

**UNEP Collaborating Centre on Water and Environment** 



# THE REPUBLIC OF TAJIKISTAN

# NATIONAL REPORT

Within the framework of UNEP support for achieving the Johannesburg Plan of implementation target of "Integrated Water Resources Management and Efficiency Plans by 2005, with support to developing countries"



DUSHANBE- 2006

# **General Information**

**Geography:** The Republic of Tajikistan is situated in the southeastern part of the Central Asia. The territory of republic borders on Uzbekistan in the west and north-west, on Kyrgyzstan in the north-east, on China in the east, and on Afghanistan in the south.

**Total Area and Relief:** The total area of the country is 143.1 thousand  $\text{km}^2$ . Tajikistan is the country of mountains. They occupy 93% of territory. More than half of the country's territory lies at an elevation of more than 3,000m above the sea level. The mountain systems of Tyan-Shan, Gissar-Alai and Pamir (with the highest point of the country at 7,495 meters above the sea level) are separated by intermountain troughs and valleys (Fergana, Zerafshan, Gissar, Vakhsh, and the others). Glaciers and snowfields of the high mountains (with the area of 8.5 thousand km<sup>2</sup> or 5.6% of the country's territory) contain the considerable reserve of water resources (around 400 km<sup>2</sup>). There are 1,300 natural lakes with the total reserve of fresh water of 50 km<sup>2</sup> and total area of 705 km<sup>2</sup>. 780 lakes are located at an elevation of more than 3,500 m above the sea level.

**Climate** of Tajikistan is classified as continental, but it is distinctly different in highland and plain land parts of the country. The average annual precipitation is 691 mm with the range from less than 100 mm in the south-east to up to 2,400 mm at the Fedchenko glacier in the central part of the country. Distribution of precipitation is non-uniform. During winter snow lies more than 6 months in the mountains, but in the plains it is mostly dry and sunny. At the elevations up to 500 m the average monthly air temperature for January varies from  $-1^{\circ}$ C in the north to  $+3^{\circ}$ C in the south. At the elevations 500-1000 m the average monthly air temperature for January is  $20^{\circ}$ C, that of for July –  $23-28^{\circ}$ C.

**Land Resources:** The country possesses the limited land resources suitable for agricultural use. Area of agricultural lands is 1.57 million ha or 11% of the total country's territory. Area of arable lands is 769.9 thousand ha, including 720 thousand ha of irrigated lands.

**Surface Waters:** Headwaters of 600 rivers and the ephemeral streams are located in Tajikistan. In regard to hydrography there are four main river basins. The Syrdarya river basin is located in the north-east, where the Khodjabakirgan, Aksu and Isfara rivers form the surface flow in a volume of 0.4 km<sup>3</sup>/year, or approximately 1% of the total basin's flow.

The Amudarya river basin is located in the south. It is represented by the Vakhsh, Pyandj, and Kafirnigan rivers. Their share of the basin's water resources is 82.5%. The Vakhsh river is the largest one in the country, crossing it from the north-east to the south-west. Its headwaters are located in Kyrgyzstan, where it is called Kzyl-Su. Its watershed lies in the highest (at elevation more than 3,500 m) part of the country. The Pyandj river designates the border between Tajikistan and Afghanistan almost along all its length. The Kafirnigan river is another large tributary of the Amudarya river, inflowing into it 36 km downstream from the confluence of the Pyandj and Vakhsh rivers. The Zerafshan river basin is located in the northwest. Sometime ago it was considered as the large tributary of Amudarya river, but now its flow is completely diverted for irrigation. The long-term average river flow formed within the boundaries of Tajikistan is 64 km<sup>3</sup>. It is necessary to emphasize that out of the total surface water flow formed in the Aral Sea basin (116 km<sup>3</sup>) the share of Tajikistan is 55.4%.

The underground water reserves are 6 km<sup>3</sup>, out of this volume 3 km<sup>3</sup> are hydraulically connected with the surface flow. On the territory of Tajikistan within the Syrdarya river basin the underground water contribution to formation of river flow is 60%, that of within the Amudarya river is 20%.

There are 19 reservoirs in the country, including 5 and 14 in the Syrdarya and the Amudarya river basins respectively. Total capacity of these reservoirs is 29 km<sup>3</sup> with the total area of 934 km<sup>2</sup>. 9 reservoirs are classified as large. Each of these reservoirs has a capacity over 0.5 km<sup>3</sup>, and their total volume is more than 25.34 km<sup>3</sup> with the area of 690 km<sup>2</sup>. The largest ones are the Nurek reservoir on the Vakhsh river with capacity 10.5 km<sup>3</sup>, the Kairakkum reservoir (4.16 km<sup>3</sup>) on the Syrdarya river, and the Lower Kafirnigan (0.9 km<sup>3</sup>) on the Kafirnigan river. Tajikistan possesses the huge hydropower potential that by the various estimations is around 527-300 billion kWh.

**Population and Labour Resources:** Population of Tajikistan is  $6.920^1$  million people (as of 01.01.06). Around 75% of population lives in the rural area. Economically active population is  $30,2\%^1$  from all inhabitants of the republic (67,8% of them are males). Population literacy rate is 97.7%. 55% of them have completed secondary and 7,5% higher education.

Average density of population in the country is 41 person/km<sup>2</sup>, with the range from less than 3 person/km<sup>2</sup> in the south-east to 77 person/km<sup>2</sup> in the south-west. The most populous are the Gissar and Vakhsh river valleys and the Khodjent city area. Over 85% of population lives in valley areas (comprising 35% of the republic's territory). The republic is multinational. The majority of population (70%) is Tajiks in all oblasts of the country. Uzbeks, Russians, Tatars, Ukrainians, Kyrgyz, Turkmen, Kazakhs, Baluchi, Arabs, the Central Asian Gypsies, and Jews also live on the territory of Tajikistan. The Gorno Badakhshan is inhabited by the small in size Pamir ethnic groups (often called the highland Tajiks). They speak the language that is attributed to the Pamir group of the eastern branch of the Iranian group of languages.

Language: The state language is Tajik one, and Russian is the interlanguage.

**Political and Administrative Structure:** Date of establishment of Tajikistan in the current boundaries and form of government were adopted at the extraordinary session of the Supreme Council of Tajikistan on 9-11 September, 1991, when Tajikistan was declared as the independent state. Independence day is 9 September, 1991. The Constitution was adopted on 6 November, 1994. Head of the state is the President. The Parliament (Majlisi Oli) exercises the legislative power, and it is the supreme representative and legislative body. The Majlisi Oli comprises two Majlisies, the Majlisi Milli and Majlisi Namoyandagon. The Government of the Republic of Tajikistan comprises the Prime Minister and his deputies.

Administrative Division: There are currently 2 oblasts and 9 rayons of the central subordination, and also the Gorno Badakhshan Autonomous region in Tajikistan.

Economy: Industry: mining, non-ferrous metallurgy (enterprises in Tursunzade and Isfara), machine building (enterprises in Dushanbe and Khodjent), metalwork, production of construction materials (Nurek), chemical industry (enterprises in Dushanbe, Kurgan-Tube, Yavan). The basis of the non-ferrous metallurgy are plants in Tursunzade (in the Gissar valley) and in Isfara (the Sogdi oblast). Ores of the non-ferrous and rare metals are extracted and enriched, such as lead, zinc, bismuth, antimony, mercury, tungsten, molybdenum, gold. Brown coal is extracted in Shurab (the Sogdi oblast). There is also production of oil (in the northern and southern regions of Tajikistan), and the natural gas (in Gissar and the Vakhsh river valley). The main branches of the light industry are: food processing, ginnery and cotton manufacturing, footwear, silk and carpet weaving manufactures. Energy: According to estimation of the World Hydropower Atlas "HYDROPOWER & DAMS" (1997), Tajikistan occupies the first place in the world by the specific indices of the hydropower reserves, and the eighth place by the absolute indices (300 billion kWh/year). The basis of the electric-power industry is the Nurek hydropower station (2,700 MW), one of 30 the most powerful hydro-electric power stations in the world. Agriculture: production of various crops, cotton, vegetables, horticulture, viniculture, livestock breeding, poultry, and the other branches. Tajikistan's cotton is of a high value in the world. Its fiber has the high breaking load and long staple. After elimination of the state monopoly on cotton market, the cotton growing farms have received the rights to mange their yields independently, i.e. to sell their production on the internal or foreign markets.

The Tajikistan's national currency is somoni. In 2005, the GDP was USD 304.9 per capita<sup>1</sup>.

# Water Management Situation in the Republic of Tajikistan

### Priorities and the Key Problems of Water Sector

Conditions of the water management complex of the country and its efficiency to the great extent depend on the general economic situation.

<sup>&</sup>lt;sup>1</sup> <u>http://www.stat.tj/russian/macroeconomic-indicators1/htm</u>

<sup>&</sup>lt;sup>1</sup> <u>http://www.stat.tj/russian/macroeconomic-indicators1/htm</u>

The following priorities had been identified at the national and basin levels:

At the National Level:

- necessity to ensure the country's energy independence in the situation of insufficient level of the huge hydropower resources utilization;
- ensuring of food security and employment, and reduction of the population's poverty level;
- necessity for rehabilitation of the water sector's infrastructure due to the substantial deterioration of the fixed assets;
- imperfection of the water use economic mechanism and insufficiency of financing from the state budget of operation and maintenance, and rehabilitation of water management infrastructure;
- necessity to provide population with drinking water supply and sewerage systems due to the significant deterioration of the existing infrastructure.

At the Basin Level:

- prevention and resolution of the arising contradictions, especially during dry years, due to imperfection of the existing mechanism for the joint management of water and energy resources;
- necessity for resolution of the interstate problems on the basis of agreed criteria and methodologies for development and conclusion of the bilateral and multilateral agreements;
- necessity of the modern strategy for the interstate water sharing and economic mechanism of water use for all region.

Amongst the destabilizing factors is the issue associated with lack of solution regarding the intestate water relationships on the basis of the international water law. Tajikistan has identified development of hydropower as its priority. The ample hydropower resources of Tajikistan should become the serious factor in the mutually beneficial cooperation amongst the Central Asian countries. However, there are also some unresolved problems here.

The Kairakkum reservoir plays the crucial role in irrigation, and first of all in the interests of Uzbekistan and Kazakhstan. It regulates 5.2 km<sup>3</sup> of water out of 6.0-6.2 km<sup>3</sup> required during the irrigation season. However, the arising costs and damages associated with operation of this reservoir in the irrigation mode fall on Tajikistan side. In addition, 54 thousand ha of the very fertile lands are assigned to the reservoir' bed.

The Nurek hydropower dam on the Vakhsh river is the waterworks of seasonal regulation of water resources in the Amudarya river basin. During Soviet times the "incidental" summer electrical energy generated by this hydropower station was supplied to consumers in all the Central Asian republics. During winter time Tajikistan used to receive electrical energy and the necessary fuel and energy resources in return. Now this situation has drastically changed. Electrical energy generated by the Nurek hydropower station during summer time is unsaleable, but water flows to the neighbors. In winter time Tajikistan has to buy electrical energy for the double price.

The social factor is also very important. Government has identified four strategies for the poverty reduction: the efficient management, support to the poorest groups of population, equitable distribution of the social services, and sustainable development. By 2015, it is envisaged to reduce the number of people living below the poverty line by 23%, increase access to the safe drinking water up to 80% of population, increase share of the private sector in the GDP up to 60%, and increase the annual growth rate of GDP up to 6% on average.

# The Main Threats to Water Resources

Trends in the global climate warming lead to the steady intensive process of shrinking the area of glaciers.

In Tajikistan, as in all the other republics of the former Soviet Union, use of the natural resources, and first of all water resources, for economic activities only was the dominating approach. In this approach water resources were considered only from the viewpoint of possibilities to provide consumers with water. The ecological role of water resources, including water requirements for the nature landscapes and ecosystems from the viewpoint of their sustainability, had not been considered at all. Such approach to use of water resources dominates up to the present time.

By the Environmental Performance Index of the world countries, officially presented at the World Economic Forum in Davos (26 January, 2006), the Republic of Tajikistan is 117-th in the world (with rating 48.2) and the last one amongst the CIS countries (rating was prepared by the Center for Environmental Law & Policy at Yale University and the Center for International Earth Science Information Network (CIESIN) at Columbia University<sup>2</sup>.

Efficiency of the sewerage water treatment plants does not exceed 40%. Only 23% of population has access to the sewerage system, including 10.1% of inhabitants of the urban-type settlements and rayon central cities.

Situation with protection of water fund from pollution and depletion, and monitoring in the upper watersheds is similar to the situation in the Kyrgyz Republic due to the following reasons:

<u>Firstly</u> – there is no practically the purposeful activities in this direction due to lack of the necessary financial funds;

<u>Secondly</u> – created in the past the hydrometric network that carries out observations of river flows, precipitations and the other climatic parameters was and is being decreased over the recent years due to lack of funds. Reliability and quality of measurements are being reduced due to poor salary of staff and drain of specialist from this sector.

### Risks Associated with Water

Amongst these risks is the insufficient degree of research and study of the high-mountain lakes, especially the collapsible ones (i.e. subjected to the dam breakage), such as the Sarez lake that can create the catastrophic impact of the regional scale on the territory of more than 55 thousand km<sup>2</sup> and population of around 6 million people. As of now, 700 families should be urgently resettled due to the natural disasters associated with water. Total number of the potential ecological migrants is 10,037 families.

In 18 rayons of Tajikistan (4 rayons in the Sogdi oblast, 10 in the Khatlon oblasts, and 3 in the rayons of the republican subordination) 142 settlements are constantly waterlogged, and another 490 settlements are periodically waterlogged (during the irrigation period).

Zone of lift irrigation covers almost 300 thousand ha. In a number of regions lands of the whole rayons are the command area of pumping stations. Zones of lift irrigation are the habitat and source of sustenance for around 2 million people and they depend on stability of electrical energy and water supply.

The significant risks associated with water are caused by the more frequent now dry years and droughts, and the other negative processes.

Increase of frequency and duration of high floods and severe droughts may reduce quality of water, biological productivity and habitat of flora and fauna in the river basins, especially small ones. The major part of precipitations will fall in the form of rains, snow accumulation in the mountains during winter time will be reduced, and turbidity of river water will be increased causing reduction of reservoirs' capabilities to regulate river flows.

Territory of the upper watershed and its population are subjected to the active impact of the various natural processes which may lead to disasters. Out of 70 types of the worldwide common dangerous natural phenomena 20 occur in the upper watershed. The most dangerous are mudflows, floods, landslides and the other ones. Amongst the other dangerous natural phenomena mudflows and floods are the most dangerous in the upper watershed due to their extent, occurrence, and caused damages.

Evidences of the above said are the annual catastrophic damages to the national economy caused by mudflows, floods, and landslides during the 90's. Only over the last six years it was replanted 332 thousand ha of various crops, destroyed and damaged 832 km of irrigation canals, 195 km of collector and drainage network, 133 pumping stations and 332 water structures. 376 enterprises and the other objects of the national economy were affected.

<sup>&</sup>lt;sup>2</sup> <u>http://www.washprofile.org/ru/node/4431</u> (Each country was rated on the basis of 16 criteria, combined into 6 groups: "Ecological Health", "Air Quality", "Condition of Water Resources", "Biological Diversity", "Productivity of the Natural Resources" and "Sustainable Energy Development". Ratings were given on the 100 score scale, where 100 is the highest score and 0 the lowest one. Rating has showed that the ecological policy, carried out by the government, has the significant impact of the environment conditions).

# Regulation of Water Relationships

The state management in the area of water resources use and protection is based on combination of the basin, territorial and administrative-territorial principles of management and is carried out by the Government of the Republic of Tajikistan, local executive authorities, as well as the specially authorized the governmental bodies for regulation of water use and protection.

The Government of the Republic of Tajikistan has identified four specially authorized state bodies for regulation of water use and protection:

- The Ministry of Amelioration and Water Resources (MAWR of the Republic of Tajikistan) is the republican management body in the area land amelioration, water management, rural water supply and pasture watering;
- The State Committee for Environment Protection and Forestry is responsible for the state control over water resources use and protection;
- The Main Geological Administration under the Government of the Republic of Tajikistan (underground waters);
- The State Committee for Supervision over Safety in Industry and Mining under the Government of the Republic of Tajikistan is responsible for control over the rational use of medical, mineral, thermal and industrial underground water, and also the therapeutic muds.

Along with the above bodies the specially authorized organizations are:

- Agency on Antimonopoly Policy and Support to Entrepreneurship exercises the tariff regulations associated with use of water and the other resources;
- The Ministry of Economy and Trade of the Republic of Tajikistan exercises coordination in the area of planning and prediction of the rational use and protection of water resources

In general, the complicated hierarchical structure with manifoldness of its functions (regulation, prediction, use and protection, planning, analysis, policy, tactics and strategy) in the area of water resources use and protection, as well as multi-sectoral character of water use and inconsistency of requirements to water resources (in terms of quantity, quality, and regime) exist in Tajikistan. Therefore, the serious improvements of water resources management system are required at the national level, because it is mainly based on the administrative method of management.

The system of sectoral supervision over water and hydropower infrastructure and its regular total inspections are not completely restored in Tajikistan. The regular annual editions of the State Cadastre and the hydrological yearbooks are not published yet. Water balances are not compiled and verified.

The payments system for water delivery services has the serious shortcomings due to low qualification of staff and unreliability of data. The system of intersectoral interactions is practically missing because the required for this purpose the Center (Committee, Commission) was not established. Sale of shares and privatization in the water management complex are just started and often conducted formally. Issues associated with change of the ownership type, transfer of the state owned water sector objects to the local and foreign legal entities are the competence of the Government, but the relevant procedure is not approved yet. Denationalization and transfer of the drinking water supply systems to the private companies are prohibited by the Water Code. As a result the drinking water supply systems are in the unsatisfactory technical conditions.

The reservoir beds are on the balance-sheet of the MAWR, but dams are the assets of the Ministry of Energy. The Vakhsh main canal is also subdivided into sections and distributed between these two ministries. Lack of coordination and the financial obligations in regard to these objects aggravate their already poor technical conditions.

The financial mechanisms of water resources management are also far from being perfect.

There is a single tariff for delivery of irrigation water irrespectively of the natural and economic factors (gravity or lift irrigation, plain or highland regions) that can not provide enough funds for the proper operation and maintenance of the irrigation and drainage systems. The similar situation is observed in the hydropower and municipal and drinking water supply sectors.

The governmental water management organizations simultaneously exercise the functions of "water supplier" and "inspector" and they have low interests in reduction of the water structures operation and maintenance costs, as well as water saving.

There is a lack of water relationships regulation at the regional/interstate level, and in particular, the economic mechanism for water use, associated with the operation of reservoirs of the interstate importance. Currently the former Soviet Union's water sharing principles are in force, but the previously existing mechanism of compensations is missing. In accordance with this mechanism Tajikistan used to receive fuel and energy resources that ensured the equal social security of population. As a result, the water energy exchange had been disbalanced and therefore, the former water sharing became inequitable. Due to lack of water regulations amongst the region's republics the current water sharing is the source of tensions.

# Legal Basis for Introduction of the IWRM Principles on the Scale of the Republic of Tajikistan

The main provisions of the national program for water sector development of the Republic of Tajikistan are based on:

- Constitution of the Republic of Tajikistan that envisaged the exclusive state ownership of waters and guarantees of the government for their efficient use and protection for the benefit of nation;
- Water Code, and the Law on nature protection that regulate water relationships for the rational water use and protection, strengthening of lawfulness and protection of rights of the physical and legal entities in the area of water relationships;
- Concept of the rational use and protection of water resources in the Republic of Tajikistan;
- Strategy for the poverty reduction;
- Law on energy;
- Program for the economic development of the Republic of Tajikistan for the period up to 2015;
- Concepts of the fuel and energy complex development of the Republic of Tajikistan for the period 2003-2015;
- Program for the first priority measures on improvement of the ameliorative conditions of irrigated lands in Tajikistan for the period 2005-2009;
- Mid-term program for overcoming of crisis in the agro-industrial complex of the Republic of Tajikistan and priority directions of the strategy for development of its sectors for the period up to 2005;
- State ecological program of the Republic of Tajikistan for the period up to 2008;
- Millennium Development Goals (estimation of financial expenses) for the Republic of Tajikistan;
- Program "Clear water and sanitation of Tajikistan" and other documents.

Currently the "Strategy for development of water sector of Tajikistan" is being elaborated (MAWR of the Republic of Tajikistan, UNDP, EC IFAS). Objective of the water strategy is not integration of all sectors of the water management complex into the single economic complex, but the efficient interaction amongst them, carrying out the unified policy, adoption and implementation of decisions ensuring the greatest economic and social benefits with the minimum damages to environment.

The strategy includes the following provisions:

- ensuring the optimal water requirements for all categories of water users and consumers taking into account the interstate water sharing;
- rehabilitation of the existing water sector's infrastructure and its facilities;
- ensuring the total reimbursement of the water delivery costs, and incentives for water users to save water;
- development of lands suitable for irrigation;
- introduction of the new economically efficient technologies;
- realization of the program for efficient water saving;
- gradual transition to the systemic management method within the hydrographical units instead of administrative ones, countrywide establishment of WUAs, introduction into practice the water

demands management, ensuring differentiation of payments for water and its delivery in accordance with the specific conditions, development of the diversified forms of private, collective, and joint-stock water use on the basis of market-oriented water management activities;

- implementation of the staged program for rehabilitation, expansion and construction of new water supply and sewage water treatment plants, staged introduction of the modern technical devices and water metering facilities on the water supply and sewerage systems;
- development of hydropower, completion of construction of the Rogun and Sangtuda hydropower stations and the other hydropower stations and reservoirs;
- staged solution of problems in environment protection associated with water (floods, waterlogging of territories and engineering structures, liquidation of mudflow impacts, land salinization, collapsible lakes (subjected to dam breakage), surging glaciers, etc);
- protection of the national interests on the basis of market relationships and the interstate agreements.

In general, the necessary legislative base for implementation of the market reforms in the water management complex exists, but it requires further development (elaboration of bylaws, decrees, instructions, rules, recommendations, etc.).

The on-going reforms in the water management complex require speedup of the decentralization process and active public participation in management. Public participation, collective/public form of control over water distribution will ensure realization of principles of openness, transparency and equity due to better awareness of water users, and material incentives.

# Actual Status of the IWRM Process in the Republic of Tajikistan<sup>3</sup>

The document of the Government of the Republic of Tajikistan "Progress in achievement of the millennium development goals in the Republic of Tajikistan" (2003) amongst the main of sustainable development goals specifies also introduction of the integrated water resources management. This is the favorable political environment for introduction of the IWRM principles in Tajikistan.

The Water Code of the Republic of Tajikistan adopted in November 2000, envisages possibilities to change type of ownership in the water management complex in accordance with the procedure established by the Government.

As of now the Ministry of Amelioration and Water Resources of the Republic of Tajikistan has developed and agreed with the ministries and bodies concerned the "Changes and amendments to the Water Code of the Republic of Tajikistan". In Section 1 of this document, submitted to the Madjilisi Oli (the Parliament of the Republic of Tajikistan) for approval, the following points were additionally included:

- In Chapter 2 (<u>Articles 16-23</u>) "Right to ownership and the other rights to water management objects" for the first time it was declared that water management objects may constitute the private property;
- Chapter 3 "Basin administration in the area of use and protection of water fund" was amended by the <u>Article 24 "Tasks of the basin water management organization (administration)</u>" and μ <u>Article 25 "Basin Council</u>, that will be charged with duty to approve the annual plans for integrated water use and protection.

Developed in 2001, the "Concept for the rational use and protection of water resources in the Republic of Tajikistan" has identified the ways for further development of the water management complex of the country. According to this "Concept...." the following measures were envisaged:

- fulfill the gradual transition to the systemic method of management within the hydrographical boundaries instead of administrative ones;
- speedup countrywide establishment of WUAs;
- introduce into practice the water demands management;
- ensure differentiation of payments for water and its delivery in accordance with the specific conditions;

<sup>&</sup>lt;sup>3</sup> Results of monitoring of process for transition to the IWRM presented in ANNEX, are used in this section (monitoring consultant is Dr. Yu. Rysbekov (SIC ICWC)

- develop the diversified forms of private, collective, and joint-stock water use on the basis of market-oriented water management activities;
- introduce water saving technologies, and in the zones of lift irrigation, in particular.

The important direction of reforms in the agriculture and water sectors in the market conditions is the countrywide establishment of the water user associations (WUAs).

The Law of the Republic of Tajikistan "On water user associations" prepared by the Ministry of Amelioration and Water Resources was recently adopted by the Government and Parliament after approval by the ministries and bodies concerned.

For introduction of the IWRM elements in the republic the consistent and systemic measures/activities are carried out, namely:

- Process of restructuring of the irrigation and drainage infrastructure and its management is going on;
- Canal administrations (CA) were established for two main canals (Chubek and Gulyakandoz), Councils of the canal water users are being established;
- The "Department for WUAs Support" within the Ministry of Amelioration and Water Resources is being created;
- Chargeable water use is transferred to development of the differentiated tariffs;
- Process of transfer of management rights to water users and privatization of some elements and structures of the irrigation systems is going on;
- Mechanisms for transition to IWRM through preparation of the new bills and normative/legislative acts are being developed with support from the international institutions (UNDP, FAO, and the others).

For introduction of principles and transition to the IWRM system adoption of the following new laws is envisaged: "On water charge", "On water resources monitoring", "On drinking water supply", "On drinking water".

The successive steps towards reformation of water sector, including introduction of the IWRM principles and approaches in Tajikistan were in general identified by the Document "Poverty Reduction Strategy" (PRS) that was approved by the Government in June 2002. This document envisages development of a number of legislative, normative/legal acts, programs, etc. Currently, the intersectoral working group develops terms of references for realization of the PRS provisions.

The poverty reduction strategy envisages development of a number of documents on the issues associated with water resources management and its reformation:

1. Legislation on water sources and procedure of operation of the independent water distribution organizations, as well as Water User Associations;

2. List of the priority objects of water management system that should be rehabilitated;

3. Tariffs for water delivery services that correspond to the increasing tariffs for electrical energy supply with the aim to cover completely the operation and maintenance costs of irrigation systems.

The specific Action Plans for transition to the IWRM on the scale of the Republic of Tajikistan are not envisaged, but the necessary preconditions for the IWRM realization (enabling political environment, institutional roles, and management instruments) appear in the national and sectoral programs. Practically all the national development plans (on reduction of poverty level or improvement of living standards for achievement of the Millennium Development Goals, agriculture, energy sectors, environmental sphere and the others) are the integrated ones and include the main IWRM principles to one or another extent.

The specific action plans are envisaged and being implemented within the framework of the pilot irrigation systems of the "IWRM-Fergana" project.

Assessment of the actual progress of the Republic of Tajikistan towards capacity building required for water management on the basis of the IWRM principles shows that currently no one out of 17 functions, characterizing the institutional capacity, works at the level of the real objective:

- <u>There are some gaps in quality and coverage in:</u> Reimbursement of water management costs, Water sharing. <u>There are a lot of gaps in:</u> Formulation of policy, Preparation of laws and ancillary normative documents, Collection of information about water resources and development of databases, Preparation of water resources,
  - information about water resources and development of databases, Preparation of water resources, and ecological and socio-economic assessments, Monitoring of water availability, use, quality, the aquatic ecosystems, pollution load, Planning of water resources use, protection and conservation, Promotion of water demands management, Intermediation in resolution of disputes, Cooperation on the international water courses.

The main serious institutional limitations impeding execution of necessary functions by the water management organizations are insufficient: budget, equipment (for maintenance of databases, operative measurements and control over water discharges and quality parameters), material and technical supply (mainly with vehicles and machinery). At the same time the staff number and level of their competence to the acceptable extent correspond to the technical complexity of the above listed management functions. Practically all heads of water management organizations are familiar with the IWRM principles. However, it should be stated that staff is only motivated to some extent to water management based on the IWRM principles.

The decision makers and specialists of water management organizations to full extent recognize that the managerial aspects of IWRM envisage fulfillment of the following requirements:

- transition from management within the administrative boundaries to management within the hydrographic boundaries;
- transition from the sectoral water management to the integrated (system) one;
- water demands management instead of the traditional supply management;
- introduction of the cooperative forms of water resources management instead of the administrative and command ones;
- replacement of the "closed" institutions by the open (transparent) water resources management structures;
- use of the system for water resources management with the active participation of stakeholders ("bottom-up" approach) instead of the previously existing the "top-down" one.

Due to shortage or lack of funds the special national trainings in the IWRM are not carried out, with the exception of the National Trainings within the framework of the "IWRM-Fergana" project.

At the same time all the on-going investment projects in the Republic of Tajikistan (ADB, IDA, IDB, etc.) aimed at restructuring and rehabilitation of water management complex include the "awareness improvement" component. The "National Training Center" had been established within the framework of the project aimed at support to reorganizations of agricultural production. Training programs of this center are developed for the broad audience of specialists: top level (decision makers), medium and low levels (labors, machine operators, etc.), as well as students and post graduates. Around 3,600 people were trained in these courses only in 2005.

The sectoral newspaper "Obu-obodoni" is regularly published. This newspaper discusses all the touchy issues associated with the water resources management.

Representatives of Tajikistan actively participate in the special training programs, seminars, and round tables, conducted under the ICWC aegis at the regional level for specialists from the various levels of the Central Asian water sector hierarchy.

# ANNEX

# $Questionnaire^{1} \hspace{0.2cm} (\text{REPUBLIC OF TAJIKISTAN})$

Note: Answers to the majority of questions are ticked in the appropriate boxes. Since IWRM is the complicated subject, in a number of cases the explanatory comments referring to the number of the question are added.

1. Na	1. National water policy				
1.1	Does the cou	ntry ha	ve a water policy?		
1.1a	Existing	$\checkmark$	Give the date of publishing: 29.11.2000	Give the title(s) of the document(s) : The Water Code of the Republic of Tajikistan	
1.1b	In progress	$\checkmark$	Give the expected date of finalisation:	Give the expected date of finalisation:	
1.1c	Foreseen		Give the expected period for preparation:		
1.1d	Not foreseen for the time being				
1.1e	Is the policy a	and the	e law/regulations harmonised? Yes:	No: D Partly:	
a					

## Comment on 1.1a :

Taking into account that:

- The Republic of Tajikistan is the successor of former Tajik SSR that had the water policy
- Succession of the water policy is specified in the Agreement of 1992 (the Agreement amongst the Governments of the Central Asian Countries "On cooperation in the joint management, use and protection of the transboundary water resources")
- The country had adopted the National constitution and Water Code<sup>2</sup>,
- The other provisions, which were outlined in the comments on this questionnaire,

**it would be incorrect to deem that the national water policy is absent.** Adoption of the Constitution, Laws regulating public relationships in the certain spheres, identification of the authorized body and its power for each sphere etc. are an embodiment of policy.

Besides, the Republic of Tajikistan had adopted and is implementing the following strategies and action plans<sup>3</sup>:

- The mid-term program for withdrawal of the agro-industrial complex of the Republic of Tajikistan from crisis and priority directions of development strategy of its sectors for period up to 2005,
- The State Ecological Program of the Republic of Tajikistan up to 2006,
- The National Action Program to Combat Desertification,
- The Strategy of the Republic of Tajikistan for protection of population health up to 2005,
- The National Program "Clear water and sanitation of Tajikistan ",
- The State Ecological Program,
- The National Action Plan on Environmental Hygiene (NAPEH) (1999),
- The National Program for reduction of threats of the natural disasters and emergency situations,
- The Program for development of cotton production in the Republic of Tajikistan for 2002-2005,
- The National Action Program to Combat Desertification (2000)
- The Strategy of EBRD on Tajikistan for 2003 2005,
- The National Action Plan for mitigation of climate change impact; and the others.

These and the other National Concepts, Strategies, Programs, and Action Plans contain to a variable extent provisions associated with the sustainable management and development of water resources.

There are many "water" projects under implementation. This also indicates not only existence of the policy, but also realization of the relevant policy in the area of IWRM at the national level.

The only problem is how efficiently these projects are being implemented.

#### Comment on 1.1b:

Policy is a phenomenon. Realization of policy is the continuous process. Dynamism of the public relationships determines the necessity for process of policy change/revision.

#### Comment on 1.1e:

It is practically impossible to ensure complete harmonization between the policy and legislation. The new public relations emerge, which should be regulated by the normative/legislative acts. Policy, as a rule, goes ahead of legislation, and the latter should "support" the former.

<sup>&</sup>lt;sup>1</sup> Questionnaire format was developed by the DHI Water and Environment jointly with UNEP Center on cooperation (UCC/DHI – 14.12.2005)

<sup>&</sup>lt;sup>2</sup> The Water Code of the Republic of Tajikistan ( $29.11.2000\Gamma$ .)

<sup>&</sup>lt;sup>3</sup> Based on materials from: <u>http://www.eco-portal.kz/modules.php?name=News&file=article&sid=31</u> and the others.

1.2	What does the water policy cover?		
1.2a	Water resources management only 🔲 Water resources management, water supply and other uses <sup>4</sup>		
1.2b	If a water policy document exists, does it explicitly state IWRM (or IWRM principles) as a basis for water resources management in the country? Yes: No: Partly: Partly:		
1.2c	Does the water policy define IWRM? Yes: $\Box$ No: $\mathbf{M}$ , but <sup>5</sup>		
1.2d	If Yes (1.2c) write definition, if necessary in an annexed document referring to the number of the question.		
1.2e	Does the water policy specify the role of the private sector in water resources management?	Yes: 🗹 No: 🗌	]
1.2f	If Yes (1.2e) describe the role as specified, if necessary in an annexed document referring to the number of the question. <u>Comment on 1.2f:</u> <u>The Water Code of the Republic of Tajikistan</u> <u>Article 13</u> . Participation of juridical and physical persons in implementation of measures aimed at the rational use and protection of water resources		
	The juridical and physical persons, regardless of their ownership forms, functioning on the Tajikistan shall have opportunity to participate in the measures aimed at the rational resources.		
	Article 43. Water User Rights		
	In accordance with the purpose of provided permission for the specialized use of water object, water users shall have rights, as established by procedure, to: - create water user associations.		
	Water user associations are established for operation and maintenance of the on-farm irrigation and drainage systems both <b>of individual and collective ownership</b> , ensuring equitable, efficient and timely distribution of water amongst dekhkan and private farms, collection of payments for water delivery and resolution of disputes arising amongst their members in regard to issues associated with distribution and use of water.		
1.2g	Does the water policy include the "polluter pays" principle (those causing pollution pay the cost of monitoring and treatment)? Yes: No:		
1.2h	Does the water policy include the "user pays" principle (water users pay the cost of management and provision of water)? Yes: $\square$ No: $\square$		
The Wa	e <b>nt on 1.2g :</b> ter Code of the Republic of Tajikistan: 142. Responsibilities for violation of the water legislation		
	esponsible for committal of actions specified in the article 124 of the present Code, as well as f	òr:	
- comm and con - violati - violati - unsati - violati phenom - dispos incur lia	<ul> <li>pollution and contamination of waters;</li> <li>commissioning of industrial enterprises, public utilities and the other objects without structures and facilities preventing pollution and contamination or their adverse impact on waters;</li> <li>violation of water protection regime at watersheds causing their pollution, water erosion and the other harmful phenomenon;</li> <li>violation of normative, technical, sanitation and metrological requirements to procedure for control and inventory of water use;</li> <li>unsatisfactory performance of water treatment plants, excessive (above normative) disposal of pollutants into water objects;</li> <li>violation of operational regime of water objects and structures causing their pollution, water erosion and the other harmful phenomenon;</li> <li>disposal of polluted sewage waters into aquifers, incur liability in accordance with the legislation of the Republic of Tajikistan.</li> <li>The legislation of the Republic of Tajikistan can impose liability for the other types of the water law violations.</li> </ul>		
2. Natio	onal water legislation		
2.1	What is the situation of ownership of water in your country?		
2.1a	Is water a common good (i.e. it belongs to everyone)?	Yes 🗹	No 🗌
2.1b	Is water the property of the State?	Yes 🗹	No 🗌

 <sup>&</sup>lt;sup>4</sup> Provided that the current Water Code (of 2000) of the Republic of Tajikistan is understood under water management policy.
 <sup>5</sup> The IWRM concept is included into legislation in the form of statement "integrated, rational, efficient use of water resources".

2.1c	Is water a private property?	Yes 🗌	No 🗹
2.1d	Is ownership variable according to the type or location of the water body?	Yes 🗌	No 🗹

#### Comment on 2.1a, 2.1b:

# 1. Constitution of the Republic of Tajikistan

Article 13

The earth, its mineral resources, water, atmosphere, flora, fauna, and the other natural resources are the exclusive property of the state, and the government guarantees their effective utilization in the interests of the people.

2. The Water Code of the Republic of Tajikistan

#### Article 5. The State Ownership for Waters

In accordance with the constitution of the Republic of Tajikistan water resources shall exclusively constitute the state property and the state guarantees its efficient use and protection in the interests of people.

Actions of the juridical and physical persons, which directly or indirectly violate the state water ownership rights and contradict the state interests of the Republic of Tajikistan are prohibited and entail liability in accordance with the legislation of the Republic of Tajikistan.

2.2	Does the country have one or more specific water laws, or a water code?				
2.2a	Existing:	$\checkmark$	1 8		Give the title(s) of the documents : The Water Code of the Republic of Tajikistan
2.2b	In progress: Give the expected date for finalisation:				
2.2c	Foreseen: Give the expected period for preparation:				
2.2d	Not foreseen for the time being				
Comm	ent on 2.2a:				

The draft law of the Republic of Tajikistan "On Water User Associations" is to the great extent relevant to the sphere of water relationships regulation.

2.3	Does the water legislation include obligations to take into account the following principles?		
2.3a	Public hearings	Yes 🗌	No 🗹
2.3b	Participation of the stakeholders in the water management	Yes 🗹	No 🗌
2.3c	Management by river basin	Yes 🗌	No 🗹
2.3d	Management at the lowest appropriate level <sup>6</sup>		No 🗌
2.3e	Financial contribution by the users towards the management of water resources	Yes 🗹	No 🗌
2.3f	The "polluter pays" (those causing pollution pay the cost of monitoring and treatment)	Yes 🗹	No 🗌
2.3g	The "user pays" (water users pay the cost of management and provision of water)	Yes 🗹	No 🗌
2.3h	h The particular role of women in water management		No 🗹
2.3i	Separation between resource management and water service provision		No 🗌
2.3j	Water use efficiency	Yes 🗹	No 🗌
2.3k	Private sector involvement	Yes 🗹	No 🗌

# Comment on 2.3a:

If the "public" is understood as "governmental", the only answer is "Yes" (the state accountability).

If the "public" is understood as "common" hearing, the only answer is "No" (such duty is not imposed on the water management bodies).

<sup>&</sup>lt;sup>6</sup> The water problems should be managed at the lowest appropriate level. I.e. at the level, where the local competences and the capacities make solution to the problems possible and where decision makers are affected by the solutions

#### Comment on 2.3b:

According to the provisions of the Constitution of the Republic of Tajikistan: All citizens shall have the right for associations, participation in the management of state affairs, both directly and through representation, and the other rights and freedoms. Therefore, any stakeholder can participate in water resources management in accordance with the procedure established by legislation.

#### See also the answers to question 1.2e

#### Comment on 2.3c:

The Water Code of the Republic of Tajikistan:

Article 9. The State management in the area of water resources use and protection

The State management in the area of water resources use and protection is based **on combination of basin, territorial and administrative-territorial management principles** and is carried out by the Government of the Republic of Tajikistan, local governmental executive bodies, as well as by the specially authorized state body for regulation of use and protection of water resources in accordance with the legislation.

The Water Code of the Republic of Tajikistan:

Article 7. Competence of local governmental executive bodies in the area of water relationships regulation

#### The local governmental executive bodies in the area of water relationships regulation are responsible for:

- identification of the main directions for use and protection of water resources at their respective territories;

ensuring of law and order in the area of regulation of water resources use and protection;

- inventory and assessment of the water object conditions, and control over use and protection of waters, compliance with the established limits of water consumption, and maintenance of water use records by water users;

- implementation of measures aimed at protection and improvement of water object conditions, prevention and elimination of the adverse impact, as well as water pollution, and rehabilitation of objects damaged by accidents, flooding, mudflows, and the other natural disasters;

- supply of drinking water, protection and development of the centralized and decentralized systems of drinking water distribution amongst consumers within the competence identified by the legislation of the Republic of Tajikistan;

- approval of location and commissioning of enterprises and water structures, and organization of works within the coastal, water protection zones;

- regulation of the other issues, specified by the legislation.

### Comment on 2.3f:

See also the answers to question 1.2g

#### Comment on 2.3g:

See also the answers to question 1.2h

#### Comment on 2.3j :

The Water Code of the Republic of Tajikistan:

Article 1. Tasks of the Water Code of the Republic of Tajikistan

The tasks of the Water Code of the Republic of Tajikistan are: **regulation of water relationships for the rational use of water** for needs of population, sectors of the national economy and environment, protection of waters from pollution, contamination, and depletion, prevention and elimination of the adverse impact of waters, improvement of water object conditions and protection, enforcement of law, and protection of rights of juridical and physical persons in the area of water relationships.

#### Comment on 2.3k:

The Constitution of the Republic of Tajikistan (article 12) has appropriate provisions for recognition of the various forms of ownership, including the private one.

See also the Comment on 1.2f.

2.4	Regulations supporting the water law			
2.4a	How many regulations are required by the water law?	Give the titles and other details of regulations in an annex		
There i in the I normat Since t	ent on 2.4a: s no exact answer to this question. It is only possible to tell the nu Law (or in the special Decree of the Government) as to be develop ive and legislative acts at the level of bylaws that should be adopt he normative and legislative acts cover all spectrums of legislation acts (Decrees of the Government, sectoral acts, etc.).	ed. As a rule, this list covers the minimum number of ed in the first place.		
2.4b	4b       Among the regulations foreseen, how many have been adopted?         If possible mark "adopted" on the list given in an annex			
Comm	ent on 2.4b:			

Water Code of the Republic of Tajikistan":

- the Ministry of Nature Protection, the Ministry of Amelioration and Water Resources, the State Committee for supervision over safety in industry and mining, and the Main geological administration under the Government of Tajikistan were identified as the especially authorized state bodies (EASB) for regulation of water resources use and protection; - the above mentioned bodies were assigned to develop and submit the Government for approval: draft Provision on differentiation of the EASB authorities for regulation of water resources use and protection; -the ministries and bodies responsible for development of the normative acts (in accordance with the below list) of the Government of the Republic of Tajikistan were identified. The List of essential acts of the Government implied by the Water Code of the Republic of Tajikistan: 1. Procedure for preparation, registration and issue of license for water use; 2. Procedure for encouragement of water users who carry out the socially useful measures on rational use and protection of water resources. 3. Procedure for compensation of damages to the juridical and physical persons caused by implementation of water management activities. 4. Procedure for use of small scale boats; 5. Procedure for use of underground waters of the other categories than drinking or curative ones; 6. Procedure for rating of water bodies as navigable waterways and rules of their exploitation; 7. Procedure for use of water bodies for parking, take-off runway, as well as for the other needs of air transport; 8. Procedure for use of water bodies for fishery; 9. Procedure for use of water bodies for hunting farm needs 10. Procedure for recognition of water bodies as nature or culture landmarks; 11. Procedure and conditions for use of water bodies for fire-fighting needs, liquidation of emergency situation impacts and for the other state and public needs; 12. Procedure for organization and coordination of measures ensuring the proper technical conditions and improvement of reservoirs (lakes and the other water bodies used as reservoirs), as well as control over observance of the rules for their operation; 13. Procedure and tariffs for the juridical and physical persons for registration in the State inventory of water structures; 14. Procedure for state control and inventory of water resources, their use, maintenance of the state water cadastre, monitoring, development and approval of the integrated water master plans: 15. The Target State Program in the area of efficient use and protection of water resources and development of drinking water supply systems; 16. Procedure of payments for water use, tariffication and setting of benefits; 17. Procedure for establishment and use of water fund, norms and limits of water use; 18. Procedure for organization of scientific and research works on development, use, and protection of water resources; 19. Program of bank/shore protection works; 20. Rules of specialized water use in the zones of emergency situations; 21. Amount, procedure, and conditions of payments for the right to use, regeneration and protection of water resources, their transportation and disposal of waste waters, pollution and depletion of water bodies; 22. Rules of water bodies' use for hydropower generation. II. According to the analysis of the technical director of EC IFAS<sup>7</sup>, the Water Code of the republic requires adoption as a minimum of 30 normative and legislative acts. In addition, it will be necessary to develop many sectoral normative acts (instructions, orders, etc.). The List of adopted decrees of the Government of the Republic of Tajikistan: - Provision on differentiation of authorities of the especially authorized state bodies (EASB) for regulation of water resources use and protection. - Procedure for maintenance of the state water cadastre of the Republic of Taiikistan: - Procedure for encouragement of water users who carry out the socially useful measures on rational use and protection of water resources (it does not work absolutely); - Procedure for recognition of water bodies as nature or culture landmarks; - Procedure for rating of water bodies as navigable waterways and rules of their exploitation; - Procedure for use of underground waters of the other categories than drinking or curative ones; - Procedure for use of water bodies for fishery; - Procedure for preparation, registration and issue of license for the special water use; - Rules of water bodies' use for hydropower generation; - On state support to the drinking water supply sector; - Procedure for maintenance of the State inventory of water structures; - Procedure for attraction of water users to implementation of irrigation and amelioration works. Partly: 2.4c Are the regulations effective? Yes: No:

I. According to the Decree of the Government of Tajikistan of 06.08.2001, #373 "On some measures aimed at realization of the

<sup>&</sup>lt;sup>7</sup> A. Kholmatov. Main provisions of the Water Code of the Republic of Tajikistan and progress with development of its bilaws http://www.caresd.net/site.html?en=0&id=1570

#### Comment on 2.4c:

Practically every newly adopted normative act is the step forward in the national legislation, i.e. it is more effective as compared with its absence. However, due to a number of reasons (it is in general lack or insufficiency of mechanisms for its implementation) it may be not as efficient as expected.

2.4d	If "No" or "Partly" for which reason? (tick one or more of the following possible reasons)	
2.4e	e Regulations insufficiently known by the users:	
2.4f	f Regulations insufficiently known by those who shall enforce them:	
2.4g	g Regulations too complicated to be operational	
2.4h	h Regulations contradict each other:	
2.4i	Regulations conflicts with customary law or cultural traditions of certain users:	

#### Comment on 2.4h, 2.4i :

There is a persistent enough opinion that the various normative and legislative acts very often allegedly "conflict" or not "harmonized" or "contradict" with each other. This is not entirely true.

The general legal force rules of the normative and legislative acts are as follows:

- The state constitution has supreme legal force
- Laws and the other normative and legislative acts are being adopted on the basis and in pursuance of the national Constitution and can not contradict its norms and principles
- The normative and legislative acts of ministries, state committees and agencies are being adopted on the basis and in pursuance of the Constitution and Laws, decisions of the Parliament, President and Government
- The normative and legislative acts of the local state authorities are being adopted on the basis and in pursuance of the Constitution and Laws, decisions of the Parliament, President, and Government, and also decisions of the superior local state authorities.

Correspondence of legal force between the various normative and legislative acts is as follows:

- Normative and legislative act should correspond to the one that has superior legal force
- In case of disagreements between two normative and legislative acts, it should be enforced the one that has the superior legal force
- In case of disagreements between two normative and legislative acts which have equal legal force, it should be enforced the subsequent one
- The normative and legislative act adopted by one ministry, state committee or agency has superior legal force as compared with the normative and legislative act adopted by the another ministry, state committee or agency if the institution that adopted such act is specially authorized to regulate the certain area of public relationships.

Thereby, in regard to legal force the normative and legislative acts harmonize with each other in accordance the above mentioned provisions.

2.4j	Sanctions are not applied in cases of non-compliance:	
Comme	<u>ent on 2.4j :</u>	
	ons are envisaged and applied. However, the size of sanctions for non-compliance with the water legislatio ajority of them is considered as administrative violations) as a rule is inadequate to the caused damage.	'n
2.4k	Monitoring capacity inadequate	$\checkmark$
2.41	2.41 Institutional enforcement capacity inadequate	
2.4m	Other reasons (explain which):	

2.5	Is the water law harmonised with other national legislation?			
2.5a	Environmental legislation	Yes: 🗹	No: 🗌	Partly:
2.5b	Land-use legislation	Yes: 🗹	No: 🗌	Partly:
2.5c	Agriculture legislation	Yes: 🗹	No:	Partly:
2.5d	Health legislation	Yes: 🗹	No:	Partly:
2.5e	Other legislation (describe):			

2.5f If relevant, list key areas of conflict between the water law and other legislation:

# Comment on 2.5:

In accordance with the above **Comments on 2.4h**, **2.4i**, disagreements between various normative and legislative acts can be easily resolved even in case if there is no agreement (in text or wording) between legislation of various sectors.

2.6	Is the national legal framework harmonise	d with the international agreements	which the country endorses?
2.6a	Yes: 🗹	No 🗌	Partly:
2.6b	List the water related agreements signed by the country <sup>7</sup> and, if possible, mark those which have been integrated in the national legal framework.		
The Con Article	nstitution of the Republic of Tajikistan 10		
of a dis	tional legal acts recognized by Tajikistan crepancy between the laws of the republi tional legal acts are applied.		
	ent on 2.6b:		
The Int	ernational normative and legislative acts of	•	
•	The Aarhus Convention on Access to Inform Environmental Matters (1998),	mation, Public Participation in Decisi	on-making and Access to Justice in
•	The Convention to Combat Desertification	(1994)	
•	The Framework Convention on Climate Ch	ange (1992)	
•	The Convention on Biological Diversity (19	992)	
•	The Ramsar Convention on Wetlands of Int	ternational Importance Especially as	Waterfowl Habitat (1971).
Agreer Tajikis	nents and equated to them the regi tan:	onal political and legal docur	ments signed by the Republic of
•	The Dushanbe Declaration (2002) Decision of the Heads the Central Asia specific actions aimed at improvement period 2003-2010" (ASBP-2) The Ashgabad Declaration (1999) The Agreement of 1998, amongst the C water and energy resources of the Syrc The Agreement of 1998, amongst the C The Issyk Kul declaration about the regiona The Agreement of 1997, amongst the Gove for Saving the Aral Sea" The Almaty Declaration (1997)	Cof ecological and socio-econom Governments of Kazakhstan, Kyrg larya river basin (Tajikistan is the Governments of the Central Asian Il cooperation of the Central Asian Co	ic situation in the Aral Sea basin for gyzstan, and Uzbekistan about use of Party to Agreement since 1999) Republics pountries
•	The Nukus Declaration (1995) of the Central Asian Countries and the international organizations on sustainable development of the Aral Sea basin Agreement of 1992 amongst the Governments of the Central Asian Republics "On cooperation in joint management, use and protection of the transboundary water resources",		
and the	others.		

2.7	Does the legal framework include an obligation to elaborate	e/maintain an IWRM Action Plan/strategy/process?
2.7a	Yes:	No: 🗖, but

<sup>&</sup>lt;sup>7</sup> Country can sign the international agreement, but not ratify it.

#### Comment on 2.7a:

The Water Code of the Republic of Tajikistan does not directly specify the development/support to the IWRM Action Plan/Strategy (they are not mentioned exactly under this title), but the IWRM process in terms of "integrated, rational, efficient use of water resources" is included in the legal structure.

The projects, which reflect practically all the main IWRM aspects (sustainable development, water saving, public participation, coordination and the others), are presented in the key political document ASBP-2, approved by the Heads of the Central Asian Republics. One of the large ASBP-2 projects (Project #8.3) is entitled **"The Integrated Water Resources Management in the Aral Sea Basin".** As "The expected results" of this project it is in particular envisaged the following:

- 1. The new managerial structure of the water management bodies with involvement of public for implementation of the IWRM principles within the hydrographic boundaries at the pilot objects ...
- 2. The legal basis for realization of the IWRM principles in the form of regulation documents package.

Development of the Concept of sustainable development in the Aral Sea basin is envisaged by the ASBP-2 as Priority #11. In priority rationale it is said that "the main objective of ASBP-2 … can be achieved only within the framework of policy aiming at sustainable development (SD)".

In the Nukus (1995), Issyk Kul (1995), Almaty (1997), Ashgabad (1999), and Dushanbe (2002) Declarations of the Central Asian countries it was declared transition of the countries to the SD policy, integrated and multi-disciplinary approach, ecosystem and **integrated natural resources management** and water use.

3. Inst	titutional framework for the water sector		
3.1	Provide the organisation chart(s) for the Institution(s) responsible for water resources management (attach in a separate document or in electronic format)         Water resources management in the Republic of Tajikistan is carried out in accordance with the traditional administrative and territorial principle.         Water management structure includes the following levels:         1. National: the Ministry of Amelioration and Water Resources (MAWR);         1.1. Oblast:         - two oblast State Water Administrations;         - five territorial State Water Administrations;         1.1.1. Rayon: 42 rayon and inter-rayon Water Management Administrations (WMA).         The Ministry of Amelioration and Water Resources had prepared draft recommendations on change of the organizational structure of water resources management that envisaged the following levels of hierarchy:         1. National: the Ministry of Amelioration and Water Resources;         1.1. Basin (river basins level): Basin Water Administrations (BWA) by the main rivers of republic: Syrdarya, Zarafshan, Karatag-Shirkent, Kafirnigan, Vakhsh, and Pyandj rivers;		
	3.2	Water resources management responsibility	
	If the water resources management responsibility is undertaken by a sector institution (e.g. Ministry of Agriculture, Energy, Environment) are there plans to move the responsibility away from the particular sector institution and place it in a cross-sectoral institution.		
3.2a	Yes:	No: 🗹	

3.3	<i>Institutions in the management framework</i> Which institutions are in place being part of a framework for IWRM?		
3.3a	Is there a national body where cross-sectoral coordination at the overall level can take place?	Yes: 🗹	No: 🗌
	If Yes, give its name: date of establishment frequency of meeting	gs	
	Comment on 3.3a:		
	At the national level: The Government of the Republic		
	On the basis and in pursuance of decisions of the Government, departments of activities at the lower levels: <b>oblast, rayon, local levels.</b>	ministries and agencies	coordinate their
	As a rule, the main coordination agency is the state authorities and administrat	ions at the relevant leve	ls.
	Dates and periodicity of the Government sessions are identified by the Govern	ment itself	

# THE REPUBLIC OF TAJIKISTAN

3.3b	Is there a platform where interaction with stakeholders at the national level can take place?	Yes: 🗹, but	No:			
	I If Yes, give its name: date of first meeting frequency of meeting	ngs				
	Comment on 3.3b:					
	This is a platform where interaction with stakeholders <b>may take place</b> : In accordance with the competence, the state authorities and management bod levels resolve <b>all issues</b> on the respective subordinated territories:	ies at the levels from ob	last to the lower			
	The Constitution of the Republic of Tajikistan (Article 76):					
	Local authority consists of representative and executive bodies that operate with the Constitution, laws, and acts of the Parliament (Madjlisy Oli) and the President executive bodies are constructed as the president of the parliament (Madjlisy Oli) and the president of the parliament of the		ensure execution of			
	The Constitution of the Republic of Tajikistan (Article 77):					
	The Madjlis of people's deputies, managed by a chairperson, are the bodies of and rayons.	local representative pow	ver in oblasts, cities,			
	The Madjlis of people's deputies identifies the ways of local socio-econom power determined by the Constitution and laws.	ic development, exe	rcises the other			
	The Constitution of the Republic of Tajikistan (Article 78):					
	The local power is exercised by representatives of the President, the chairperson of oblast, city, and rayon.					
	The representative and executive power of corresponding administrative territorial units is headed by the Chairperson.					
	The self-administration bodies in settlements and villages are council (jamoat)					
	<b>Note:</b> The above mentioned bodies are responsible, in particular, for solution of issues associated with water resources management, including issues related with activities coordination and interaction amongst water use entities on their respective subordinated territories.					
	Another issue is poor public control and necessity for establishment of the pub resources management: basin, irrigation system or canals of various orders (B Associations) and their active involvement in the process of Water Resources	asin Councils, Unions ar				
3.3c	3.3c.1. Are there platforms for interaction with stakeholders at the regional/provincial level?	Yes: 🗹	No:			
	See Comment on 3.3b, the part relevant to 3.3c.1.					
	3.3c.2. Are they operational (holding meetings and influencing decisions)?	Yes:	No: 🗹			
3.3d	3.3d.1. Are there bodies for participation of the users at the local level	Yes: 🗹	No:			
	See Comment on 3.3b, the part relevant to 3.3d.1.					
	3.3d.2. Are they operational (holding meetings and influencing decisions)?	Yes:	No: 🗹			
3.3e	3.3e.1. Are there bodies for river basin management?	Yes:	No: 🗹			
3.3f	Other institutions (explain)					
	• Union of canal water users ("Gulyakandoz" Union of Canal Water the IWRM Fergana project	Users), established with	in the framework of			
	• Water User Associations, farmers and dekhkan farms (lower level or during the recent years.	of water resources managed	gement), established			

3.4	Institutional Capacity at the national/central level						
	The questions below try to establish how far the country has come towards a realistically attainable institutional capacity for water resources management based on IWRM principles. Imagine a 5 year goal of establishing the management functions below and associated competences. The goal has to be consistent with a realistic water resources management budget and staffing considering the usual or immediately foreseen national budget priorities.						
	For each of the functions below, give your assessment of the national/central level capacity using the following scale function not established, $1 =$ function has many large gaps in quality and coverage, $2 =$ function has some gaps in quality and coverage, $3 =$ function operates at the realistic goal level.						
3.4a	Policy formulation	0:	1: 🔽	2:	3: 🗌		
3.4b	Drafting of laws and associated regulations	0:	1: 🔽	2:	3:		
3.4c	Recovery of cost of water resources management	0: 🗌	1:	2: 🔽	3:		
3.4d	Collecting water resources information and operating databases	0:	1: 🔽	2:	3: 🗌		

3.4e	Preparation of water resources assessments	0:	1: 🔽	2:	3:
3.4f	Preparation of environmental assessments	0:	1: 🔽	2: 🗌	3: 🗌
3.4g	Preparation of socio-economic assessments	0:	1: 🔽	2:	3:
3.4h	Monitoring of water availability	0:	1: 🔽	2:	3: 🗌
3.4i	Monitoring of ambient water quality	0:	1: 🔽	2: 🗌	3: 🗌
3.4j	Monitoring of aquatic ecosystems	0:	1: 🔽	2:	3: 🗌
3.4k	Monitoring of pollution loads	0:	1: 🔽	2:	3: 🗌
3.41	Monitoring of water use	0:	1: 🔽	2:	3: 🗌
3.4m	Planning resource use, protection and conservation	0:	1: 🔽	2:	3: 🗌
3.4n	Facilitating water demand management	0:	1: 🔽	2:	3: 🗌
3.40	Water allocation	0:	1:	2: 🔽	3: 🗌
3.4p	Conflict mediation	0:	1: 🔽	2:	3: 🗌
3.4q	Cooperation on internationally shared watercourses	0:	1: 🔽	2:	3: 🗌

3.5	Institutional constraints (apart from human resources) at the national/central level Give your assessment of the severity of major negative factors constraining the water resources management institution(s). Use the following scale: $0 = not$ relevant, $1 = not$ severe, $2 = severe$ , $3 = very$ severe				
3.5a	Lack of Good Governance (transparency, accountability, integrative, communication, participation)	0:	1: 🛛	2: 🗌	3: 🔲
3.5b	Institutional framework poorly suited to address the key water resources management issues (e.g. mix of regulatory and service provider functions)	0:	1: 🔽	2:	3:
3.5c	Institutional mandate poorly defined	0:	1: 🔲	2: 🔽	3: 🗌
3.5d	Responsibilities poorly described for departments/sections	0:	1: 🔽	2:	3:
3.5e	Inadequate equipment (laboratory, monitoring equipment, etc.)	0:	1:	2:	3: 🔽
3.5f	Inadequate budget	0:	1:	2:	3: 🔽
3.5g	Inadequate logistics (e.g. transport)	0:	1:	2:	3: 🔽
3.5h	Inadequate office facilities	0:	1:	2: 🔽	3:

3.6	Human resources				
	Development of the water resources management functions requires staff we technical complexity of the functions. The questions below address the st level of the functions (ref 3.4)	1		1	0
	Assess the human resource situation in the national/central water resource IWRM functions under $3.4a - 3.4q$ . Use the following scale: $0 = not$ at all, 3: fully	0			
3.6a	Is the number of staff adequate for handling the IWRM functions at goal level as outlined above?	0:	1:	2: 🚺	3:
3.6b	Is the staff sufficiently qualified for to handle the IWRM functions at goal level as outlined above?	0:	1:	2: 🔽	3:
3.6c	Is the staff motivated to handle the water resources management based on IWRM principles?	0:	1: 🔽	2:	3:
3.6d	Estimate the number of senior managers in the water sector that are familiar	with IWRM	principles.		
	Less than 5 $\Box$ 5 - 10 $\Box$ 10 - 20 $\Box$ More than 20 $\Box$				
3.6e	Are there specific IWRM training activities in your country (if Yes, list them here or in a separate annex referring to the number of the question	Yes	:	No: 🔽	, but

#### List of IWRM training activities:

#### Comment on 3.6e:

Apart from the national trainings within framework of the "IWRM Fergana" project, the special trainings in the IWRM are not being conducted due to insufficiency or lack of finance.

The specialized regional training courses, seminars, and round tables are held under the aegis of ICWC for representatives of the various levels of the Central Asian water hierarchy at the Training Center of SIC-ICWC in Tashkent. The list of regional training topics on IWRM is quite wide.

At the same time, all the on-going investment projects in the Republic of Tajikistan (ADB, International Development Association, IDB) aimed at restructuring and rehabilitating of water management complex include component "awareness building". The "National Training Center" for advanced training of specialists had been established within the framework of project aimed at support to reorganization of agricultural production. Training programs of this center are aimed at the broad audience of specialists: upper level (decision makers), medium level, and low level (labors, machine operators, etc), as well as students and postgraduates. 3,600 persons were trained at this center during 2005.

The sectoral newspaper "Obu-obodoni" is published regularly. This newspaper features discussions of all the touchy issues of water resources management and examples of farmers' participation in discussions of the problem associated with operation and maintenance of irrigation and drainage systems.

4. Pr	ocesses and Milestones leading towards IWRM
4.1	Status of Action Plan/strategy for implementation of an IWRM Framework (enabling environment, institutional roles and management instruments)
4.1a	Not foreseen for the time being 🗹, but
4.1b	Under preparation
4.1c	Existing Approved by Date of approval: month year
4.1d	Existing and under implementationAgency in charge of implementationDate of start of implementation : monthyear

#### Comment on 4.1:

Although Action Plans on the scale of Tajikistan are not envisaged right at this moment, the conditions for implementation of the IWRM (enabling environment, institutional framework and management instruments) appear in the national and sectoral programs. Part of these programs is listed in the comment on 1.1a.

Specific action plans are envisaged within the framework of the pilot objects of Tajikistan in "IWRM-Fergana" project.

Within the framework of project "UNEP support for achieving the IWRM 2005 target Central Asia" by October 2006, it is envisaged development and approval of the national "road maps", which will be the basis for subsequent development of the detailed Action Plans.

4.2	If an Action Plan exists (confirmed in 4.1c or 4.1d)					
4.2a	Which government and non-government agencies were involved in preparing the plan? Specify :					
4.2b	Is there a portfolio of projects to implement the IWRM Action Plan?	Yes:	No: 🗹 , but			
4.2c	Is there a programme for capacity building included in the IWRM Action Plan?	Yes:	No: 🗹			
4.2d	If Yes, is it a recurrent programme?	Yes:	No: 🗌			
4.2e	Does the action plan have mechanisms for monitoring of implementation?	Yes:	No: 🗹			
4.2f	If Yes, which agency is responsible for monitoring?	·				
4.2g	Is there a strategy for financing of the Action Plan implementation?	Yes:	No: 🗹			

#### Comment on 4.2b:

There are some projects that include elements of the Action Plan on the scale of pilot irrigation systems (for example within the framework of "IWRM Fergana" project), but not on the scale of the Republic of Tajikistan as a whole.

4.3	IWRM in other Plans				
	Is IWRM itself or the principles that form the basis for IWRM parts of official from other sectors that use water or relate to water	documents (policies, pl	ans or strategies,		
4.3a	Does IWRM appear in a Poverty Reduction Strategy Paper	Yes: 🗹	No:		
4.3b	If Yes, provide date and title of document month year title				
4.3c	Does IWRM appear in a National Development Strategy to achieve the MDGs	Yes: 🗹	No:		
4.3d	If Yes, provide date and title of document month year title				
4.3e	Does IWRM appear in an Agricultural Development Plan	Yes: 🗹	No: 🗌		
4.3f	If Yes, provide date and title of document month year title				
4.3g	Does IWRM appear in an Energy Development Plan	Yes: 🗹	No: 🗌		
4.3h	If Yes, provide date and title of document month year title		1		
4.3i	Does IWRM appear in a National Environmental Action Plan	Yes: 🗹	No: 🗌		
4.3j	If Yes, provide date and title of document month year title				
4.3k	Does IWRM appear in other national plans development plans	Yes: 🗹	No:		
4.31	If Yes, provide date(s) and title(s) of document month year title	<u> </u>			

# Comment on 4.3:

Each national development plan (on reduction of poverty or improvement of living standards for achievement of the Millennium Development Goals, agriculture, energy sectors, environmental sphere and the others) is **the integrated one** and includes the main IWRM principles to one or another extent.

4.4	Awareness on IWRM				
	Is IWRM and the inherent concepts known and understood by the major ope to water (e.g. agriculture/irrigation, hydropower, health, environment, wate scale: $0 = not$ at all, $1 = to$ some degree, $2 = to$ a reasonable degree, $3 = ft$	r supply and			
4.4a	High level decision makers	0:	1:	2: 🗹	3: 🗌
4.4b	Professionals in agencies responsible for water resources management	0:	1:	2:	3: 🗹
4.4c	Professionals in agencies within water use and water related sectors	0:	1:	2: 🗹	3: 🗌
4.4d	Major water users (incl. industries)	0:	1: 🗹	2:	3: 🗌
4.4e	Consultants	0:	1:	2: 🗹	3:
4.4f	Non-government organisations (NGOs) in the water sector	0:	1:	2: 🗹	3:

5 Nar	5 Narrative descriptions of process towards IWRM			
5.1	Describe in your own words your assessment of the extent to which your country has achieved the target of the Johannesburg Plan of Implementation on IWRM: "to develop integrated water resources management and efficiency plans by 2005"			
	The IWRM 2005 Plans were not prepared			

# **CONTACT & INFORMATION:**

National Expert, Republic of Tajikistan: **Yarash Pulatov** – tj\_water@mail.ru Regional Consultant, Sub-regional Programme coordination: **Mikhail Horst** – horst\_mg@icwc-aral.uz GWP CACENA, Chairman, Administrative coordination: **Vadim Sokolov** – vadim@icwc-aral.uz