

GOVERNMENT OF KAZAKHSTAN

*COMMITTEE FOR WATER RESOURCES
OF THE MINISTRY OF NATURAL RESOURCES
AND ENVIRONMENTAL PROTECTION*

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

*PROBLEM IDENTIFICATION AND PRIORITISATION
WORKSHOP IN TARAZ
FOR THE SHU-TALAS RIVER BASIN*

WORKSHOP PROTOCOL

16 August 2002

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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. The funding of this project is provided by the Austrian Government through the World Bank upon request of the Government of Kazakhstan. This project is the first step in the preparation of the Water Resources Development Plan for Kazakhstan. The project is prepared by a team consisting of Kazakh and international experts of Posch & Partners, Austria.

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 Taraz covering the Shu-Talas river basin.

1.2 WORKSHOP ORGANISATION

The one-day workshop was organised by the project team with the assistance and in close cooperation with the Shu-Talas river basin authority. It took place in Taraz at the Institute of KazNIIWH (Kazakhstan Research Institute of Water Economy) on August 16, 2002. The workshop was chaired by the Kazakh Project Coordinator, Mr. Nariman Kipshakbaev, and co-chaired by the Austrian consultant Fritz Schwaiger. The World Bank was represented by Mr. Evgeny Tyrtyschny, Operations Officer.

In a first session, the river basin expert Mr. Nurtaza Kudaibergenov presented the main findings of his 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 63 people participated at the workshop, representing 27 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 problems are as shown below.

Each problem was assigned to one of three priority levels. The following criteria were agreed and applied for the ranking of the problems:

- Adverse effect on environment
- Reliable water supply of sufficient quantity
- Quality Water Supply, meeting standards
- Affected population
 - health
 - discomfort
 - economic disadvantage
- Economic productivity (added value)
- Cost of alternatives (opportunity cost)
- Realisation time needed

2.1 PROBLEMS OF FIRST PRIORITY

1. Kyrgyzstan-Kazakhstan transboundary water sharing cooperation

Only $\frac{1}{4}$ of the basins water resources is formed in Kazakhstan and $\frac{3}{4}$ is formed in Kyrgyzstan. Water allocation is done on the basis of an agreement made in 1983 which needs to be re-negotiated annually. There is the need to make a long term agreement for 10 to 15 years.

It is also needed to establish a permanent commission for regulating questions of transboundary river management, including quality and quantity, e.g. International Commission for the Use and Protection of the Shu-Talas-Assa rivers.

For allocation of water resources it is necessary to take into consideration economical as well as ecological water demands. Interstate agreements to include the regulation of water quality.

2. Quality and quantity monitoring of river flows

There are no quality monitoring stations at the Kyrgyz-Kazakh border on the rivers Shu, Talas and Assa. It is proposed to install additional monitoring stations at the 3 rivers and to move the stations at Bakrovka settlement at Taras river and at Blagoveshenskoe on Shu river to the territory of Kazakhstan. There is the need for a joint Kyrgyz-Kazakh working group (preferably reporting to the International Commission) which is responsible for the agreement on methods and procedures of water quality analysis and monitoring.

It is also required to determine the water resources and to do ecological monitoring of the Aksu, Karabalta and Toktas rivers in Kazakhstan.

3. General scheme of complex water use and protection

It is necessary to develop a complex scheme for water use and water protection (water master plan) for the Shu-Talas river basin on Kazakh territory. It needs to include the water balance for all rivers from the point of origin to its mouth and a scientific analysis and modelling of the water use. The variation coefficient of the flow of Shu river has changed from 0.15-0.19 to 0.3-0.35. So it is necessary to study the water flow and to revise water allocations. YuzhKazVodProjekt (South-Kazakhstan-Water-Design-Institute) should be engaged to do this work.

4. Water scarcity of rivers in the low lands

One can observe environmental degradation in the low lands of the rivers Shu and Talas. There is a need to: (i) create a state special nature reserve; (ii) provide ecological sanitary releases (nature conservation flow); (iii) initiate actions aimed at preservation of internal ponds Bilikol, Akkol etc.

5. Participation of NGOs

The participants made a proposal to support Non-governmental Organizations and to engage NGOs in taking solutions over crucial problems of water sector (from working out of the project up to its implementation stage). It is also necessary to follow terms and conditions of the Aarhus convention.

6. Improve institutional structure of water management

To improve institutional structure of water management and to raise up status of water economy the participants made a proposal to establish an independent state water management authority.

7. Bad technical condition of reservoirs

Due to deterioration of the dams the reservoirs are not filled in according to its designed capacity. 108 mln. m³ out of 158 mln. m³ designed capacity of the Ters-Ashibulak reservoir is being filled in these days; identical situation at the Tasotkel reservoir – it works only for 450 mln. m³ out of its 620 mln. m³ capacity. One can observe flooding of the adjacent areas, especially in spring period. The material damage due to this year floods amounted 400 mln. KZT. The participants made a proposal: (i) to reconstruct Ters-Ashibulak (at the Ters river) and Tasatkel reservoirs (Shu river); (ii) to carry out corresponding clean up of the riverbed and (iii) to conduct coast protection measures.

8. Rural and district centre water supply

Condition of water supply systems of the Talas, Sarysu and Moynkum rayons is rather poor. Majority of population is consuming untreated surface waters; existing water pipelines are highly deteriorated. It is necessary to: (i) conduct immediate reconstruction of the water pipeline system (ii) strengthen implementation of the state program “Drinking water” in the field of rural water supply. To define the owner of the rural water supply system.

9. Taraz city water distribution system

140 th. m³/day capacity of the water intake station in Taraz city is anticipated only for the city water supply. Total length of the water distribution system is equal to 426 km with steel pipes diameter of 100 up to 1000 mm; the main part of the system was constructed in 1955. Due to lack of funds anticipated for repair operations one can observe bursts of the system with total 30% of leakages. It is necessary to initiate reconstruction of the water distribution system.

10. Biological wastewater treatment for Taraz city

Wastewaters are discharged into the filtration fields without preliminary biological treatment. The filtration fields are based on the gravel ground and ground waters, used for water supply of Zhambyl and Baizak rayons. There is a feasibility study anticipating construction of biological treatment plant with capacity reaching 120-130 th. m³/day and reusing wastewaters for irrigation purposes. The project cannot be implemented due to lack of funds. This problem has a 25 years history. It is necessary to introduce centralized water supply of settlements of the above mentioned rayons (construction of treatment stations and water pipelines).

11. Irrigation systems

Kurdai and Chui irrigation system are deteriorated for 90%. It is necessary to initiate capital repair and rehabilitation of the system starting from water intake up to irrigation canals.

12. Detailed inventory and assessment of all water facilities

Before transferring water facilities into communal property it is necessary to conduct its complex inventory and assessment.

13. Qualification of staff

There is a lack of qualified staff at the water-concerned bodies. It is necessary to increase number of students at the water economy faculties of the high schools.

2.2 PROBLEMS OF SECOND PRIORITY

1. Rehabilitation of group water pipelines

The group water pipeline system is out of action these days. The participants suggested to rehabilitate the old group water pipelines (Kokteresk, Bostandyksk, Sadu-Shakir). For preparation design estimates it is necessary to attract local qualified specialists.

2. Establish a GIS for water data systematisation

For updating and systematisation information for water economy system in Shu-Talas basin it is necessary to develop a Geographical Information System (GIS) engaging experts of water sector, agriculture, ecologists and other stakeholders.

3. Protection of small rivers

The initiate actions aimed at protection of small waterways. To prohibit water diversion from the rivers with flow less than 300-100 l/sec.

4. Reconsider water pollution index (WPI)

Existing water pollution index does not reflect actual situation. It is necessary to reconsider methodology for WPI identification.

2.3 PROBLEMS OF THIRD PRIORITY

1. Deterioration of flora and fauna variety (biodiversity)

Nonobservance of the measures for Karatau massive preservation containing rare animals included into the Red book and app. 72 medicinal plants. The massive is being used for pasture purposes, artificial fires resulting violation of biodiversity of the area. To preserve Karartau massive it was proposed to create a national park.

Signed by

Nariman Kipshakbaev
Project Coordinator

Fritz Schwaiger
Team Leader

COMMITTEE FOR WATER RESOURCES
PRIORITY ISSUES IN 7 MAJOR RIVER BASINS IN KAZAKHSTAN
TARAZ WORKSHOP

3 ANNEX A – LIST OF PARTICIPANTS

№	Name of workshop participant	Organization	Position
1	Mr. Boribai Zheksemin	Akimat of Zhambyl oblast	Deputy Akim
2	Mr. Yzgarbek Bektursynov	Akimat of Zhambyl oblast	Head of agriculture dept.
3	Mr. Asyl Sabdenaliev	Akimat of Zhambyl oblast	Leading specialist of agriculture dept.
5	Mr. Nariman Kipshakbaev		Project coordinator
6	Mr. Fritz Schwaiger	Posch & Partners Cons. Engineers	Project Manager
7	Mr. Evgeny Tyrtysny	The World Bank country office in Kz	Operations Officer, Environment, Water supply and Water resources
8	Mr. Berik Nuraliev	Shu-Talas RBA	Chief of the dept
9	Mr. Keldybai Shakirov	Shu-Talas RBA	Chief of the dept
10	Mr. Bayurzhan Dildebaev	Shu-Talas RBA	Chief of the dept
11	Mr. Agibai Daurenbekov	Shu-Talas RBA	Chief of the state control dept
12	Mrs. Indira Akbozova	Shu-Talas RBA	Leading specialist
13	Mrs. Rasykhan Alimbetova	Shu-Talas RBA	Leading specialist
14	Mrs. Arafat Shukuralieva	Shu-Talas RBA	Leading specialist
15	Mrs. Zubaira Rustem	Shu-Talas RBA	Leading specialist
16	Mrs. Maral Egenberdieva	Shu-Talas RBA	Leading specialist

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17	Mrs. Gulmira Imasheva	Shu-Talas RBA	Leading specialist
18	Mr. Zhuman Tukebaev	RSE «Zhambyl Vodhoz»	Director
19	Mr. Nurtaza Kudaibergenov	RSE «Zhambyl Vodhoz»	Leading engineer
20	Mr. Galimbek Kuralbaev	RSE «Zhambyl Vodhoz»	Chief of Water consumption dept
21	Mr. Besken Omarov	RSE «Zhambyl Vodhoz»	Chief of Asinsk affiliation
22	Mr. Valeriy Sergeev	RSE «Zhambyl Vodhoz»	Chief of Kordai affiliation
23	Mr. Tleu Pazylbekov	RSE «Zhambyl Vodhoz»	Chief of Shu affiliation
24	Mr. Almurat Kobesov	Zhambyl oblast territorial environmental protection administration	Deputy Chief
25	Mr. Sagikhan Amrekulov	Administration of Agriculture, Zhambyl oblast	Deputy Chief
26	Mr. Erden Bermanov	Zhambyl oblast territorial environmental protection administration	Leading specialist
27	Mr. Rustem Begaliev	PC «Amangeldy», Zhambyl rayon	Director
28	Mrs. Irina Kim	Zhambyl HPS	Engineer
29	Mr. Vladimir Skopintsov	JSC «Zhambyl power energy combinat»	Technical Director
30	Mr. Hamza Tazhbaev	Chumprom Ltd, 2030	Leading power engineering specialist
31	Mr. Gerasim Pak	Taraz affiliate «Kazfosfat» LTD	Deputy leading power engineering specialist
32	Mrs. Valentina Izbasarova	Taraz affiliate «Kazfosfat» LTD	Chief of dept
33	Mr. Boris Sergeev	Govvodocanal of Taraz city	Leading engineer
34	Mrs. B. Dautova	SCE of sewage enterprises	
35	Mr. Kadyrbek Orazbekov	Zhambyl oblast territorial administration for forest industry and bioresources	Deputy chief

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36	Mr. Husein Bekturganov	Administration of state control of flora and fauna protection	Director
37	Mr. Valiakhmet Mugamedzhanov	Kazakh state research and scientific institute of water industry	Director
38	Mr. Zhuzbai Kasymbekov	Kazakh state research and scientific institute of water industry	Deputy director
39	Mr. Ravil Vagapov	Kazakh state research and scientific institute of water industry	Chief of the laboratory
40	Mr. Grigoriy Zhdanov	Kazakh state research and scientific institute of water industry	Chief of the laboratory
41	Mr. Rem Kvan	Kazakh state research and scientific institute of water industry	Chief of the laboratory
42	Mr. Jury Grankin	Kazakh state research and scientific institute of water industry	Chief of the laboratory
43	Mr. Khamit Muhamedzhanov	Kazakh state research and scientific institute of water industry	Leading research officer
44	Mr. Baranov	Kazakh state research and scientific institute of water industry	Leading research officer
45	Mrs. Raisa Bespalova	Kazgidromet (Zhambyl SMC)	Chief of the laboratory
46	Mr. Anatoliy Fedushin	Emergency situations administration	Chief of the dept
47	Mr. Zhumahan Mustafaev	Taraz State University	Dean of melioration chair, professor
48	Mr. Aulbek Zaurbekov	Taraz State University	Chief of Phd dissertation council, Professor
49	Mr. Abdumanap Abdramanov	Taraz State University	Dean of water resources chair, professor
50	Mr. Demesin Nurmagambetov	Taraz State University	Senior lecturer of the chair, Phd
51	Mr. N.Panasenko	Taraz State University	Economics chair

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52	Mr. Daulet Zhunisov	Oblast administration of Sanitary supervision	Chief of Sanitary dept
53	Mr. A.Vruchkovskiy	City Sanitary station	Chief of dept
54	Mr. Asan Mamazhanov	Design institute «KazUzhGiprovodhoz»	Director
55	Mr. Mark Baumstein	Design institute «KazUzhGiprovodhoz»	Chief of dept
56	Mr. Ayaz Denebekov	NGO of environmental protection for Taraz city	Chairman, Leading lecturer of ecology chair
57	Mr. Vladimir Proskurin	Club «KIVANIS» (NGO)	Chairman
58	Mr. T.Tolkumbaev	Newspaper «Akzhol»	Correspondent
59	Mr. S.Manko.	Newspaper «Znamya truda»	Correspondent
60	Mrs. Ludosanova	Newspaper «Znamya truda»	Correspondent
61	Mr. Mostovykh	TV «ZDT»	Correspondent
62		TV «ZDT»	Correspondent