drinking water supply and sanitation in Tajikistan;
   - Preparation and presentation of the final version of the report.
2. BRIEF OVERVIEW OF THE WATER SECTOR IN TAJIKISTAN

Although Tajikistan has significant sources of fresh water, its rural population has limited access to safe drinking water.

Water supply systems have been operating for 30 - 50 years. There has been no adequate technical maintenance of these systems in the last 10-15 years, which resulted in their current poor technical capacities.

Only 20% of the population in rural areas is provided with centralized drinking water supply. Other residents use water from different sources (springs, wells with hand pumps, canals, precipitation, etc.), which do not comply with existing requirements for sanitation and hygiene\(^6\).

More than 70% of existing infrastructure is worn and requires significant rehabilitation and reconstruction. These conditions lead to the deterioration of drinking water quality and pose a serious threat to public health\(^4\).

Moreover, current state of drinking water supply systems causes significant water loses due to leakages through water pipes (50-60% on average). This decreases the volume of water supply to the population and creates a dangerous epidemiological situation due to the pollution of underground water\(^5\).

The spread of infectious diseases in rural areas and settlements is observed in areas with inadequate drinking water supply. In most of the cases, water conduits in rural areas are operating with serious violation of technical regulations.

Lack of access to clean drinking water supply and sewage systems poses a serious threat to the population of Tajikistan\(^6\).

93% of urban residents are provided with drinking water. 75% of Tajikistan’s population resides in rural areas\(^7\), with 40% of the population not having access to safe drinking water\(^8\), and with only 3% having access to sewage systems. 47% of rural toilets are not safe in terms of sanitary and hygiene norms. Despite their significant number (98.6%), the access to adequate sanitary facilities is quite limited\(^9\).

Only 55 out of 66 towns, district centers and settlements have centralized water supply system.\(^10\). 87% of urban and 20% of rural residents receive water from centralized water supply systems\(^11\).

“Tajikistan is one of the pilot countries for the implementation of MDGs. In accordance with the MDG Needs Assessment, our country needs for about 1 billion USD in order to halve, by 2015, the proportion of the population without sustainable access to safe drinking water. The Government of RT has adopted its “Programme on improvement of the provision of safe drinking water to the population of RT for 2008-2020”\(^4\).

In order to address existing water related challenges, the Government of RT adopted more than 15 programmes, strategies and plans of actions in the last five years; these initiatives laid the framework for dozens of projects for more than USD 500m. These documents included some of the recommendations of the Water Management Study of 2007.

Unfortunately, despite all our efforts, the process of implementation of these projects and programmes has been delayed due to the financial and economic crisis and recurring natural disasters, which have a negative impact on the country’s budget\(^12\).

The analysis of water supply legislative and institutional basis shows that in addition to the lack of financial resources, sustainable provision of clean safe drinking water in Tajikistan is challenged by:

- Absence of sustainable legislative basis for water supply sector. The current Water Code of RT is insufficient for regulation of existing water supply issues;
- Late payments of water fees by water supply consumers;

\(^1\) Programme on improvement of the provision of safe drinking water to the population of RT for 2008-2020.
\(^2\) Ibid.
\(^3\) Data from KMK and TOD, 2008.
\(^4\) UN, 2004
\(^5\) Amendments to the WB’ Assessment on Poverty, 2005 rga, page 2
\(^7\) Booklet of the Project “Water Supply and Sanitation in Tajikistan”.
\(^8\) Programme on improvement of the provision of safe drinking water to the population of RT for 2008-2020, approved by the Government’ Resolution №514 of 2 December, 2006.
• Absence of the coordinating body, which would promote a common technical policy on the design, rehabilitation, construction and maintenance of water supply systems;
• Absence of accurate assessments of water supply, water and absence of water meters;
• Limited electricity supply for water supply systems, especially in winter time;
• Inadequate technical capacities of water supply structures. More than 70% of existing water supply systems deteriorated, and this proportion is increasing every year\(^\text{13}\);
• Lack of electric power and hydro-mechanical equipment;
• Absence of the common approach to ownership of water supply systems, and etc.

In order to improve provision of clean drinking water to the rural population, it is essential to implement the following activities using existing capacities of organizations, which are working or would like to work in this area:

• Implementation of reforms in water supply sector and implementation of tariff policy in order to improve the overall management and technical capacities of water supply systems;
• Introduction of efficient systems for the assessment of water supply structures and water;
• Adoption of the separate Law of RT “On drinking water and water supply”. This will require establishment of the working group (with the participation of all stakeholders), which will assess all issues related to water supply, including international experience in this area, and will come up with the draft law, which will outline the main principles, rights and responsibilities of all parties, provisions for practical and realistic implementation, and mechanisms for guarantees as prescribed by the Constitution and other laws of RT;
• Training of specialists, technical and managerial staff, and establishment of adequate conditions for their work;
• Rehabilitation, reconstruction and expansion of existing water supply systems with involvement of relevant stakeholders;
• Construction of local water intake structures for water supply systems in rural areas;
• Improvement of awareness of the population of its responsibilities on water use and observance of sanitary and hygiene requirements;
• Improvement of the quality of drinking water sterilization process in accordance with the state regulations, protection and maintenance of drinking water sources and main water intake structures of water supply systems;
• Development and adoption of interim programmes and standards for further implementation of Sanitary norms and regulations for water supply and sanitation, which were adopted in 2007;
• Elimination of linkages in water supply system, installment of water meters for each water user, etc.

In 2006, the Government of RT adopted its Programme on improvement of the provision of safe drinking water to the population of RT for 2008-2020 in order to address existing challenges in water supply sector\(^\text{14}\). The main goal of this programme is to ensure sustainable provision of clean and safe drinking water to the population of Tajikistan.

Provision of access of the population to safe and clean water is also one of the priority tasks in order to ensure poverty reduction, decrease mortality rates, improve health status and prevent infectious diseases.

The Government of Tajikistan believes that it is necessary to implement the following activities in order to achieve the goal of this programme:

• Training of technical and managerial staff in water sector, improvement of the culture of water consumption, sanitary and hygiene activities, and attraction of public and private investments for water supply system;
• Rehabilitation of existing water supply systems, construction of small, medium and local systems and water intake wells for individual and group use, based on project designs;

\(^{13}\) Programme on improvement of the provision of safe drinking water to the population of RT for 2008-2020
\(^{14}\) The Programme was adopted by the Government of RT: №514 as of 2 December, 2006.
• Introduction of new technologies, rehabilitation techniques, methods for drinking water sterilization, automated operational systems, quality control and water inventory, physical disinfection using ultraviolet rays, and construction of laboratory for water quality assessment;

• Introduction of new technologies to soften and clarify drinking water, and further physical disinfection of water sources with hard and turbid water;

• Rehabilitation, reconstruction and expansion of existing systems, construction of new centralized water supply systems based on feasibility studies with the use of advanced methods of water supply, modern equipment, materials, control and measurement systems, sterilization techniques and self-management methods;

• Targeted use of internal and external investments, and introduction of effective technologies and equipment;

• Rehabilitation of capacities of scientific-research and design-production institutions;

• Construction of local water supply systems in mountainous areas of the country, which have sufficient amount of springs, rivers, streams and underground waters with good quality and sufficient rate of flow.

The Programme of the Government of RT for 2008-2020 is aimed at ensuring the provision of regular access of 7,683,900 people, including 6,304,000 people in rural areas, to clean and safe drinking water.

**However, successful implementation of this Programme depends on contributions from investors, international financial institutions, state budget and consumers.**

Therefore, it is envisaged that the financing for the implementation of activities outlined in the Programme on improvement of the provision of safe drinking water to the population of RT for 2008-2020 (USD 960 million by exchange rate of TJS to USD in 2007) will be provided by local and foreign investors, international financial organizations and the state budget. Currently, 20-23% of government’s resources are already available and 18% - from donors.

Currently, the main international organizations, which work with the state bodies to implement various projects on rehabilitation and construction of drinking water supply systems, include: World Bank, European Bank for Reconstruction and Development, International Fund for Agricultural Development, Swiss Agency for Development and Cooperation, Japan International Cooperation Agency, European Commission, UNDP, UNICEF, German Agro Action, Oxfam, Caritas, International Water Secretariat, Mountain Societies Development Support Programme, CESVI and others.

All these organizations have common objective to achieve sustainable exploitation and technical maintenance of water supply systems. However, a general lack of adequate networking between these organizations often hampers the promotion of innovative and sustainable development approaches. It should be mentioned that this gap is met by the TajWSS Network of organizations on sustainable water supply and sanitation in Tajikistan that provides a good platform for improved networking that leads to broader replication of different approaches and create more enabling environment. Furthermore the participants can draw on each other experiences and adopt them to their own context.

However, there is a need to improve the existing legislative base on drinking water supply and ownership of the infrastructures of water resources, in order to ensure adequate maintenance of water supply systems in Tajikistan.

Sustainable access to clean and safe drinking water is one of the main human rights as stated in both international and local legislation. However, the vast majority of the population are unaware they have a right to affordable, safe potable water. The few that are aware are typically unaware of the redress mechanisms available to them when their access is denied. There is a grave need for consumers to be aware of when the water supplying companies are violating the law, to develop confidence to demand proper service and safe water from water suppliers and develop skills to file claims and demand compensation when appropriate.

By 2010, ‘60% of the country’ population has access to safe drinking water. The Government of RT will increase this proportion to 80% in the following 5 years as the economic capacities of the country

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15 From the speech of Rahimov S., First Deputy Minister of Melioration and Water Resources of RT, 3\textsuperscript{rd} meeting of the sustainable water supply network, Dushanbe, 8 April, 2010.
increase”. At the same time, “more than 40% of the population of Tajikistan does not have access to safe drinking water, while provision of water in rural areas remains a critical challenge”.

As it is shown in the above chart, the proportion of water use for irrigation in 2009 was 93.9%, for drinking water supply and industry - 2.4%, for fishery - 0.6%, and other sectors - 0.7%.

Water consumption is combined with a number of negative factors, such as, excessive consumption, non-payments for provided services, inadequate water metering, etc.

Insufficient budget allocations, low tariffs and inefficient use of internal and external investments mean that there have been no tangible changes in the resource base and in the quality of provided services.

Most of the efforts of donors and international organizations to rehabilitate and reconstruct the water supply system in the last decade have not been successful. This happened due to a number of factors, which need to be taken into account in order to achieve sustainability in water supply sector:

- Insufficient legislative base and institutional fragmentation;
- Lack of effective approaches in management of water supply and sanitary systems;
- Lack of clarity in division of roles and responsibilities between state and non-state stakeholders providing relevant services;
- Inadequate tariff policy;
- Need in high qualified specialists and trainings;
- Need in new approaches and innovations;
- Necessity to increase awareness of the population and decision-makers on the rational use of water.

Currently, the Water Code of RT is the main legislative and regulatory document, which defines the main principles of priority access to drinking waters.

**The level of awareness of the population on water supply legislation is low. The local population is not informed about approved legislative and regulatory acts in a timely manner, which leads to delays in their implementation acts in 2009, which simplify the procedures related to the construction of water supply systems; however, the local population and relevant organizations are not aware of these documents.**

The Government of RT recognizes that there is a need to introduce comprehensive structural and institutional reforms in water sector, as well as to revise existing legislative framework and to adopt a separate Law “On drinking water and its supply.

Meanwhile, it is necessary to create a working group (with the possible participation of all stakeholders). This working group will assess all issues related to water supply, including international

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16 Saifullo Safarov, Deputy Director, Center for strategic research at the President of RT


18 Water Sector Development Programme, Tajikistan, Dushanbe, November 2009.

19 SNR, p. 51

20 Ibid, стр.51
experience in this area, and will come up with the draft law, which will outline the main principles, rights and responsibilities of all parties, provisions for practical and realistic implementation, and mechanisms for guarantees as prescribed by the Constitution and other laws of RT; 

Private sector participation in drinking water supply is hampered by the lack of mechanisms for public-private partnership, existing administrative barriers, including prohibition of privatization of the centralized drinking water supply systems", low rehabilitation investment return and insufficient state support.

It is necessary to create favorable legislative framework in order to address the issue of permitting the privatization of centralized water supply systems.

Ability and willingness of consumers to pay for water supply services is much to be desired. It is necessary to attract private investments in rural water supply in order to create small enterprises at the local level.

It is also necessary to pay attention to the low quality of strategic plans, lack of skilled professionals and existing focus on water supply as priority area. While the Ministry of melioration and water resources is responsible for development and implementation of the water supply policies, it lacks necessary capacities to be able to implement these tasks.

Another important challenge is related to the access of different stakeholders to official data on water supply and sanitation, as well as transparency and systematic approach to its collection.

As the analysis of official statistical reports and publications shows, there is no one specific single source of official information, which would be able to answer such questions as:

- Proportionality of water consumption by sector: irrigation; drinking water; industry; recreation and fishery.
- Access of the population to sources of drinking water supply and sewage systems by regions, and in the country, overall.
- Ratio of access of urban and rural population to sources of drinking water supply and sewage systems.
- Quantity of drinking water supply systems, and ratio (in percentage) of state and private owners.
- Quantity of on-going project in drinking water supply, proportion of contributions of the state, international investors, local investors and donors.;
- Drinking water tariffs by regions, and in the country, overall and any other statistical data related to drinking water supply.

Analysis of various sources shows that the same statistical data is used without any updates from year to year in different programmes, frameworks, publications, reports, and etc.

Although, there is a slight increase in financing of water supply and sanitation subsector in compare with 2007, capacities of donors to fund various initiatives are limited. Moreover, major donors are considering alternative approaches in order to guarantee the sustainability of their decisions. Main conclusions of this assessment confirm that donors are cautious when it comes to rural water supply financing. This tendency might continue until the key challenges related to the sustainability of water supply facilities are addressed, and favorable conditions for the sub-sector development are created. This means that opportunities to receive financial assistance from international donors for water and sanitation programmes are very limited.

\[21\] Part 3, Article 57, Water Code.
3. LEGISLATIVE FRAMEWORK FOR DRINKING WATER SUPPLY IN TAJIKISTAN

Tajik water legislation is based on the national Constitution and includes Water Code, current legislation and regulatory acts and international legal documents recognized by Tajikistan. Main national legislative documents regulating various aspects of water relations include:

- Constitution of RT adopted on November 6, 1994 (amended by referendum of June 22, 2003);
- Water Code of RT adopted on November 10, 2000 (amended in 2006, 2008 and 2009);

According to the Constitution of RT, water belongs to the state, and the state guarantees its effective use in the interests of people.

Tajik Water Code regulates economic relations for the use and protection of water resources, provision of legal basis for the support and development of water use and protection of water resources, and determination of the main principles and approaches for the use and protection of water resources. In accordance with the current Water Code, drinking water supply systems, which are on the balance of any structure, cannot be privatized.

The Law of RT “On Water Users Association” provides legal regulations for the establishment, activities and management of water users associations, as non-commercial organization for the operation and maintenance of irrigation systems.

Main objectives of water users associations include:

- Involvement of its members in the management, repairing and rehabilitation of irrigation structures;
- Provision of guarantees for adequate and equitable water distribution, and, first of all, between members of associations and other water users;
- Ensuring rational and effective water use in order to save resources and prevent contamination, water logging and salification of land, and etc.

In accordance with the law “water users association” is a “non-commercial organization established by legal entities, which have the right to use the land for agricultural purpose”.

Despite constitutional guarantees of the right of every person to unification in water users associations and to participation in establishment of public associations, such as water users association, provision of the Law of RT “On water users associations” do not apply to users of drinking water (both citizens and legal bodies).

The Law of RT “On natural monopolies” is one of the legislative documents regulating drinking water supply in Tajikistan. In accordance with this law, all services of water supply and (or) sewage system are within the authorities of structures of the natural monopoly. The structure of the natural monopoly is an economic entity (legal body), which is tasked with provision of labor and (or) services related to drinking water supply to users.

Directive on the order of approval and issuance of permission for the special water use (adopted by the State committee on environment protection and forestry in January 20, 2005) is one of the most important legal and regulatory acts related to drinking water supply and sewage systems.

This directive covers water use for all types of needs and includes provisions on the following:

- Order of approval of the permit for special water use, and issuance of such permits by authorized state bodies regulating water use and protection;
- Set of documents required to receive special permission;
- Order for introduction of changes and termination provisions for permit for special water use in Tajikistan;

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22 Article 3, Water Code of RT.
23 Article 13, Constitution of RT.
24 Part 3, Article 57, Water Code of RT.
25 Article 17, Constitution of RT.
26 Article 28, Constitution of RT.
27 Ibid.
28 Article 5, Law of RT «On natural monopolies».
29 Ibid, Article 4.
30 For drinking water supply, irrigation, fishery, sewage, industry, energy, etc.
• Order for the review of the construction (reconstruction) projects for enterprises, facilities and other structures, which have impact on water conditions, regardless of the form of ownership.

Based on the analysis of this directive, it was concluded that it is very difficult to understand and is in need of revision and improvement. First of all, there is a need to have a clear division between the procedure for giving permission for special water use for drinking purposes, and the procedure for giving permission for special water use for any other purposes. Second, it is also necessary to reduce the volume of required information by eliminating duplicate or unnecessary documents from the list. Third, this directive is in contradiction with existing legal acts regulating the order of administrative procedures related to construction activities\textsuperscript{31}.

Besides, based on the amendments to the Article 6 of the Water Code of RT\textsuperscript{32}, the order of execution, registration and issuance of permissions for special water use shall be approved by the Government of RT, while the authorized state body regulating water use and protection, shall define the List of types of special water use and the limits for water intake from water sources\textsuperscript{33}.

Besides, there are many laws regulating different aspects and issues related to water (see Attachment 1. List of legal and regulatory acts regulating water supply and sewage issues).

The Government of RT approved a number of legislative and regulatory acts on drinking water supply in 2002-2009, including:

• Concept paper on the rational use and protection of water resources in RT\textsuperscript{34};
• State Water Cadastre\textsuperscript{35};
• Concept paper on the development of fuel and energy sector of RT for 2003-2015\textsuperscript{36};
• Order for encouraging water users performing activities on rational use and protection of water\textsuperscript{37};
• Order of execution, registration and issuance of permissions for special water use\textsuperscript{38};
• Rules and regulations for use of water objects for hydro-energy purposes\textsuperscript{39};
• Programme for economic development in Tajikistan till 2015\textsuperscript{40};
• Programme of priority tasks on improvement of melioration of irrigation lands in Tajikistan for 2005-2009\textsuperscript{41};
• Concept paper on transition of Tajikistan to sustainable development\textsuperscript{42};
• Food security programme for Tajikistan till 2015\textsuperscript{43};
• State environment programme of RT for 2009-2019\textsuperscript{43};
• Programme for the rehabilitation of pressure pipes of pumping stations of the Ministry of melioration and water resources PT\textsuperscript{44};
• Order of administrative procedures related to construction activities in RT\textsuperscript{45};
• Rules and regulations on connection to engineering networks and provision of communal services\textsuperscript{46}, etc.
• Medium-term implementation plan of the Framework for environment protection in RT for 2010-2012\textsuperscript{47};

\textsuperscript{31} Resolution of GoT №282 of 6 May, 2009 and №531 of 1 October, 2009.
\textsuperscript{32} Law of PT of 20 March, 2008, №381.
\textsuperscript{33} Part 2, Article 23, Water Code of RT.
\textsuperscript{34} of 1 December 2001, №551
\textsuperscript{35} 30 April, 2002 №193
\textsuperscript{36} of 3 August 2002, №318
\textsuperscript{37} Resolution of GoT of 31 August, 2002, №349
\textsuperscript{38} Resolution of GoT of 3 December, 2002, №485.
\textsuperscript{39} Resolution of GoT of 4 March, 2003, №95.
\textsuperscript{40} of 1 March, 2004, №86
\textsuperscript{41} of 2 July, 2005, №236
\textsuperscript{42} of 1 October, 2007, №500
\textsuperscript{43} of 27 February, 2009, №1123
\textsuperscript{44} of 29 April 2009, №235
\textsuperscript{45} of 6 May 2009, №282.
\textsuperscript{46} As of 1 October, 2009, №531
\textsuperscript{47} of 27 February 2010, №94.
• Concept on reforming the housing services in RT, 2010-2025\textsuperscript{88} and etc.

In addition to the laws and decisions of the Government of RT, there are sectoral regulatory acts, which cover some specific issues related to water supply:

• Construction norms and regulations for water supply and sanitation\textsuperscript{89};

• Sanitary norms and regulations 2.1.4.004-07 Drinking water. Hygiene requirements for the quality of water from centralized drinking water supply systems. Quality control. Approved by the resolution of the Ministry of Health of RT as of 28 February, 2007, №73-A. Registered with the Ministry of Justice of RT on 1 March, 2007, №245;

• Sanitary norms and regulations 2.1.4.004-07 Requirements for the quality of water from non-centralized water supply. Sanitary protection of sources. Approved by the resolution of the Ministry of Health of RT as of 28 February, 2007, №73-A. Registered with the Ministry of Justice of RT on 1 March, 2007, №245;

• Sanitary norms and regulations 2.1.4.004-07 Zones of sanitary protection of water supply sources and water pipes for economic and drinking purposes. Approved by the resolution of the Ministry of Health of RT as of 28 February, 2007, №73-A. Registered with the Ministry of Justice of RT on 1 March, 2007, №245;

Matrices of the main laws, other legislative and regulatory acts, concept papers, strategies and programmes on water issues are included in Attachment 2.

\textsuperscript{88} От 1 июля 2010 года, №321.

\textsuperscript{89} Some of these norms (construction norms and rules) have been revised after the collapse of Soviet Union. However, the core documentation on these issues is still valid. Things have been still unclear by July 2010, and not all specialists have updated documents, thus there is lack of access to these regulations in the field, which hinders their implementation at the local level.
4. RURAL WATER SUPPLY AND SEWAGE SYSTEMS

4.1 State bodies regulating water sector

Protection and use of water resources is based on the combination of basin, territorial and administrative-territorial principles of governance and is performed by the Government of RT, local authorities, as well as special authorized state bodies responsible for the regulation of protection and use of water resources.50 Tajik legislation defines four state structures, which have direct responsibility for regulating water resources use and protection (see Table 1).

Table 1. Authorized state structures responsible for regulating use and protection of water resources

<table>
<thead>
<tr>
<th>Government of RT (Executive Office of the President of RT)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MMWR</strong></td>
</tr>
<tr>
<td>• Rural water supply and pasture irrigation;</td>
</tr>
<tr>
<td>• Rational use of water</td>
</tr>
<tr>
<td>• Land melioration</td>
</tr>
<tr>
<td>• Use and maintenance of water objects</td>
</tr>
<tr>
<td>• Formation, use and protection of water resources</td>
</tr>
<tr>
<td><strong>CEP</strong></td>
</tr>
<tr>
<td>• State control for protection and rational use of water resources</td>
</tr>
<tr>
<td>• Research and examine issues related to restoration and reproduction of water resources</td>
</tr>
<tr>
<td>• Development and introduction of measures aimed at saving properties of water</td>
</tr>
<tr>
<td>• Determination of norms for special water use</td>
</tr>
<tr>
<td><strong>Chief Geological Department</strong></td>
</tr>
<tr>
<td>• Research and determination of water resources</td>
</tr>
<tr>
<td>• State control on surface waters</td>
</tr>
<tr>
<td><strong>Chief Department for Safety Control in Industry and Mining</strong></td>
</tr>
<tr>
<td>• State control on:</td>
</tr>
<tr>
<td>• Use of therapeutic, mineral, thermal and fresh waters</td>
</tr>
<tr>
<td>• Chlorination of water in treatment plants and water preparation systems (in towns of republican and regional significance)</td>
</tr>
<tr>
<td>• Water supply circulation</td>
</tr>
</tbody>
</table>

- The Ministry of Melioration and Water Resources of RT51 is a core structure of the government for water resources and land irrigation, which is responsible for development of the common state policy and legislative and regulatory framework on land melioration, use and maintenance of water objects, formation, use and protection of water resources, construction, rural water supply and pasture irrigation.52
- The State Committee on Environment Protection of RT is a central body of the government, which is involved in implementation of the common state policy on environment protection, forestry, special protected areas, hydrometeorology, rational use of natural resources, and enforces state control on environment protection and use of natures.53
- The Chief Geological Department of RT is a central body of the government, which implements the state policy, and manages and coordinates activities related to geological research, rational use and reproduction of mineral and raw resources, as well as to the State geological information on interiors of Tajikistan.54
- The Chief Department for Safety Control in Industry and Mining, Government of RT is a special authorized central body, which is responsible for adoption of legislative and regulatory acts, control and oversight over compliance with industrial safety regulations, rational use and protection of interiors, circulation of explosives intended for civic use, and control over geological research on interiors of the country.55

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50 National report on the implementation of Johannesburg plan on “Integrated management of water resources and improved efficiency of water use by 2005”, supported by UNEP.
51 Organizational chart and management scheme of the Ministry of melioration and water resources of RT - Attachment 3.
52 Regulations on the Ministry of Melioration and Water Resources of RT as of 28 December 2006, № 595.
54 Regulations of the Chief Geological Department, Government of RT, 28 December 2006, №617.
55 Regulations on the Chief Department for safety control in industry and mining of the Government of RT, 28 December 2006, №618.
### Table 2: Key organizations involved in management of water resources in Tajikistan

<table>
<thead>
<tr>
<th>Other ministries and agencies</th>
<th>MMWR</th>
<th>Government of RT State Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>• AMA: Regulations on water tariffs;</td>
<td>• Land meioration;</td>
<td></td>
</tr>
<tr>
<td>• MoH: control on water quality (SES) and prevention of water borne diseases (HLSC);</td>
<td>• Water resources management;</td>
<td></td>
</tr>
<tr>
<td>• CEP: control over use and protection of water resources;</td>
<td></td>
<td></td>
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<tr>
<td>• Chief Geological Department: control over surface waters;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• State safety control: use of therapeutic, mineral, thermal and fresh waters;</td>
<td></td>
<td></td>
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<tr>
<td>• MoF – budget planning and resources distribution;</td>
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<td></td>
</tr>
<tr>
<td>• MoE: approval of learning materials (IEC, PH) for schools, colleges, etc.;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• ACA: licensing related to construction and architecture;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Tajik standard: standardization, certification of goods</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Local authorities**
- President’s authorized bodies at regional, municipal and district level
- Jamoats: self-government at rural and village levels

**TOD**
- Rural water supply;
- Pasture irrigation;
- Construction, reconstruction, technical maintenance of water supply systems, mostly for main pipelines

**KMK + KJKP**
- Communal services, including:
  - Water supply;
  - Sewage – operation and technical maintenance in municipalities, district centers in rural areas

**Vodocanal**
- Urban water supply
- Construction;
- Reconstruction;
- Technical maintenance of water supply system and main water pipe systems

**Community level**
- Public associations/businessmen (private operators) in the field (drinking water providers), which own water supply systems

Authorities of these bodies are defined in the Regulations on distinction of functions of authorized state bodies responsible for regulating the use and protection of water resources.

In addition to the above mentioned government bodies, there are other institutions, which, to some extent, address issues related to the provision of drinking water to the population:

- President’s Advisory council on improving the investment climate in Tajikistan is responsible for facilitating the development of recommendations and proposals intended for the President of RT, the Government of RT and other state bodies, and aimed at improving the investment and business development climate in Tajikistan needed to promote the social and economic development of the country;
- The Ministry of Economic Development and Trade coordinates the activities on planning and forecast of the rational use and protection of water resources;
- The Ministry of Health and its a) Sanitary and epidemiological services (SES), which ensures safe sanitary and epidemiological environment for the population of the country, and guarantees the right of citizens for favorable environment, safe drinking water and quality control over the water from centralized and non-centralized water supply, in particular; b) Republican healthy life style center, which is responsible for preventing the spread of diseases

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56 TOD was created in 1984 during the Soviet Union era and was reporting directly to the Government of Tajikistan. In 1997 this structure was reconstructed and became a part of MMWR. TOD is responsible for the construction, operation and maintenance of water supply systems, which it has on its balance (may be able to provide such services to other organizations based on contractual agreements) and for pasture irrigation in rural areas. TOD is operating in Isfara, Istrovnax, Nacho, B.Gafurov, Spitamen (Gugd Region), Gissar, Rudaki and Vazob (DRD); in all districts except Khovd, Shurabad, Muninabad, Hamadoni (Khatlon Region). By July 2010 TOD does not have presence in GBAO.

57 KMK was a part of the Ministry of communal construction and was reconstructed after the collapse of Soviet Union. KMK is the state unitary enterprise, which operates on sustainable basis, but under state control over key staff positions and appointments. In rural areas KMK operated only in districts centers. KMK is present in 55 cities and districts, except 10 cities and districts, where municipalities are responsible for provision of water supply and sewage services.

58 Dushanbe, Khujand, Chkalovsk, Kayrakum, Spitamen, Fayzabad, Sarband, Jilikul, Nurek and Rogun.


60 The Advisory council was established by the Order of the President of RT as of 19 December 2007, № 356.
(including water-borne diseases) through improvement of the awareness of the population and provision of trainings on public health issues for medical staff;

- The Ministry of Education provides special information, education and communication materials (IEC) and approves learning materials for school, college and university curriculums (e.g. on public health and healthy life style);

- The State committee on investments and state property of RT is a central government body, which implements the state police and legislative regulations on investments, manages the state property, and leads and implements privatization of the state property, including drinking water supply systems;

- The State committee on land management and geodesy of RT participates in the selection of land sites suitable for construction, files the land management case in cooperation with the client, issues land use certificates based on the decision of the district (municipality) chairman, and maintains the state land cadastre;

- Agency on construction and architecture of the Government of RT develops and approves construction norms and regulations, which include issues related to the design, review, expert appraisal, and approval of the project documentation for the construction and commissioning; the agency conducts expert appraisal, reviews and approves PD, issues construction permits, performs control and oversight over construction activities, and participates in approval of the commissioning of drinking water supply structures;

- Anti-monopoly agency of the Government of RT (AMA) develops and approves guidelines for price (tariffs) setting or price ceiling for drinking water supply, defines the order of price regulation for services (including for drinking water supply), and agrees on tariffs for paid services for water drinking supply;

- Agency for standardization, metrology, certification and trade inspection is responsible for organization and implementation of activities related to certification of products, provision of the state control and oversight on standards and technical regulations compliance, measurement assurance, and enforcement of the obligatory certification in RT in order to ensure safety of life, health and property of the population, protection of environment, compliance with trade regulations, interchangeability and competitiveness of products, uniformed methods of control and labeling, protection of consumers' rights, and provision of state metrology control for measurement tools, etc.;

- “Barki Tojik” provides technical requirements for project documentation design, connects water supply facilities to electric lines, and provides regular electric supply for water supply facilities;

- Local state executive bodies (led by chairmen of regions, municipalities and districts) are the main stakeholders in provision of rural water supply and sewage. Local authorities have the following responsibilities:
  a) To establish and liquidate enterprises for drinking water supply and sewage;
  b) To manage water supply systems within communal ownership;
  c) To ensure control over the use of water resources, construction and reconstruction of water objects established based on the relevant communal ownership;
  d) To regulate any other relationships on the use of water resources and ensure implementation of the Constitution, laws and other legal and regulatory acts of RT on drinking water supply and sewage.

- Local self-government bodies in villages and settlements (jamoats) are responsible for the following activities in drinking water supply sector:
  a) Maintenance and improvement of water supply sources;
  b) Provision of control over sanitary conditions of water supply sources.

### 4.2 State approaches to the ownership and sustainability of drinking water supply and sewage systems

In accordance with the Water Code of RT (Articles 53 and 54), safe drinking water supply shall be provided through centralized and non-centralized water supply systems. The quality of water in centralized and non-centralized water supply systems shall be in compliance with the prescribed sanitary norms and requirements (Article 53).

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61 Constitutional law of RT “On local bodies of state power”, 17 May, 2004, No28
While using water objects for drinking, household and other needs of the population through the centralized water supply system, legal bodies, which operate or own household and drinking water pipes, shall have the right to collect water from water supply sources in accordance with issued permit for special water use and to supply it to consumers. Legal bodies are liable:

- to comply with all prescribed technological requirements for the provision of drinking water;
- to provide drinking water, which complies with existing norms of quality, measure the volume of water intake, and regularly control the quality of water in water intake points;
- to ensure regular drinking water supply regime to satisfy needs of the population and food industry;
- not to violate the regular regime of water supply to the population, if there is no need in drinking water for the technological processes of the organization;
- to inform authorized state institutions on the regulation of protection and use of water, and sanitary institutions and local authorities on divergence of water quality from the prescribed norms.

While using water objects for drinking, household and other needs of the population through the non-centralized water supply system, enterprises, organizations and citizens shall have the right to collect water directly from the surface and underground sources based on the order of the general and special water use. The use of water intake facilities provided for these purposes shall be based on the regulations defined by the authorities of the area of their location.

In accordance with the Article 57, Part 3 of the Water Code, *centralized and non-centralized water supply sources cannot be privatized*. However, the same article (Part 1) states that “*centralized and non-centralized drinking water supply systems can be the property of republican, municipal or legal bodies*”. This law *does not clarify what legal bodies (organizational and legal forms)* can own water supply systems. It is possible that this provision was the reason why in recent years some private legal bodies acquired ownership rights on drinking water supply systems after their built them on their own expenses.

The status of the water supply systems built with the support of international donors and charity organizations in rural areas is also unclear. These systems usually use water from springs, which are located in 5000 meters from the villages, where systems are built.

In order to save drinking water resources, it is not permitted to use underground drinking water for needs other than drinking. However, in some districts, where there are no surface water sources and there are sufficient underground drinking water resources, the specially authorized state body, which regulates the use and protection of water, may give permission for using these water resources for purposes other than drinking and household water supply.

**The state guarantees provision of regular and uninterrupted drinking water supply to its citizens** through:

1. Identification of responsibilities of the local authorities, owners of systems and organizations in case of failure of the centralized or non-centralized drinking water supply systems:
   - To introduce measures for the provision of water supply from reserve drinking water sources or supply systems;
   - To use technical components for daily and collective water purification;
   - To provide drinking water in tanks for public use.

   In accordance with the logic of the Water Code, local governments and other owners of drinking water supply systems shall be liable for timely provision of drinking water. However, *none of the existing laws makes provisions for such liability*.

2. Establishment of non-government (public) organizations for joint water supply by private and legal bodies on voluntary basis. Non-government organizations on joint water supply are created in order to improve sustainability of water supply in one settlement or in a group of settlements with the participation of the whole or the part of the population through construction of new systems, rehabilitation of existing water supply systems, maintenance, financing and operation of systems used by public.

   State bodies are obliged to provide support to the establishment of such non-governmental organizations for joint water supply activities.

Water bodies are provided for general use and special use.
General water use is guaranteed without any permission. However, in case of general water use it is obligatory to comply with the requirements of the bodies responsible for the state sanitary control, regulations on life safety on water and special authorized state body regulating the use and protection of water resources.

General use is provided for free of charge. Special water use is provided based on permits issued by:

- The Ministry of melioration and water resources - for irrigation, based on defined limits;
- Committee on environment protection of the Government of RT - for the use of water from natural sites;
- Local governments, jamoats of settlements and villages - for the use of underground waters, which are not used for centralized water supply, through installment of dug wells, drive filter wells and catchment structures on sources, which do not require forced decrease of water level.\(^{63}\)

If necessary, permissions for special water use shall be agreed with the special authorized state body on sanitary control and other relevant institutions. Review of water use conditions and decision on issuing the water use permits shall be finalized by each authorized body within two weeks.\(^{64}\) This requirement leads to the significant increase of time needed for issuance of permission for special water use.

Special water use is permitted for a defined fee, which shall be paid by all water users regardless of departmental affiliation, citizenship, forms of ownership and management methods:

- For the use of water resources within defined limits (except agricultural irrigation and forestry);
- For excessive and irrational use of water resources;
- For services related to accumulation, transportation to consumers’ border, distribution and purification of water;
- For granting the right to use water resources for irrigation;
- For performing any other economic activities, except agricultural irrigation and forestry.

In accordance with the Article 39 of the Water Code of RT, water bodies are allocated for temporary or permanent use. Water use without defined time limit is considered as permanent. Temporary water use can be short-term or long-term - from 3 to 25 years. \textit{It is unclear what the law attributes short-term and long-term water use to.} If necessary, terms of water use can be extended for a period not exceeding the initial term. General water use does not have time limit. Permanent permits for special water use can be granted for the use of waterworks facilities, water basins, irrigation systems and other hydraulic facilities.

Draft permit for special water use shall be reviewed by the special authorized state body, which is responsible for regulating the protection and use of water, within one month after the submission of all required documents.

Special water use permits are issued based on the approved format. The permit is issued in four copies: one copy for the state body issuing the permit, second – for the owner of the water supply system, third and fourth – for the relevant authorized state bodies regulating the protection and use of water resources depending on the purpose of water use.

After the application for special water use is submitted, the following state bodies are consulted through coordination advisory meetings:

- State structures of SES;
- State geological structures;
- Committee on the state safety control in industry and mining;
- State bodies on environment protection;
- State bodies on water resources management;
- Owners of water supply s and sewage systems;
- Veterinary services structures;
- Primary water users (if permission is issued for individual use).

\(^{63}\) Article 33, Part 1, Water Code of RT.
\(^{64}\) Paragraph 1.6. Instructions on the order of approval and issuance of permit for special water use.
5. DEVELOPMENT TRENDS FOR RURAL WATER SUPPLY AND SEWAGE SYSTEMS IN RT

5.1 Construction of new and reconstruction of existing rural water supply and sewage systems

Both surface and underground waters are used in Tajikistan as sources of drinking water supply. “Some drinking water sources in Kurgan-Tube area in Khatlon and in Sugd region have very hard (15-22 mg. e/l) mineralized (up to 10 f/l and higher) water”\(^{65}\).

In the process of constructing new network, rehabilitating and maintaining existing water supply systems, financing and operating networks of general use, MMWR and local authorities provide advisory, technical and other support to the development of non-governmental organizations on joint water supply, which are created in order to improve sustainability of water supply in one settlement or in a group of settlements with the participation of the whole or the part of the population.

In order to make decision on construction of enterprises, facilities and other objects, which impact conditions of water, and in order to issue the permit for special water use, the special authorized state body regulating the use and protection of water resources \(^{66}\) shall be guided by the existing schemes for integrated water use and protection and water resources balance, which take into account interests of water users and environment needs.

Installation, design, construction and operation of new and reconstructed enterprises, facilities and other objects as well as introduction of new technological processes, which impact conditions of water, shall ensure the rational use of water, comply with the requirements for environment protection and health safety, and shall, foremost, take into account the needs of the population in water for drinking and household purposes.

This approach requires that the following requirements are addressed:

- measurement of water collected from water objects and of water returned to water objects;
- protection of water from pollution, clogging and depletion;
- prevention of harmful impact of water;
- land flooding restricted to minimal volume possible;
- protection of land from flooding, logging, increase of underground water, salinization and drought;
- establishment of special water protection zones and preservation of natural landscape.

In the process of design and construction of enterprises, facilities and other objects, which can impact conditions of water, it is important to introduce timely measures for protection of fish and other aquatic flora and fauna and to maintain proper environment for their reproduction, as well as to take into account existing opportunities for use of water objects for sport and recreation activities.

In the process of design and construction of new or rehabilitation of existing facilities for intake of underground water, the operational regime for these facilities shall exclude possibilities for water pollution and depletion.

Location of the construction of enterprises, facilities and other objects, which can impact conditions of water, shall be agreed upon with the special authorized state body regulating the use and protection of water resources, local governments, state sanitary control bodies and other relevant authorities as defined by the legislation of RT.

Project designs for construction of enterprises, facilities and other objects shall be agreed upon with the special authorized state body regulating the use and protection of water resources and any other related authorities, in cases and in the order defined by the legislation of RT.

Construction of enterprises, facilities and other objects, which can impact conditions of water, shall be permitted only based on the favorable decision of the state ecological expertise.

It shall not be permitted to operate:

\(^{65}\) From the Programme on Improvement of the provision of safe drinking water to the population of RT for 2008-2020, approved by the Government of RT, №514, as of 2 December 2006.

\(^{66}\) Special authorized bodies include: MMWR, CEP, State safety control, Chief geological department (see Table 1). Each of these bodies, their representatives in the field (depending on the complexity of the object and source of water), and local authorities are involved in the process of granting special water use permit.
• Water users facilities, which have not been granted permission for special water use and favorable decision of the state ecological expertise;
• New and reconstructed enterprises, workshops, units, communal and any other objects, which do not have relevant facilities preventing water pollution or their negative impact;
• Irrigation systems, water reservoirs and canals prior to introduction of measures, which prevent flooding, logging, salinization and erosion;
• Drainage systems prior to completion of water intake chambers and other facilities as defined in approved project designs;
• Water facilities, which do not provide compensation for any damage to fish sources and any other aquatic flora or fauna;
• Boreholes without water control facilities and establishment of sanitary zones, where deemed necessary.

It shall not be permitted to load the water reservoirs prior to completion of the reservoir floor as outlined in project designs.

Project designs for construction of bridges, passages and other transport communication lines through water objects shall ensure proper arrangements for flood water flow, implementation of the regime for water object operation, protection of fish and aquatic flora and fauna, prevention of pollution, clogging and depletion and any other negative impact.

Table 3. The order of procedures related to the construction of water supply and sanitary facilities67.

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Involved stakeholders</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection and allotment of the land plot68</td>
<td>Chairman of district/city, Commission, State land committee</td>
<td>Selection and allotment process is regulated by the land legislation</td>
</tr>
<tr>
<td>Acquisition of Architectural and planning assignment (APA) and Technical requirements (TR)69</td>
<td>Architecture of the district/city, technical services</td>
<td>TR can be acquired from technical services through the architecture based on “one-stop shop” principle</td>
</tr>
<tr>
<td>Development of Project documentation (PD)</td>
<td>Project designer, project design organization (PO)</td>
<td>PD is prepared based on contractual agreement with project designer or PO, which have relevant license</td>
</tr>
<tr>
<td>Agreement and approval of PD</td>
<td>Architecture of the district/city</td>
<td>PD is agreed upon only with architecture</td>
</tr>
<tr>
<td>Expert evaluation of PD</td>
<td>Department for external expert evaluation of ACA</td>
<td>Expert evaluation shall be conducted within 20 working days depending on the size and complexity of the object</td>
</tr>
<tr>
<td>Acquisition of permit for construction</td>
<td>Architecture of the district/city</td>
<td>Timeframe - 5 working days</td>
</tr>
<tr>
<td>Construction</td>
<td>Contracting company, control and oversight agencies</td>
<td>Terms and costs are defined in contractual agreements</td>
</tr>
<tr>
<td>Preparation of the object for approval</td>
<td>Working commission (WC)</td>
<td>WC shall be created by the principal client, timeframe for preparation - up to 10 days, depending on the significance and cost of the object</td>
</tr>
</tbody>
</table>

67 The order is approved based on the Resolution of the Government of RT, 6 May, 2009, No282.
68 This procedure shall be followed if the system is built for the first time, and there was no land plot selected for this.
69 This procedure is necessary if there is a plan to connect to the existing system.
<table>
<thead>
<tr>
<th>Procedures</th>
<th>Involved stakeholders</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance of the object for further operation</td>
<td>State acceptance commission (SAC), primary customer, designer, contracting company</td>
<td>SAC shall be created by the primary client - chairman of district/city, ministry, agency</td>
</tr>
<tr>
<td>Property registration</td>
<td>Registering body</td>
<td>Certificate on ownership rights is issued</td>
</tr>
<tr>
<td>Acquisition of technical passport</td>
<td>Technical inventory bureau</td>
<td>Technical passport is issued</td>
</tr>
</tbody>
</table>

There are three well-known stages of construction of new water supply and sewage systems:

- **Pre-construction phase:** This phase includes: selection and allotment of the land plot (for new objects), acquisition of APA and TR (for objects that will be connected to existing water supply systems), development, agreement and approval, expert evaluation of PD and issuance of the construction permission. Design of water supply objects shall be provided by the organization or person (persons), which have license to design water supply objects. All project designs on construction of new and reconstruction/rehabilitation of existing water supply systems shall be subject to state evaluation, which is conducted by the Chief department of state expertise for project documentation of the Agency for construction and architecture of RT. It is recommended to define the owner of future drinking water supply systems from the beginning of the process. It is important to evaluate and analyze capacities of the potential owner to maintain sustainable functioning of the system. If possible, it is important to develop a plan for capacity building and also to provide required technical equipment and assistance. In accordance with land legislation, it is required to go through the whole process: from selection and allotment of the land plot and issuance of the document confirming the selection of the land plot to the stage when the decision on allocation of the land plot for construction is made. It is required to receive approval/permission of each authorized body (the list of these bodies varies depending on the size and the purpose of the system). Drinking water supply systems can be republican and communal property or the property of legal bodies. Physical and legal bodies can own water supply system, which they built independently in accordance with existing norms and regulations of RT.

- **Construction phase:** This phase includes: construction, and control and oversight over the construction. Construction is usually conducted based on the contractual agreement between the client and contracting organization. The client (funding organization) prepares and signs a contract with the contracting organization (which has license, experience, machinery, good reputation, etc.), which is selected through the tender process among licensed construction companies. The contract shall cover the following aspects: project feasibility study, construction stages and funding allocations, standards of quality for construction materials. Technical project design of the water supply system should be attached to the contract. The process of construction will be subject to designer’s inspection, technical control and state construction oversight. Besides, there is a possibility of numerous inspections in accordance with the Law of RT “On inspection of activities of business entities in RT”.

- **Post-construction phase:** After the completion of construction, the client establishes a working commission, which includes representatives of client, designer and contracting company in order to prepare the constructed object for approval. The working commission assesses all relevant parameters and requirements and provides its conclusion, which is submitted to the State acceptance commission. This commission is also established by the client - chairman of the district/city, head of the ministry or agency - and includes representatives of different stakeholders. Representatives of the client, designer and contracting company can also participate in the work of the commission. Usually, commission identifies different issues (mainly related to construction works and the quality of construction materials), which shall be addressed by the executor (contracting company) by the defined date in order to ensure smooth hand-over of the system to its future owner. Issues like registration of the property and issuance of technical passport are also addressed during this stage.

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71 Article 57, Water Code of RT.
5.2 Operation and maintenance of the existing drinking water supply systems

In general, operation of water supply in Tajikistan is based on decentralized approach. MMMWR is a core structure for rural water supply in 24 districts, which are covered by 5 main pipe lines and serve 1.2 million residents. Besides, MMMWR has functions to coordinate activities of relevant organizations, including international agencies working on water supply systems, regardless of their form of ownership.

The State Unitary Enterprise “Khojagii Manzili Komunali” (KMK) provides services to 830 000 residents in 15 cities/towns and 40 district centers through its affiliated units. KMK is responsible for provision of water to big and small cities/towns, district centers and settlements. It is accountable to the Government of RT. KMK has 32 affiliated units in the field, which are responsible for water supply and sewage systems and which, in fact, have dual accountability (they are accountable to local governments as well).

“TojikObDekhot” of MMMWR is a republican body, which is responsible for rural water supply, including provision of drinking water to rural settlements, which have rural water supply systems.

SUEs “Dushanbevodokanal”, “Khujandvodokanal”,vodokanals of Chkalovsk, Kanibamad, Kurgan-Tube, Vakhdat, Isfara and Spitamen district operate water supply and sewage systems in their respective locations, and are accountable only to relevant local authorities.

Drinking water supply system requires efficiency and sustainability. Relevant stakeholder organizations in Tajikistan are well-informed about non-operational water supply systems. Unstable electricity supply, poor maintenance, limited financial resources for repairs, lack of skills, low quality of construction materials and unavailability of spare parts are among many other causes of inefficiency of the system. Communities need assistance from the Government of RT and donors in providing additional resources for the operation and technical maintenance of the existing drinking water supply systems.

In accordance with the Programme on improvement of the provision of safe drinking water to the population of RT for 2008-2020, most of existing water supply systems were built in 1960-1980.

Joint activities of relevant enterprises have been suspended due to significant transformation of management arrangements and economic relations, which had a negative impact on maintenance and development of drinking water supply.

One of the causes of decreased productivity in the sector is a lack of favorable conditions and persistent physical deterioration of fixed assets as their service life has already expired.

As there are no relevant industries developed in Tajikistan, pipes and other parts for water pipe systems, which comply with acceptable standards of quality, are not manufactured in the country. These materials are imported from abroad, which impacts the cost of systems and eventually becomes a burden on consumer’s shoulders.

Relevant water supply enterprises do not have capacities to operate and maintain existing systems. Moreover, the situation is deteriorating since water consumers do not pay their water bills in time.

There is a need for further reforms in water sector. Despite increasing state budget allocations for water sector, this funding covers only 8-10% of all actual needs of state organizations in water sector. The budget of MMMWR during the Soviet era amounted at USD 380 mln. (technical maintenance, repairs and construction, but excluding needs of agricultural sector in water resources). Below is the budget of MMMWR:

<table>
<thead>
<tr>
<th></th>
<th>MMWR</th>
<th>Amount (in Tajik somoni)</th>
<th>Increase compared to previous year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2007</td>
<td>10.4 mln.</td>
<td>64.5%</td>
</tr>
<tr>
<td>2</td>
<td>2008</td>
<td>22.981 mln.</td>
<td>54.7%</td>
</tr>
<tr>
<td>3</td>
<td>2009</td>
<td>29.319 mln.</td>
<td>21.6%</td>
</tr>
</tbody>
</table>

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73. Law of RT “On State budget of RT for 2008”.
74. Law of RT “On State budget of RT for 2009”.

28
There is no separate budget line for MMWR in the Law of RT “On State budget for 2010”. However, the budget allocates “TJS 200 mln. for the provision of clean drinking water to the population, expansion of irrigated land, improvement of land melioration, determination of the size and land cadastre (State budget for 2010 - Author). This is an increase for TJS 48 mln. or 33% compared to 2009”.

Moreover, laws of RT on state budget for 2008 and 2009 have separate budget lines for the rehabilitation of the water supply system in Khujand from the republican budget at the amount of TJS 4 mln. and TJS 3.5 mln. respectively.

One of the most critical challenges in water sector is internal and external staff turn-over. There is a lack of skilled professionals in state organizations. Many of those who were working with the projects financed by donors, left for other organizations abroad (e.g. in Russia), for international organizations or private sector. The main reason is that staff workers are not satisfied with the wages offered in state institutions.

5.3 Tariffs for water supply and sewage, their cost-recovery and efficiency

In accordance with the Article 58 of the Water Code, drinking water supply is financed through the following sources:

- Payments of users of centralized water systems and drinking water consumers;
- Funding from republican budget;
- Funding from local budgets;
- Contributions of physical and legal bodies, including investments, received for the development of drinking water supply systems;
- Any other sources, which are not forbidden by the laws of RT.

General water use in RT is free of charge, while special water use is provided for a fee:

- For the use of water resources within defined limits;
- For excessive and irrational use of water resources;
- For services related to accumulation, transportation to consumers’ border, distribution and purification of water;
- For permits to use water resources;
- For performing any other economic activities.

In the last several years many systems of drinking water supply have been constructed in rural areas with the support of international donors and charity organizations; however, their current status is unclear.

At the same time, some villages are able to find solutions and come up with ways to manage drinking water supply systems.

Community water users associations have been created by some of rural development committees, which also have accumulation funds and audit commission. Rural development committees define the fee for water use - 1 somoni per family. Community water users association collects these fees for the accumulation fund. These resources are used to pay for the services of one staff (plumber), and also to cover emergency expenses (breakages, accidents, etc.). Audit commission reviews the accumulation fund on ad hoc basis or by the request of the rural development committee, and reports its findings to the general assembly of the rural development committee.

Tajikistan has a very complicated structure, which was created in Soviet era; however, limited budget allocations resulted in lack of technical maintenance of the existing water supply and sewage systems. Ineffective water tariffs also had negative impact on the operation and technical maintenance. All costs were covered by limited subsidies from state budgets (budgets of MMWR, TajikObDekhot, local governments at regional and district levels).

Superior institutions perform their control functions through the heads of affiliate organizations in the field by providing subsidies, capital investments and other resources. As a result, affiliate organizations have to introduce very low tariffs, which do not correspond to actual maintenance costs, thus, they are operating at loss.

From the address of the President of RT to the Parliament on 24 April 2010.
Therefore, rehabilitation and upgrade of existing infrastructure requires significant investments. It is necessary to increase the awareness of the population on the rational use of drinking water (people are not used to closing water taps, which leads to significant losses of water) through campaigns and distribution of IEC materials and social advertisement on water loss, international standards of daily water consumption per person, average water consumption per capita, which also includes the cost of 1/m³ of water.

Installation of water meters could improve the situation as people will have to pay more, which will force them to use water resources more rationally.

It should be noted that currently Vodokanal is installing individual water meters in Khujand and Dushanbe. Khujand water supply system has been upgraded in the recent years with the support from the state budget and international donors, thus it has capacities for installation of water meters. In Dushanbe, water meters are installed mainly for enterprises, institutions and organizations as the existing water supply systems is in poor conditions and is unable to provide sufficient water pressure after the installation of water meters.

The Government of RT is currently working on a gradual increase of water tariffs to eventually achieve the level of cost-recovery. The below table shows that drinking water and sewage tariffs have been increasing every year, e.g. tariffs as of 1 February 2008 is 16 times higher than as of 1 February 2010.

Table 5. Water and sewage tariffs for 2007 - 2010 (based on Dushanbe example)

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Indicator</th>
<th>Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1 April 2007</td>
<td>Per person</td>
<td>0.51 TJS</td>
<td>No information available</td>
</tr>
<tr>
<td>From 1 April 2007</td>
<td>Per person</td>
<td>0.85 TJS</td>
<td>09.6 TJS</td>
</tr>
<tr>
<td>From 1 June 2008</td>
<td>per 1 m³</td>
<td>0.10 TJS</td>
<td>05.4 TJS</td>
</tr>
<tr>
<td>From 1 February 2010</td>
<td>Per person</td>
<td>1.77 TJS</td>
<td>0.70 TJS</td>
</tr>
</tbody>
</table>

The latest changes in tariff scheme were introduced for the capital city and approved by the resolution of MEDT on 12 February, 2010, No327. These tariffs have been applied starting from 1 February 2010.

Despite these developments, Tajikistan is one of the three countries with the lowest tariffs for water supply (as stated by CIS Statistical Committee). Azerbaijan is a leading country with monthly rate of TJS 0.6 per person, while residents of Kazakhstan and Tajikistan paid TJS 0.87 and TJS 1.21 respectively. The highest water tariffs in CIS are in Russia - TJS 20.6578.

There is no uniform rate for water supply services, especially in rural areas. In accordance with the existing legislation, tariffs shall be set by the water supply organization (and there are plenty of them) and approved by the anti-monopoly agency. For example, TOD has 23 organizations in Khatlon and Sugd regions and some Direct Rule districts and sets tariffs for each location separately depending on the cost of each system; these tariffs vary from TJS 0.11 to TJS 0.38. Each of these organizations will also have to cover expenses for the trip to the regional center (for districts accountable to regional government) or to Dushanbe (for DRD) in order to get approval of anti-monopoly body for these tariffs79.

Tariffs for water supply and sewage services shall compensate the needs in financial resources, which is the sum of annual operational costs and the profit80. Operational costs shall be calculated based on the “Regulations on calculation of production (services, labor) costs for enterprises and organizations in RT”81. This document was put into force on July 1, 1999 and was amended by the resolution of the Government of RT on December 3, 2002 (No487).

Since services of water supply and (or) sewage system are regulated by the Law of RT “On natural monopolies”82, it shall be necessary to follow the Order on (public) discussions of tariffs for commodities (labor, services) proposed by subjects of natural monopolies83.

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76 There are separate budget line in the laws of RT “on state budget of RT” for 2008 and 2009 on allocations for water supply system in Khujand for 4 m. and 3.5 m. respectively.
77 See. Attachment 4. Tariffs for the provision of drinking water supply and sewage services to the population of Dushanbe.
79 Data from TOD.
80 Guidelines for the implementation of drinking water supply projects in Tajikistan, page 87.
81 This regulation was approved by the Government of RT on May 12, 1999, No 210.
82 As of March 5, 2007, No235.
83 This order was approved by MEDT on May 28, 2007, No28 and registered with MJ on June 21, 2007, No274.
5.4 The role of the private sector in drinking water supply

Relevant state organizations, such as TojikObDekhot (rural water supply) and KMK (water supply and sanitation in district centers, settlements and cities/towns) are unable to provide adequate drinking water for many rural areas in Tajikistan because of the weak organizational framework, limited budget and inadequate technical capacities. Therefore, rural water consumers very often rely on community-based water supply management.

The Law of RT “On water users associations” covers legal aspects of the organization, operation and management of WUAs as non-commercial organizations established for the operation and maintenance of irrigation systems only. All aspects related to the establishment and operation of other non-commercial structures are regulated by the laws of RT “On public associations” and “On public self-initiative bodies”. These laws regulate social relations, which are related to the right of citizens to unite in public associations or in public self-initiative bodies, and to establish, operate, reorganize and liquidate public associations of public self-initiative bodies. In accordance with the Law of RT “On public self-initiative bodies”, these structures are subject to inventory registration only; however, their legal status and status of decisions that they make is unclear.

Therefore, despite the adoption of the above mentioned laws, it is still necessary to have a clear distinction and definition of roles and responsibilities of civil society organizations and other organizations involved in the management of drinking water supply. Roles and responsibilities of all relevant stakeholders shall be defined in a separate law and regulatory documents, which shall be supported by the agreed mechanisms for collaboration between different organizations (civil society, government and private sector). These mechanisms shall be flexible in defining the role of the civil society organizations, and take into account all internal and external aspects, including technological processes of water supply, duration and level of maintenance, size and complexity of the water supply system, management capacities and social dynamics in the society. However, the problem that civil society is facing is a lack of awareness regarding their water rights and the process through which they can claim their rights and hold duty-bearers to account poses an obstacle to improving the situation.

Furthermore, most of the rights-holders affected are the poor and uneducated rural areas who have little means or courage to claim their rights. Awareness is stronger among duty-bearers, such as the Ministry of Water Resources and Land Reclamation and Dushanbe Vodokanal, but institutional capacities are too weak to address the problem without the help of international organizations.

The following are the potential areas for participation and commitment of the civil society organizations:

- Dialogue with the government in order to officially recognize the right of the civil society organizations to provide services and also to define the role of civil society in this process;
- Conclusion of agreements and long-term contracts for provision of services with adequate incentives;
- Setting up the minimal standards for quality of maintenance and service providers; support to self-regulation, provision of information to and empowerment of consumers;
- Monitoring of effectiveness and efficiency of water supply processes, and their impact on environment.

Authorities often welcome communities’ initiatives of rural water supply; however, they refuse to legalize the civil society organizations and recognize them as partners in service provision. Legal status of service providers helps them not only to gain recognition and trust, but also to deal with contracts, apply for loans and regulate their own operations.

Despite the fact that many legal aspects for private operators have not been resolved yet, they still do operate in some districts, e.g., in Farkhor (UNDP), Muminabad (Caritas) and Vose (Oxfam). These operators work at the district level and face the following challenges: legalization of their activities, lack of support from local authorities and issues related to financial support through concessional loans and credits, etc.

In order to address these challenges it is necessary to review the existing legislation to legalize activities of private operators and eliminate administrative barriers that hamper their activities.

International NGOs and local community organizations usually receive grants from international organizations in order to implement projects related to water resources management. Most of the
international NGOs/UN Agencies/donors encourage local communities to contribute their own resources (human capacities, cash contributions); however these contributions are not sufficient. When external funding is over and the project is completed, local communities lack sufficient resources and are unable to effectively manage the system and provide services.

In order to ensure sustainability and reliability of drinking water supply systems in rural areas, participants of the network on sustainable water supply and sanitation identified the following areas of required improvement:

Legal issues
1. Legal and institutional framework: upgrade of the legislative framework and update of functions of relevant organizations in order to comply with the current requirements of the sector; observance of laws at all levels.
2. Infrastructure ownership: determination / presence of potential owners of WSS

Management issues
3. Management, operation and technical maintenance: clear distinction of roles and responsibilities between regulators and operators, definition of bodies responsible for the operation and technical maintenance of objects.
4. Sector wide strategies for financing and reimbursement should be developed (improved) together with clear policies and arrangements for resolving financial gaps and reimbursing operation and maintenance expenses, to help achieve system cost-recovery.

Improve Capacities
5. The water sector needs a clear strategy to improve municipal and local authority capacities. This should clearly define their roles and responsibilities.
6. Training of stakeholders and staff at all levels should be undertaken to build the capacity and efficiency of the sector.
7. The installation of water meters needs to be made a priority in forthcoming water projects. It should be a requirement that all projects in the sector should include a component covering the installation of drinking water meters.

Economic issues
8. Financial resources: provision of reliable funding from different sources.
9. Ensuring proper and efficient use of budget resources allocated for water supply and sewerage systems needs, as well as diligent coordination and use of loans, grants and other funds;
10. Tariffs settings: free methods of tariffs setting, which guarantee profitable service provision, diversification of tariffs depending on water use.
11. Human resources: presence of skilled professionals; adequate organizational capacities to create favorable and safe working conditions, including sufficient salaries, social benefits package, equipment, etc.

Monitoring issues
12. A large-scale sectoral monitoring systems needs to be developed for assessing the accessibility and functionality of services;
13. Information on population numbers with access to the centralized water supply system and pertaining to the extent of water supply and sanitation networks should be included in the state reporting form. Training materials and seminars will need to be prepared on calculating the new indicators;

Technological issues
14. Compliance with existing standards: mainly for water quality - Sanitary norms and regulations (SanPIN); for construction quality - Construction norms and regulations (SNiP).
15. Quality of construction: International / National certificate for construction materials and spare parts; independent monitoring system / evaluation of construction.
16. Access to knowledge: new technologies, introduction of know-how technologies by operators and regulators; creation of adequate basis for organization/provision of trainings for staff.
17. Access to energy sources, including alternative energy resources; reliability / sustainability (without interruption) energy supply; introduction of new technologies and alternative energy sources.
18. **Sources of water**: hydro-geological capacities of sources of water, water debit, information on reliable geo-technical assessments, data/information received from local residents.

**Social issues**

19. **Ability and willingness to pay or services**: social assessment on poor population; modified and affordable tariffs, reliability and quality of services, which gain trust among consumers.

20. **Attitude and behavior of consumers**: needs assessment of targeted population/ demand for WSS services; culture of water consumption.

**Every donor and international organizations have their own conditions and requirements for implemented projects.**

**Table 6. Requirements of the National Red Crescent Society of Tajikistan for implemented projects:**

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of sustainable water source, preferable spring with the adequate water reserves;</td>
</tr>
<tr>
<td>The source of future water supply system shall be located higher than served rural settlement, so that water could flow without using electricity, as there is a lack of electricity supply throughout the country, especially in winter time;</td>
</tr>
<tr>
<td>The distance between the water source and the settlement shall not exceed 5,000 meters;</td>
</tr>
<tr>
<td>Absence of conflict on ownership right/ use of water sources;</td>
</tr>
<tr>
<td>The size of the population, which requires drinking water supply, shall be not less than 1,000 people;</td>
</tr>
<tr>
<td>Proportion of participation of the population in project implementation shall be 30 - 50% from the overall cost of the project. Use of local working force (“khashar”) is not considered as a contributed share of water users;</td>
</tr>
<tr>
<td>Morbidity rates of infectious diseases in rural areas, etc.</td>
</tr>
</tbody>
</table>

Non-functioning rehabilitated /constructed water supply systems are very well-known across Tajikistan. Unstable electricity supply, poor maintenance limited finances to carry out minor repairs or skills to resolve major problems, poor quality of construction materials and lack of access to spare parts, are just some of the causes of inefficient operation of the system. Communities often request additional funding from donors to rehabilitate the system. Overcoming such dependency requires making the right choice of technology (simple, affordable, locally maintainable), availability of spare parts when needed and well-trained and skilled staff.

In order to ensure technical, institutional and financial sustainability of systems, local community organizations shall be fully involved in the project cycle, including: designing and construction of water system, trainings for capacity building, participation in development of fair tariffs policy, operation and technical maintenance, public awareness on efficient use of water resources, timely collection of contributions, etc.

Service provider should pay special attention to financial management. Budget formulation, tariffs policies, collection of fees and financial statements are the main aspects of transparent service provision. Fee collection and their use - are the core elements of operation and technical maintenance, thus, they should be outlined clearly in laws and regulatory acts, which define rights and responsibilities of state authorities, community organizations, operators and consumers.

Effective community support for rural water suppliers requires adequate system of internal monitoring (water quality, environmental impact, service provision). Such monitoring shall be able to provide opportunities for decisions making and actions at the local level. Monitoring data shall be entered in national or regional information management systems, which ensures adequate long-term planning and investments. Monitoring, data collection and analysis are among the most challenging tasks, which shall be implemented now, as there are limited opportunities at the district, regional and national levels.

### 5.5 SWOT analysis - analysis of strengths and weaknesses, opportunities and threats of stakeholders in water supply and sanitation sub-sector in Tajikistan.

It is necessary to further improve coordination and joint planning of activities on water use at the national level.

SWOT analysis was prepared for the water supply sub-sector in general. Therefore, some of its provisions may partially concern all stakeholders in water supply and sanitation sector.

The current SWOT analysis can serve as a starting point and can be recommended to all interested stakeholders.

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87 In case of submission of similar projects, the main attention is paid to this requirement.
stakeholders. This analysis covers different aspects and focuses on such criteria as strengths and weaknesses of the sub-sector, as well as opportunities and challenges faced by the stakeholders in water supply and sanitation sector in Tajikistan.

**Strengths**

- The Government of RT implements pro-active policy on ensuring sustainability of the water sector, promotion of international cooperation and preservation of water objects;
- There is an adequate legal framework to regulate water relations in the country;
- There is a system for payment of fees for water supply and sewage;
- There is a system of special authorized bodies responsible for management and protection of water resources: ministries, committees, state unitary enterprises;
- Centralized water supply systems are available in most of the parts of the country;
- Availability of engineering and technical staff for the construction and rehabilitation of water infrastructure;
- Existing state system of control for the use and protection of water objects;
- The state encourages the establishment of public associations to maintain and utilize existing economic systems, which are used jointly and individually, in order to ensure fair, effective, timely distribution of water between the members and other water users, collect fees for water supply, settle disputes between the members and other water users on water distribution and use;
- Donors’ interest in providing support to the water supply and sanitation sub-sector, including in rural areas.

**Weaknesses**

- Tajikistan’s water sector is heavily dependent on aid and cooperation from international organizations;
- Reform efforts in water supply and sanitation sector do not meet expectations at the high level of the government and of the water consumers in the field;
- Some regulatory acts, which were adopted in USSR, are still valid, despite the fact that they do not comply with current requirements, and often duplicate functions of authorized bodies. Sometimes, new acts and documents are not published for the information of wider public, which limits access to information;
- Tariffs setting process does not take into account costs of operation and maintenance, which leads to further deterioration of equipment, low levels of wages in water sector and lack of skilled professionals in sector; lack of accurate water measurement and control of consumed electric energy; unprofitability of enterprises and organizations; lack of interest of potential investors to invest in the sector;
- Water resources management system is divided between different state organizations; water resources management is mostly performed by the state organizations; key management rights are concentrated in the centre; absence of public-private partnerships; lack of participation of private sector, which in most cases have social purpose;
- More than a half of existing water infrastructure is in poor condition; equipment is outdated and obsolete; outdated equipment uses more energy to operate; deterioration of water infrastructure is ongoing due to the lack of necessary support and maintenance;
- Existing state system of control for the use and protection of water objects is unable to perform its functions due to the limited technical, economic and human potential;
- Existing water users associations include only legal bodies, and address only issues related to irrigation. There are no public organizations of water users - physical bodies, which would protect their interests and address challenges related to water supply and sanitation;
- There is no single informational portal (internet website), which would provide information, including statistical data, on the current situation in the sub-sector, inventory of water objects, their status and conditions and information on completed and on-going water supply and sanitation projects.

**Opportunities**

- Reform process in water sector is ongoing, which gives stakeholders the opportunity to support the Government of RT and the Parliament in this process and to jointly develop adequate legal
framework, which complies with the current requirements and conditions of the sub-sector in Tajikistan;

- Introduction of the system of free and differentiated tariffs setting for water supply and sanitation services, which is aimed at ensuring profitability of enterprises; state support through direct and indirect subsidies (tax benefits, seasonal energy price decrease), tax benefits for private investments in water supply systems; introduction of the system of penalties for irrational use of water resources;
- Selection and introduction of effective management methods with the use of water saving and energy saving technologies;

Threats

- Deterioration of political and economic relations with neighboring countries;
- One-sided lobbying in legislation processes; widespread lack of observance of the law; interference of local authorities in the operation of water management organizations;
- Inability of operators to cover expenses on water supply; corruption in relations between water management organizations and water consumers, and also oversight bodies.
- Lack of understanding of the current situation in the sub-sector, which lead to lack of clarity on reform processes; insufficient involvement of the civil society, private sector, international organizations and donor community;
- Economic crisis and lack of financial resources for the implementation of planned activities, lack of qualified staff and high staff turn-over.

6. CONCLUSION

A number of strategic programmes, concepts and other documents have been adopted and are currently implemented in Tajikistan. As a result, water tariffs have increased in the last 10 years; however, with TJS 1.77/м³ for drinking water supply and TJS 0.7/м³ for sewage, they still cannot cover all operational and maintenance costs. Fees collection has improved in the recent years and reached 80% (70% in 2007). Water fees collection has improved considerably in areas of implementation of pilot project on the installation of water meters.

Moreover, project staff has organized public awareness campaigns and distribution of IEC materials among the local population. This resulted in more effective and rational use of water by the local population, and also in decrease of negative impact on environment. There are less social conflicts between water users, as water taps are being closed regularly, which ensures that water reaches remote households.

At the same time, the Government of RT recognizes the existing problems in water supply sector and the need for comprehensive structural and institutional reforms in water sector. “Efforts aimed at addressing the existing challenges in water sector are the integral part of the National Development Strategy and Poverty Reduction Strategy of Tajikistan. Based on the indicators of per capita water use, our country is at the bottom line among the countries of Central Asia”88. Water supply enterprises are considered by water users as affiliates of the state government rather than looking at them from technical effectiveness and economic activities point of view. As a result, the quality of provided services is quite low. Meanwhile, consumers tend to blame these water supply and sewage enterprises for the lack of drinking water.

There is no coordinated approach among interested stakeholders related to the mechanisms of hand-over of constructed/rehabilitated water supply systems to the private sector. There are no guiding regulations developed for the hand-over of new/rehabilitated water supply systems. However, there is an “Order on preparation, registration and issuance of permits for special water use”89, which also requires some improvements.

These systems do not have legal registration and are not on the balance of any organization. Usually these systems are handed over to rural development committees (public community-based organizations). However, the issues of their further operation and maintenance have not been addressed. They are not covered by any legislation in terms of payments for their use or the cost of

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their use. In these cases all efforts to define the amount of payment and collect these payments for water use have not been successful. In case of emergency or any break out, representatives of rural development committees have to appeal to international and charity organizations for support.

Based on existing estimates more than 25% of water is lost on its way, 40-70% - in water supply network. Water consumption in Dushanbe is 340-500 liters per person. Annual water consumption throughout the country is 9 880 m^3 per capita.

Irrational use of water and significant subsidies for the maintenance of drinking water supply system in Soviet era has created the artificial norm of excessive use of water resources in Tajikistan.

Strategic plans, developed in recent years, need to be updated based on the current development trends and with the participation of a wider group of specialists and representatives of the civil society in order to improve awareness and accountability on their implementation in the field. Key strategic documents, such as NDS, PRSP and SWS are not available to all stakeholders in rural areas. State strategic plans shall be distributed widely and developed in accordance with the results-based management - SMART;

There are many state organizations involved in water resources management; however, there is no clear distinction between regulators, operators, owners and other organizations, which are responsible for the operation of the existing water supply system and construction of new systems to replace old, inefficient facilities, etc. Inter-agency coordination council on water supply and sanitation at the national level is currently being established in the framework of the project “Water supply and sanitation in Tajikistan”, which is financed by SDC and implemented by Oxfam. This work will be facilitated by UNDP from June 2010 to December 2012;

There is no clear distinction between functions of operators and regulators in the sub-sector, which would allow creating favorable conditions for the improvement of provided services, coordination, quality and efficiency control, protection of environment, development of public-private partnerships, elimination of administrative barriers, profitability and increased state support.

Budget allocations of MMWR for TOD do not cover maintenance costs and are insufficient for the operation of the system. TOD' budget during the Soviet era was 9 mlr. rubles (more than USD 9 min. at that time). In 2010, TOD received TJS 1,217,597, which is much higher than in 2007 (TJS 300,000). Budget of 2010 includes TJS 1 min. for wages and salaries of the staff of the central administration of TOD and TJS 217,000 for any other needs, including financing of 23 affiliated units. Estimated calculations show that TOD will need, at least, TJS 7 mlr. to finance its operations in 2011.

There is a lack of qualified staff in all state institutions. Many of those who worked in the projects financed by donors often leave for other better paid jobs, go to other countries (e.g. Russia), join international organizations or private sector companies. The main reason is that people are not satisfied with the current level of salaries in state institutions, which cannot give them enough incentives to stay.

Effectiveness and sustainability of the systems are not considered during the construction of water supply systems. Non-functioning rehabilitated /constructed water supply systems are very well-known across Tajikistan. Unstable electricity supply, poor maintenance limited finances to carry out minor repairs or skills to resolve major problems, poor quality of construction materials and lack of access to spare parts, are just some of the causes of inefficient operation of the system. Communities often request additional funding from donors to rehabilitate the system. It is encouraging that representatives of the international community in Tajikistan are interested in provision of technical assistance to the Government of RT in order to address these issues.

It is encouraging that the international community in Tajikistan is interested in providing technical assistance to the Government of Tajikistan to address these issues.

7. RECOMMENDATIONS

Some of the recommendations made in the report on the “Management of water resources in Tajikistan” 2007, have been implemented, including:

1) Joining efforts in order to adopt new laws on safe drinking water supply, which define the role of drinking water providers. Draft Law of RT-‘On drinking water and its supply’ was approved by the
Government of RT and submitted to the Parliament\textsuperscript{92}. However, this document does not define the role of drinking water providers, which shall be taken into account during the process of its review and adoption by the Parliament of RT.

2) Provision of consultations with relevant stakeholders, including representatives of the civil society, and further formation of new policies, laws, etc. Ensuring opportunities for active and fruitful participation of all stakeholders. The Network of partner organizations on sustainable water supply and sanitation in Tajikistan was created with participation of the representatives of the Government of RT, donors, UN Agencies, NGOs, civil society and private sector. This network is also working on the implementation of:

a) Recommendations for implementers (UN, international NGOs) on the organization of campaigns (seminars, conferences, symposiums) of different scale (national, regional, district), focus groups, round tables, public campaigns, events, etc;

b) Recommendations for IFIs to continue ongoing joint consultations of all stakeholders (Government of RT, civil society, UN, NGOs, etc) in order to define priority financial needs, to effectively implement the key strategies and programmes related to water supply and sanitation, and also in order to ensure comprehensive and timely implementation of the international legal acts, which were recognized by Tajikistan (e.g. MDGs, etc.)

3) Raise awareness of water users through organization of public campaigns, social advertisements, distribution of IEC materials and etc., in order to decrease the volume of water loss. Periodically carry out promotional activities for the economical use of water and maintenance of water supply systems in the normal state.

4) Develop and implement large-scale projects on installation of water meters in order to ensure effective planning and efficient water use and mitigate negative impact on environment as the population will use water resources more effectively. These projects started in some regional, municipal and district centers, including Dushanbe, Khujand, etc..

5) It is necessary to make SWOT-analysis (both internal and external) for each organization involved in drinking water supply, and compile it in one document for further use. SWOT-analysis was already made for MMWR and TOD\textsuperscript{93}. This approach would be also useful for civil society organizations, private operators and drinking water suppliers in order to identify their own opportunities, development needs and to ensure necessary support to satisfy these needs. Outcomes of this analysis can serve as guiding principles for other stakeholders, including special authorized bodies regulating the use and protection of water, MoH and SES, local governments, Vodokanals and KMK.

However, many of outstanding recommendations of the Water Management Study for 2007 are still valid and require immediate implementation. These recommendations have been updated based on the existing situation and requirements, including:

1. Ensure access to all regulatory and legislative documents, including on-line access, for all interested stakeholders. Distribution of these and other documents among relevant partners (international NGOs, UN, civil society organizations, private sector, mass media, all levels of government) will be very useful in order to ensure general understanding of the situation in the sector

2. Introduce decentralized water management approach in rural areas with active involvement of state, public and private service providers, including through the shared participation of water consumers. This is important since relevant state organizations are unable to provide many rural areas with drinking water

3. Develop justified and effective tariffs and pilot these tariffs in order to evaluate their viability and lay the ground for their introduction throughout the country

4. Organize large-scale (republican and local levels) campaigns (seminars, conferences, working group discussions, round tables, social advertisement campaigns) for water users and other interested stakeholders; actively participate in the process of policy development/ advocacy and promotion activities, organized by other stakeholders, including:

a) Revision of the legislation on water supply, improvement of strategic planning,

\textsuperscript{92} Постановление Правительства РТ от 1 июля 2010 г., №324.
\textsuperscript{93} Detailed SWOT-analysis for MMWR can be found in Oxfam’ report on the «Management of water resources in Tajikistan », December 2007.
b) Restructuring of state bodies in order to improve their efficiency, effectiveness and productivity,

c) Determination of the role of the civil society and private sector in water supply and sanitation, including their shared participation in establishment, operation, maintenance and safety control of the systems of general water supply and use,

d) Monitoring and revision of budget for water supply and sanitation, development of tariffs in accordance with the international experience and local conditions,

e) Support for the technical, institutional and social sustainability of drinking water supply systems,

f) Organizations and provision of technical assistance (e.g. awareness and advocacy campaigns) in order to ensure adequate and effective use and maintenance of water supply and sanitation systems,

g) Involvement of new donors, sponsors and investors for financing of water supply and sanitation sub-sector with the opportunity for shared participation of water consumers;

5. Design and implementation of water supply projects should be based on the adequate selection of technologies (simple, affordable, can be maintained locally) and involvement of skilled and professional staff, in order to ensure effectiveness, efficiency and sustainability of the systems

6. Potential owners of drinking water supply systems should be actively involved in the project cycle and participated in the following activities:

a) Design and construction of water supply system,

b) Provision of training for capacity building,

c) Promote fair tariffs, timely collection of fees, regular operation and technical maintenance, and increased awareness of the population on rational use of water resources, etc.;

7. Organization and provision of capacity building trainings for the operators of drinking water supply systems shall be focused on:

a) Operation and technical maintenance,

b) Transparent financial management system (budget formulation, system of tariffs, collection of fees and financial records),

c) Communication and training skills to ensure that population understands the importance of rational use of water resources;

8. Raise awareness of water users through organization of public campaigns, social advertisements, distribution of IEC materials and etc., in order to decrease the volume of water loss;

9. Develop and implement large-scale projects on installation of water meters in order to ensure effective planning and efficient water use, mitigate negative impact on environment and introduce adequate fees for used water;

10. NGOs and local communities should inform donors and IFIs on their initiatives in the field, so that donors and IFIs could take their work into account during their discussions with the Government of RT and in the process of defining priority areas for financial support.

In order to ensure achievement of MDGs in Tajikistan, reduce poverty and provide the local population with drinking water, it is necessary to implement the following measures in addition to recommendations provided in the Water Management Study for Tajikistan for 2007:

Recommendations for the Government and the Parliament of RT:

• Organize safety of water intakes, water reservoirs and water supply systems, in general;

• Review the opportunities for the revision of existing construction norms and regulations for water supply and sanitation systems, especially those norms and regulations, which were adopted during Soviet Union and are still valid in Tajikistan;

• Ensure public access to the drafts of legal documents on water supply and sanitation for their comprehensive review and analysis, development of a common approach to existing issues and preparation of recommendations for their improvement;
• Review the strategy of primary priority in the sphere of water supply and transfer certain authorities to HMK or to form new agency with structures at the places by the example of former Ministry of Municipal economy. At the same time provide them with the powers associated with the rural water supply which currently engages by TojikObDehot, and the function of operator to provide drinking water supply and sanitation to rural people. The agency must also play the role of regulator to get private and public operators on contract base;

• Develop a thoughtful, coherent and phased implementation mechanism of the current legislation that would address issues of regulating relations in the water supply and the establishment of state guarantees to provide the population with permanent access to quality and safe drinking water, clear lines of authority, rights and responsibilities of legal entities in the water and Sanitation;

• Consolidate efforts in order to develop water supply and sanitation network based on the water legislation, which complies with current development trends and requirements of the sub-sector. Special focus should be made on:
  a) Regulation of relations in water supply sector between regulating, controlling bodies and operators;
  b) Provision of state guarantees on provision of access of the population to safe and quality drinking water;
  c) Regulation of the key aspects of water supply; clear and justifiable definition of rights, responsibilities and authorities of actors in water supply and sanitation sector, etc.;

• Introduce necessary amendments to the legislation in order to comply with existing situation and experience and to address the following issues:
  a) Operation of objects through concessional agreements between the state owner and community/private operator;
  b) Privatization of decentralized (local) water supply systems and consequent enforcement of the accountability of future owners for provision of access for other users and for the maintenance of the systems;

• In order to reduce the terms and simplify procedures related to water supply it’s necessary to provide in the legislation the system of permits for water use on the principle of “Single Window” for example of business registration or obtain building permits94.

• Review the system of price setting, development and approval of tariffs on water supply in order to over the actual cost of these services;

• Develop a plan of cluster construction of water supply systems, and transition from temporary supply system to permanent water supply;

• Organize a comprehensive inventory of all objects of water supply and sanitation system; this work shall be systemized from bottom-up in order to ensure the regular information flow for decision making by relevant services and organizations.

• Publish official statistical information based on the needs of interested donors and investors in order for them to plan their support for construction of new and maintenance of existing rural water supply and sewage systems:
  a) Access of the population to the sources of drinking water supply and sewage systems for the country and by regions.
  b) Ratio of access of urban and rural population to water supply and sewage.
  c) Quantity of water supply systems and ratio (%) of state and private owners.
  d) Quantity of implemented water supply projects; share of the state, international and local investors and donors;
  e) Drinking water tariffs in the country and by regions, etc.

Recommendations for implementing organizations (UN Agencies / international NGOs)

• Construction of new and/or rehabilitation of existing drinking water supply systems shall be guided by: Order of administration procedures related to construction in RT95, Regulations on connection

94 Порядок прохождения административных процедур, связанных с осуществлением строительной деятельности в РТ, утвержденный постановлением Правительства РТ от 6 мая 2009 года, №282.
to engineering networks and communal services\textsuperscript{96} and other regulatory and legislative acts, which have been adopted in order to improve the investment climate and business environment;

- Organize systematic review of the existing and newly adopted legal documents related to water supply and sanitation, especially those adopted for the population and relevant structures, who are directly responsible for their implementation in the field;
- Organize partnerships with all relevant stakeholders, including representatives of the civil society, in the process of development of new strategies and policies in water supply sector, including development and adoption of new laws and other regulatory acts;

**Recommendations for donors and IFIs:**

- Support the establishment of the Inter-agency coordination council at the national level with the participation of representatives of all ministries and agencies, involved in water supply and sanitation;
- Identify pilot districts for development, regulation and monitoring of projects on water supply and sanitation and capacity building for local authorities, private sector, public and self-governance organizations;
- Create trust funds as a pilot model for supporting investments in selected districts in order to provide financial support for the implementation of water supply and sanitation projects, based on research findings and outcomes of pilot projects.

**General recommendations:**

- Existing strategies for donors’ funding should be thoroughly evaluated in order to have a clear general picture of donors’ activities for statistical purposes and also for improvement of coordination between all stakeholders working in drinking water supply sub-sector.
- In addition to analyzing the experience of Tajikistan, it is also important to review international best practices, which can be used in Tajikistan based on the current development trends and existing potential.
- Moreover, it is necessary to analyze potential participation of the private sector in drinking water supply, especially in the process of establishment, use and maintenance of drinking water supply systems.
- To continue ongoing joint consultations of all stakeholders in order to define priority financial needs, to effectively implement the key strategies and programmes related to water supply and sanitation, and also in order to ensure comprehensive and timely implementation of the international legal acts, which were recognized by Tajikistan (e.g. MDGs. etc.)

**Implementation of these recommendations can help all relevant stakeholders to contribute to the establishment of favorable conditions for achieving MDGs and poverty reduction and will also lead to:**

- Improved collaboration and cooperation between interested stakeholders through the establishment of the network of organizations working effectively on achieving sustainable water supply and sanitation;
- Attraction of additional donor funds at the field level;
- Introduction of innovative approaches in addressing issues related to the sustainability of water supply and sanitation in rural areas, including methods of tariffs setting and operation and design of water supply systems;
- Integration of issues like effective management and disasters risk mitigation;
- Changes in legislative and institutional framework for drinking water supply and sanitation;
- Selection, piloting and development of effective methods and approaches in managing, operating and maintaining drinking water supply and sanitation systems in rural areas, and etc.

\textsuperscript{95} This order was approved by the resolution of the Government of RT N\textsuperscript{282}, 6 May, 2009.

\textsuperscript{96} These regulations were approved by the Government of RT, N\textsuperscript{531}, 1 October, 2009.
8. ATTACHMENTS

Attachment 1. List of legislative and regulatory acts related to water supply and sewage systems

<table>
<thead>
<tr>
<th>Title</th>
<th>Date of adoption and №</th>
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</thead>
<tbody>
<tr>
<td>Constitution of RT (amended after the referendum on June 22, 2003)</td>
<td>November 6, 1994</td>
</tr>
<tr>
<td>Codes of RT</td>
<td></td>
</tr>
<tr>
<td>2. Forestry Code of RT (with amendments in laws as of 15.05.1997, №421, 5.01.2008 №352, 18.06.2008 №406)</td>
<td>1993</td>
</tr>
<tr>
<td>Laws of RT</td>
<td></td>
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<tr>
<td>No.</td>
<td>Title</td>
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<tr>
<td>12.</td>
<td>Law of RT “On public associations” (with amendments in law as of 20.03.2008 №384)</td>
</tr>
<tr>
<td>13.</td>
<td>Law of RT “On natural monopolies” (with amendments in law as of 6.10.2008 №433)</td>
</tr>
<tr>
<td>16.</td>
<td>Law of RT “On architectural, urban planning and construction activities”</td>
</tr>
<tr>
<td>17.</td>
<td>Law of RT “On state registration of legal bodies and individual entrepreneurs”</td>
</tr>
</tbody>
</table>

**Decisions of the President of RT and the Government of RT**

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
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<tbody>
<tr>
<td>1.</td>
<td>Order of the President of RT “On introduction of fee for water supply to consumers from state irrigation systems in RT”</td>
<td>8.04.1996, №460</td>
</tr>
<tr>
<td>2.</td>
<td>Order of the President of RT “On improvement of the structure of central bodies of the government of RT”</td>
<td>30.11.2006, №9</td>
</tr>
<tr>
<td>3.</td>
<td>Regulations on collection of fees from consumers for water supply services from the state irrigation systems in RT, approved by the resolution of the Government of RT</td>
<td>25.06.1996, №281</td>
</tr>
<tr>
<td>4.</td>
<td>Regulations on calculation of production (services, labor) costs for enterprises and organizations in RT, approved by the resolution of the Government of RT</td>
<td>12.05.1999, №210</td>
</tr>
<tr>
<td>5.</td>
<td>Concept paper on rational use and protection of water resources in RT, approved by the resolution of the Government of RT</td>
<td>1.12.2001, №551</td>
</tr>
<tr>
<td>6.</td>
<td>Regulations on distinction of functions of special authorized state bodies regulating the use and protection of water resources, approved by the resolution of the Government of RT</td>
<td>4.02.2002, №39</td>
</tr>
<tr>
<td>7.</td>
<td>Order for the maintenance of the state water cadastre of RT, approved by the resolution of the Government of RT</td>
<td>30.04.2002, №193</td>
</tr>
<tr>
<td>9.</td>
<td>Order for encouraging water users performing activities on rational use and protection of water, approved by the resolution of the Government of RT</td>
<td>31.08.2002, №349</td>
</tr>
<tr>
<td>10.</td>
<td>Order on the use of water objects for fishery, approved by the resolution of the Government of RT</td>
<td>5.11.2002, №437</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td>Date</td>
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<tr>
<td>12.</td>
<td>Order on the use of water objects for hydro-energy purposes, approved by the resolution of the Government of RT</td>
<td>4.03.2003, №95</td>
</tr>
<tr>
<td>13.</td>
<td>Economic development programme till 2015 года, approved by the resolution of the Government of RT</td>
<td>1.03.2004, №86</td>
</tr>
<tr>
<td>21.</td>
<td>Concept on transition of RT to sustainable development, approved by the resolution of the Government of RT</td>
<td>1.10.2007, №500</td>
</tr>
<tr>
<td>24.</td>
<td>Food security programme for RT till 2015, approved by the resolution of the Government of RT</td>
<td>2.02.2009, №72</td>
</tr>
<tr>
<td>26.</td>
<td>Programme for the rehabilitation of pressure pipes of pumping stations of the Ministry of melioration and water resources PT, approved by the resolution of the Government of RT</td>
<td>29.04.2009, №235</td>
</tr>
<tr>
<td>27.</td>
<td>Order of administrative procedures related to construction activities in RT, approved by the resolution of the Government of RT</td>
<td>6.05.2009, №282</td>
</tr>
<tr>
<td>28.</td>
<td>Regulations on connection to engineering networks and provision of communal services, approved by the resolution of the Government of RT</td>
<td>1.10.2009, №531</td>
</tr>
<tr>
<td>29.</td>
<td>Mid-term plan for the implementation of environment protection framework for 2010-2012, approved by the resolution of the Government of RT</td>
<td>27.02.2010, №94</td>
</tr>
<tr>
<td>30.</td>
<td>Regulations on the State committee on land resources and geodesy of RT</td>
<td>3.05.2010, №225</td>
</tr>
<tr>
<td>31.</td>
<td>Regulations on Anti-monopoly agency of the Government of RT</td>
<td>3.05.2010, №227</td>
</tr>
<tr>
<td>32.</td>
<td>Concept of reforming the housing services in the Republic of Tajikistan for the period 2010-2025</td>
<td>1.07.2010, №321</td>
</tr>
</tbody>
</table>

Decisions of the ministries and agencies

<table>
<thead>
<tr>
<th>No.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Construction norms and regulations МКС ЧТ 40.01-2008 Water supply. External networks and facilities. Approved by ACA RT</td>
</tr>
</tbody>
</table>
2. Construction norms and regulations 2.04.03-85 Sewage. External networks and facilities. Approved by the resolution of the State Committee on construction of USSR. 21.05.1985, №71

3. Construction norms and regulations 3.05.04-85 External networks and facilities for water supply and sewage. Approved by the resolution of the State Committee on construction of USSR. 31.05.1985, №73

4. Construction norms and regulations 2.06.01-86 Hydro-technical facilities. Main regulations for project design. Approved by the resolution of the State Committee on construction of USSR. 28.05.1986, №71

5. Instruction on the order of approval and issuance of the special water use, approved by the State committee on environment protection of RT 20.01.2005

6. The order of (public) discussions of the proposals for tariffs for products (labor, services) of natural monopolies, approved by MEDT RT 28.05.2007, №28


8. Sanitary norms and regulations 2.1.4.004-07 Requirements for the quality of water from non-centralized water supply. Sanitary protection of sources. Approved by the resolution of the Ministry of Health of RT as of 28 February, 2007, №73-A. Registered with the Ministry of Justice of RT on 1 March, 2007, №245; 28.02.2007, №73-A


10. Tariffs for provision of drinking water and sewage services to the residents of Dushanbe, approved by the MEDT RT 12.02.2010, №3
Attachment 2. Provisions of the key legislative and regulatory acts regulating issues related to drinking water supply and sewage systems

<table>
<thead>
<tr>
<th>Title and brief outline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constitution of RT</td>
</tr>
</tbody>
</table>
| Constitution consists of 10 parts (1. Fundamentals of Constitutional structure; 2. Rights, Freedoms, Core Duties of Individuals and Citizens; 3. Majlisi Oli; 4. The President; 5. The Government; 6. Local Government; 7. The Gorno Badakhshan Autonomous Oblast; 8. The Court; 9. Procurator’s office; 10. Procedure for introducing amendments to Constitution) and 100 articles. As it is mentioned in articles 5 (the individual, his / her rights and freedoms are the highest value, recognition, observance and protection of human and civil rights and freedoms is the obligation of the state) and 14 (freedoms and rights of individuals and citizens are protected by the constitution, the laws of the republic, and international documents recognized by Tajikistan) it is an effective entry point for dialogue on fundamental human right to have access to potable water;

In art. 10, part 1 of the Constitution mentioned that the main law has supreme legal authority and its norms have direct application, laws and other legal acts that run counter to the constitution are of no legal validity. Since Independence up to present times Tajikistan has ratified many internationally accepted instruments and if national laws do not conform to the recognized international legal documents, the norms of the international documents apply; Article 13 stipulates that land, bowels of the earth, water, airspace, animal and vegetable kingdoms, and other natural resources are owned by the state, and the state guarantees their effective use in the interests of the people; In article 38 it is mentioned that everyone has the right to health care and the state undertakes measures aimed on environment sanitation. Article 44 demands protection of nature is the duty of every person.

Water Code of RT

The Purpose of the Water Code of the Republic of Tajikistan is aimed at regulating water relations in order to ensure rational use of water for the needs of the population, branches of economy and the natural environment, protection of water from pollution, damage and exhaustion, preventing and liquidating adverse impact of water, improvement of condition and protection of water bodies, strengthening of lawfulness and protecting the rights of individuals and legal entities in the field of water relations. Water Code of the Republic of Tajikistan describes the economic mechanisms of water use including: charges for special water use and free of charge of general water use, payments for water resources use within limits (excepting agricultural irrigation and forestry), payment for above limits and irrational water use, service fees in regard to collection, transportation of water to consumer.

The Law consists of V Sections, containing 24 Chapters that comprehend 146 Articles. Water resources represent the totality of groundwater and surface water. Water is the exclusive property of the state. Water use shall be classified as general water use that is carried out without waterworks and technical equipment that can have impact on the state of water and special water use that is carried out with the utilisation of waterworks and technical equipment. Special water use is charged. Section I lays down the general provisions: Chapter I lays down the general provisions (arts. 1-13). Chapter 2 regards distribution, designing, construction and putting into operation factories, constructions and other objectives that can have impact on the state of water (arts. 14-18). Chapter 3 regards execution of work at water bodies and water conservation zones (arts. 19-22). Section II lays down the Water Use: Chapter 4 classifies the types of water use (arts. 23-26). It deals with general and special water use (arts. 23-26). Chapter 5 concerns water users and the objects of water use (arts. 27-29). Chapter 6 determines the modalities and conditions of the concession of bodies of water for use (arts. 30-41). Chapter 7 determines the rights and the duties of water users and water management bodies (arts. 42-48). Chapter 8 regards cessation of the rights of water use (arts. 49-52). Chapter 9 deals with use of bodies of water for drinking, domestic and other needs of the population (arts. 53-60). Chapter 10 regards use of bodies of water for care of health, recreational and sanitary purposes (arts. 61-65). Chapter 11 regards use of bodies of water for agriculture (arts. 66-79). Chapter 12 deals with industrial and hydroelectric purposes (arts. 80-84). Chapter 13 regards use of bodies of water for the needs of water and air transport (arts. 85-87). Chapter 14 regards use of the bodies of water for fisheries (arts. 88-91). Chapter 15 regards use of bodies of water for hunting (arts. 92-93). Chapter 16 regards the use of bodies of water for the

The following amendments have been made in Water Code of RT in 2006, 2008 and 2009:

- **Law of RT №174 March 3, 2006**: the following definitions were included: “special water use permit”, “water users associations”, “basin water management organization”. Article 5 “on water facilities, which have special strategic purposes” was included¹. “License” was replaced by “special water use permit”. It was the first time that physical and legal bodies have been permitted to: a) own the water supply system, which they built independently; b) create non-governmental organizations in order to ensure sustainability of water supply systems.

- **Law of RT №381 March 20, 2008**: changes were made to: a) goals of objectives of the code; b) competence of the Government of RT; competence of local governments; c) functions of the state control on measurement, use and protection of water resources; content of the state water objects register.

- **Law of RT №572 December 3, 2009**: introduction of amendments aimed at improving flood mitigation measures.

**Law of RT “On water users associations”**

Law regulates the legal framework of the organization, activities and management of WUAs as non-profit organization for operation and maintenance of irrigation system in the interest for the public benefit. The law consist of Chapter 1: General Provision (articles 1-4); Chapter 2: Establishment and Liquidation of WUA (articles 5-7); Chapter 3: Legal Status of WUA (articles 8-11); Chapter 4: WUA Management (articles 12-17); Chapter 5: WUA Property (articles 18-19); Chapter: Final Provision (articles 20-25). According to the art. 3 of this law the purpose of establishing of the WUAs to protect, use inter-farm irrigation system shared or belonging to individuals water facilities for fair, effective, timely distribution of water among their members and other water consumers, collection of water supply charges, resolution of disputes between members and other water consumers on distribution and use of water.

**Law of RT “On environment protections”**

This Law secures the legal framework of the following basic principles in the field of environment: prevention of the destruction of natural ecosystems and beginning of irreversible changes in the natural environment; compliance with acceptable bounds of environmental impact; quality standards of natural environment ensuring environmental security and conservancy of natural resources; quantitative and qualitative registration of harmful impact on natural environment; enforcing environmental impact assessment. Law regulates water relations with the goals of rational use, protection of water resources and providing a legal framework to protect the rights of physical and legal persons in water relations. The Law consists of 16 Chapters and 90 articles. According to the article 5, water resources are under special protection. Chapter 6, articles 38 - 42 should be taken into consideration for design, construction, reconstruction and exploitation of objects (water supply systems in particular). Chapter 7 stipulates ecological requirements during exploitation of objects. Chapter 11 describes civil society’s roles and opportunities to take part in nature protection measures.

The following changes were made in 2007:

**Law of RT №284 as of June 13, 2007**: some competencies have been revised: a) of the Government of RT; b) authorized body regulating environment protection; c) local governments; amendments made to some provisions related to state and sectoral oversight and control, etc., no changes made to chapters 6, 7 and 11.

**Land Code of RT**

The Land Code makes provision for the regulation of "land relations" and its purpose is to secure rational use and protection of land, the protection of the environment, and "the equal development of all forms of economic activity in Tajikistan” (Preamble). Other laws regulating land relations may
be enacted on the basis of this Code. 
Land is declared to be in exclusive ownership if the State in article 2. National land resources are divided into categories listed in article 3 and including farming lands, lands of national wood reserves, lands of national water reserves, and state land reserves. These categories are stated in the land cadastre, the land use register; in land allocation decisions of executive bodies Chapter 16, articles 95 - 98 specify water resources conservation issues.

**Law of RT “On ensuring of sanitary and epidemiological safety of the population”**

The Law regulates public and legal relations as regards ensuring sanitary and epidemiological well-being and radiation safety of the population securing the right of the citizens to favourable environment. The Law consists of 7 Sections composed of 39 articles dealing with the following matters: 1) general provisions (sect. 1, arts. 1-4); 2) the rights and the duties as regards sanitary and epidemiological well-being of the population (sect. 2, arts. 5-10); 3) requirements for the ensuring regards sanitary and epidemiological well-being of the population (sect. 3, arts. 11-25); 4) liability (sect. 4, arts. 26-27); 5) the state sanitary and epidemiological supervision and public control (sect. 5, arts. 28-31); 6) the state sanitary and epidemiological service (sect. 6, arts. 32-38); 7) international agreements (sect. 7, art. 39). The citizens shall be granted access to the following information: 1) the state of environment; 2) quality and safety of foodstuffs and potable water (art. 5). Water quality used for centralized and decentralized water supply must comply with the established sanitary requirements (art. 16).

**Order and instructions on the use of water objects for fishery and hydro-energy purposes**

These rules were developed according to the Water Code of the RT, art 91 and aimed to regulate relations for protection of water reservoirs (according to the article 2: all rivers, lakes, ponds and its appendage waters) which are using or could be used for fishery purposes. According to the art. 16. Water taking from fishery water reservoirs for irrigation can be done after approval of special state bodies for nature resources control and regulations.

**Order on preparation, registration and issuance of permits for special water use**

This instruction was approved on January 20, 2005 and stipulates the order of design, registration and permit for special water use (use of water by way of application structures and engineering means, in exceptional cases other water objects could be referred to the “special water use” if they make impact on condition of water). The instruction defines the list of required documents for coordination and obtaining the permit; provide the guidelines on making the amendments and nullifying conditions for special water use; the instruction provides guidelines on consideration of the construction (reconstruction) projects of water supply objects of without regard to form of ownership. The permit is given by MoANP (nature protection territories); MoMWR (irrigation); Local Authorities (for underground water use not centralized water supply less than 50 m3 per day). Coordination for getting permit for the special water use should be done with: state sanitary control agencies; with geology department (underground water); state agencies responsible for control over thermal waters; with owners of water pipelines and sewerage; with veterinary service; etc.

**Order for encouraging water users performing activities on rational use and protection of water**

The following regulations were introduced based on the Water Code, article 46 aimed on provision of incentives for water users implementing measures on rational use and protection of water. The order and level of incentives defined by upper bodies of the water users according to the legal normative acts of the Republic of Tajikistan. Financial incentives are provided from saved resources of the water users by the end of each year according to the proposals of specialized governmental bodies as the result of monitoring activities / reports.

**State Water Cadastre**

The Water Cadastre was introduced according to the articles 12 and 135 of the Water Code aimed on increase efficiency and effectiveness in water supply according to the real needs in water resources, regime and quality of water used, and better documentation of the information on water users through formation an automatic electronic system of data collection and analysis. Main focal ministries on the development and further elaboration of this document are: MoANP (on surface waters) in coordination with Centralized Administration (Main Department) on Geology (un underground waters) and MoMWR (on water use).

**Water Sector Strategy (WSS) for 2006–2020**

This document addresses problems related to water resources, their integrated management and water utilization systems with respect to economic development and poverty reduction. Increasing
effectiveness in the water utilization system is the goal of the present Strategy, which includes short-, mid-, and long-term interventions. The main strategic objectives include: a) Satisfaction water users and water-consumers’ water resource needs with due consideration of inter-state water divisions; b) Rehabilitation of the existing water economy infrastructure and its productive base; c) Instituting full cost recovery for the water supply sector; d) Reclamation of lands suited for irrigation; e) Integration of new, economically efficient technologies; f) Implementation of an effective water-saving program; g) Gradual transfer to a systematic management approach with regard to hydrographic and one administrative units, wide establishment of WUAs, water demand management, differentiation of water payment and its water supply depending on context; h) Implementation of the restoration, expansion and construction of new water supply, sewage, and water-treatment facilities; integration of updated technical devices and technologies, water meters and quality control. The Section 6: Water Supply and Sanitation specify that the infrastructure deteriorated by an estimated 70 percent while water losses amount in it equals 50 to 60 percent. The main problems of water supply mentioned in WSS are: a) poor legal framework - the Water Code does not sufficiently deal with the issues of water supply and sanitation; it is necessary to elaborate a specific law concerning water supply, to develop drinking water standards and to allow the privatization of water supply and sewerage facilities; b) absence of water meters and limited ability for users to make service payments; c) absence of a body which could coordinate technical policy, design, rehabilitation, construction and operation of water supply and sanitation systems; d) inconsistent power supply and high depreciation of capital assets, as well as a deficit of hydro-power equipment; e) low public awareness about proper water use and sanitation practices.


This document provides an overview of the Republic of Tajikistan in relation to its long-term development and the directions of action required to realize projected economic reforms. The goal of these reforms is to guarantee a stable high rate of economic growth and thereby reduce poverty levels, with the aim of achieving the Millennium Development Goals (MDGs). The W&S described under the Social Block of the Strategy (section 7.5, p. 84). Basic direction of actions in the Water Sector are: a) Reform the system as a whole by improving the policy in the sector and setting up new organizations of proprietors; b) Creation of favorable conditions for investments in the sector, and for attracting the private sector; Development of local water supply systems in rural settlements. Expected results: The number of people without secure access to drinking water will be halved and new associations of owners of water supply, sanitation, and housing services will be set up that will regulate the sector.

### Poverty Reduction Strategy Paper for 2007-2009 (PRSP)

This document, the Poverty Reduction Strategy of the Republic of Tajikistan for 2007-2009 (PRS), is intended to serve as a medium-range socio-economic development programme for the country. The actions outlined in the PRS take into account the results of the implementation of the Poverty Reduction Strategy Paper (PRSP) for 2002-2006 and the lessons learned from that process. Under the Section 2.1.1 “The status of poverty. Dynamics and key tasks” it is laid down that “...A significant proportion of the population in Tajikistan has problems with access to clean drinking water. Only one-third of the population has access to chlorinated water from a public utility, 29% of the population uses water from centralized sources, and the rest of the people collect water from cisterns and irrigation ditches. As much as 40% of the water consumed is not potable and 41% of the population uses water from public utilities that is of poor quality” (page 11). The plan is to increase the provision of regular access to high quality safe drinking water from 93 to 96 percent in urban areas and from 49 to 51 percent for rural population.
Attachment 3. Structure, management system, list of enterprises, institutions and other organizations on MMWR of RT

Structure of the central office of MMWR RT
1) Management
2) Department for operation of irrigation systems
3) Department of water resources, sciences and technologies
4) Department of economy and forecast
5) Department for legal affairs and human resources
6) Accounting and financial department
7) Unit for the operation and monitoring of technical status of pump station, energy and communication
8) External economic relations unit
9) Units for capital construction and contract works
10) Unit for mechanization, transport and industry

Management system of MMWR financed through the state budget
1) Central office
2) Regional department of water industry in GBAO
3) Regional department of water industry in Sugd
4) Regional department of water industry in Khatlon
5) Dushanbe inter-district department of water industry
6) Gissar inter-district department of water industry
7) Department of construction, design and operation of drinking water systems in rural areas and pastures

List of enterprises, institutions and other organizations on MMWR of RT
1) State institution “ТаджикНИИГиМ” (Tadzhik NII GIM)
2) State institution “Таджикгипроводхоз” (Таджикгипроводхоз)
3) Sugd state directorate for irrigation construction
4) Dushanbe state directorate for irrigation construction
5) Tajik branch of Golodnospeskiy department of waterworks facilities and “Dustlik” canal
6) Verhneamudaryinskiy department of the basin water management enterprise “Amudarya”
7) Secretariat of inter-state coordination water commission
8) SUE “Гидрогеолого-мелiorативная экспедиция”
9) SUE “Судогощетный”
10) SUE “Вахшоб.Seekh город""
11) SUE “Таджикселезашита”
12) SUE “Машхинообразный Dushanbe
13) SUE of Dangara waterworks facility
14) SUE “Electric lines and substations”
15) SUE “Canal Chubek” Farhor district
16) SUE “Таджикводавтоматика”
17) SUE “Jelezobetonnih izdeliy”, Sarband
18) SUE of water industry of Rasht district
19) SUE of water industry of Jirgatal district
20) SUE of water industry of Nurabad district
21) SUE of water industry of Tajikabad district
22) SUE of water industry of Tvildara district
23) SUE for construction and completion of irrigation systems
24) SUE “Peshray”
25) SUE for the operation of industrial and social objects
26) SUE for the specialized works #10, Vahdat town
27) SUE Canal Khojabakirgan
28) SUE for the operation and construction, Khamadono district

Approved by the resolution of the Government of RT, December 28, 2006, №595.
### Attachment 4. Tariffs for drinking water supply and sewage services in Dushanbe (per month/per person)

<table>
<thead>
<tr>
<th>№</th>
<th>Services</th>
<th>Volume person/month</th>
<th>Fees for services (TJS)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Without VAT</td>
<td>VAT - 18%</td>
</tr>
<tr>
<td>1</td>
<td>Multiple apartments building (from 2 to 12 stories)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drinking water</td>
<td>10.8 м³</td>
<td>1.501</td>
<td>0.270</td>
</tr>
<tr>
<td></td>
<td>Sewage</td>
<td>11 м³</td>
<td>0.594</td>
<td>0.107</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>2.095</td>
<td>0.377</td>
</tr>
<tr>
<td>2</td>
<td>Multiple apartments building with more than 12 stories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drinking water</td>
<td>14.4 м³</td>
<td>2.001</td>
<td>0.360</td>
</tr>
<tr>
<td></td>
<td>Sewage</td>
<td>11.4 м³</td>
<td>0.616</td>
<td>0.111</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>2.617</td>
<td>0.471</td>
</tr>
<tr>
<td>3</td>
<td>Private houses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drinking water</td>
<td>7.5 м³</td>
<td>1.043</td>
<td>0.188</td>
</tr>
<tr>
<td></td>
<td>Sewage</td>
<td>3 м³</td>
<td>0.16</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>1.203</td>
<td>0.218</td>
</tr>
<tr>
<td>4</td>
<td>Dormitories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drinking water</td>
<td>9 м³</td>
<td>1.251</td>
<td>0.225</td>
</tr>
<tr>
<td></td>
<td>Sewage</td>
<td>9 м³</td>
<td>0.486</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>1.737</td>
<td>0.315</td>
</tr>
</tbody>
</table>

**Notes:** These tariffs were approved in accordance with the resolution of MEDT RT as of February 12, 2010, №3 and have been put into force from February 1, 2010. The following items were also adopted based on this resolution:

1) **Coefficient:**
   - For drinking water - 0.139
   - For sewage - 0.054

2) Tariffs for summer shower cabins - 0.295.
Attachment 5. List of publications/sources of information

1. Challenges and recommendations for rural drinking water supply at the community level in Tajikistan, Report, SDC, MMWR, UNDP, February 2009;

2. Challenges and recommendations for rural drinking water at the inter-ministry level in Tajikistan, Report, SDC, MMWR, UNDP, June 2009;


4. SMART - specific, measurable, achievable, realistic, time bound;

5. Millennium Development Goals (assessment of financial costs) RT;

6. Programme on provision of clean drinking water to the population of RT for 2008-20;

7. Informational materials: Traditional knowledge on land and water use, NGO “Fund for support of Civil Initiatives” (Фонд поддержки гражданских инициатив), UNDP, 2006 года;

### List of persons who participated in individual interviews

<table>
<thead>
<tr>
<th>Attachment 6</th>
<th>Name and Position</th>
</tr>
</thead>
</table>
| **State institution “Chief department “TajikObDekhot”** | Gul Vahobovich Sharifov, Chief engineer + 992 918 29 75 44  
Rustam Gaforov, Head of planning and financial unit + 992 951 42 65 45 |
| **Vodokanal, Vakhdat town** | Mavjudsho Zaripov, Head of Vodokanal, Vakhdat town  
Mirsaidiv Khomijon, Chief engineer |
| **SUE “Department for the operation of main water supply systems -5”, Gissar district** | Saidmurod Raupov, Head + 992 918 73 66 64 |
| **National Red Crescent Society of Tajikistan** | Elena Lyapina, Programme Coordinator, Water Sanitation + 992 37 224 03 74; 224 53 78; + 992 918 61 60 21 E-mail: elivanpis39@list.ru  
Umarali Oripov, Head in Gissar district + 992 918 68 54 58  
Shamigul Khaitova, staff in Gissar district + 992 919 97 66 33  
Firuza Gairatova, Head in Vakhdat town + 992 901 07 07 93  
Shamsigul Boeva, staff in Vakhdat district + 992 907 40 26 25 |
| **Local development committees** | Saifov Shamsiddin, Chairman, Surkhteppa, Vakhdat town  
Yatimov Fathullo, Chairman, Kamongaroni Bolo, jamoat Bahor, Vakhdat town + 992 917 11 38 31  
Boymurodov Boymurod, committee member, Kamongaroni Bolo, jamoat Bahor, Vakhdat town |
| **** | Mirsaidov, committee member, Kamongaroni Bolo, jamoat Bahor, Vakhdat town  
Gulakov Kurbonali, Vchairman of the public water users committee, Kamongaroni Bolo, jamoat Bahor, Vakhdat town + 992 37 223 21 95  
Saifulloev Ziyodullo, Chairman, Ziraki Bolo, jamoat Almosi, Gissar district + 992 985 70 30 31 |