

Report on the Survey of Operational and Financial Performance Indicators of Water and Sewerage Utilities in the Republic of Tajikistan

Introduction

The Republic of Tajikistan is situated in the southern part of Central Asia and neighbors with Uzbekistan, Kyrgyzstan, China, Pakistan and Afghanistan. Tajikistan comprises 3 regions, 67 administrative districts and 15 towns. It is a mountainous country with absolute altitudes ranging from 300 to 7,495 meters and a total area of 143.1 thousand square kilometers, of which 93% are taken by mountains and 5% by ploughlands. The climate is continental and dry. Population exceeds 6.4 million persons.

Due to its alpine terrain with mountains covering the major part of the country, Tajikistan boasts vast natural riches, including massive freshwater resources that make up 70% of total water resources in Central Asia. The national water resources are a combination of surface sources (glaciers, rivers, lakes) and groundwater. There are 8,000 glaciers covering about 8% of the total territory of the country and containing some 550 km³ of freshwater, seven times the annual flow of all Central Asian rivers. Tajikistan's rivers account for 55.4% of the Aral Sea basin average annual flow.

The Government of the Republic of Tajikistan pays great attention to prudent and rational use of water resources and to creating a favorable environment to meet the requirements of all consumer groups in such a vital product as safe drinking water, as evidenced by the declaration of 2003 the Year of Fresh Water by the UN upon the initiative of the President of Tajikistan and the subsequent pronouncement of 2005-2015 the International Decade of Fresh Water at the Dushanbe International Fresh Water Forum.

The survey of operational and financial performance indicators (the "Survey") covered 22 of the 32 water and sewerage utilities reporting to the national State Unitary Enterprise *Housing and Utilities* (the "H&U").

It needs to be noted that water companies in large cities, such as Dushanbe, Khodgent, Chkalovsk and Nurek are managed by local *khukumats* (municipalities) and did not participate in the Survey.

All water and sewerage utilities (hereinafter, the "**utilities**") were broken down into three major groups based on the population of respective towns and districts:

1. Small utilities with no sewerage service serving up to 10 thousand persons (Group 1);
2. Medium-size utilities serving 10 to 15 thousand persons (Group 2);
3. Large utilities serving over 15 thousand persons (Group 3).

Some utilities were unable to provide source data for indicator calculations in full or of adequate quality. The questions that gave rise to difficulties in filling out the questionnaires include the following:

- metered water consumption;
- proportion of metered connections;
- proportion of water charges in per capita income;
- energy costs per types of activities;
- information on environmental aspects of utility operations.

Accordingly, the Survey does not cover these matters.

The list of utilities included in the Survey is presented in Appendix 1.

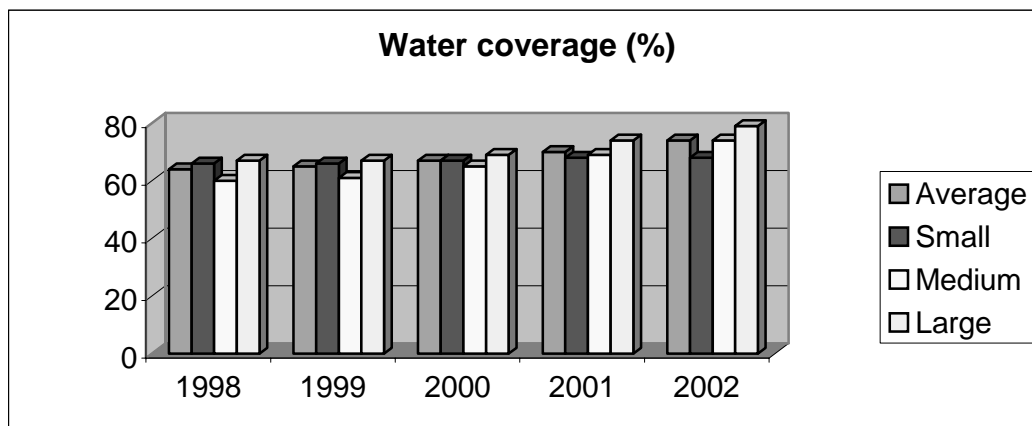
Performance Indicators of Water and Sewerage Utilities in the Republic of Tajikistan

Indicator 1.1. Water coverage

In 2002, water coverage totaled 74% nation-wide against 64% in 1998. **Indicator 1.1** over the surveyed period grew by 2-3% each year. The main factor underlying the high availability of drinking water in Tajikistan is its favorable geographical environment enabling low-cost water delivery. The highest coverage was reported by large and medium-sized utilities serving major towns and district administrative centers with well-developed infrastructure and industrial facilities as well as many smaller localities, where coverage totaled up to 80% against 70% in rural communities lacking the resources required for water and sewerage networks extension or construction.

The highest water coverage throughout the analyzed period was among the utilities serving large communities that number more than 20 thousand persons. In 2002, such utilities showed coverage at or above 80% (80% in Kurgan-Tyube, 84% in Yavan, 89% in Tursunzade and 80% in Shakhrinau) against the national average of 73%. The other high-performance group includes small utilities in areas with favorable geographical conditions and free-flowing natural sources of water which can be delivered to customers with minimal costs. These include Farhor with coverage at 80%, Kolkhozabad (85%) and Shaartuz (85%).

The lowest **indicator 1.1** over the analyzed period was observed among medium and small utilities located in dry areas and arid valleys with scarce natural water resources that do not meet the national (GOST) and international quality standards.

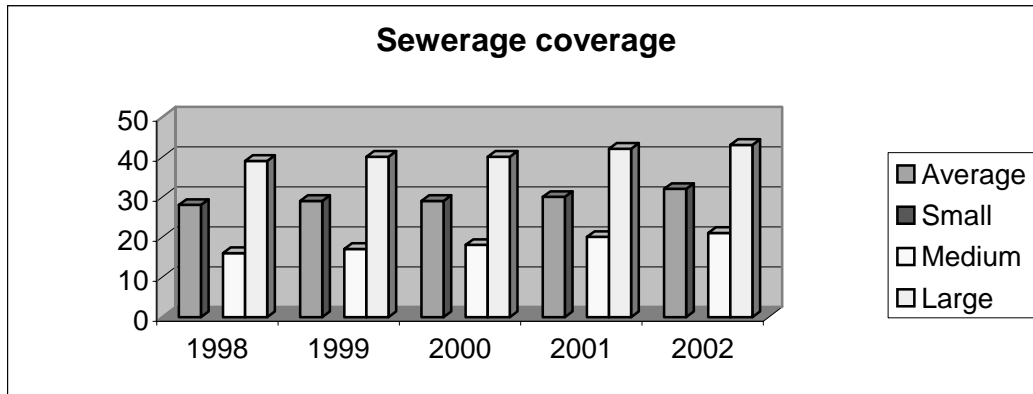


Indicator 2.1 Sewerage coverage

Coverage is very low for a region with favorable geographic conditions, sufficient natural water resources, agricultural focus and complete absence in some areas of industrial or other facilities with hazardous emissions, waste, chemicals and other harmful substances.

In 2002, six of the 22 surveyed utilities did not provide sewerage services due to the absence of sewerage and treatment facilities, while at other utilities treatment facilities were inoperative. These include the utilities in the Vosey, Dangarin, Kabadien, Pyanj, Muminabad and Ganchin Districts.

These areas have no manufacturing enterprises, plants with hazardous emissions or other similar facilities. However, residential housing constructed in 1970-1980s was designed without the development of the relevant infrastructure in mind, which now precludes the improvement of sewerage service, while new networks require major capital investments that utilities are unable to fund from own resources. As a result, sewerage coverage in these areas remains low.



Indicator 3.1. Water production per consumer

Indicator 3.2. Water production per connection

Indicator 3.3. Water production per household

Overall, daily water production per consumer across the surveyed utilities reduced over the analyzed period by 19.0%, from 371 liters in 1998 to 312 liters in 2002, while monthly water production per connection declined from 69.5 to 63.2 m³, or by 10%, and monthly production per household - by 12.8%, from 58.0 to 51.4 m³.

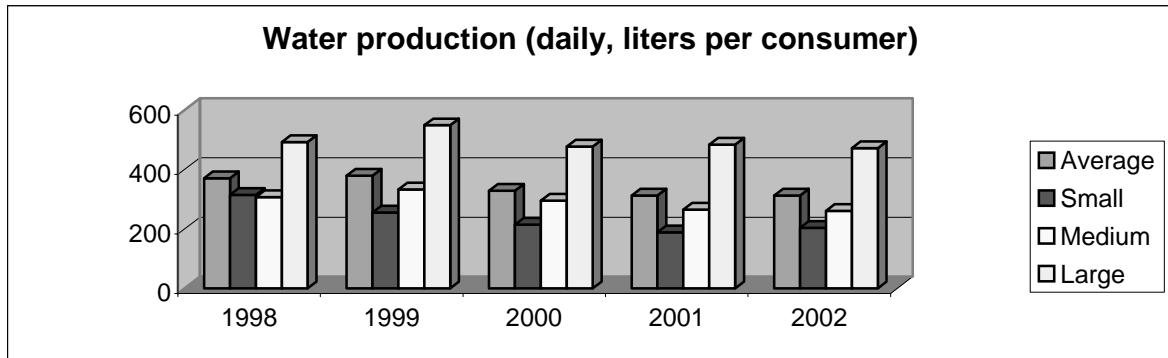
The steadiest **indicator 3.1** performance throughout the analyzed period was reported by utilities serving large communities with over 20 thousand residents and a well-developed industrial sector, where daily water production per consumer reduced from 492.4 liters in 1998 to 472.1 liters in 2002, or by a mere 4.1%.

The most dramatic drop in water production was observed among Group 1 utilities (small water companies without sewerage service). Within this group, **indicator 3.1** plummeted by 54%, from 315 liters per consumer daily in 1998 to 204 liters in 2002; **indicator 3.2** declined from 65.5 m³ to 57.7 m³ monthly, or by 13.5%, and **indicator 3.3** went down 30.1%, from 63.5 to 48.8 m³. The largest decreases in **indicator 3.1** were reported by the utilities in Kolkhozabad (by 56%) and Penjikent (a triple-fold decline). In the Shaartuz and Kumsangir Districts, this indicator over the analyzed period increased by 1.9 and 1.2 times, respectively.

Group 2 utilities reported either no significant changes in **indicator 3.1** over the analyzed period or a 15% decrease in 2002 against 1998, while **indicator 3.2** declined by 6.6%, and **indicator 3.3** slightly increased.

Water consumption declined primarily due to the introduction of new tariffs, which in the past two years exhibited growth of up to 20-30%, and reduced water service hours (by an average 15% across all surveyed utilities).

It needs to be noted that utilities have ample technological capacity to increase drinking water production, but the low paying capacity of customers and, in certain instances, the total absence of funds to pay for water and sewerage services restrict the development of utility services and growth of water production.



Indicator 4.1. Water consumption per consumer

Indicator 4.2. Water consumption per connection

Indicator 4.3. Water consumption per household

Overall, water consumption indicators across all surveyed regions exhibited a downward trend throughout the analyzed period. Monthly consumption per consumer (**indicator 4.1**) reduced by 43 liters, from 310.8 to 267.3 liters per person daily, and **indicator 4.2** over 1998-2002 steadily declined (from 57.2 to 54.0 m³ per month), while **indicator 4.3** decreased from 49.2 to 45.2 m³ monthly per household.

Monthly consumption per consumer reduced by a hefty 30% amount Group 1 utilities, from 265.5 to 186.9 liters per consumer daily, while **indicator 4.2** declined by 4.3% (from 53.6 to 51.3 m³ monthly) and **indicator 4.3** went down 12% (from 53 to 46.7 m³).

High **indicator 4.1** performance, above national average, was observed among Group 3 utilities, albeit even within this group **indicators 4.1, 4.2** and **4.3** decreased (by 1.1%, 7.6% and 10.4%, respectively).

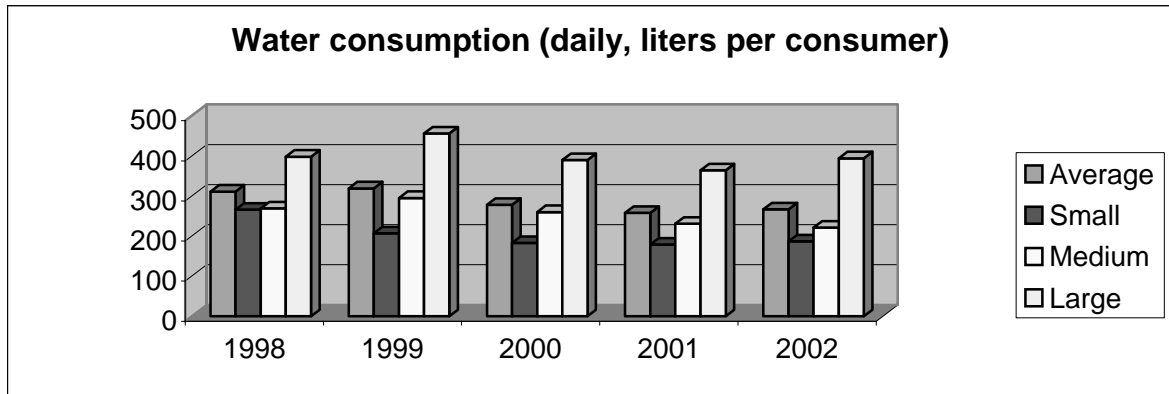
An analysis of **indicators 4.1, 4.2** and **4.3** reveals a clear connection between water consumption volumes and service area population. Minimal consumption per consumer and per household throughout the analyzed period was observed among utilities serving small, semi-rural district centers. Water consumption increases commensurate with population, peaking at utilities that serve towns and other urban settlements with more than 20,000 residents.

This trend is generally quite clear among the surveyed utilities. For example, monthly consumption per consumer within the small utility group stood at 5.5-6 m³ during 1998-2002, while in Group 2 and Group 3 it totaled 7-8 m³ and 11-12 m³, respectively.

One of the main reasons of high consumption rates (two or more times above the established standard levels) is the fact that in some regions (with hot climate and no natural water sources) water, lifted to altitudes of up to 300 meters, is used for watering personal garden plots and other domestic needs in excess of the standard consumption rates.

Overall, the surveyed utilities reported declining water consumption per consumer, connection and household over the analyzed period, although in 2002 **indicators 4.1, 4.2** and **4.3** increased against 2001 by 3.6%, 8.0 and 2.7%, respectively.

Several rational water use initiatives have been designed to economize water resources, while utility workers have stepped up control over the designated use of water, compliance with consumption standards and minimization of losses.



- Indicator 6.1. Unaccounted-for water as a proportion of total water produced**
- Indicator 6.2. Unaccounted-for water per km of water distribution network**
- Indicator 6.3. Unaccounted-for water per connection per day**

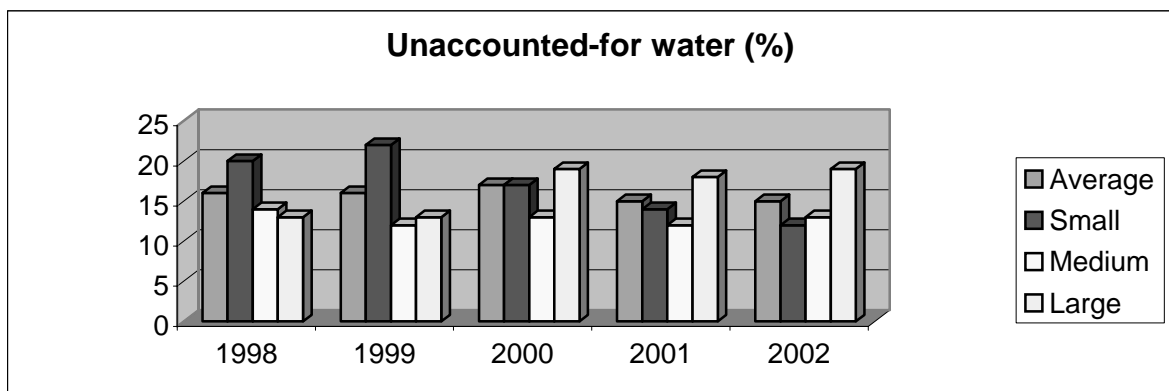
The broadest picture of water losses is provided by **Indicator 6.1**, defined as the difference between produced potable water delivered to the water distribution network and water billed. **Indicator 6.1** among the utilities covered by the Survey totaled 15% in the analyzed period, declining from 15.9% in 1998 to 14.5 in 2002.

The biggest water losses over the analyzed period were sustained by Group 1 utilities: above 20% in the first two years and down to 12-13% in the next three years (2000-2002).

Minimal water losses (**indicator 6.1**) were reported by Group 2 utilities at 13-14% throughout the analyzed period, while **indicator 6.2** within this Group stood at 16-14%, reducing by 30-35% against 2000-2001.

Group 3 utilities serving large and industrially-developed communities showed losses of 13% in the first two years of the Survey, followed by a surge to 19% in 2000-2002, with even larger losses at certain utilities (33% on average over the five years in Vakhdat, 38% in Gissar and 30% in Leninsky).

At four of the surveyed utilities, losses over the period under review did not exceed 10% of total water produced. Thirteen and four utilities reported losses of 10-20% and 20-38%, respectively. The number of utilities with daily losses at 10-15 m³ per km of network reduced from twelve in 1998 to seven in 2001, while the number of utilities with minimal losses (under 10 m³ per km) increased from eight to nine in 2002. These include the utilities in Shaartuz (5.9 m³), Kumsangir (2.3 m³), Shakhrinav (6.4 m³), Moskovsky (9.6 m³) Kabadien (2.5 m³) and other districts.



Indicator 9.1. Pipe breaks per annum
Indicator 9.2. Pipe breaks per connection

Distribution network incidence rate at the surveyed utilities over the period exhibited a downward trend, reducing by 27% against 1998 overall, and by 47% and 6% in Group 2 and Group 3, respectively.

The most stable **indicator 9.1** performance was observed in Group 1 that reported one break per each 1-1.2 km annually, compared to 2.8 km and 1.82 km for Group 2 and Group 3, respectively.

However, some of the small and medium utilities showed higher than average (1.9 km) break rates. These include Vosey (0.5 km), Muminabad (0.3 km), Kabadien (0.9 km), Isfara (0.5 km) and Kolkhozabad (0.9 km).

Some utilities reported worsened **indicator 9.1** performance in 2002 against 1998, with a two-fold or greater increase in the annual break rate. These include Penjikent (3 km vs. 7 km), Farhor (1.6 km vs. 3.2 km), Kumsangir (2.8 km vs. 6.5 km), Tursunzade (0.94 km vs. 2.1 km) and Kurgan-Tyube (0.6 km vs. 2.1 km). Overall, 10 of the 22 utilities reported increases in networks affected by failures, which indicates significant network wear and the absence of repair and maintenance efforts, including the replacement or relaying of worn-out sections.

Indicator 9.2 exhibited an overall increase in 2002 against 1998 to a tune of 11%. This growth trend is observed in Group 3, where **indicator 9.2** increased by 43%, while in Group 2 growth totaled 5.6%.

Summing it up, the significant values of **indicators 9.1 and 9.2** testify to significant network wear (approximating 70-80%), while financial difficulties faced by utilities in recent years preclude repair and rehabilitation efforts or re-laying of dilapidated pipeline sections and sewers.

Indicator 11.1 Operational costs per cubic meter of water produced
Indicator 11.2 Operational costs per cubic meter of water billed

Unit operational costs among the surveyed utilities generally increased over the analyzed period, both in relation to water produced and water billed. Average operational costs per annual water produced (**indicator 11.1**) at all surveyed utilities totaled 0.034 against 0.033 in 1998, an increase of 3.4%.

The highest **indicator 11.1** was reported by Group 1 utilities at 0.040 in 2002 against 0.038 in 2001 (a 5.3% growth). In Group 2, the indicator increased from 0.031 to 0.032, or by 3.2%, and in Group 3, growth totaled 18.5% (0.032 vs. 0.027).

Average **indicator 11.2** *Operational costs per cubic meter of water billed* over the analyzed period totaled 0.041, an increase of 8% against 1998. Performance by utility groups was as follows: Group 1 - 0.046 against 0.040 (a 15% increase); Group 2 - 0.038 against 0.034 (+11.8%); Group 3 - 0.040 vs. 0.033 (+21.2%).

Indicator 11.1 for Group 1 is especially high at a period average of 0.042, which is 1.3 times more than in Group 2 and 1.6 times more than in Group 3. **Indicator 11.2** for Group 1 totaled 0.047, 1.3 and 1.4 times higher than among Group 2 and Group 3 utilities, respectively.

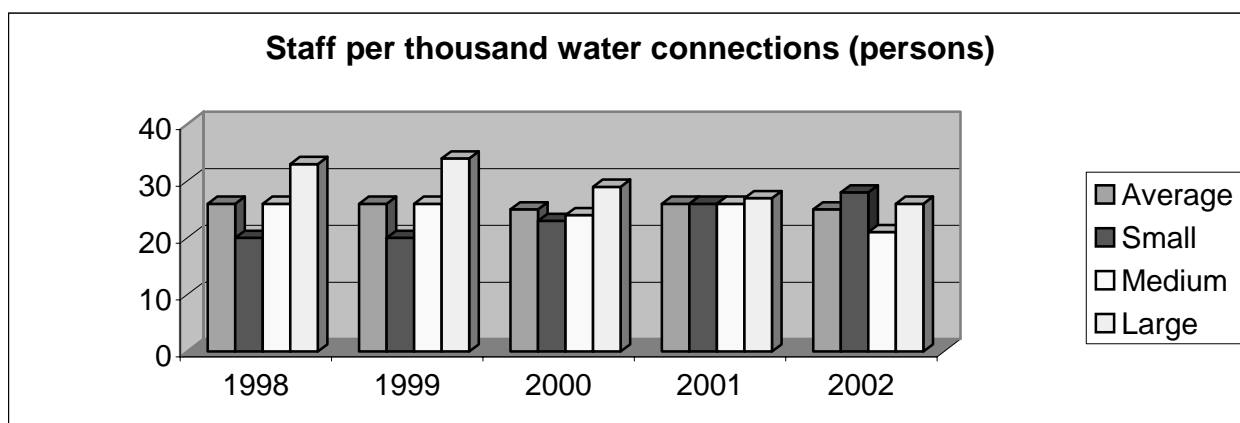
The high levels of **indicators 11.1 and 11.2** in Group 1 are explained by the fact that these utilities do not provide sewerage service, and all general and administrative expenses are allocated to water service.

Indicator 12.1. Staff per thousand water connections
Indicator 12.2. Staff per thousand sewerage connections
Indicator 12.3. Staff per thousand water service population

Overall, staff per thousand connections during the analyzed period reduced, going down from 26.4 persons in 1998 to 24.9 employees in 2002. This reduction was primarily brought around by Group 3 utilities, at which the staffing rate over the five years in question declined by 7.4 persons (22.4%), and Group 2 that reported a decrease by 18% (or 4.6 persons). At the same time, Group 1 utilities reported an increase over the same period by 7.7 persons, or 37%.

Indicator 12.2 also demonstrates reduced staffing levels, with the quickest rate of decrease in Group 3 (by 9 persons, or 31%, over the surveyed period). In Group 2, the decrease over the same period totaled 0.9 persons, or 3.5%. No indicator calculations were performed for Group 1 utilities which do not have sewerage operations. The drop in **indicator 12.3** (staff per thousand service population) was as follows: Group 3 - 20% (by 1.1 persons to 4.2 employees in 2002; Group 2 - by 1.8 persons; Group 3 - by 1.2 persons).

The principal factor on a nation-wide scale affecting **indicator 12.3** values were wage increases with the concurrent decline in staffing, as well as a decrease in the volume of water and sewerage services due to low paying ability of users and reduced service schedules.



Indicator 13.1. Labor costs as a proportion of operational costs

Overall, in 1998-2000 the proportion of payroll in the service-related operational costs of the surveyed utilities totaled 41.2%. The highest ratio was among Group 1 and 2 utilities (small and medium), with **indicator 13.1** averaging 42.9%, or 3.1% more than the overall average. The largest ratios within these groups were reported by the utilities in Moskovsky (43.2%), Farhor (45.0%), Kumsangir (45.1%), Shaartuz and Dangarin (49.0% each), Pyanj (52.3%) and Ganchin (51.4%). Group 3 utilities serving large industrially-developed towns with more than 20 thousand residents showed a 3.7% increase in payroll against the background of a slight decline in production and service volumes.

The high proportion of payroll in total operational costs at small and medium-size utilities is conditioned by the fact that they serve small areas with minor population, while the share of administrative and management expenses directly related to the provision of services remains high.

Indicator 15.1. Uninterrupted daily service

Average uninterrupted daily service for all utilities over the analyzed period totaled 15.1 hours. In the last years, **indicator 15.1** has been declining, going down from 16.7 hours in 1998 to 14.8 hours in 2002. Across the utility groups, the decrease totaled 2.5, 2.3 and 1.0 hours. Among small and medium utilities, actual uninterrupted daily service in the last two years of the surveyed period stood at 15 and 12 hours, respectively. Within this group, serving district administrative centers and rural-type settlements, a special power delivery regime is in effect in autumn and winter. In some areas electricity, due to its deficit, is supplied for only 6-8 hours a day, which has a significant impact on water production and consumption.

Group 3 utilities serving large and industrially-developed localities are in a better position, with power supply curtailed to 18 hours. In this group, **indicator 15.1** was the highest throughout 1998-2002 (18-19 hours daily) and remained at a steady 17 hours in 2001-2002.

Indicator 16.1. Number of water and sewerage service complaints

Indicator 16.1 across all surveyed utilities totaled 0.028 in 2002 against 0.017 in 1998, increasing by 1.6 times. The growth of **indicator 16.1** can be observed in all utility groups: 1.4 times in Group 1, 2.1 times in Group 2 and 1.7 times in Group 3.

The surge of **indicator 16.1** for Groups 1 and 3 (from 0.027 to 0.038 and from 0.018 to 0.030, respectively) testifies to declining quality of water and sewerage services.

In Group 2, the value of **indicator 16.1** has doubled but is still lower than the average for the surveyed utilities, standing at 0.011 against 0.022.

The analysis of the number of water complaints with the service population factored in reveals that the value of **indicator 16.1** for Groups 1 and 2 in 2002 was zero, while Group 3 utilities reported notable growth and an upward trend indicating stronger service quality expectations in large and better-developed towns and communities, whereas in small towns and rural areas residents make do with water supply that covers only the vital and indispensable needs.

It should be noted that the actual extent of water and sewerage complaints cannot possibly be identical to their registered number because some utilities retain the original complaint data (registration logs) for no longer than one or two years as the collection and retention of information on poor quality of user services is clearly not in their interests.

Indicator 18.1. Average annual tariff per cubic meter

Indicator 18.2. Average annual tariff per connection

Indicator 18.3. Average annual tariff per household

Average tariff per cubic meter of water over the analyzed period (1998-2002) across all utilities totaled 0.033, having increased by 48.0%.

The growth trend in the last two years of the surveyed period was evident in all three utility groups. The growth factor totaled 1.3, 1.5 and 1.3 for Groups 1, 2 and 3, respectively.

Among Group 3 utilities serving large industrial towns **indicator 18.1** averaged 0.034, with several utilities exhibiting maximum indicator values: 0.06 in Tursunzade, i.e. twice above the average; 0.05 in Kurgan-Tyube (1.5 times the average) and 0.07 in Kulob and Yavan, (2.1 times the average).

The average value of **indicator 18.2** over the analyzed period grew by 1.4 times for Group 2 and 1.7 times for Group 3.

Indicator 18.3 over the analyzed period averaged 17.6, having increased by 1.8 times in 2002 against 1998. The highest growth was reported by Group 2, with the indicator value increasing to 30.0 in 2002 against 17.2 in 1998, or by 1.7 times. In Group 3, the indicator increased by 2.2 times (from 14 to 31.4). Growing prices on energy resources and the introduction of free market prices for equipment and materials in recent years have had a major impact on the level of operational costs that has to be offset by commensurate tariff increases. However, current tariffs do not fully reflect actual costs and cover only current operational expenses, hence utilities do not have sufficient own resources to acquire new equipment or upgrade and overhaul their fixed assets.

The head office of H&U has drafted a tariff-setting regulation for utility services. The introduction of this regulation may increase tariffs by 2-2.5 times to ensure cost-effective operations of utilities and formation of amortization and other repair/maintenance funds to finance the replacement and reconstruction of water and sewerage facilities and networks.

Indicator 21.1. Ratio of industrial to residential revenues

Indicator 21.1 across the surveyed utilities averaged 2.27, an 11% reduction over the analyzed period.

In terms of utility groups, the highest ratio of industrial to residential tariffs was reported by Group 1 serving small communities. The indicator value averaged 3.39, with a subsequent stabilization trend.

The maximum levels of this indicator compared to the group average were reported by Ganchin (5), Muminabad (4.1), Dangarin (3.5) and Kabadien (2.5).

Among Group 2 utilities, **indicator 21.1** declined by 19% and stood at 1.38 in 2002 against 1.78 in 1998. In Group 3, the reduction totaled 26%, from 2.11 to 1.56.

The most dramatic drop in the indicator value over the analyzed period was observed at the utilities in Isfara (from 2.71 to 1.11), Penjikent (3.0 vs. 1.6) and Farhor (1.51 vs. 1.30); and in Group 3, including Vakhdat (3.33 vs. 1.72) Kulob (3.4 vs. 1.42) and Kurgan-Tyube (1.72 vs. 1.35).

The overall decrease of **indicator 21.1** across the surveyed utilities over the analyzed period testifies to the equalization of industrial and residential tariffs, while continued growth in Group 1 is explained by the limited scope of residential service due to small number of residential consumers and their low paying ability, as well as the absence of profitable sewerage operations. To be able to fulfill their production plans and avoid losses, utilities are forced to utilize cross-subsidizing.

Indicator 23.1. Collection

Collection is critical for ensuring a normal economic environment for a utility.

Indicator 23.1 among the surveyed utilities averaged 20.5%, having reduced from 19.1 months in 1998 to 17.8 months in 2002. The highest growth in **indicator 23.1** across all utilities was observed in 2000-2001, when the indicator value increased by 1.6 and 1.4 times for Group 1 and Group 2, respectively. This growth was triggered by the introduction of the new national currency in 2000, following which many customers initially experienced a shortage of funds.

Notably, accounts receivable from budget-funded organizations included payables for above-limit water supply and sewerage services that were not covered by budget financing, thus resulting in major arrears outstanding for 2-3 years.

In the last year of the surveyed period, **indicator 23.1** performance considerably improved against 2000 in all three utility groups: 17.0 vs. 19.3 months in Group 1, 23.4 vs. 29.9 months in Group 2 and 14.0 vs. 18 months in Group 3.

The decrease was driven by a number of Government decisions and resolutions obliging consumers to make timely payments for utility services and limiting the scope of services to the extent of available funds. Partially, better collection performance resulted from the efforts of the H&U head office, which managed to introduce a system of offsets, where the debts of public sector users for utility services would be offset against the utilities' tax liabilities. However, local *khukumats* did not support this initiative that deprived local budgets of live-cash tax payments by utilities.

Indicator 24.1. Operational costs to billings

The ratio of operational costs to billings over the analyzed period increased: among Group 1 utilities, from 104% in 1998 to 108.2% in 2002, and in Group 2 - from 80.9% to 92.6%. The works performance was reported by the utilities in Penjikent (growth by a factor of 2.0), Moskovsky (1.5), Farhor (1.3) and Ganchin (1.2). Poor **indicator 24.1** performance among this group is conditioned by the specifics of their service areas, sparsely-populated and with little industrial activity or other facilities, which limits the scope and range of their services. Group 1 utilities did not provide any sewerage services, while in Group 2 sewerage coverage totaled a mere 18%.

The best results throughout the analyzed period were exhibited by Group 3. Among these utilities, **indicator 24.1** was positive and decreased from 98.6% in 1998 to 92% in 2002. Some Group 3 operators showed an even better performance. These include Vakhdat with 77% in 2002 against 132% in 1998, Gissar (98% vs. 115%), Tursunzade (76% vs. 98%) and Yavan (92% vs. 98.6%).

Such solid performance by Group 3 utilities is largely explained by the fact that they predominantly serve areas with population above 20 thousand persons (industrially developed regional centers) where the efficiency of water and sewerage services tends to increase.

Indicator 26.2. Utility investment policy

Only a fraction of the surveyed utilities (about 10%) provided data on capital investments and expenditures.

As external investments have been made on a one-off basis in only some utilities and in odd years, and the ratio of such utilities to other Survey participants is not particularly relevant for our purposes, this indicator has not been considered.

Indicator 27.1. Fixed assets per capita

Overall, the fixed assets of utilities covered by the survey increased from \$4.18 to \$5.71 per capita. The growth trend in this indicator is more or less evident in all utility groups and totals \$0.26 in Group 1, \$4.23 in Group 2 and \$0.10 in Group 3.

The highest average value of **indicator 27.1** was reported by Group 2 at 9.30, i.e. 3-4 times more than in Group 1, and 6.5 times the value for Group 3.

Fixed asset growth was underpinned by the following factors:

- transformations underway in the utilities sector (over the last ten years the sector was subject to six reforms). As part of the most recent transformations in 1999, the communal property of local *khukumats* and utility assets of other institutions were transferred to H&U, thus becoming republican property;

- revaluation of fixed and other assets (resulting in a three-fold increase in value on average) or their mark-to-market adjustment.

Appendix 1

LIST of utilities in towns, district administrative centers and urban settlements in the Republic of Tajikistan covered by the Survey of Operational and Financial Performance Indicators

1. Sugd Region:

<i>Utility type</i>	<i>Town/district</i>
WSU	Penjikent
WSU	Gafurov
WSU	Isfara
WSU	Matchinsk District

2. Khatlon Region:

<i>Utility type</i>	<i>Town/district</i>
WSS	Kulob
IWSU	Kurgan-Tyube
WSS	Farhor
WSU	Shaartuz District
WSU	Kabadien District
WSU	Kumsangir District
WSS	Vosey District
WSU	Moskovsky District
WSU	Muminabad District
HWSS	Dangara*
WSU	Pyanj*
HWSS	Yavan*
WSU	Kolkhozabad*

3. Towns under republican jurisdiction:

JSWSU	Tursunzade
WSS	Gissar
WSU	Vakhdat (Kofarnigan)
WSS	I. Somoni*, Leninsky District
WSU	Shakhrinav*

Comments:

WSU - water and sewerage utility;

WSS - water and sewerage subsidiary;

JSWSU - joint-stock water and sewerage utility;

HWSS - heating, water and sewerage subsidiary;

IWSU - inter-regional water and sewerage utility;

* - urban settlement

Organization for Economic Cooperation and
Development
Paris

Pursuant to Contract of May 27, 2003 by and between our organizations, State Unitary Enterprise *Хољагии манзилию коммунали* (Housing and Utilities) of the Republic of Tajikistan is pleased to present the report on the Survey of Operational and Financial Performance Indicators of subordinate water and sewerage utilities (20 pages), Appendix No. 1 to the Survey (1 page) and tables according to your established form (8 pages).

Sincerely,

M. Gafurov
Deputy General Director