

Interstate Coordination Water Commission of Central Asia	BULLETIN N 11	November 1996
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AGENDA OF INTERSTATE COUNCIL MEETING OF THE REPUBLIC OF KAZAKHSTAN, THE KYRGHIZ REPUBLIC AND THE REPUBLIC OF UZBEKISTAN

Almaty

23-d August 1996

1. About the Program of action of the Republic of Kazakhstan, the Kyrghiz Republic and the Republic of Uzbekistan on the creation of the united economic space on 1996-1997 in accordance with the decision of heads of states-participants from 6-th May 1996.
2. About insertion of the corrections and supplements to the Agreement between the Republic of Kazakhstan, the Kyrghiz Republic and the Republic of Uzbekistan on establishment of the Central Asian Development and Cooperation Bank.
3. About creation of special economic zones in the boarder territories of the states-participants.
4. About the candidates of "Central Asia: integration problems" magazine's editor in - chief.
5. About the plenipotentiary representation at Interstate Council of the Republic of Kazakhstan, the Kyrghiz Republic and the Republic of Uzbekistan and their institutions.
6. About admittance of Russian Federation at the Interstate Council of the Republic of Kasakhstan, the Kyrghiz Republic and the Republic of Uzbekistan as a spectator.
7. About admittance at Interstate Council of the Republic of Kazakhstan, the Kyrghiz Republic, and the Republic of Uzbekistan, the Republic of Tadjikistan as a spectator
8. About preparation and carrying out exercises of peace-keeping battalion of the Republic of Kazakhstan, the Kyrghiz Republic and the Republic of Uzbekistan under supervision of UN, with multinational forces attraction.

DECISION ABOUT ACTION PROGRAM OF THE REPUBLIC OF KAZAKHSTAN, THE KYRGHIZ REPUBLIC AND THE REPUBLIC OF UZBEKISTAN ON THE CREATION OF UNITED ECONOMIC SPACE ON 1996-1998

According to decision of heads of states: the Republic of Kazakhstan, the Kyrghiz Republic and the Republic of Uzbekistan from 6-th May 1996 Interstate Council of states-participants has decided:

1. To approve the Action program of the Republic of Kazakhstan, the Kyrghiz Republic and the Republic of Uzbekistan on creation of united economic space on 1996-1997 (attached)
2. To charge heads of governments at the nearest meeting of Prime-ministers of the Council to examine and confirm the program given:

It has been accomplished in Almaty, 23 August 1996 in a single copy in Russian.

The original is in Executive Committee of Interstate Council of the Republic of Kazakhstan, the Kyrghiz Republic and the Republic of Uzbekistan, which sends its certified copy to each state-participant.

Republic of Kazakhstan President N.Nazarbaev.

Kyrghiz Republic President A.Akaev

Republic of Uzbekistan President I.Karimov

Program
of Action of the Republic of Kazakhstan, the Kyrgyz Republic and the Republic of Uzbeki-
stan on creation of united economic space in 1996-1997

№	Action title	Persons responsible for execution	Execution term
Foreign economic relations problems			
I. Ministries of Foreign Economic Relations			
1	To prepare and sign : Agreements on free trade between Kazakhstan and Uzbekistan, between Kyrgyzstan and Uzbekistan with the minutes about withdrawals from free trade regime between Kazakhstan and Uzbekistan, between Uzbekistan and Kyrgyzstan.	Ministries on cooperation with CIS Central economic departments, Executive Committee of ICAS.	After approval of united list of withdrawals from free trade regime in framework of custom union.
2	Agreements between the Republic of Kazakhstan and the Republic of Uzbekistan, between the Republic of Uzbekistan and the Kyrgyz Republic about mutual investment protection.	Ministries of Foreign Economic Relations	4-th quarter 1996
3	Agreements between the Kyrgyz Republic and the Republic of Uzbekistan, between the Republic of Kazakhstan and the Kyrgyz Republic about income and property double taxation	Tax services, Ministries of Finance	4-th quarter 1996
II. Legislation adjustment			
1	To create the trilateral commission for identification of the principal divergencies in the states' legislation	Ministries for Cooperation with CIS	October 1996

№	Action title	Persons responsible for execution	Execution term
2	To prepare suggestions on elimination of these divergencies	Ministries of Justice, Central Economic Departments	September-October 1996

III. In the financial and payment sphere

1	To prepare the suggestions on change incerting in legislations and regulations to make their adjustment: a)On currency regulation and control; b)On the order of import and export of money; c)On bank legislation ; d)On taxation;	Central (National) banks, Ministries of finance, taxation and custom services	1-2-s quarter 1997
2	To prepare and sign: a)Agreement on mutual convertability of national currencies b)Agreement on mutual accessibility to internal currency markets of CAB and other authorized banks	Central (National) Banks, Ministries of finance Central (National)Banks, Ministries of finance	3-d quarter 1997 4-th quarter1997

IV. On production and enterprising development

1	To exchange programs about economic reforms implementation in order to take measures on their coordinated application	Ministries of Foreign Economic Relation and departments on cooperation with CIS. Central economic departments. Executive Committee of ICAS.	3-d quarter 1996
2	To prepare and sign the agreement on united scientific-technical space	Ministries (departments) responsible for scientific and technical development, Academies of science	4-th quarter1997

№	Action title	Persons responsible for execution	Execution term
3	To adjust the investment activity regime, immovability acquisitions, its protection guarantee	Central economic departments	1-st quarter 1997
4	To study the investment programs of the states, to select the separate priority projects equally important for development of economy and to begin their implementation	Central economic departments. ICAS Executive Council. Central Asian Bank of Development and Cooperation	4-th quarter 1996
5	To continue the work on looking means for financial support of actions, foreseen by three states economic integration Program	Executive Committee of ICAS. Central Asian Bank of Development and Cooperation. Interested ministries and departments	1996-1997
6	To collaborate with the interstate program on development and rational use of water-energetic resources	Ministries (departments) of energetics and water resources	1-st quarter 1997
7	To prepare and approve the unified standard acts about the supply principles, customs of goods, supplied within the framework of production cooperation	Ministries of Foreign Economic Relation and departments on cooperation with CIS Central economic departments	2-nd quarter 1997

V. Institutional questions

1	One the base of analysis of the documents, approved by heads of states and governments of CIS countries, to determine the list of documents, which	Central economic departments, Ministries of Justice foreign affairs ministries Executive Council of	4-th quarter 1996
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№	Action title	Persons responsible for execution	Execution term
	are necessary to complete the standard legislative basis of united economic space. To confirm their development and consideration time-table	ISC	
2	To create constantly acting expert group (to 10 persons from every state-participant).To confirm the staff and status work regulation	Central economic departments, Ministries of Justice, Ministries of Foreign Affairs, Executive Council of ICAS	4-th quarter 1996

PROTOCOL № 14
of ICWC meeting of the Republic of Kazakhstan, the Kyrghiz Republic, the Republic of
Tadjikistan, Turkmenistan and the Republic of Uzbekistan

9-th August 1996

Bishkek

Were presented:

Sarsenbekov T.T.	Chairman of the State Committee for Water resources of the Republic of Kazakhstan
Bekbolotov I.B.	Minister of Water Management of the Kyrghiz Republic
Ashurov N.A.	Minister of Water Management of the Republic of Tadjikistan
Altiyev T.A.	Deputy Minister of Water Management of Turkmenistan
Djalalov A.A.	Acting Minister of Water Management of the Republic of Uzbekistan

Invited persons:

Kunanbayev S.	Deputy department chief in the Kazakhstan government
Kenshimov A.K.	State Committee for water resources, department chief
Apasov R.T.	Major reviewer in the government of the Kyrghiz Republic
Bekenov A.E.	Ministry of Water Management of the Kyrghiz Republic, department chief
Ovezov A.O.	Ministry of Water Management of Turkmenistan, department chief
Buranov U.K.	Ministry of Water Management of the Republic of Uzbekistan, department chief
Sokol'sky Ju.V.	Ministry of Water Management of the Republic of Tadjikistan, department chief
Kalandarov I.D.	BWO "AmuDarya", director
Sayatov K.A.	BWO "AmuDarya", deputy director
Khamidov M.H.	BWO "SyrDarya", director
Tolstunov Ju.V.	BWO "SyrDarya", deputy director
Dukhovny V.A.	SIC ICWC, director
Kasimov A.K.	Tadjik branch SIC ICWC, director
Negmatov G.A.	ICWC secretary

Minister for Water Management of the Kyrghiz Republic Mr. Bekbolotov J. was a Chairman

AGENDA

1. Making more accurate limits of intakes, reservoirs cascades operation regime on AmuDarya and SyrDarya rivers and flash volume to the Aralside and Aral Sea, 1995-1996. (Responsible: BWO "SyrDarya", BWO "AmuDarya")

2. About technical state of the objects, transmitted under provisional management to BVO.

(Responsible: BWO "SyrDarya", BWO "AmuDarya")

3. About SIC ICWC plan-1995 fulfilment and consideration of its plan-1996-1998.

(Responsible: SIC ICWC)

4. About plan and progress in WARMAP project 2-nd phase, including preliminary consideration of legislative documents

(Responsible: SIC ICWC)

5. About perfection of the ICWC structure

(Responsible: SIC ICWC and leading research institutes)

6. About next ICWC meeting agenda.

Exchanging by opinion ICWC members have decided:

On the first question:

1. To confirm BWO "SyrDarya" and BWO "AmuDarya" measures on water-intakes limits and provision of water reservoirs cascades operation regime within non-growing period 1995-1996.

2. BWO "SyrDarya" together with ICWC members should provide necessary operation regime of Kairakkum reservoir for growing period completion.

3. ICWC members should apply to their governments with proposal about preparation in September-October special agreements about Naryn-Syrdarya cascade utilization in 1996-1997 and about mutual delivery and accounts for electric energy, gas and coal with attraction of all states in the SyrDarya basin. It is expedient to sign an agreement by all governments before the beginning of new year.

4. To charge BWO "AmuDarya" jointly with Ministries of Water Management of Turkmenistan and Uzbekistan to specify Tuyamuyun reservoir operation regime with consideration of water demand to the end of growing season of 1996.

On the second question:

1. To accept as satisfactory the technical state of hydrounits which belong to BWO "SyrDarya" and BWO "AmuDarya". At the same time it is worth to underline, that the operation regulations are not fully executed.

2. To eliminate in short time shortages fixed by working groups as a result of a special observation.

3. ICWC members should consider issue about financing necessary preparation and construction works.

On the third question:

1. To confirm SIC ICWC plan-1996 fulfilment.

2. To approve SIC ICWC plan-1996-1998 agreed with all Ministries of Water Management. SIC ICWC should within a month specify the national executors of the programs. ICWC members should provide financing and support for SIC ICWC plan fulfilment.

3. To apply to the World Bank an UNDP for assistance in systematic training of water economy's high level specialists with attraction of different donors.

4. SIC ICWC on behalf of ICWC to apply to the International Fund for Aral Sea to support financially SIC ICWC plan since 1997.

On the fourth question:

1. To confirm generally the WARMAP project phase 2 activity.

2. To submit to ICAS preliminary report on "General Provisions on Water Management Strategy in the Aral Sea Basin".

3. For strengthening the integral water resources management within the basin to propose to ICAS to confirm the following states:

- ICWC is a main body executing water management policy and is responsible for elaboration, implementation and coordination of the "Program of concrete actions", approved by heads of states on 11-th January 1994;

- ICWC prepares water strategy in the basin jointly with all economic branches. The strategy, after its approval becomes principle regulation for all states and their economic branches and water-users for water resources provision of the Central Asian region sustainable development;

- all water-users should agree their actions on the water resources use with ICWC;

- taking into account impossibility of any divergence from main provisions "Conception of improvement of natural and socio-economic situation in the Aral Sea basin" all consulting companies reports should be submitted to ICWC before and been revised by SIC ICWC with participation of all countries of the region;

- further investigations within the framework of the projects which are financed by international organizations and countries-donors, should be executed by local specialists and institutions, attraction of the foreign specialists should be made of the basis of tender, where the ICWC members have decisive opinion;

- the pilot projects elaboration and implementation in each country should be enhanced. These projects should be the polygons for water-saving technologies perfection, updated methods of production, agricultural products processing and staff training;

- to strengthen donors attraction to programs 2.2, 4.3, 5.4, 5.5, 7, which delay prevents development of "Program of concrete actions" as a whole, and to provide, from experience of European Union, uninterrupted financing.

4. Taking into consideration absence of coordination of all program within the framework of "Program of concrete actions" and their adjustment to "Main provisions of water management strategy in the Aral Sea Basin", to ask ICWC members to introduce their proposals on coordination, expertise and adjustment of the programs.

5. SIC ICWC should develop within a month the draft agreements on improvement of water resources management with consideration of the Ministries of Water Management comments and discuss them at the next ICWC meeting.

6. Taking into account support, development and participation in water strategy elaboration by WARMAP program and according to Memorandum on ICWC members visit to Belgium and Italy in 1995, to apply to European Commission and TACIS program's leadership in order to increase financing of 2-nd phase of this project to create the information system with involvement of agricultural bodies and permanent remote monitoring rivers, channels, deltas and Aral Sea itself using existing international experience.

On the fifth questions:

1. To confirm SIC ICWC new status agreed with all ICWC members with consideration of comments and to cancel SIC ICWC status approved by ICWC 10-th October 1993.

2. SIC ICWC should strengthen actions on equipment provision of its branches on expense of UNDP, EU and Capacity building program.

Next ICWC meeting should be held in Djambyl in the second half of October 1996.

Agenda of the next ICWC meeting

1. Consideration and approval of water-intakes limits, AmuDarya and SyrDarya reservoirs cascade operation regime and water flash to the Aralside and Aral Sea in 1996-1997 with consideration of perennial cycle of humidity of the river basins.

(Responsible: BWO "SyrDarya", BWO "AmuDarya", SIC ICWC)

2. About the results of investigations executed by foreign consulting companies within the programs 3 and 4 of "Program of concrete actions".

(Responsible: SIC ICWC)

3. ICWC Secretariat report for 1995-1996.
(Responsible: ICWC Secretariat)
4. About agenda of the next ICWC meeting.

For the Republic of Kazakhstan	Sarsenbekov T.T.
For the Kyrgyz Republic	Bekbolotov J.B.
For the Republic of Tadjikistan	Ashurov N.A.
For Turkmenistan	Altyev T.A.
For the Republik of Uzbekistan	Djalalov A.A.

MINUTES DECISION OF ICWC

9 August 1996 ä.

Bishkek

On the preparation to ICID Congress to be held
15-22-nd September 1996 in Cairo

15-22-nd September 1996 in Cairo International Commission on Irrigation and Drainage meeting will be held. The Aral Sea Basin problem will be considered separately.

To take as information, that all managers of water economy organizations of Central Asian States are invited to take part in its work.

To ask ICWC members to prepare national reports for presentation at the Congress to attract the world community attention to this problem.

For the Republic of Kazakhstan	Sarsenbeckov T.T.
For the Kyrgyz Republic	Bekbolotov J.B.
For the Republic of Tadjikistan	Ashurov N.A.
For Turkmenistan	Altyev T.A.
For the Republic of Uzbekistan	Djalolov A.A.

To minutes N14 ICWC meeting
9-10-th August 1996 Bishkek

INFORMATION ON THE THIRD QUESTION OF AGENDA OF ICWC MEETING: "ON ICWC PLAN 1995 FULFILMENT AND CONSIDERATION OF ITS PLAN FOR 1996-1998"

Scientific-information centre (SIC) ICWC carries out coordination of interstate program "To work out water-economy strategy on water resources rational use and management ensuring guaranteed development of Central Asian region's national economy and restoration of environment to the level of ecological equilibrium", coordinated with leading research and design institutes and ICWC states-members and confirmed as the SIC ICWC working plan on 1994-95 by the ICWC meeting in Nukus (ICWC minutes, 10-th October 1993)

To control the SIC ICWC working plan fulfilment for 1-st half-year 1995, 16-th June 1995, in Tashkent the conference of ICWC states-members was held. At the meeting was determined financing for 1995:

Uzbekistan - 4.480 thousands sums. 4.480th.s. was distinguished.

Turkmenistan - 500 thousands manats; financing was absent.

Tadjikistan - 8,4 mln tadji.roubles; 0,4 mln tadji.roubles was distinguished.

Kazakhstan and Kyrgyzstan financing was absent. Nevertheless, due to financing Program 1 by the World Bank and WARMAP project by European Union, all national institutes carried out participated work and made a big step in working out principal provisions of regional water strategy.

The main results of work are following:

- The principal provisions of the Aral Sea Basin water strategy are developed and agreed, considering and performing as interaction of national and regional aspects, coordinated to full agreement;

- plan on program 1.1 and TOR`s on programs 1.2 and 1.3 were prepared.

- the principal provisions about transboundary waters classification are elaborated taking into account ICWC responsibility for transboundary resources management;

- the set of measures for water resources productivity is developed. It is shown that under high technical level of the system is possible to achieve productivity which is 20-50% more than average indices for full water consumption all over the region. Technical-economic indices of water use efficiency on the economy branches (irrigation and power generation) are developed; approaches to potential productivity of water-consuming industries and water productivity in irrigated agriculture on the base of biological demand are worked out;

- the set of institutional, legislative and engineering measures on water quality improvement in Central Asian sources was elaborated, including:

- pollution limits on rivers and tributaries establishing and penalty sanctions for their exceeding;

- collector water withdrawal management depending of water quality;

- setting up of hydro-ecological monitoring;

- ecological stabilizing of the natural processes on expense of management by "river-irrigated schemes" at the basin level;

- adjustment of infra-system drainage water use with ecological equilibrium achievement;

- set of managerial and nature-protection measures on desertification intensity decrease, Aral Sea water level and quality stabilizing;

- pricing policy for water resources, used in different industries of the Central Asian countries which considers water as a resource, sharing expenditures between state and water-users, financial mechanism of water-users involvement in management sphere, proposals on economic mechanism of water resources redistribution, water preservation incentives and struggle against pollution. The principle "polluter pays" is formulated at state and interstate level;

- principles of united information system for integral use and water resources protection of the Aral Sea basin are worked out. The system is interstate four-level which unifies regional and five national information systems at the level "irrigated scheme-farm-field". The field level will be filled in by the information from WARMAP pilot projects results. This system is dedicated to provide with reliable information all water-users what is obligatory condition for international water right;

- principles of optimization of engineering-reclamative measures for ecological situation improvement in the watersheds;

- remote observation system on water use and water preservation has been elaborated on the base of water-balance stations and new irrigation technologies;
- river channel's processes have been studied, their forecast is completed. Scientific grounded bank-defending and flood preventing measures are recommended;
- meteorological provision of water account related to large water-intakes and canals, draft interstate standards on the methods and technical means of water account are elaborated. The standards are submitted to Ministries of Water Management of ICWC members for agreement.

It is necessary to note that all 9 tasks of the SIC ICWC plan are connected. For example, task 01 on the integral assessment of water resources use efficiency is complementary to task 04 on elaboration of water-pricing. Task 02 on AmuDarya and SyrDarya waters quality improvement is close to task 03 on elaboration of measures for stabilizing horizon and quality of Aral Sea water.

SIC ICWC has prepared the plan for 1996-1998 which agreed with leading institutions and Ministries for Water Management of all Central Asian states. Some new task are included. For instance, task 10 "Assessment of operation reliability of existing reservoirs and waterworks and elaboration of measures on improvement of their efficiency" which allow to increase reliability of water units. The plan 1996-1998 which was corrected and made closer to "Program of concrete actions", grounds a good basement for its fulfilment jointly with the World Bank and EC programs.

Significant shortcoming of SIC ICWC activity is absence of agreement with international organizations on training program for water-related economy specialists.

INFORMATION ON 4-th ITEM OF THE AGENDA OF ICWC MEETING: "ABOUT WARMAP PROGRAM AND PHASE 2 PROGRAM 1.1, INCLUDING CONSIDERATION OF LEGISLATIVE DOCUMENTS, ELABORATED BY SIC ICWC"

According to wishes of the ministers - ICWC members during their visit to EC head-quarter in Brussels WARMAP program phase 2 concentrates efforts on three main questions:

- preparation of the set of legislative documents and regulations on improvement of basin's water resources management and use;
- elaboration and creation of united information system for management and development of the Aral Sea basin's water resources (WARMIS);
- selection and preparation of technical-economic ground on the pilot project's system for irrigated agriculture efficiency increase.

According to the plan following workshops were carried out:

6-th December 1996 - on legislative aspects with participation of ministers of Tadjikistan and Uzbekistan and other representatives of Ministries of Water Management of the region, where main principles and directions were agreed;

13-14-th February and 28-th February 1996- on the main provisions, plan and information contents included in first level of WARMIS program;

12-th March and 23-d July 1996 - on pilot projects' system.

On all subprograms the national and regional groups are organized, TOR's are agreed and project implementation is started.

Under subprogram 1 draft three first agreements are prepared as component of "Water strategy" and are disseminated to national groups for discussion. The national group from their side prepared their suggestions. On May the meeting for preliminary agreement proposed project was held at the working group level. After discussions the draft projects were submitted to the ministries. The comments from Kyrghizstan, Tadjikistan and Uzbekistan have been received. They are accepted as a basis for further development.

Under Program 2 main provisions, set of information and inter-correlation of all sub-systems at the basin's level are elaborated; information chain "basin-system-region" pilot projects' elaboration is started. Equipment delivery, information collection and accumulation as well in the ministries of water management, two BWO and SIC ICWC. Agreement is achieved between national and regional groups about common methodology and connection with modeling at the regional and national level.

On program 4.

35 farms in 5 states are indicated, which reflect typical natural conditions for all irrigated lands of the Central Asian region, including: Kazakhstan-4, Kyrghizstan-6, Tadjikistan-4, Turkmenistan-6, Uzbekistan-14. This pilot sites are agreed with all ministries. Common methodology of observation and information collection is approved which allow to prepare technical-economic ground of the pilot projects and to proposed them to donors for financing.

According to the request of ministers-ICWC members EU agreed to increase financing of WARMAP Program 2-nd phase on 1mln. ECU for WARMIS project and on 650 th. ECU for pilot projects.

It is worth to note that number of foreign consultants is decreased to minimum and subprogram leaders and consultants were fully agreed with proposals of the local specialists.

The main activity shortcoming is that the training of middle level specialists is not executed as it was supposed at the meeting in Brussels.

At present time the criteria and order of selection of the pilot projects I and II types (inter-farm and on-farm network) are elaborated, working groups are created and schedule is affirmed which prescribes submission to EU till 10-th November 1996 short technical-economic grounds of 10 pilot projects for opening of financing.

On Program 1.1 "The main provisions of the region water strategy" are prepared.

The national and regional reports on the preparatory stage of 1-st phase were presented for consideration to the World Bank and GEF (customer and donor of the project)

The report was confirmed. Experience and professional knowledge of the local specialists showed ability of the region to work jointly and fruitfully.

The program of work continuation at the 2-nd stage is presented. Its cost is 5,3 mln. USD, including 2,410 th. USD for national strategies. It is supposed that the program starts since 1-st October 1996 (financing of modeling and programs 1.2 and 1.3 will be started immediately).

On the national reports texts comments are obtained from all national groups. On the common report comments from the ministries of Kyrghizstan, Tadjikistan, Uzbekistan and Kazakhstan are received. Necessary corrections are made.

The report is submitted to ICAS members and independent expertise on ICAS choice. The work is completed. On the national reports principal affirmation is obtained as the basis for "Main part of strategy" elaboration from Kyrghizstan, Kazakhstan, Tadjikistan, Turkmenistan and Uzbekistan.

The report apply to joint efforts of all states for water resources rational use, preservation and management. Taking into account its role in water resources planning and utilization, in improvement of environment and the fact that ICWC is a real initiator, organizer and ex-

ecutor of "Program of concrete actions", it is necessary to define clearly ICWC role as coordinator and its relations with ICAS.

On the SIC ICWC report participants noted significant delay in financing some projects which are necessary for successful fulfilment of the Aral Sea Program.

INFORMATION ON THE AGENDA 5-th ITEM OF ICWC MEETING "ABOUT PERFECTION OF SIC ICWC STRUCTURE"

While it is necessary to give SIC ICWC independent interstate status it was singled from SPA SANIIRI as an independent executive body.

SIC ICWC includes 2 regional institutes -SPA SANIIRI and PKTI "Vod-avtomatika", 5 leading scientific-information centres: Kazgiprovdhoz, Kyrghizgiprovdhoz, TadjikNIIGiM, Turkmengiprovdhoz and Uzvodproect and 5 national organizations.

According to proposals of the Ministry of Water Management of Tadjikistan and State Committee for Water Resources of Kazakhstan the SIC ICWC subdivisions were established in these countries for direct coordination communications between different organizations and SIC ICWC.

Under new regulation the leadership is charged on the Regional Council, including all organizations' directors, which responsible for:

- preparation of common plans, submitted for consideration of ICWC;
- coordination of joint researches for scientific provision of water-related problems, elaboration of ecological programs and scientific-grounded measures on preservation and re-charge of the AmuDarya and SyrDarya basins' water resources;
- preparation of proposals for ICWC on appointment projects' leaders on the international organizations programs.

This regulation is preliminary agreed with ministers of water management of Kazakhstan T.T.Sarsenbekov, Kyrghizstan - M.Z.Zulpuev, Tadjikistan - I.Eshmirzoyev, Turkmenistan - A.I.Illamanov, Uzbekistan - R.A.Giniyatullin. Acting Minister of water management of Uzbekistan A.A.Djalalov approved this regulation. SIC ICWC is registered in Ministry of Foreign Affairs of Uzbekistan as international organization.

REPORT ABOUT ICWC DELEGATION PARTICIPATION AT ICID XVI CONGRESS IN CAIRO 14-26 SEPTEMBER 1996

ICWC delegation including Chairman of the State Committee of Water Resources of Kazakhstan T.T.Sarsenbekov, Ministers of Water Management of Kyrghizstan - J.V.Bekbolotov, Tadjikistan - N.A.Ashurov, Turkmenistan - D.O.Deryakuliev, Uzbekistan - A.A.Djalalov, SIC ICWC Director V.A.Dukhovny and EC ICAS Director Ju.V.Bobko took part at ICID XVI Congress and its Executive Committee meeting 14-26-th September in Cairo (Egypt). Visit was supported by the World Bank (Mr. Peter Whitford).

Before the Congress Inter-ministerial Council meeting was held in which Ministers of Water Management of Egypt, Syria, Ethiopia, Sudan, Marocco, Vietnam, Malaysia, and Central Asia took part. General report was done by the World Bank Vice-President and Global Water Cooperation President Mr. Seraghildin. On behalf of ICWC Council was greeted by Minister of Water Management of Tadjikistan Mr. N.A.Ashurov. The slogan of the Congress was "Irrigated agriculture sustainability" and two problems were considered:

- item 46 - NGO participation in planning, development and maintenance of irrigation and drainage systems;
- item 47 - planning of irrigation and management - measures to make harmony with environment.

Mr. Ali Shadi, CIDA adviser was elected as ISID President for next 3 years. Special meeting was dedicated to ICID participation in the Aral Sea problem solution. At this meeting the reports of all Ministries of Central Asian States, Mr. Ju.V.Bobko and Mr. V.A.Dukhovny were presented and discussed.

The delegation visited First Deputy Minister for public utilities and water management of Egypt Mr. Abd-El Rakhman Shelyaby and aquited with the Ministry activity and a new centre for forecast and telecommunication management created with support of USAID. The delegation visited irrigation and drainage network in Egypt, hydrostructures and canals on Nile including old Assuan dam, two barrages on Nile, etc. Delegation was also invited by Uzbekistan Ambassador in Egypt Dr. Shamsutdin Babakhanov.

The set of questions was discussed with different organizations:

1. With ILRI Director Mr. Pinckers:
 - about joint proposal to participate in "Copernicus" program on theme "ICWC information provision";
 - about joint presentation to Dutch Government proposal on training centre creation on expense of Dutch MFE grant;
 - about provision on expense of ILRI all ICWC branches by computers to include them in IPTRID network;
2. With the Chairman of Spanish National Committee of ICID Dr. Martin Mendeluza and Spanish National Committee Secretary Dr. Jose Ortiss Urussia:
 - about concordance with Ministries of Water Management, Agriculture and Environment expected visit to Spain ministers ICWC-members in January-February 1997;
 - about exchange of experience in regional planning prospective water resources development, water-users associations' activity and water tribunal.
3. With IWASRI (International Institute for soil salinity and reclamation, Pakistan) Director Dr. Mukhamed Bhutto:
 - about protocol and agreement with former IWASRI Director Dr. Zubery about collaboration between SIC ICWC and IWASRI;

- about exchange of delegations consisting of 6 persons on establishment of a joint research program and application to donors to support these visits and program.

4. With ICID National Committee of Iran prof. Farkhady:

- about joint research and preparation a special workshop in Teheran for 12-15 specialists from Central Asia;

- about invitation NCI 2 representative to Tashkent and Ashgabat for preliminary discussions in October.

5. With Chairman of ICID Australian National Committee Mr. Kyrpatric:

- about experience exchange on basin management with ICID ANC;

- about visit of ICWC delegation to Australia in February-April 1997 on Murrey-Darling basin management;

- about Mr. Kyrpatric visit in Central Asia 3-9 October 1997.

6. With IPTRID program Coordinator Dr. Pearce (Wallingford, England, "Cemagref" and "US Reclamation Bureau") about exchange of information between these organizations and three centers within the former Soviet Union: SIC ICWC, VNIIGiM (Shumakov), and UkrNIIGiM (Kovalenko). Prof. V. Dukhovny has put a question to Mr. Pierce about common base of information presented and about financial aspects of this exchange.

7. With ICID President of Honor Dr. Henessy:

- he supports Uzbekistan representative participation in the headed by him working group "Water preservation". Candidate with deep knowledge of Central Asian experience and speaking English will be chosen in this month;

- about possibility of joint discussion with donors about program and financial support of the workshop "Water preservation, economic and technological policy in irrigated farming";

- Alexander GIBB company which is headed by him supports the "Trans-Asian water consult" joint venture creation with participation of all states of the region and foreign partners and particularly his company.

8. With USA ICID National Committee Mr. Larry Stedens, Mr. Gerb Creydanus.

The Aral Sea region has a lot of similar regions all over the world and especially in the states Colorado, California and Nevada. US Reclamation Bureau is transmitting now from large construction projects to improvement of operation, maintenance, ecological aspects and from this point of view the collaboration between USRB and SIC ICWC is desirable.

It is agreed:

- to send US ICID NC ICWC proposals on technical problems, which are the subjects of mutual interest, in the field of operation, reconstruction, irrigation technique, salinity control;

- to prepare ICWC suggestion about possible profile of proposed joint ventures;

- to prepare joint conference in California with an agenda "Inland basins problem under current ecological and socio-economic pressure conditions".

9. ICID National Committee of Slovenia Chairman Bruno Matiss proposed:

- to continue common work for attraction financing of INCO "Copernicus" program. With this purpose Mr. Bruno Matiss will rennovate previously prepared project taking into account discussion which took place at the meeting;

- Mr. Bruno Matiss is going to attract the attention of Mediterranean Fund and Institute of Bari (Italy) to the joint projects;

- he proposed to paid attention to saline water use in which Institute of Bari has a big experience.

10. Leader of working group "System approach and computerization" prof. Illias was interested to attract our specialists to the group activity and asked to choose 2-3 English speaking persons.

11. Exchange of opinions was held with FAO Irrigation and Drainage Department chief Mr. Hans Walter:

- about FAO publication provision for SIC ICWC Library for last 5-6 years;
- about FAO methodology author Mr. Martin Smith involvement in this methodology adjustment to the Central Asia conditions for elaboration of unified base of water consumption in the region. FAO will attempt to find donors and the use its connections with NATO (de Cunya).

12. "Conference development of sustainability of Central Asia" (CODOSCA) Frank Crown informed about this program execution by London school of eastern sciences. This program includes along with Central Asia Mongolia, Pakistan, India, China, Afghanistan and Iran. Mr. Frank Crown expressed his willingness to cooperative with SIC ICWC on sustainable development problem. Recent meeting in Mongolia has failed because of absence of CAR specialists.

13. David Sekler, Institute of international management in irrigation (Shri Lanka) new director promised to restore previous agreements about IIMI branch creation on the base of SIC ICWC, which should be financed by International Fund for Stuggle against hunger.

14. Dr. Menenti (DIO-NL) is trying on expense of NASA Program to assess Aral Sea basin environment by means of remote sensing methods. He was suggested to cooperate with SIC ICWC and WARMAP for use and development of on-ground investigations.

15. Prof. Trevor Tenton (Southgempton University) has a guarant from EU science fund for Aral Sea basin mathematical modeling financing. He was suggested to cooperate with SIC ICWC and WARMAP.

MINISTER FOR WATER MANAGEMENT AND RECLAMATION OF TADJIKISTAN
N.A ASHUROV PRESENTATION ON THE ICID XVI INTERNATIONAL CONGRESS
OPENING

*DEAR COLLEAGUES! YOUR EXCELLENCY, MR. MINISTER!
LADIES AND GENTLEMEN!*

I am awarded by high honor - to make my presentation on behalf not only of my colleagues - five ministers, ICWC members, but on behalf of a huge staff of water-related specialists which accounts about 0,5 mln. people and manage more than 100 bln. cu. m. water and 7,9 mln. ha of irrigated lands !

The problem, to which the Congress is dedicated, sustainable development on the base of proper water resources management is very important for world arid countries and all mankind.

Egypt and Central Asia are two zones where civilization and water-economy have appeared in ancient time and where history taught always to respect and protect water resources. We can be proud that inspire of wars, the region's water economy developed permanently, giving life, employment and food to growing population. At the same time our ancestors studied not only from own experience, but from experience of Mesopotamia and other regions where failed management led to disaster and poverty.

That is why Central Asian Governments and Ministries of Water management and Reclamation did not allow to appear conflict situation after the collapse of the Soviet Union. We immediately created Interstate Commission on Water Coordination, which took responsibility for Central Asian water resources management and development.

ICWC during 5 years successfully manages water resources. It is initiator of the "Program of concrete actions", approved by Heads of Central Asian states on September 11, 1994.

Recognizing meaning and importance of water-related systems sustainability under conditions of unstable economy and transition to the market, we pay big attention to water strategy creation on the base of mutual cooperation improvement.

We have put five principles into the base of our cooperation:

1. Recognizing environment including Aral Sea and Sea adjacent zone as separate water-user in interest of nature preservation for future generation.
2. Water saving on the base of strict limitation and economic mechanism introduction.
3. Unity in management, use and protection.
4. Equal and mutual beneficial rights we understand as an equal rights but as well as equal responsibility for the system maintenance, protection and development.
5. Regional interests priority above national ones.

Our region is surviving now not a simple period. But we are sure to overcome these difficulties together. Moreover, water-related economies integration, governments' aspiration toward the joint policy will lead to the economic and social integration of our countries.

Under conditions of current economic stress we hope for world community financial support. From the range of developed countries we suddenly transmitted to the status of developing countries, but it does not mean that we lost our scientific, technical and human potential. We need assistance in financing and modern equipment. We are sure that with time Central Asia will repay to the all world by experience, know ledge and finance.

Thank you for attention.

**INFORMATION ABOUT FOREIGN DONORS SUPPORT TO THE ARAL SEA BASIN
PROGRAM AND ITS FULFILMENT (OCTOBER 1, 1996)**

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availabi- lity	Firm consultant	Termination month/ year	Preparation stage
<p>Program 1 To develop the common strategy of water share, rational use and water resources protection in Aral Sea Basin and to prepare on its base the drafts of interstate legal and normative agreements, regulating the questions of joint water use and protection from pollution taking into account regions socio-economic development. Program coordinator V.A.Dukhovny, SIC ICWC Director, Tashkent, Uzbekistan</p>								
1.1	Strategy of rational water-use and water resources protection in the Aral Sea Basin	0.375 0.450 total 0.825	0.331	GEF NL	EC no	no no	01.96	Preparation stage of the 1-st phase has been finished, positive conclusions from all governments have been obtained. ICWC recommended to ICAS to approve "Main provisions of water strategy" as the base for 1-st phase works. Terms of reference (TOR`s) for 1-st phase main stage have been prepared, but practically works were ceased because of finance absence
1.2	Efficiency of existing water-reservoirs with irrigation and energetic importance increase	0.200		SWE	no	no	_____	TOR`s prepared and coordinated by Aral Sea Basin countries. ICAS Executive Committee and World Bank are conducting negotiations with CIDA on financing opening acceleration, although CIDA wants to finance only seminars and foreign consultants, that does not allow to execute the programs in accordance with TOR`s
1.3	Dams and water-reservoirs sustainability	0.200	_____	SWE	no	no	_____	The same

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
Program 2								
To develop and inculcate the united for Aral Sea Basin unified system of water resources account and use and also the regional system of environment monitoring with data base creation, to provide with instruments and equipment the gauging stations, especially in watersheds								
2.1	Regional unified system of hydrometeorological information, account and forecast of water resources and environment monitoring is the Aral Sea Basin (Hydromet services)	1.500 0.250 total: 1.750		SWISS UK	SWISS UK	no no	_____	On the base of Uzbekistan Hydromet service the working groups of 5 Central Asian countries have been organized. The equipment for taking and processing of hydrometeorologic information have been got. The training courses for local specialists under the guidance of foreign specialists have been carried out. The educational tour was organized and conducted to Great Britain and Switzerland
2.2	Data base of SIC ICWC and information system management	0.250	---	no	no	no		The draft term of reference has been specified for donor-countries Because of lack of finance, the works were not begun
Program 3								
To develop the principles of water quality improvement ,restriction of all kinds pollution, to take the effective measures to reduction and then for full cessation of disposal into rivers and other water-sources, neighboring countries territory the high mineralized and polluted collector-drainage waters and also unpurified industrial and domestic waste waters								
Program coordinator V.G.Konyukhov, Vice-Chairman of State Committee on nature protection, Tashkent, Uzbekistan								
3.1 à	Water quality estimation and management	0.125 0.257 Total 0.382	no data	GEF NL	UK no	TVA (USA) no	06.96	The work has been begun in January 1996. Preliminary regional report and basin plan of water resources quality management have been worked out. At present time correction being made after regional group

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
								comments.
3.1 b	Improvement of agricultural use water quality	0.350	no data	NL	Bank	ILRI (NL)	04/96	Works have been begun in September 1995. Report is supposed to be completed in October 1996.
3.2	Collector-drainage network and collectors of AmuDarya right bank	1.000 0.400 total 1.400		Japan NL	Uz no			Work is carried out under separate project by Turkish firm Temilsu and Uzgi-promeliiovodkhoz institute.
<p>Program 4</p> <p>To carry out corresponding investigations and study on engineering decision selection ,to provide projects preparation and realize the work on creation in Amu-Darya and SyrDarya deltas and adjacent desiccated Aral Sea bottom areas artificially irrigated landscape ecosystems, to carry out there the necessary reclamation to restore the natural-historic ecological regime and sanitation of these territories.</p> <p>Program coordinator A.G.Babayev, Desert Institute Director, Ashgabat, Turkmenistan</p>								
4.1	Creation of wetlands in Amu-Darya delta and on Aral Sea drained bottom	1.100	1100	NL	Bank	Euro-consult Italy	01.96	Final report is prepared. The report and its decisions are not approved by MKWM and its leading institutes. In program scope the pilot project by lake Sudochye is foreseen, Dutch government has allotted 1mln US dollars for the works and Mejdurechye water reservoir

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
								has been allotted 300 thousand US dollars
4.2	Restoration of the Aral Sea northern part. Northern bay	0.770 0.150 total 0.920	no data	Japan NL	no	no	—	
4.3	Environment investigation in the Aral Sea Basin (Northern and Southern Aral Side)	0.500 0.250 0.120 0.120 0.200 total 1.190	no data	UNEP DM UK UK Finland	no no no no no	no no no no no		TOR`s have been developed and WG formed. The works were not begun because of lack of financing.
4.4	Cleaning of SyrDarya channel downstream of Chardara reservoir	0.520	0.520	Italy	Bank	«Electro consult	01/96	Final report has been finished, but has not been discussed.

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
Program 5								
To develop and realize interstate programs «Pure water» and «Health», providing Central Asia population with pure high quality water and improving sanitary-epidemiologic situation.								
Program coordinators from Uzbekistan: A.M.Mironenkov, State Committee on statistics and forecast, from Kazakhstan-no from Turkmenistan-no								
5.1	«Pure water» and «Health», Uzbekistan	0.470 0.390 0.830 0.160 total 1.850		Japan NL KFAED NL	Bank no no no	Binnie and Partners (UK) Helvetas USA no no no	06/96	The final report has to be presented in October 1996. At the expense of grants the realization of demonstration projects on country sanitary is executed. The works on small-scale projects of country water-supply in Aralside are begun. The possibility of World Bank loan being examined for demonstration project of Kyzketken settlement water-supply.
5.2	«Pure water» and «Health», Turkmenistan	0.280 0.800 total 1.000		NL Japan	no no	no no	_____	Works are carried out.
5.3		0.500		NL	no	no		Work is stopped

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
	«Pure water» and «Health», Kazakhstan	0.750 1.250 total 2.500		Japan KFAED	no no	no no		
5.4	Middle-term water-supply and population sanitation in Amu-Darya delta	no		no	no	no	_____	Works have not been begun because of lack of finance
5.5	Long-term strategy of water-supply and waste water purification management	no		no	no	no	_____	_____
5.6	Medical-social rehabilitation of Aralside population	no		no	no	no	_____	_____
<p>Program 6</p> <p>To carry out water -related and ecological investigations and on their base to realize the concrete measures for improvement of sanitary conditions in watersheds. Program curator: A.U.Usmanov, Department chief SANIIRI, Tashkent, Uzbekistan</p>								
6.1	To carry out water related and ecological investigations and on their base to realize the concrete measures on sanitation in watersheds	0.200 0.100 total 0.300		Finland Turkey	no	no	_____	Preliminary report is prepared and submitted to Finland Trust Fund and World Bank. At present the work on comments is carried out. The propositions on pilot projects are prepared.

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
8.2	Interstate organizations technical supply	0.750	no data	EU WAR-MAP	EU	no	08.96	The calculation technique and communications means have been bought for 5 states organizations including BWO «SyrDarya» and BWO «AmuDarya».
8.3	Interstate organisations staff qualification increase	2.800	no data		UNDP	no		The English courses for specialists, involved in Aral Sea Basin programs
Program 9 Aral Sea program activity enlargement Program coordinator: Yu.V.Bobko, Executive Committee Vice-Chairman								
9.1	Project of immediate action, directed to solution of urgent needs in Aralside disaster zone (Karakalpakstan, Kyzil-Orda, Tashauz regions)	10.000 (estimation) 0.950	no data	Bank Others on 23.09 allotted and distributed	no no	no no	—	First report on necessary works has been completed and being examined by the World Bank
9.2	Pilot projects in irrigation and drainage	Is being determined		EU OEFC Others	no no no no	no no no no	—	Offers have been developed

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
WARMAP (Water resources and agricultural production management in Central Asian Republics), phase 2								
1.1.2	Subproject 1. Support of ICAS Executive Committee and collaborating organizations Regional group manager: Sh.H. Rakhimov, vice-director SPA SANIIRI	0,43	0,18	EC TACIS WARMAP	yes	AQUATER Italy	06.97	Juridical documents are being worked out, seminars are being carried out, the current work on phase 2 completion is being conducted
code	Project contents	Financing (mln \$ USA)	Actually financed	Country donor (Fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
2.1.2	Subproject 2. "WARMIS" Determination and analysis of land and water resources management regional strategy Regional group manager I.A.Sorokina, SIC ICWC	2,03	1,62	EC TACIS WARMAP	yes	AQUATER Italy	05.97	The estimation of models, general planning, programming partially are ready (water, land, economics-stage of correction without interface, works on GIS are begun)
4.2.2	Subproject 4	1,20	1,03	EU		AQUATER	06.97	Works were performed: «Investiga-

Code	Project contents	Financing mln\$ US	Actually financed	Country donor (fund)	Financing availability	Firm consultant	Termination month/year	Preparation stage
	«WUFMAS» Investigation of water consumption and farm management. Coordinator : M.G.Horst vice-director SPA SANIIRI			TACIS WARMAP		Italy		tion of unconventional irrigation experience» Sets of codifying forms with information (photographs of current situation) for WUFMAS data base which is being formed for 360 fields of the region Analysis and conclusion (December 1996)
	Pilot projects Coordinator: R.K.Ikramov SPA SANIIRI Director	1,04	0,14	EU TACIS WARMAP	yes	AQUATER Italy		Initial stage (Objects selection) and TEG development
	Total for WARMAP, phase 2	4,70	2,97					

Note. The next abbreviations are adopted:

GEF - Global Environment Fund

EU - European Union

NL - the Netherlands

SWE - Sweden

SWISS - Switzerland

UK - United Kingdom

FAED - Kuwait Fund

DM -Denmark

UNDP - United Nations Development Program

OECF - European Security Organization

Bank - World Bank

EC ICAS - Interstate Council Executive Committee

IFAS - International Fund of Aral Sea

Others - Other organizations

ABOUT PROJECT IMPLEMENTATION «ARAL SEA, UZBEKISTAN: PURE WATER, SANITATION AND HEALTH» .

For all our region inhabitants it is obvious, unfortunately necessity to accelerate the works on population supply with qualitative drinking water. Especially this problem is critical in conditions of increasing ecological crisis in Aralside, where it becomes more sharp by unsatisfactory quality of environment, exhausting and degradation of water sources and social-economic development common low level of this region.

It is impossible to say, that understanding of acuteness and complexity of this problem came only now. A lot was done for it solving in soviet power years and especially last time.

For fundamental decision on Karakalpak Republic and Khorezm region population water-supply regional pipelines Tuyamuyun -Nukus-Chimbai-Tachtacupir and Tuyamuyun-Urgench were built; distribution network began to develop.

In Aralside over a period of 1990-1995 3660km of water-supply lines were built. Priority of government policy regarding ecological crisis zone is evident from the fact: only 11% country population live here, but however, putting into operation network is more than 30%.

Nevertheless we are extremely far away from full satisfaction of Aralside population with qualitative drinking water, therefore this problem takes its place among the urgent measures of «Program of concrete actions» for nearest years adopted by heads of Central Asian states at Nukus meeting in 1994.

In development of these decisions Uzbekistan government on May 1995 signed the agreement with the World Bank on implementation of Aralside population water-supply project.

Project 5.1 implementation foresees the level increases and drinking water-supply quality improvement of Aralside where 2,5mln people live. Centralized water-supply of Karakalpakstan and Khorezm urban population is, at present accordingly, 60 and 62,3% and rural population only 35,3 and 57,5%. Amu-Darya water quality has tendency toward worsening due to its pollution by drainage effluent, industrial and municipal waste waters.

The problem of Amu-Darya lower reaches population water-supply consist also of necessity to search decision in conditions of departmental separation of urban and rural water-supply and water resources scarcity, necessity to develop systems and more efficient use of operational objects at the expense of their reconstruction and rehabilitation.

To develop the projects` technical-economic ground special competition by Uzbekistan government jointly with the World Bank was carried out. The competition winner became British firm «Binney and Partners». Project financing is carried out by Kuwait Fund of Arab Economic Development. The work has been begun on November 1995, the final report according schedule will be presented by the firm in September 1996. It is planned to carry out the wide report discussion by the interested organizations, ministries and departments, Executive Committee and also Karakalpak and Khorezm authorities.

Simultaneously at the expense of grants the performance of demonstration projects on rural sanitation, small-scale projects of rural water-supply in Aralside is being executed.

On the World Bank suggestion, Uzbekistan government is considering possibility of the Bank loan to realize the demonstration project for settlement Kyzketen (Nukus Suburb) and for detailed engineering preparation of full-scale project.

Demonstration project is directed to improvement of drinking water-supply for settlement of 34 thousand population, which up to now is forced to use mainly imported low quality drinking water. Simultaneously the methodology of population involvement in project fi-

nancing will be worked out both by labour participation and directly by payments. Also the tariff policy will be developed, approximated to real estimation of service cost.

Thus on the demonstration project base the requirements to technical design, agreements on the subcontracts for water-supply and water distribution systems construction will be worked out. The experience obtained in the course of this project realisation will be used for wide-scale project.

On this stage detail and engineering preparation of full-scale project on goods purchase, works and services for its realization will be done. It will include control for project realization, negotiations with suppliers and construction supervision.

At the beginning of October the World Bank estimation mission is expected with co-financing organizations participation and other donors. Uzbekistan government directed invitations to possible mission participants, which jointly with government will have to determine the sources, conditions and terms of the project financing.

By mission results the agreement with the World Bank will be prepared on the loan offer for water-supply project in Aralside.

ON COURSE OF PROGRAM 6 REALISATION «INTEGRATED LAND AND WATER RESOURCES MANAGEMENT IN THE ARAL SEA BASIN RIVERS WATERSHEDS»

Program 6 is one of 7 programs, approved by heads of Central Asian states addressed to decision problems, arising in the Aral Sea Basin. It is known, that disasterous situation in Aral Sea and Aralside has appeared as a result of water intake increase for irrigation and ecological equilibrium disturbance in the basin. From this point of view the watersheds contribution to the basin state is significant.

Economic activity in the watersheds leads to unfavourable influence on water and land resources and other environment components. Because of watersheds` conditions change (forests cutting down, land ploughing, cattle grasing, etc.) and also owing to population growth and populated area enlargement the influence of dangerous and disasterous phenomena (sels, floods, landslides, snow avalanches, etc.) increased significantly.

There are very complex problems, connected with water-related activity and land use. Imperfect irrigation systems and non-rational water-use caused high irrigation water losses, waterlogging and salination of lower lands, underground and surface water pollution.

Agricultural production, connected with wide use of agrochemicals, on one hand, and industrial production emanated in environment harmful substances, on the other hand, determine total human-made loading on environment. All above mentioned belongs to soil cover and surface run-off. The soils degradating under influence of unperfect agricultural system which changes their properties are subjected to water, wind and irrigation erosion. These factors negatively influence not only on ecological but also economic situation. Even under present conditions many of these problems are connected directly with ecological disaster in the region (soil erosion, forest disappearance, water and land resources pollution, vulnerability to natural calamity increasing, waterlogging, soil salination, etc.). In future ecological conditions sustainability will become even more important factor.

Besides of serious problems presence watersheds influence cumulatively on lower lands. The most important factors are waterstreams exhaustion and pollution which are used in lower land for water-supply and irrigation, increasing floods and sels flow, caused by forests disappearance and erosion, leading to siltation of hydrotechnical communications and canals; high fields and irrigation systems losses causing underground and surface water pollution and also groundwater table increase on lower lands.

Therefore, the long-term tasks of program 6 are ecological degradation decrease, water resources and land-use in the watersheds sustainable management

Kyrghizstan, Tadjikistan, Uzbekistan and Kazakhstan take part in program development. National creative and working groups has been formed. Their tasks were investigations and estimation of state of art of ecological, economic and water-economy situation in the Aral Sea basin rivers watersheds and on the its base to determine priority of the short- and long-term measures on its improvement.

National groups, consisting of local high-qualified specialists have prepared reports 1-st version where watersheds main problems, scales and their causes were determined. In accordance with it, the certain recommendations have been prepared connected with priority tasks solution.

In republics` reports the detail information is given about natural economic peculiarities of republics watersheds about macro- and micro-economic aspects, juridical and institutional land and water use constraints in different economy sectors, qualitative characteristics

of land use in irrigated and rainfed agriculture planning, water resources management and their utilization.

More attention was given to irrigated agriculture problems, soil erosion, waterlogging and soil salination. Analysis of surface and ground water quality was carried out, their pollution origin and also ecological consequences of water quality worsening, the problems connected with natural calamities, inherent to watersheds.

The main problems related to water and land management are summarized. Special attention was paid to problems emerging in social sphere.

First version of the national reports is directed to Finland Trust Fund (program's donor) and the World Bank specialists for consideration. At present, the comments are obtained and correction is being carried out.

All national teams spoke out for work continuation on the pilot plots to work out of water and land resources management models accordingly to their conditions. They also proposed pilot projects realization alternatives. Proposals on program 6 pilot project are based on information and recommendations, stated in national reports and also on other sources related to methods of all interested persons and population involvement in information collection on pilot plots.

To complete program 1-st stage it is necessary:

- regional report completion and its transference to interested organizations of states-participants. This work has been planned to fulfil to the end of October 1996 by the efforts of editorial group consisting of national teams' leading specialists.

Preparation of combined final proposition on pilot project, which also has to be disseminated and discussed by interested organizations.

The further program 6 development depends on the governments interest in pilot project realization. Therefore, it is necessary to get the ministries and departments obligations in financing of the pilot projects technical and institutional measures.

ON THE COURSE OF ARAL SEA PROGRAM 3 FULFILMENT

«To develop principles of water quality improvement, all kinds pollution restriction, to take effective measures on decrease and, in future, on full disposal of highly mineralized and polluted collector-drainage effluent and also unpurified industrial and municipal waste waters cessation in rivers, other water sources and bordering states»

Program 3 is one of «Program of concrete actions» elements, which reflects qualitative aspect of region water resources and foresees water quality improvement principles development, limitation of pollution, adoption of effective measures on inadmission in rivers and other water basins disposals of highly mineralized and polluted drainage waters, unpurified industrial and municipal waste waters and, primarily, water resources quality management strategy development in the Aral Sea basin. Program 3 corresponds with Programs 1, 2, 4, 5, 6 and serves as information base for above mentioned programs development in part concerning water quality estimation and management.

Program 3 main purposes:

- To develop principles of water quality management;
- To harmonize the structure of water quality management and to develop the program directed to decrease of polluting substances disposal in ground and surface waters from industrial and agricultural production in the Aral Sea basin;
- To refine national and develop regional water quality monitoring system, including waste water monitoring;
- To estimate water quality and pollution sources influence on underground and surface waters quality;
- To distinguish priorities and projects for the second phase, where social-economic advantages are combined with advantages for environment.

Program 3 includes 2 projects:

3.1.A «Water quality estimation and management»

3.1.B «Water quality improvement for agricultural use»

Program 3 is divided into 2 phases. The first phase is designed for projects 3.1A and 3.1B details refinement and action plan for the second phase composing. The second phase, which duration is 3 years, is directed to achievement of main objectives. For the 1-st phase realization the interstate creative group was created consisting of 15 persons (3 men from each state) and its leader V.G. Konyuchov was elected.

The projects 3.1A and 3.1B first phase TOR's were developed and confirmed on the meeting of Program 3 creative group members in Chimkent (2-4-th April 1995) and in Tashkent (16-18-th May 1995).

Project 3.1A TOR includes 8 tasks, directed to analysis of existing situation, problems and needs of each country and the Aral Sea Basin as a whole, determination, development of priority directions and working plan for the second phase on the following directions:

1. Surface water quality assessment.
2. Water quality monitoring.
3. Underground water quality assessment.
4. Pollution sources inventory and monitoring.

5. Normative-legal base, regulating programs.
6. Drainage effluent disposal alternatives.
7. Pollution prevention, waste water treatment.
8. Water quality management in the Aral Sea basin.

The project 3.1B TOR includes 10 tasks devoted to estimation of irrigation water pollution main reasons and sources, development of measures on agricultural use water pollution prevention, drainage waters reuse, development of priority directions and actions on agricultural use water quality improvement as well on the 2-nd phase on the following directions:

1. Main sources of water resources pollution revelation.
2. Agricultural use water quality assessment.
3. Drainage effluent desalination possibilities and other types of treatment assessment.
4. Possibilities of drainage waters reuse assessment.
5. Self-purification capacity of rivers and collectors assessment.
6. Estimation of Water quality regulation possibility in rivers at the expence of run-off regulation.
7. Improvement of reclamation systems technical state for drainage outflow decrease.
8. Suggestions on demonstration and pilot projects, decreasing water-use and improving water quality.
9. Preparation of infrastructure investing plans to decrease water resources pollution.
10. Consideration of ecological grounded drainage effluent disposal schemes from water sources.

For the projects 3.1A and 3.1B TOR's realization national working groups were formed in each state from high-qualified personnel of committees on nature protection, geology, agriculture, public health, hydromet services, research institutes which started to work on the project 3.1B on September 1995 and on the project 3.1A on January 1996.

According to the projects National reports were prepared in which integral assessment of water resources quality is given, in particular surface and ground waters, the questions of water quality monitoring and pollution sources, drainage and waste water purification and use, industrial and agricultural water resources pollution prevention and legislation, the reasons of water quality worsening are determined and the ways of problems solution are outlined. National working group have developed the suggestions to pilot project program and action plan on water resources quality management in the Aral Sea basin.

On the base of information, obtained from Central Asian five states as the national reports, project 3.1A regional groups drew up first edition of the regional report and basin plan for water resources quality management. According to project 3.1B preparation of these documents is supposed to complete in September this year.

At present project 3.1A regional report and basin plan are being corrected in accordance with creative groups members remarks and in September will be presented to Executive Committee and all interested organizations. Project 3.1B documents presentation is planned to be done in October 1996.

All documents enumerated are prepared with assistance of american TVA firm experts (project 3.1A) and Dutch institute ILRI (project 3.1B).

CONSIDERATION AND CONFIRMATION OF WATER INTAKES LIMITS, OPERATIONAL REGIMES OF AMUDARYA RIVER RESERVOIRS CASCADES AND WATER SUPPLY TO THE ARALSIDE AND ARAL SEA

Water-related situation in 1995-1996 hydrological year as compared with last hydrological year turned out more favourable. Daring water-planning BWO "AmuDarya" took into account the experience of 1995 water scarcity.

According to Uzglavhydromet forecast river's flow in first and second quarter 1996 was expected in limits 70-80% of ordinary. In this connection at ICWC meeting in Chardjou 19-th January 1996 the limits were cut down to 10% in average of perennial ones for all water-users. Considering water scarcity forecast on 1996 the measures were taken for maximum water accumulation in all water-reservoirs. As a result leaching was carried out well. Due to coordinated actions of all water-economy participants non-vegetation and vegetation periods were carried out successfully. There were no special remarks and complains from water-users on timely and qualitative water provision.

AmuDarya flow discharge for hydrologic year by Kerki gauging station upstream of Karakum canal was 61.6km³, i. e. 97% of ordinary.

Tuyamuyun reservoir water volume on 30 September 1996 was 4406 mln. m³ or on 886 mln. m³ more than last year.

Over a period since 1.10.95 till 1.10.96 under determined water intake limit from AmuDarya river basin in volume of 53797 mln. m³, actually was taken 53061 mln. m³ or limit was used at 98,6% including for Uzbekistan under limit 22000 mln. m³ was taken 22725 mln. m³ or 103,3%, for Turkmenistan under limit 21900mln. m³ actually was taken 21454mln. m³ or 98% of limit.

On the Republic of Tadjikistan under limit 8456 mln. m³, actually 7414 mln. m³ was taken or 87,7%. On Surkhandarya region of Uzbekistan under limit 1442 mln. m actually 1467mln. m³ was taken or 101,8% of limit.

Over period since 1.10.1995 till 1.10.1996 in Aral Sea and AmuDarya delta under plan 8800 mln. m³ actually was supplied 6674 mln. m³, including 4339 mln. m³ from the river, 1546 mln. m³ from the drainage and 789 mln. m³ from irrigation system.

The use of water intake limits from AmuDarya river for 1995-1996 and water supply to Aral Sea and rivers delta is shown in the table below.

River basin, state	Limit, mln. i ³		Fact, mln. i ³	
	Total for year (from 1.10.95 up to 1.10.96)	Including vege- tation period (from 1.04.96 up to 1.10.96)	Total for year (from 1.10.95u p to 1.10.96)	Including vege- tation period (from 1.04.96 up to 1.10.96)
Total from AmuDarya river including Republic of Tadjikistan	53800	38843	53060	37975 98,6
	8455	6343	7414	5302 87,7%
	Limit, mln. i ³		Fact, mln. i ³	

River basin, state	Total for year (from 1.10.95 up to 1.10.96)	Including vegetation pe- riod (from 1.04.96 up to 1.10.96)	Total for year (from 1.10.95 up to 1.10.96)	Including vege- tation period (from 1.04.96 up to 1.10.96)	
Kyrghiz Republic (from AmuDarya river on Kerki gauging station)	43900				
		31400	44180	31550	100,6%
Turkmenistan	21900	15650	21455	15157	98%
Republic of Uzbekistan	22000	15750	22725	16390	103,3%
Besides: water supply in Aralside with taking into ac- count drainage water releases and drainage effluent	8500	5000	6674	4740	78,5%

Calculation of AmuDarya water balance shows that at present, the most problematic regions remain Dargan-Ata-Tuyamuyun and Tuyamuyun-Kipchak, where the losses are 40-20%. One of the main reasons is unreliable information on river hydrology and returned waters.

Analysis of water reservoirs (Nurek, Tuyamuyun) within the hydrological year shows that, in common, the necessary release were kept under sufficiently accumulated water volumes. Water stocks created in water reservoirs at the beginning of non-vegetation period 1996-1997 allow the normal conducting of non-vegetation period.

On Hydromet service river flow forecast non-vegetation period of 1996-1997 is expected in limits 105% of ordinary.

Coming from expecting flow discharge and intake perennial data analysis it is supposed to adopt water intakes limit on 1996-1997 hydrological year on the level of average perennial means:

Analysis of AmuDarya river discharge and water intakes over period from 1987 to 1996

	1987- 88	1988- 89	1989- 90	1990- 91	1991- 92	1992- 93	1993- 94	1994- 95	1995- 96
Gauging station Kerki upstream KKK	74,3	47,5	59,7	56,1	80,1	69,1	77,6	58	61,6
Water in- take total	51,45	43,4	52,5	48,57	51,45	51,45	51,24	48,9	53,06

On the base of discharge forecast and proposed limits the foreseen operational regime of Nurek and Tuyamuyun reservoirs was worked out (supplements ¹ 2, 3).

to ICWC meeting decision
in Djambyl

Water intakes limits from AmuDarya river on 1996-1997 and water supply to Aral Sea and rivers` delta

River basin, state	water-intake limits, km ³		
	Total for year from 1.10.96 up to 1.10.97	including non- vegetation (from 1.10.96 up to 1.04.97) period	including vegeta- tion (from 1.04.97 up to 1.10.97) period
Total from AmuDarya river, including	52,05	15,522	36,428
Republic of Tadjikistan	7,90	2,957	4,943
Kyrghiz Republic	0,15		0,15
From AmuDarya (Kerki gauging station)	44,00	12,565	31,435
Turkmenistan	22,00	6,6	15,4
Republic of Uzbekistan	22,00	5,965	16,035
Besides: water supply to Aralside with ac- count of irrigation release and drainage outflow	8,50	3,5	5,0
supply of sanitary-ecological re- leases in irrigation systems:			
Dashovuz veloyat	0,15	0,15	
Horezm region	0,15	0,15	
Karakalpak Republic	0,5	0,5	
Total Aral Sea and Aralside	2,5	6,5	6,0

Note 1. Water intake limits suppose water-supply for irrigation, industrial, municipal and other needs. Under basin water-supply changes water intake limits are accordingly corrected.

Operational schedule of Nurek and Tuyamuyun reservoirs on period
since October 1996 till March 1997.

Nurek reservoir	Measure- ment unit	Forecast						Total
		October	November	December	January	February	March	
Inflow to reservoir	m ³ /sec	351	225	190	155	145	190	3292
Water losses in reservoir	m ³ /sec	-25	-58	-26	-115	353	-36	244
Volume: beginning of period	mln. m ³	10500	10244	9810	8943	8460	6867	1050
end of period	mln. m ³	10244	9810	8943	8460	6867	6268	6268
Accumulation(+), release (-)	mln. m ³	-256	-434	-867	-483	-1593	-599	4232
Altitude: the end of period	m	907,53	903,30	895,40	883,50	869,25	861,00	
Release from reservoir	m ³ /sec	472	450	540	450	450	450	7371

Tuyamuyun reservoir	Measure- ment unit	Forecast						Total
		October	November	December	January	February	March	
Inflow to reservoir	m ³ /sec	838	657	757	649	528	568	10474
Water losses in reservoir	m ³ /sec	210	73	92	105	177	93	1968
Volume: beginning of period	mln. m ³	4406	4630	5046	5759	6519	5541	4406
end of period	mln. m ³	4630	5046	5759	6519	5541	3773	3773
Accumulation.(+), release (-)	mln. m ³	224	416	713	760	-978	-1768	633
Altitude: the end of period	m	124,34	125,60	128,65	129,00	127,81	124,04	
Release from reservoir	m ³ /sec	544	423	399	259	756	1135	9215

Operational schedule of Nurek and Tuyamuyun reservoirs on period
since April 1996 till October 1996.

Nurek reservoir	Measure- ment unit	Fact						Total
		April	May	June	July	August	September	
Inflow to reservoir	m ³ /sec	488	718	1067	965	1139	600	13041
Water losses in reservoir	m ³ /sec	-79	-42	-306	-353	-256	-154	-3116
Volume: beginning of period	mln. m ³	5884	6467	6712	8454	1000	10548	5884
end of period	mln. m ³	6467	6712	8454	10000	10548	10543	10543
Accumulation.(+), release (-)	mln. m ³	583	245	1742	1546	548	-5	-4659
Altitude: the end of period	m	863,96	867,22	888,74	905,18	910,48	910,43	
Release from reservoir	m ³ /sec	349	665	722	740	1168	756	11532

Tuyamuyun reservoir	Measure- ment unit	Fact						Total
		April	May	June	July	August	September	
Inflow to reservoir	m ³ /sec	964	1593	2994	2687	2526	1115	31303
Water losses in reservoir	m ³ /sec	271	420	737	274	459	219	6271
Volume: beginning of period	mln. m ³	4542	4463	3843	4987	4637	4640	4542
end of period	mln. m ³	4463	3843	4987	4637	4640	4406	4406
Accumulation.(+), release (-)	mln. m ³	-79	-620	1144	-350	3	-234	136
Altitude: the end of period	m	125,52	123,13	127,43	125,51	126,78	126,33	
Release from reservoir	m ³ /sec	723	1412	1830	2544	2065	983	25186

THE WATER-RELATED ECONOMY ACTIVITY AND SYRDARYA WATER RESOURCES USE IN 1995-1996 HYDROLOGICAL YEAR

Operational regime of Naryn-Syrdarya water reservoirs cascade in 1995-1996 hydrological year was confirmed at ICWC meeting in January 1996 in Chardjou. BWO «SyrDarya» was charged of correction following Hydromets' forecast refinement. For non-vegetation period it was necessary to realize water accumulation in reservoirs, high flow pass and also to provide water supply for leaching and water-charging waterings in determined limits.

Information about basin water resources in non-vegetation period by Hydromet data are presented in table below:

Lot	Volume mln. m ³		% from foreseen
	Forecast	Fact	
Natural inflow to upper reservoirs	4140	4420	106
Lateral inflow on sites:			
from Toktogul reservoir to Chardara reservoir	5585	6695	120
from Andijan reservoir to Uchtepe settlement	1740	2098	120
from Charvak reservoir to Chirchic river mouth	855	906	105
Total	12320	14119	114

Thus the volume of reservoirs water resources (upstream Chardara) in non-vegetation period was 14119 mln. m³ or 114% of expecting water-supply value.

In accordance with refined forecast, Narun-Syrdarya reservoirs cascade operational regime turned out as follows:

Reservoirs	inflow, mln. m ³		Release, mln m ³	
	Forecast	Fact	by schedule	fact
Toktogul	2295	2628	5845	8088
Andijan	740	663	422	415
Charwak	1105	1129	1297	1223
Kairakkum	9067	11220	6585	10014
Chardara,	7886	10027	3951	4809
including supply to Aral Sea			3000	2500
Release to Arnasay sink				999

In given period water volume in reservoirs was as follows:

Reservoir	Non-vegetation period, mln. m ³		Previous year volumes at the same time, mln. m ³	
	beginning	end	beginning	end
Toktogul	15770	10432	19339	14198
Andijan	578	838	564	1046
Kairakkum	659	3266	1192	2997
Charwak	1247	1142	1661	1079
Chardara	694	5327	1065	5221

The releases values from Toktogul reservoir in non-vegetation period in connection with hydrounit conversion in energetic operational regime was 8088 mln. m³ or 2243 mln. m³ more than was expected by schedule; at the same period the 1km³ escape in Arnasay sink took place.

Water-supply regime in non-vegetation is presented in the table below:

Republic	ICWC limit, mln. m ³	Fact, mln. m ³	% share
Kyrghiz Republic	20	11,84	59,2
Republic of Uzbekistan	2350	2645,73	112,6
Republic of Tadjikistan	200	215,31	107,6
Republic of Kazakhstan (ÊC)	400	398,3	99,3
Supply to Aral Sea	3000	2500	83

Råalization of water supply to republics was fulfilled according to the plan timely and continuously. There were no claims to BWO «SyrDarya». Supply to Aral sea happened to be less than planned, in spite of the fact, that real releases from Chardara were 1.2 fold more, than indices specified by schedule.

Water accumulation in channel reservoirs -Kairakkum and Chardara to the beginning of vegetation was completed, what allowed to provide guaranteed water-supply in middle reaches and downstream Chardara. The prominent role in successful cascade work was conclusion on 6-th May 1996 by 3 Presidents in Bishkek interstate agreement on Naryn-SyrDarya hydropower cascade water-energetic resources use and about the carrying out of mutual deliveries and mutual settling for electric energy, gas and coal between Kazakhstan, Kyrghizstan and Uzbekistan in accordance with Bishkek meeting minutes of 19-21-st December 1995, where the conditions of resources supplies and releases regime from Toktogul were stipulated.

In the current year vegetation period BWO «SyrDarya» provides with water ICWC states-members within the limits established. This task solution has been carried out with allowance for actual annual humidity.

District	Volume mln. m ³		Share of forecast, %
	Forecast	Fact	
Natural inflow to upper reservoir, including:			
Toktogul	12670	18475	145,8
Andijan	6296	10246	162,7
Charwak	2304	3131	135,9
	4070	5098	125,2
Lateral inflow, including:	8521	11871	139,3
from Toktogul reservoir to Chardara reservoir	5520	7736	140,1
from Andigan reservoir to Uchtepe set	2211	2796	126,4
from Charwak reservoir to Chirchik river mouth	790	1339	169,5
Total	21191	30346	143,2

Increased humidity allows to increase water intake above ICWC confirmed limits and keep to the end of vegetation period in the most of cascade reservoirs water volumes, significantly exceeding last year indices.

Reservoir	Inflow to reservoir, mln. m ³		Release, mln. m ³		Volumes, mln. m ³	
	forecast	fact	according to schedule	fact	on 1.10.96	on 1.10.95
Toktogul	6296	10246	6500	6227	15187	15770
Andijan	2304	3131	2461	2702	1384	578
Charwak	4070	5098	4054	5048	1619	1247
Kairakkum	7038	7123	8194	8389	1726	659
Chardara	3975	5405	6643	9406	831	694

BWO "SyrDarya" corrected the regime of reservoirs cascade operation by refined forecast, informing timely about it all ICWC members. For vegetation period water-supply volume was distributed as follows:

Republics, water-economy region	ICWC limit, mln. m ³	Fact, mln. m ³	%
Kyrghiz Republic	179	171	95,5
Republic of Uzbekistan	7832	8902	113,6
Republic of Tadjikistan	1603	1820	113,5
Republic of Kazakhstan (ÊÌC)	736	686	93,2
Supply to Aral Sea	1000	1423	142,3

Working meeting of fuel-energetic and water-economy sectors of Kazakhstan, Kyrghizstan, Tadjikistan and Uzbekistan took place in Bishkek 23-24-th August 1996. It prepared recommendations on rational use of water-energetic resources of Naryn-SyrDarya cascade reservoirs in IV quarter 1996 and in 1997. It is supposed that for carrying out of vegetation watering in 1997 the releases value in Toktogul hydrounit has to be 6,5 km³. To provide these releases Kazakhstan and Uzbekistan must in summer period to take in their energetic systems by 1,1 billion kWt/h electric-energy, worked out by Toktogyl hydropower with its compensation to Kyrghizstan by electric-energy backflow from Uzbekistan in autumn-winter period 1996-1997 and energetic resources supply: gas from Uzbekistan and coal from Kazakhstan. It is necessary as soon as possible to make interstate agreement, which will allow to provide the optimum operational regime of SyrDarya river basin water-economy in 1996-1997 hydrological year.

DETACHMENT OF LOANS TO KAZAKHSTAN ON IRRIGATION AND DRAINAGE BY THE WORLD BANK

The World Bank (News release 96/54 ECA)

At present, the World Bank offered to Kazakhstan 80mln US dollars loan to improve state irrigation and drainage systems. By project 118 mln. US dollars are planned to fulfil «turn key» work on the irrigation and drainage infrastructure. The project is realized by Ministry of Agriculture jointly with other stakeholders and includes construction and irrigation actions to improve environment and monitoring, farmers training by modern methods of water economy management.

Project consists of next components with indication of their cost:

Restoration of irrigation and drainage systems (108,1 mln. dollars). This part is directed to improvement mainly on-farm and partially inter-farm systems (about 30000 ha on-farm and inter-farm irrigation and drainage systems).

Individual subprojects include the following: thorough reconstruction of on-farm irrigation and drainage systems, drainage rehabilitation for on-farm systems only or inter-farm irrigation and drainage network.

Agriculture development on the base of privatized farms (2,3 mln. dollars). This direction foresees the equipment testing to improve information gathering and its transference in data base, investigation and study of privatized farms service.

It includes:

Courses organization for farmers, managers, farmer groups on modern economy and water management, improvement of high-yield technologies, marketing and production processing.

Demonstration of modern high-yield productive technologies.

Information panel for farmers, securing technical papers survey, also video, radio, TV and broadcasting for experience, marketing and production cost investigation.

Institutional structure (5,9 mln. dollars). This part includes:

Allowance to management staff and securing by Ministry of Agriculture the control on project fulfilment and provision by finance local budgets and technical consultants, supervising project implementation.

Provision of international consultants to supervise the project implementation, realization of environment protection plans, preparation of necessary documents, constructive observations and establishing of local water-users Association.

Strengthening of environment protection by Ministry of Agriculture, Ministry of ecology and biological resources and other organizations training, technical assistance rendering and special equipment supply.

Carrying out investigations by pilot projects with standard irrigation systems use. Investigation of possibilities of water-users privatization.

Additionally, 1,5 mln. dollars will go on equipment reconstruction project refinancing which was used by government in course of project preparation.

Project main meaning-increase of basic agricultural production, water-use efficiency in irrigation and industry.

Arrangement of declined timber-rafting, struggle with salination enlargement of cultivated zones by reclamation of deserted areas.

Creation of high-productive farms with in time water management, with perspective land cultivation and high yields.

Total project cost is 117,8 mln. dollars including taxes, from these Bank allocated only 80 mln. dollars and the rest Kazakhstan Government has to finance. Kazakhstan takes credit and Ministry of Agriculture bears the responsibility for this loan use. The daily control is carried out by Ministry on the project implementation.

The loan is repaid off according to Bank standards of acting rate of exchange during 20 years, including 5 years delay.

MEMORANDUM OF MUTUAL UNDERSTANDING BETWEEN AUSTRALIAN NATIONAL COMMITTEE ON IRRIGATION AND DRAINAGE AND SCIENTIFIC-INFORMATION CENTRE OF INTERSTATE COORDINATION WATER COMMISSION

So far as Australian National Committee on Irrigation and Drainage (ANCID) is scientific-technical non-government organization in structure of International Committee on Irrigation and Drainage (ICID) and is concerned with water and land resources management improvement by engineering, agricultural, economic, ecological and social sciences and technologies.

So far as Scientific-Information Centre of Interstate Coordination Water Commission (SIC ICWC) provides scientific-information, research and analytical support to ICWC decisions which deals with water resources management in the Aral Sea Basin and common water-allocation rational use and protection of the Aral Sea Basin water resources development which is connected with long-term agricultural and economic development of Central Asian region.

Taking into account the problems identity and natural-climatic conditions of Australia and Central Asia (water resources management on transboundary rivers, salinity, water deficit, etc.), SIC ICWC and ANCID offer cooperation on the next questions.

1. Creation of structure between SIC ICWC and ANCID for coordinated information exchange between organizations of Australia and Central Asia.

2. Preparation of scientific and technical cooperation and staff training joint Program.

3. Development, organization and mutual coordination of technical missions and seminars for professionals from the Aral Sea basin countries (representatives of Water Ministries of 5 Central Asia countries, SIC ICWC and BWO «SyrDarya») and ANCID.

SIC ICWC asks support from ANCID and ICID in sponsorship his for organization of above-mentioned program.

Signatures:

V.A.Dukhovny (SIC ICWC Director)
B.V.Killpatric (ANCID President)
R.P.Barnes (ANCID secretary)
A.A.Kadyrov (Secretary of Uzbekistan
National Committee on
Irrigation and Drainage)

**ASIAN DEVELOPMENT AND RECONSTRUCTION BANK (ADB) ANNOUNCED
TENDER ON PROJECT «KAZAKHSTAN: WATER AND LAND RESOURCES
MANAGEMENT IMPROVEMENT»**

Executor: Ministry of Agriculture, Kazakhstan, Almaty, 480065, Fax (3272)
631377

Credit volume: 30 mln. USA \$

Sector/subsector: Agriculture and agroindustry/Irrigation and country development.

Registration data: April 1996

TASKS AND ACTIVITY SPHERE

The project is directed to rise of farmers income and employment at the expense of farmers production increase. It will be provided by improvement of irrigation and drainage infrastructure and water resources management with support of state and commercial organizations.

Project activity sphere will include next 2 components:

1. Improvement of existing irrigation infrastructure and water resources management, restoration of water-pipelines, used for electric energy production, roads and transport and collector-drainage systems rehabilitation.

2. State institutes support under improvement by institutional potential, provision of consulting support, training and privatization process, assistance in farm development and agricultural service improvement.

Project manager: M-r.Ashraf Malik - (403-632-6903)

Department of forest and natural resources, UMA, Canada

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