

THE WORLD BANK
REPUBLIC OF KAZAKHSTAN

***IDENTIFICATION OF PRIORITY ISSUES
IN SEVEN MAJOR RIVER BASINS
IN KAZAKHSTAN***

*PROBLEM IDENTIFICATION AND PRIORITISATION
WORKSHOP ASTANA*

WORKSHOP PROTOCOL

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1 INTRODUCTION

1.1 BACKGROUND

The subject workshop is part of the project: Priority Issues in 7 Major River Basins in Kazakhstan.

In a first step, individual experts prepared background papers for each river basin outlining the characteristics of the river basin and the major problems. In the following step - which represents a first consultation round – the river basin experts presented the essence of these reports in Problem Identification and Prioritisation Workshops. Such workshops were held at the river basin level, giving all stakeholders and interested parties the chance to present their views and to complement the findings. This report summarises the main findings of the workshop in Astana covering the Ishim river basin.

1.2 WORKSHOP ORGANISATION

The one-day workshop was organised by the consultant with the assistance and in close cooperation with the Ishim river basin authority. It took place in Astana at the Vodokanal conference hall on July 26, 2002. The workshop was chaired by the Kazakh Project Coordinator, Mr. Nuriman Kipshakbaev, and co-chaired by the Austrian consultant Fritz Schwaiger. The World Bank was represented by Mr. Roman Solodchenko, Country Programme Manager and Mr. Evgeny Tyrtyschny, Operations Officer..

In a first session, the river basin expert Ms. Gulshakira Sarsenbaeva presented the main findings of her report. Then discussion sessions followed, focusing on the following:

- Discussion of the report with emphasis on water resources, existing infrastructure, water demand and major polluters
- Major problems and possible solutions
- Priority ranking criteria and priority ranking of problems

1.3 PARTICIPANTS

In total 23 people participated at the workshop, representing 18 organisations. A complete list of participants is attached in Annex A.

2 PRIORITY ISSUES IN THE RIVER BASIN

After intensive discussions it was agreed that the priority issues are as shown below. The issues are ranked according to three categories.

2.1 PROBLEMS OF FIRST PRIORITY

1. State dotation of the most important waterworks facilities Irtysh-Karaganda canal (Satpaev's canal)

Satpaev's Canal is a strategically important facility for the region. To support its efficient functioning the government has to allocate dotations from the public budget.

2. Mercury pollution of Nura river

Investigations aimed at identification of mercury pollution are presently being implemented. This project aimed at liquidation of pollution source and clean up of the river bed has to be completed. It is also necessary to solve the issue of future Nura water use (after clean-up).

3. Governmental control

For strengthening governmental control of water quality, volume of water consumption and quality and quantity of wastewater discharges, it was proposed to establish an independent state authority managing water resources consumption, regulation and protection.

4. Development of new water code

The new water code being under preparation should regulate not only water resources but also drinking water supply and water protection zones.

5. Water supply of Astana city

The Japanese government financed a study for the water supply of Astana. It is anticipated that the Ishim river (Vecheslav reservoir) source will be insufficient in future. Additional sources could be the recently completed pipeline/canal from Irtysh-Karaganda canal to Ishim river, or the Nura river after clean-up.

One of the options suggested at the workshop is the separation of drinking and technical water supply of Astana city. The technical water supply to come from the existing water intake at the Ishim river and by using the old distribution system; the drinking water supply to be based on the Vyacheslav reservoir and supplied through a new distribution system.

This requires also the installation of sanitary zones at the Ishim river upstream of Astana and at Vyacheslav reservoir to avoid pollution.

It is also necessary to solve the issue of minimum ecological water releases from Vyacheslav reservoir.

6. Astana sewage disposal

At the moment wastewater is treated and then discharged to the Taldykol storage pond. However, most of the sewage is currently disposed into the natural storage without biological treatment or after insufficient treatment (due to heavy load).

A feasibility study, financed by the Kuwait Fund for Arab Economic Development is ongoing, considering different alternatives of wastewater disposal, including the rehabilitation of the treatment plant and the liquidation of the storage pond.

It was suggested at the workshop to introduce a system of water recycling, to improve treatment technology, to liquidate the storage pond and to use treated wastewater for irrigation and not to permit its disposal to the Ishim river bed.

7. Water treatment for drinking water purpose in 20 rural settlements

20 rural settlements in the river basin are currently consuming drinking water without any treatment. It was proposed to construct appropriate treatment facilities. A project of the Asian Development Bank for rural water supply is under preparation for Akmola, Northern Kazakhstan and other oblasts.

8. Rural water supply. Imperfect irrigation system.

Remote settlements of the basin don't have access to quality drinking water. These areas were covered by group water pipelines, which are presently in emergency state or out of work due to lack of funds for repairs. Low water consumption fees cannot cover high maintenance costs for group pipelines.

The participants made a proposal to solve this issue by:

- (i) allocating government dotations (subsidies) to the rural drinking water supply organisations.
- (ii) To carry out an analysis for rehabilitation the group water supply system or alternatively convert the systems into local pipeline supplies.
- (iii) To attract funds of grain-producing companies for rehabilitation the water pipeline networks.

2.2 PROBLEMS OF SECOND PRIORITY

1. Flood protection of Astana city.

Due to the extensive construction of buildings in Astana, it is necessary to study in detail the protection of these assets against floods from Ishim and Nura rivers. A project needs to be developed.

2. Nonpayment of water consumers in rural areas

Collection of consumer charges is an actual problem. The low revenue collection ratio influences the technical condition of the waterworks facilities. To solve the problem it

was proposed to reconsider water consumption tariffs and to give incentives to agricultural producers to improve their ability to pay.

3. Unsatisfactory condition of water supply and sewerage . Utilisation of sludge from sewage treatment plants.

Reconstruction and repair of water supply and sewerage facilities and plants is required. To rehabilitate and construct those, it was proposed to create a new water fund.

A solution needs to be found for the use and/or disposal of the sludge produced at the wastewater treatment plant in Astana.

4. Radionuclide pollution (alpha and beta) in the Northern Kazakhstan.

The sanitary service of the Northern Kazakhstan oblast is implementing an analysis of alpha and beta radionuclid pollution of surface and ground water resources. Exceedance of radiological pollution permissible norms is being observed in 8 out of 14 rayons of the oblast. The degree of oncological diseases (cancer) is very high.

It was proposed to strengthen monitoring and to identify and eliminate the still undefined pollution source. An Uranic vein crossing the oblast could be one of the probable sources of this pollution.

5. Water management in Ishim river.

To develop and approve rules for operation and maintenance for 5 large reservoirs. To prepare a scheme for complex use and protection of Ishim water resources (multi purpose planning).

6. Water quality monitoring.

7 hydro posts are being operated at the Ishim river. These need to be supplied with modern new equipment of quality and quantity monitoring . The Dolmatov's frontier point needs to be rehabilitated.

7. Sanitary zones along the river.

It is necessary to prepare projects and to establish water protection zones and belts along rivers and lakes.

2.3 PROBLEMS OF THIRD PRIORITY

1. Small rivers problem

Package of measures needs to be identified and developed for the protection of small rivers.

2. Reduction of irrational water resources use

It is suggested to introduce the secondary use (reuse) of treated sewage to reduce excessive strains on water resources. Also the installation of water meters is necessary to reduce wastage and losses.

3. Lack of qualified staff.

There is concern about good education and training of young staff. Capacity building and the establishment of good design and research institutes is required.

Signed by

Nariman Kipshakbaev
Project Coordinator

Fritz Schwaiger
Team Leader

3 ANNEX A – LIST OF PARTICIPANTS

№	Name of the participant	Organization	Position
1	2	3	4
1	Mr. Kabeldin	Akimat of Astana city	Power engineering deptment
2	Mr. Kudaibergen Askarov	Committee for Water resources	Head of administration
3	Mr. Nariman Kipshkbaev		Project coordinator
4	Mr. Fritz Schwaiger	Posch and Partners Cons. Engineers	Project Manager
5	Mr. Roman Solodchenko	The World Bank country office in Kazakhstan	Acting Country Manager
6	Mr. Evgeny Tyrtshny	The World Bank country office in Kazakhstan	Operations Officer, Environment, Water supply and Water resources
7	Mr. Omirbek Abaidildin	Ministry of Agriculture	Head of dept.
8	Mr. V Stefurak	RSE "Satpaev's Canal"	Consular to General Director
9	Mrs. R. Galieva	Territorial environment protection department, Astana city	Head of dept.
10	Mrs. Svetlana Urupina	Akmola oblast center for hydro meteorological monitoring	Head of hydrology dept.
11	Mr. A. Beikeev	Oblast department of state Sanitary supervision services for Akmola oblast	
12	Mrs. Erna Firsova	Oblast department of state sanitary-hygienic supervision services for Northern Kaz oblast	Chief of sanitary-hygienic lab
13	Mr. F. Peev	Oblast department of state sanitary-hygienic supervision services for Astana city (sanitary-hygienic station)	
14	Mr. B. Kadyrov	RSE "Severovodhoz"	
15	Mr. Sergei Kim	RSE "Astana Su"	Deputy director
16	Mr. Valeriy Sundukov	Association "Kazakhstan Su Arnasy"	President of association
17	Mr. Zhanbyrshy Nurkenov	Association "Kazakhstan Su Arnasy"	General Director
18	Mrs. N. Mukhina	JSC "Astana Energy service"	Chief of the Lab.

19	Mr. B. Kamchenko	"ORTA" Ltd.	
20	Mr. Anatoliy Berezin	SCE "Astana city project"	Leading specialist
21	Mr. K.Eltaev	Ishim RBA (Petropavlovsk city)	Head of Monitoring, state registration and water objects cadaster dept.
22	Mr. A.Sharipov	President SHS	
23	Mr. K.Mukushev	Correspondent "Astana su Arnasy"	