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Coordination
Water
Commission of
Central Asia

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DECISION
of Board of International Fund for Aral Sea Saving
1. About Central-Asian Head of the states' decisions fulfillment on the Aral Sea basin problems of April 9, 1999 (Ashkhabad)

February 4, 2000 Ashkhabad

1.1. About IFAS means formation:

- To take into account EC IFAS information about situation related to fees contribution and IFAS own means use in 1999;
- To emphasize disadvantages in providing decisions of Head of the states of February 28, 1997 in a part of fees contribution;
- To ask Governments of IFAS state - founders to undertake measures on providing fees contribution in full volume.

1.2. About support of GEF project implementation. About draft Provision about GEF project Agency of EC IFAS:

- To take into account EC IFAS information about measures carried out by the states of Central Asia on providing support of project " Water resources management and environment in the Aral Sea basin " on areas of the states;

- To recognize necessity of adopting Provision about GEF Project Agency of EC IFAS on IFAS Board. To ask Governments of the state - founders to coordinate in a month submitted by EC IFAS draft Provision. EC IFAS should present for approval of Board members Provision about GEF Project Agency by polling way;

- EC IFAS should intense GEF project executors responsibility and control of their activity for project implementation according to "Agreement about grant of trust fund of Global Ecological Facility " between EC IFAS and World Bank of June 21, 1998.

- EC IFAS should study ways and opportunities of closer interaction of GEF Project with UN SPECA Program "Effective and rational power and hydropower resources use of the Central-Asian states" and other international projects, programs which are carried out in region.

1.3. About EC IFAS activity intensification on extension of cooperation with the country - donors, international organizations and funds as well as financial resources allocation for the Aral Sea problems solution:

- To take into account EC IFAS information about work on expansion of cooperation with the country-donors, international organizations and funds as well as financial means;

- EC IFAS and its Branches in the state-founders should continue activity on financial means involvement for the Aral Sea basin problems solution.

1.4. About implementation of Agreement about status of International Fund for Aral Sea Saving on the Central-Asian states area by the state - founders:

- To take into account EC IFAS information about work executed by state-IFAS founders on legal base provision of Agreement about status of International Fund for Aral Sea Saving on the Central-Asian states area by the state - founders.

The Republic of Kazakhstan	E. Utembayev
The Kyrgyz Republic	B. Silayev
The Republic of Tadjikistan	M. Nazriyev
Turkmenistan	S. Babayev
The Republic of Uzbekistan	B. Alimjanov

DECISION
of Board of International Fund for Aral Sea Saving
2. About organization of IFAS managing bodies activity

February 4, 2000 Ashkhabad

***2.1. About bringing amendments in "Activity procedure of International Fund for Aral* Sea Saving and Audit Commission":**

- To approve "Activity procedure of International Fund for Aral Sea Saving and Audit Commission" in updated version;
- EC IFAS should organize activity of IFAS and Audit Commission according to approved Procedure.

2.2. About approval of Plan of IFAS Board meetings for 2000-2001 years:

- To approve Plan of IFAS Board meetings for 2000-2001 years;
- EC IFAS, its branches and other structural divisions of Fund should organize activity according to Plan of IFAS Board meetings and ensure preparation of materials and dispatch to IFAS Board members 30 days before Board meeting;
- IFAS Board members should submit their comments and proposals on IFAS Board meeting materials to EC IFAS at least 10 days before meeting will be held.

The Republic of Kazakhstan	E. Utembayev
The Kyrgyz Republic	B. Silayev
The Republic of Tadjikistan	M. Nazriyev
Turkmenistan	S. Babayev
The Republic of Uzbekistan	B. Alimjanov

DECISION
of Board of International Fund for Aral Sea Saving

February 4, 2000 Ashkhabad

3. Collector-drainage waters use for agricultural crop production in Central-Asian countries:

- To approve proposal of Interstate Coordination Water Commission about Collector-drainage waters use for agricultural crop production in Central-Asian countries;
- EC IFAS should develop necessary documentation on given project and ensure their coordination with IFAS Board members and International organizations according to established procedure;
- To prepare necessary materials for financing sources definition.

The Republic of Kazakhstan	E. Utembayev
The Kyrgyz Republic	B. Silayev
The Republic of Tadjikistan	M. Nazriyev
Turkmenistan	S. Babayev
The Republic of Uzbekistan	B. Alimjanov

DECISION
of Board of International Fund for Aral Sea Saving

February 4, 2000 Ashkhabad

4. About creation of Center of population health rehabilitation in the Aral Sea basin.

- EC IFAS should consider issue of creation of Center of population health rehabilitation in Central Asia on boarding house base on Issyk-Kul lake of the Kyrgyz Republic.

The Republic of Kazakhstan	E. Utembayev
The Kyrgyz Republic	B. Silayev
The Republic of Tadjikistan	M. Nazriyev
Turkmenistan	S. Babayev
The Republic of Uzbekistan	B. Alimjanov

ABOUT EC IFAS ACTIVITY FOR 1999

Central-Asian (CA) Head of the states meeting was held on April 8-9 in capital of Turkmenistan, Ashkhabad, where IFAS activity issues in 1997-1999 as well as measures on supporting prior projects, about IFAS President election, assignment of EC IFAS Chairman and Ashgabat declaration were considered; IFAS Statute and Agreement about status of IFAS and its organizations were approved.

The government of Turkmenistan of May 3, 1999 the letters N3-270 were sent to all governments of CA states with request to determine and to inform about nominees for members IFAS Board, Audit Commission and EC IFAS members for appropriate registration.

Governments of the state -IFAS founders have presented above-mentioned nominees in following terms:

Government of the Republic of Tadjikistan - June 8, 1999;

Government of the Republic of Uzbekistan - August 30, 1999;

Government of the Kyrgyz Republic - October 29, 1999;

Government of the Republic of Kazakhstan - November 17, 1999.

On base of specified documents EC IFAS has prepared Decision of IFAS President of December 2, 1999 № 2-p.

Meeting materials have been issued by EC IFAS in separate brochure on 72 pages in full circulation 200 copies. Brochure has been directed to structural IFAS organizations, governments of CA states, ministries, departments, embassies of CA states, accredited in Turkmenistan as well as international organizations such as World Bank, UNDP, WARMAP.

Organizational work on creation of IFAS legal base and conditions for its activity has been carried out. EC IFAS has been registered, EC IFAS Statute has been updated which had been approved by IFAS President, President of Turkmenistan C. Niyazov, the letters to embassies of all foreign states in Ashgabat and representations, including UNO, World Bank, WARMAP, UNDP, USAID have been sent about keeping cooperation in Aral Sea problems solution.

EC IFAS cost estimate of expenses and staff list have been developed in coordination with Ministry of economy and finance. EC IFAS specialists' staff has been completed. EC IFAS petitioned Ministry of economy and finance of Turkmenistan for financing SIC SDC at the expense of payments of Turkmenistan, and this problem has been solved.

According to Order of President of Turkmenistan Ministry of economy and finance of Turkmenistan has started to finance activity of EC IFAS and SIC SDC and Secretariat as well.

Plan of measures on execution of orders and proposals of Head of CA states on the Aral Sea basin problems submitted on Ashgabat meeting was developed and considered with participation of directors of EC IFAS branches on June 10, 1999 in Dashhovuz. Taking into account EC IFAS comments and proposals plan of measures was updated.

In order to form Program of further joint actions on Aral Sea problems, to be introduced with the Aral Sea basin projects financed by donors through the World Bank and EC IFAS administrative support range of meetings have been held in Ashgabat and Tashkent with representatives of the World Bank Mission Mr. David Pearce, Anatoly Krutov and Director of UNDP project "Aral Sea basin potential development" Mr. A. Demidenko as well.

In result of these meetings range of questions of EC IFAS financial support has been solved and arrangement on granting the technical help to EC IFAS has been achieved. At the expense of own financial means UNDP and World Bank will finance seminars, IFAS working meetings, IFAS Board meetings (except of travel expenses), training, work of international advisers and experts, publications, purchase of office equipment, transport and office equip-

ment. In June of last year A. Demidenko proposed transfer of second-hand equipment from Tashkent to Ashgaba, purchase of new equipment in sum up to 10000 USD, local network setting, introduction in Internet, computer network training of users. By present moment 50 % advance has been paid according to the contract on equipment delivery as well as EC IFAS office equipping by computers and office equipment is carrying out

EC IFAS Chairman on September took part in work of working group of International Commission on Irrigation and Drainage (ICID) 8, 1999 in Grenada, Spain and having come back met representatives of the World Bank, UNDP Project and Directors of GEF Project.

In October 1999 with participation of EC Chairman organizational questions on realization together with UNESCO of symposium "Water and peace in Central Asia" in Ashgabat as well as about participation in three-lateral meeting on annual estimation of progress in implementation of UNDP Project "Aral Sea basin potential development" in Tashkent were considered.

At the end of November of last year EC IFAS Chairman was introduced with activity EC IFAS Nukus branch of the Republic of Uzbekistan on practical introduction of reclamation and other measures to restore natural-historical ecological regime and improve social-ecological situation in Aral Sea coastal zone. Evaluation trip in Muinak taking place in epicenter of Aral Sea coastal zone ecological disaster occurred. Range of issues was considered and solved by EC IFAS in part of initiation and support of farmer and enterprise activity on their realization by forces of experts of Executive Agency, created by Nukus branch under the project "Prior measures on local reservoirs watering in Aral Sea coastal zone", "Creation of wood plantings and protective wood strips on drained Aral Sea bed", "Organization of social assistance for population of Aral Sea coastal zone in adaptation to market conditions in ecological crisis zone".

Question of creation of regional project on drainage waters use has been stated to World Bank.

SIC ICWC together with SIC SDC have made Analytical report about IFAS activity assessment during 1993-1997, in which analysis of executing decisions adopted before of Head of the states and IFAS Board, work with national contributions in IFAS, estimation of donors participation in the Aral Sea Basin Program are given.

According to analysis results conclusions have been made. Report was discussed with participation of EC experts, comments and proposals have been made, according to which the report has been updated. Final version of report has been adopted to use in work and directed to IFAS structural divisions.

EC IFAS participated in coordination of ICWC and SDC activity.

Under EC IFAS initiative at the expense of UNDP Project (A. Demidenko) partial payment of expenses of Children's conference "Aral crisis by eyes of children ", taking place in August, 1999 in Nukus was made

IFAS Board work plan for 2000-2001 has been prepared.

At present preparation of draft decisions of next IFAS Board meeting about fulfilling measures related to the Aral Sea problem on base of received information from EC IFAS Branches and GEF Agency is conducting.

Apartments for EC IFAS members- representatives of the states of Central Asia, arriving to Ashgabat have been allocated.

EC IFAS activity is carried out under sanction of IFAS Board member, Deputy Chairman of Turkmenistan Cabinet of Ministers with experts involvement from Department of interstate water relations, Department of investments and capital construction as well as other services of Minselvodkhoz, Ministry for Foreign Affairs. Ministries of Economy and Finance, SIC ICWC, SIC SDC, GEF Project Agency (Tashkent) and EC IFAS branches.

ABOUT IFAS FINANCIAL MEANS USE AND STATES' CONTRIBUTIONS IN 1999

In all CA states in 1999 measures on realization of tasks of ecological and epidemiological situation improvement were carried out at the expense of own means. EC IFAS and its branches in CA states directed basic efforts for providing social population support and fulfillment of IFAS Board decisions.

Over the Republic of Kazakhstan - on November 1, 1999 payments came to IFAS in amount 71,3 mln. tenge from 84,18 mln. tenge foreseen in the budget of the republic. These means are allocated for construction of prior industrial and social objects, which list has been coordinated with Government of the Republic and approved by EC IFAS.

In 1999 in Kazakh part of Aral Sea region 10 projects implementation by total cost 1275,09 mln. tenge was carried out, and works related to these projects - 657,91 mln. tenge, including on November 1, 1999 - 603,87 mln. tenge.

In order to stabilize ecological conditions in northern part of Aral Sea and its adjacent areas Кокaral dyke construction was continued. Academy of sciences of the Republic of Kazakhstan has completed development of program "Monitoring of Aral Sea dust-salt storms". Well was drilled to supply drinking water to Kzylorda regional versatile hospital with volume 36 м3/hours.

Installation works of electric dialysis units in Urkendeu settlement of Kazalinsk oblast to supply population in amount 2000 with drinking water are in stage of completion.

Mini-boiler for heating a boarding school for 1500 places of Kazalinsk was installed.

Aiteck dyke construction to increase water availability on15 th. ha irrigated lands, reconstruction of canals "Tastak" with length 7 km, "Koksh" - 2,2 km, "Sagimbay" - 3,2 km, and repair-reconstruction works on two gauges on Syrdarya river have been completed and total cost is 105,0 mln. tenge, from which 16,71 mln. tenge will be spent during current year

For maintenance of water supply of the population Aral and Kazalinsk of areas Kzylorda of area at the expense of the loan of the World bank the works on reconstruction of working group water pipes by extent of 16,2 km with common cost 1008,0 mln tenge (7,2 mln. dollars are conducted. USA), from which on November 1 is mastered 546 mln tenge (3,9 mln dollars. USA) or 54 %. The development of the project " Regulation of a channel of the SyrDarya river and northern part of the Aral Sea", cost 197 mln. dollars is finished. USA and consisting from six independent components.

The basic purpose of the project is the stay degradation of natural environment(Wednesday), sanitary-epidemiological improvement of region, improvement of social conditions of the population of region in 600 thousand the man with attraction of the donors on financing of the specified project.

Over the Kyrgyz Republic - on November 1, 1999 in Fund the catfish from 3892,2 thousand a catfish stipulated by the Decision of Government Kyrgyz Republic about payment of contributions has arrived of payments in the sum 2005 thousand. The basic part of means is spent for purchase of a building of the Executive Direction IFAS (ED IFAS) and equipment by its office equipment, vehicle, equipment and stock. For the account Trust Fund of Government of Denmark are acquired and 4 motor vehicles of first aid for the sum 30 thousand dollars are transferred in organization of the Ministry of public health services of Republic. USA.

With assistance ED IFAS the project of development of farms "Itself" is carried out with which through "Aral" Agency by Fund of development seed-farming the returnable credit as elite sapodilla for the sum 93 thousand a catfish or 2,2 thousand dollars allocated. USA. ED IFAS takes part in design group of the UN Special Program on development of economy of Central Asia on rational and effective utilization of power and water resources of Central Asia and in a commission on consideration of the projects of the intergovernmental agreements between the Central Asian countries on management and use of water resources of pool of the Aral Sea.

Now Government of Republic creates a working commission for generalization both development of the Program of improvement and stabilization of social - ecological conditions of pool of the Aral Sea in territory Kyrgyz Republic with definition of concrete volumes and sources of financing.

Over the Republic of Tadjikistan - the Branch of executive Committee IFAS continues work on attraction to cooperation and participation in realization of the priority projects on Aral Sea problems of various international state, not governmental and public organizations. With this purpose is prepared and in the beginning of 1999 the brochure "Aral today, problem and way of their decision " issued which is distributed among the international organizations, ministries and departments of republic. Within the current year the works on financing end of construction Gissar of a group water pipe are continued. For this purpose is allocated 6,0 mln tadj. roubles. The work above 1st phase of the project "Rational use of water in Tadjikistan", cost 1,5 mln tadj. roubles is completed.

The work on realization of the program "Clean water and sanitation of Tadjikistan " proceeds, for which realization this year is spent 250 thousand tadj. roubles. The financial support to a "Shodmon" farm of Varzob district for the sum 4,0 mln tadj. roubles is rendered, the motor vehicle of first aid for Beshkent hospital for the sum 7,415 thousand tadj. roubles. The development " the Programs of improvement and stabilization of social - ecological conditions in pool of the Aral Sea " is begun which is under the control of the Tadjik branch of executive Committee IFAS. Is determined and the structure of working group on realization of the named program is authorized by Government of Republic of Tadjikistan.

Over Turkmenistan - on November 1, 1999 in Fund has arrived of payments for the sum 10775 mln manat, stipulated in the Turkmenistan's budget.

With the purposes of stabilization of ecological conditions Dashoguz velayat with Turkmenistan Government on "Aral" State Program in 1999 is allocated 18683 mln manat, from them at the expense of the Turkmenistan current payments in IFAS 7186,5 mln manat.

As of November 1 is mastered 13937 mln manat. On improvement of reclamation condition of velayat irrigated lands is directed 11755,47 mln manat. At the expense of these means the reconstruction of interstate Lake and Daryalyk collectors, clearing of inter-economic collectors and construction Main Shakhsenem collector will be carried out. The performance of above named objects will make 7660,87 mln manat. 11,3 km of collectors are reconstructed, 4 km of collectors, group water pipes of agricultural purpose by extent of 8 km with water structures and with water-desalinating plant by installation SPC "Ecology" for central etrap hospital in Niyazovsk are constructed - 1 piece. The part of means is directed on energy supply of Dashoguz, settlements Niyazovsk and Gulistan with common extent of power transmission line 25,2 km. The construction of urban sewer pump station in Dashoguz proceeds, which development makes 2372,5 mln manat, and the commissioning will enable to improve sanitary-epidemiological conditions in one.

Over Republic of Uzbekistan - with the purposes of stabilization of conditions in Aral Sea coastal zone in 1999 the means for the sum 2947,6 mln sum or 23487 thousand US dollars, including on Aral Sea coastal zone management 2500 mln sum, from them on the Republic of Karakalpakstan - 1560 mln sum, Bukhara province - 240 mln sum, Navoi province - 60 mln sum and Khorezm province - 640 mln sum are used.

Brisk up the work of EC IFAS Nukus Branch on realization of the concrete and target programs and projects under the Program of realization of the projects of pool of the Aral Sea. The forces of the workers EC IFAS Nukus Branch and involved experts of local design organizations complete development "Prime measures on irrigation of local reservoirs in Aral Sea coastal zone". The works on the program "Creation of wood plantings and protective wood strips on the drained day of the Aral Sea" on the area 500 ha in Muinak timber enterprise, organization of a skilled site on cultivation salt- and drought-resistant of plants, introduction of new effective methods of irrigation will be carried out.

Under the Program "Realization of the target projects on equipment by the modern medical equipment and technological experience of separate medical establishments for realization of qualitative diagnostics and effective treatment of social - dangerous diseases in Republic Karakalpakstan ".

Name	mln. sum	thousands USD
1. Direction of Aral Sea coastal zone in Karakalpakstan	1560	12480
2. Direction of Aral Sea coastal zone in Bukhara province	240	1920
3. Direction of Aral Sea coastal zone in Navoi province	60	480
4. Direction of Aral Sea coastal zone in Khorezm province	640	5120
5. Through Nukus Branch:		
a) urology center establishment	293,75	2350
b) micro-crediting through funds of social support	69,2	512,6
c) feasibility study on small water bodies	13.5	100
6. Shear participation in GEF Project	70.5	520
7. CSD financial support	0.65	5
TOTAL:	2947,6	23487,6

Under the contract with the Israeli firm "Forum Technologies Ltd" equipment is purchased for the Urology center in Nukus on 1906568 USD. Installation will be completed this current year. Technological part of the project "Organization of diagnostics, cerement and rehabilitation heart diseases in Nukus" and Dental Clinic in Nukus is under development.

Nukus Branch has given assistance to GEF Project implementation, competition for publications on theme "Water is life and future un Central Asia" is established. For this purpose 185000 sum are spent.

International Children Conference "Aral Sea crisis by eyes of children" was held in Nukus on September 10-15, 1999, where 60 children from Central Asia states and separate delegation from Karakalpakstan took part. Besides, there were 2 children from Sweden, representatives and experts from the UNICEF Fund "Save children", Redd Burnen Fund, etc.

As to initiation and support of farmers and entrepreneurs Nukus Branch has considered 1474 different commercial proposals from which 361 on sum of 190327.27 th. sum were adopted by commission of Cabinet of Ministers of Karakalpakstan, 290 projects have been started now. Totally 2540 proposals within the framework of the project "Organization of social support to Aral Sea coastal zone population under transition to market economy" have

been considered from which 846 projects (232.5 mln. sum) have been financed. During this project implementation 594 working places are created, 324.7 ton of meat, 1001 ton of milk, 1700 kg of poultry, 386.8 th. eggs, 190 ton grain have been produced. Total production accounted for 1212760.4 th. sum from which 40801.2 th. sum is net profit.

Work on grant credits of 1998 return is very active and 52349.7 th. sum are received as revenue and directed to new projects implementation.

Uzbekistan participation in GEF Project funding in 1999 accounted for 520 th. USD and for CSD support - 650 th. sum.

INFORMATION ABOUT CONTRIBUTIONS TO THE ARAL FUND

State	Unit	Essential fee		Annual fee for 1995-1997		1998		1999		Foreseen according to calcula-tions for 1995-1999	Actually contrib-uted	Rest of fees non-paid on 01.11.1999
		foreseen	fact	foreseen	fact	foreseen	fact	foreseen	fact			
Republic of Kazakhstan	mln tenge	5.00	5.00	207.49	142.36	574.90	58.80	84.18	71.30	871.57	277.46	594.11
Kyrgyz Re-public	mln som	4.80	0.80	4.02	-	1.00	0.60	3.89	2.00	13.71	3.40	10.31
Republic of Tadjikistan	mln tadj. roubl.	27.00	8.98	37.46	31.01	108.80	55.40	87.55	17.00	260.81	112.39	148.42
Turkmenistan	mln. manat	76.50	76.50	3 995.00	2010.00	6 624.50	907.90	10 775.00	10 775.00	21 471.00	13 769.40	7 701.60
Republic of Uzbekistan	mln sum	36.70	36.70	76.10	76.10	1 192.00	397.31	1 192.00	2 947.60	2 496.80	3 457.71	

GEF PROJECT "WATER RESOURCES AND ENVIRONMENT MANAGEMENT IN THE ARAL SEA BASIN" (ON JANUARY 1, 2000)

According to the "Program of immediate actions on ecological situation improvement in the Aral Sea basin" approved by Heads of states of Central Asia on January 11, 1994, project development has been started.

Definitions of strategy and project implementation were carried out jointly by representatives of all states.

Main goal of the project is to unite scientific-technical potential of scientists and specialists of all countries and create common models of collaboration taking into account interests of all countries and the region as a whole, distinguishing specific priorities which are as follow:

Sub-Component A-1. "Management of water resources and salts at the national and regional level"

This component is the most important part of the project to provide conditions for development of national strategies and on their base to form regional one. Foreign experts are responsible for:

a) in each country to form national teams and select leading organization which will work on contractual base;

b) international consultant jointly with GEF Project Agency national coordinators, appointed by governments, provides coordination of all national teams and agrees with National Coordination Council and governments;

c) national strategies are being developed with participation of all governmental structures concerned and approved by these structures;

d) regional strategy is formed on the base of national strategies with regard for regional restrictions;

e) A-1 budget for all national teams is formed independently of irrigated area, number of population and water diversion.

Total cost of the project is 5268 th. USD under 225 th. USD deficit, including:

GEF grant	3424.2 th. USD
Netherlands grant	1355.5 th. USD
Central Asia states	263.3 th. USD

Share of states is as follow: Kazakhstan - 64.52 th. USD, Kyrgyzstan - 23.0 th. USD, Tadjikistan - 5.0 th. USD, Turkmenistan - 3.96 th. USD, Uzbekistan - 166.82 th. USD.

Actual expenditures for sub-component since May 1998 till November 1999 accounted for 27.4 th. USD.

Sub-Component A-2 "Participation in water saving"

Sub-Component is directed to support rural water consumers is undertaking measures on water saving in agricultural production due to agrotechnique improvement, reduction of water use per unit production.

Competition organization

Competition project is developed by group of specialists representing all countries of the region. February 16, 1999 package of documents has been submitted to provincial organizer-managers for competition organization.

In each state two province are determined for competition carrying out:

Kazakhstan - South-Kazakhstan and Kzylorda provinces;

Kyrgyzstan - Osh and Jalalabad provinces;

Tadjikistan - Khatlon and Leninabad provinces;

Uzbekistan - Fergana and Kashkadarya provinces;

Turkmenistan - Tashauz and Akhal provinces.

In each provinces Provincial Expert Councils are created. National Coordinators proposed organizers-managers working on contractual base.

Competition is carried out during 3 years in three nominations (about 36 th. USD or 18 th. USD for each province):

- farmers;
- collective farms;
- water organizations.

Competition is carried out during 3 agricultural years:

since April 1, 1999 till 31 March 2000;

since April 1, 2000 till 31 March 2001;

since April 1, 2001 till 31 March 2002.

Competition results are summarized by Provincial Experts Councils on proposals of organizers-managers and monitors in January each year with award in March-April.

GEF Project Agency has signed a contract with WARMAP-2 Project leadership on competition monitoring.

Total cost of the project is 1000 th. USD, including GEF grant - 685 th. USD and states contributions - 315 th. USD.

Main goal of this project is to prepare analysis of designed measures fulfillment and give proposals for Provincial Experts Councils in order to make decision on competition winners.

For Turkmenistan it is necessary to agree all questions related to competition in Tashauz and Akhal provinces in 2000. In the nearest future Provincial Experts Councils should be appointed by Khakims.

Component B «Public awareness»

I. Measures undertaken under agreement with the World Bank assessment mission.

1. Budget distribution for long-term actions will be executed under agreement with foreign consultant after situation study and agreed strategy development.

2. National groups in Kazakhstan and Uzbekistan should be completed. In Turkmenistan their formation is under progress.

II. National groups within the allocated means have done following work.

1. Publications

National groups have developed press-release and brochures about IFAS activity system in Russian and national languages (totally 10 636 units), addresses of their dissemination, cost of publications, effectiveness and possible risk.

2. Radio and television use

National groups have developed system of interaction with television and radio, defined ownership and cost of broadcasting time (totally 2916 minutes), transmitting monitoring, assessed lingual information, social groups over locations, effectiveness and possible risk.

3. Newspapers use

National groups have publicized 214 papers, defined publishing houses, periodicity, draw, cost of publications, scope of readers depending on location, effectiveness and possible risk.

4. Sub-contracts with mass-media

National groups have defined form of sub-contract, effectiveness of use and cost depending on mass-media use, possible risk.

5. Information preparation for press, briefings, seminars, competitions

National groups have carried out 187 events, defined cost of preparation and carrying out, effectiveness, scope of social groups and possible risk.

Conclusions

Generally National groups have fulfilled all tasks assigned, determined by ToR, carried out presentations on radio, television, seminars, competitions, issued publications, monitored own actions.

During last time National groups gained certain experience in public awareness for different social groups, that allows to reduce time of consultant for explanation of public opinion formation forms and methods, establishing contract with mass-media, governmental organizations, minimize risk.

Component C "Dam safety"

Since September 21 till October 21, 1999 international consultants and group of independent experts from five countries have surveyed all ten dams mentioned in the component. Based on survey results the following measures are undertaken:

	Activity	Terms	Executors
1	Draft report on assessment of dam safety is prepared	November 1999	International Consultants
2	First workshop is carried out with national groups on discussion of final report and methodology, ToR on pilot and detailed design	November 8-9, 1999	International Consultants, National groups
3	Final report has been prepared	November 22, 1999	International Consultants, National groups
4	ToR for national groups on pilot and detailed design have been prepared	December 1999	International Consultants, National groups
5	National groups pilot design specifications on telecommunication and monitoring equipment and awareness systems are prepared	Since January 2000	National groups
6	National groups work start on preparation of international exhibition of telecommunication and monitoring equipment and awareness systems	Since January 2000	International Consultants, National groups, Component C managing group

Works executed at expense of national contributions: Kazakhstan - 11.2 th. USD, Kyrgyzstan - 11.2 th. USD, Tadjikistan - 11.2 th. USD, Turkmenistan - 11.2 th. USD, Uzbekistan - 11.2 th. USD.

Component D "Transboundary waters monitoring"

GEF Project Agency building commission has assessed proposals of delivers of main hydrometric and hydrochemical equipment and decided to give a contract to SEBA-Hydromertry.

Cars for national groups are purchased. National groups are looking for delivers of radio stations, boats, mobile generators and bicycles in order to attract attention top participation in our tender. It is revealed that radio stations and generators needed are produced in Kazakhstan and Kyrgyzstan. Tender is postponed for the second quarter of 2000.

In all states cost estimates are developed for new gauging station construction and existing stations repair as well as ferries construction.

In Kazakhstan construction works on Kokbulak station downstream Chardara reservoir are completed. Two ferries are built and installed.

In Kyrgyzstan construction and rehabilitation works were not started due to lack of Kyrgyzstan contribution to the GEF Project. It is known that financial means are allocated and construction is started on the first station in Kyrgyzstan.

In Tadjikistan Tatki station construction is completed.

In Turkmenistan rehabilitation works on Kerki and Chardjou are completed. On Kerki station only building repair is done, but on Chardjou station all works have been fulfilled.

In Uzbekistan contract between GEF Project Agency, plant-producer and Hydrometservice is prepared for production, transportation and installation of 2 hydrometric ferries. One ferry is already produced.

Contracts with Hydrometservice is signed on storehouses construction to store equipment.

National Hydrometservices have prepared storehouses, working space for National groups. GEF Project Agency has purchased necessary technics (computers, facsimiles, copiers, etc.).

Component E "Wetland restoration"

Component E, based on Sudochie lake experience, should show possibilities of coastal zone biodiversity conservation and strengthening.

Project realization is necessary for conservation of global meaning biological resources, in particular, birds' migration.

Coordination Council under Government of Karakalpakstan has been established during preparatory stage of the Sudochie project implementation. Between EC IFAS and Government of Karakalpakstan agreement has been concluded based on which ecological and technical requirements were prepared for ToR on ecological and socio-economic monitoring.

Group on the project "Sudochie" implementation has been established in Karakalpakstan.

Group promotes attraction of local, firms to tender for detailed design, ecological and socio-economic monitoring, and advertising of this activity in mass media. Group collects information about Sudochie lake (cartographic materials, water inflow, lake area, water quality, muskrat and fish harvesting, reed production, etc.).

Under sub-components E9, E10 building has been conducted for equipment, transportation and so on. Contracts are concluded for sub-component E2 "Detailed design"; E3 "Ecological monitoring"; E4 "Socio-economic monitoring" with firms-winners.

Since October 1999 "Resource Analysis" company starts sub-component E2 realization. Field trips are being conducted by groups "Ecology and wetland design", "Investigation and mapping"; ToR has been developed for group "Economics and water management", inception report is prepared.

Since September 1999 sub-component E4 "Socio-economic monitoring" implementation was started by "EKO Priaralie". Applications and instructions for interviewers and supervisors have been prepared. Following seminars are planned: "Public awareness", "Training of interviewers and respondents". First seminars were conducted in Ravshan, Sarancha-aul, Uchsay, Mashankol, Karakalpak, Dustlik, Shagirlik settlements.inception report has been submitted.

National tender on feasibility study development for small water bodies creation along Aral Sea shoreline. In result of tender a company is defined which will execute work at expense of Uzbekistan fee to the Fund.

On the World Bank memory note

1. Component E implementation schedule is revised with regard for all works within the component completion in December 2002.

2. Sudochie Group is conducting monitoring on oil and gas prospecting on the project area.

According to the data of Karakalpakstan Government and Oil and Gas Prospecting Expedition oil mining in Sudochie area is not expected.

Component A Director	M. Ospanov
Component B Director	K. Bozov
Component C Director	K. Balliyev
Component D Director	S. Aslov
Component E Director	S. Pernabekov

Regulations of International Fund for Aral Sea saving Board and Inspection Commission activity

1. Board and Inspection Commission are established and act according to IFAS management structure adopted by Heads of state on February 28, 1997 in Almaty.

2. Fund's Board includes one representative from state-founders. Board composition is approved by IFAS President.

3. Board meetings are conducted twice a year. Place and date of meeting are determined by Fund President. Extraordinary meetings can be conducted initiative of Fund President, Board members. Decision on the meeting is made by President.

4. Main tasks of Fund's Board are as follow:

• organization and coordination of all regional projects and programs related to sustainable development problems in the Aral Sea basin;

• promotion and support to countries-donor, international organizations, juridical and physical persons wishing to participate in Aral Sea problems solution;

• determination and consideration short-term and long-term tasks of high priority on ecological and epidemiological situation improvement and immediate assistance to coastal zone's population.

5. Fund's Board members:

• control annual fees to IFAS by state-founders;

• approve regional programs, cost estimates, programs and projects leaders;

• make necessary decisions jointly with EC, which do not require IFAS adoption.

6. EC IFAS is Fund permanent working body. Representatives in EC IFAS are plenipotentiary experts of countries-founder on preparation to Board meetings, except cases when other experts are needed. Materials are directed by EC IFAS to Board members 30 days before Board meeting.

7. Board meeting's decisions are obligatory for EC IFAS, its branches, all structures and bodies participating in the Aral Sea problems solution.

8. Inspection Commission includes one representative from state-founders. Commission composition is approved bi IFAS President.

9. Inspection Commission makes revision of IFAS financial activity and submits results to the Fund Board.

10. Documentation of Fund Board meetings, Inspection Commission is written in Russian. If necessary translation into national language of country-founders and English is provided.

11. Regulations of IFAS Board and Inspection Commission changes are made according to Fund's Board decision.

Schedule of IFAS Board meetings in 2000-2001

February 2000

1. About Heads of state decision of April 9, 1999 (Ashgabat) fulfillment.

1.1. About IFAS financial means formation.

1.2. About GEF Project implementation support. About GEF Project Agency statute approval.

1.3. About EC IFAS activity strengthening in broadening of collaboration with countries-donor, international organizations and funds and financial means attraction for the Aral Sea basin problems solution.

1.4. About observance by countries-founder Agreement on statute of IFAS on the territory of Central Asia states.

2. About organization of IFAS bodies activity.

2.1. About changes introduction in "Regulations of IFAS Board and Inspection Commission".

2.2. About IFAS Board meetings plan on 2000-2001 approval.

June 2000

1. About assistance to ICWC in fulfillment of IFAS Board decision of September 30, 1998 "About water resources use in the Aral Sea basin".

2. About fulfillment of "Program of immediate actions on ecological situation improvement in the basin with regard for socio-economic development of the region".

3. About approval of joint international programs for funding by IFAS and donors.

4. About GEF Project implementation "Water resources and environment management"(GEF Project Agency Leader's report).

5. About IFAS financial means formation.

November 2000

1. About assistance to CSD in fulfillment of IFAS Board's decision of September 11, 1997 and March 12, 1998 "About sanitary-epidemiological situation in the Aral Sea basin".

2. About IFAS activity on public opinion formation on natural resources rational use and NGOs participation.

3. About UNDP Project "Capacity building in the Aral Sea basin" implementation.

4. About donors meeting organization.

5. About IFAS financial means formation.

February 2001

1. About Heads of state meeting preparation.
2. About IFAS Board decisions fulfillment in 2000-2001 and report on EC IFAS activity.
3. Proposals on further perfection of IFAS and its bodies activity.
4. About GEF Project implementation "Water resources and environment management"(GEF Project Agency Leader's report).
5. About IFAS financial means formation.

Protocol No 25
of ICWC meeting of Kazakhstan, Kyrgyzstan, Tadjikistan Turkmenistan and Uzbekistan

February 11, 2000 Bishkek

ICWC members

Kh. Askarov	Department Chief, Ministry of Natural Resources of the Republic of Kazakhstan
A. Kostyuk	Deputy Minister of Agriculture and Water Management of the Kyrgyz Republic
M. Nazriyev	First Deputy Minister of Reclamation and Water Management of the Republic of Tadjikistan
A. Ovezov	EC IFAS member, Turkmenistan representative
A. Jalalov	First Deputy Minister of Agriculture and Water Management of the Republic of Uzbekistan

From ICWC organizations

G. Negmatov	ICWC Secretariat Head
O. Lysenko	BWO "AmuDarya" Water Management Department Head
M. Khamidov	BWO "SyrDarya" Head
N. Rakhmatov	BWO "SyrDarya" Deputy Head
V. Dukhovny	SIC ICWC Director
P. Umarov	SIC ICWC Deputy Director
L. Kiyashkina	SIC ICWC Kyrgyz Branch Director.

Invited

J. Tukebayev	Jambul Oblvodkhoz Director
R. Lyubar	SANIPLAST Director, Uzbekistan
Kh. Gapparov	MAWR of Uzbekistan, Department Head
R. Apasov	Prime-Minister Office of Kyrgyzstan, Deputy Head of Department
K. Beishekeyev	Department First Deputy Director of MAWR of Kyrgyzstan
K.Batyrkanov	MAWR of Kyrgyzstan, Department Chief

A. Kostyuk, Deputy Minister of Agriculture and Water Management of the Kyrgyz Republic was as aChairman.

Agenda

1. Amplification of reservoir cascade on AmuDarya and SyrDarya rivers operation regime for non-growing period of 1999-2000.
2. Program of ICWC and its executive bodies (BWOs, SIC ICWC, Secretariat) financing for 2000 including operation needs, design and scientific works, etc.
3. About SCADA system on Dustlik canal operation experience.
4. About Agreement of Central Asia states on information exchange and database creation on transboundary water resources.
5. About the project "Provision on order of financing of BWOs, SIC ICWC and ICWC Secretariat.
6. About the project "Provision on metrological center".

Additional questions

1. Approval of the project "Provision of Training Center in water sector of Central Asia" and "Program of specialists training".
2. About WARMAP-2 Project results and WARMAP-3 directions.

ICWC members have decided:

On the first question

1. To accept BWOs' measures on realization of water intake limits and providing established regime of reservoirs' cascade operation for past period of non-growing period of 1999-2000.
2. To note that recommended at 24th ICWC meeting regime of Naryn-SyrDarya reservoirs' cascade operation (Protocol No 24 of October 24, 1999 in Kzylorda) is not being followed due to the lack of annual intergovernmental agreement on Naryn-SyrDarya cascade on 2000 that has led to increased from Toktogul reservoir.
3. To approve amplificated regime of reservoirs' cascade operation and water intake limits for non-growing period of 1999-2000. Releases from Toktogul reservoir can be changed with respect to water-economic situation.
4. ICWC members and ICWC executive bodies to promote signing of intergovernmental agreements on water-power resources of Naryn-SyrDarya cascade.

On the second question

1. To approve cost estimates for 2000 on BWOs and SIC ICWC.
2. To approve SIC ICWC plan of scientific-research works on 2000-2002.
3. ICWC bodies' cost estimates on 2001 to submit to ICWC consideration up to September of current year.

On the third question

1. Accept information about BWO "SyrDarya" and SIC ICWC work completion on design, installation and putting in operation telemetric automatic SCADA system on Dustlik canal's headwork.

2. To express gratitude to CIDA for financial and technical assistance and UMA Engineering Ltd for design and installation of SCADA system.

3. BWO "SyrDarya" and BWO "AmuDarya" together with SIC ICWC to prepare proposals on further introduction of telemetric automatic systems on other interstate irrigation schemes of Central Asia. To apply to international organizations for joint financing of this activity.

On the fourth question

1. To adopt preparatory work for draft "Agreement between the Republic of Kazakhstan, Kyrgyz Republic, the Republic of Tadjikistan, Turkmenistan and the Republic of Uzbekistan on information exchange and national, basin and regional database on integrated transboundary water resources use and protection in the Aral Sea basin", finalized in accordance with decision of International Review Seminar (Almaty, December 21-22, 1999).

2. ICWC members to finalize draft agreement taking into account national procedures of coordination. To charge SIC ICWC to correct text of agreement jointly with national and regional experts and submit for consideration to next ICWC meeting.

On the fifth question

1. To take into account that BWO "AmuDarya", BWO "SyrDarya" and SIC ICWC have prepared the project "Provision about financing order of BWOs, SIC ICWC and ICWC Secretariat", which according to national procedures of coordination will be submitted in completed version on the next ICWC meeting.

On the sixth question

1. To approve provision "About ICWC coordination metrological center".

On the first additional question

1. To approve finalized project "provision of Training Center in water sector of Central Asia".

2. To adopt program of vocational training of water specialists prepared by SIC ICWC jointly with CIDA.

On the second additional question

1. To adopt positive results of work on WARMAP-2 Project gained in 1998-2000.

2. New WARMAP-3 Project should be directed to resolution of resources management problems taking into account the following major aspects:

a) legal base regulating integrated water resources use and protection;

b) creation of two pilot plots in each state providing integrated management of water resources according to hydrographic and other principles taking into account agriculture restructuring;

c) information base strengthening, in first turn, through remote monitoring and tools of decision making for water resources management, especially at the national level.

Agenda of next 26th ICWC meeting

1. Consideration and approval of water reservoir cascades regime, water intake limits within the AmuDarya and SyrDarya basins for growing period of 2000 (responsible - BWO "AmuDarya" and BWO "SyrDarya").

2. About the project "Provision about BWOs, SIC ICWC and Secretariat financing" (responsible - ICWC Members, SIC ICWC, BWOs).

3. About Agreement of Central Asian governments "About information exchange and database establishing on water resources of the transboundary rivers of the Aral Sea basin" and base of knowledge development within IPTRID network (responsible - SIC ICWC).

4. About agenda and place of next 27th ICWC meeting.

For the Republic of Kazakhstan	K. Askarov
For Kyrgyz Republic	A. Kostyuk
For the Republic of Tadjikistan	M. Nazriyev
For Turkmenistan	A. Ovezov
For the Republic of Uzbekistan	A. Jalalaov

Annex 1
to the ICWC Protocol No 25
of February 11, 2000

Amplificated water intake limits from AmuDarya and SyrDarya
and water supply to the Aral Sea and deltas
for non-growing period of 1999-2000.

Basin, state	Water intake limits, km^3	
	Since 1.10.1999 till 1.10.2000	Including non-growing period (since 1.10.1999 till 1.04.2000)
Totally from SyrDarya	21.57	3.07
including:		
The Republic of Kazakhstan	8.2	0.5
Kyrgyz Republic	0.22	0.02
The Republic of Tadjikistan	2	0.2
The Republic of Uzbekistan	11.15	2.35
Besides that:		
Water supply to the Aral Sea	2.8	1.8
Totally from AmuDarya	53.620	15.352
including:		
The Republic of Tadjikistan	9.170	2.887
Kyrgyz Republic	0.450	0.000
From AmuDarya to the Kerki gauging station	44.000	12.465
Turkmenistan	22.000	6.500
The Republic of Uzbekistan	22.000	5.965
Besides that:		
- water supply to the coastal zone including irrigation releases and collector-drainage water	5.000	2.000
- sanitary-epidemiological releases to irrigation systems:	0.800	0.800
Dashoguz velayat	0.150	0.150
Khorezm province	0.150	0.150
Karakalpakstan	0.500	0.500
Totally to the Aral Sea and coastal zone	7.800	3.800

Remarks.

1. Water intake limits foresee water supply for irrigation, industry, municipal needs, etc. Under water availability changes limits will be corrected appropriately.

2. Under river flow increase all water volume will be directed to the Aral Sea.

AMPLIFICATION OF WATER RESERVOIRS OPERATION REGIME AND WATER INTAKE LIMITS IN AMUDARYA BASIN ON NON-GROWING PERIOD OF 1999-2000[1]

Established limits use is demonstrated in table below:

Name	Limit on non-growing period	Limit on 01.01.2000	Fact on 01.01.2000	Percentage incre-mented	Percent-age of total
The Republic of Tadjikistan	2887	1506.5	130.9	86.9	45.3
The Republic of Uzbekistan	5965	2375.5	2716.2	114.3	45.5
Turkmenistan	6500	2568.9	2587.6	100.7	39.8
TOTAL:	15352	6450.7	6612.4	102.5	43.1
Sanitary release:	800	531.0	500.8	94.3	62.6
- including:					
1. Khorezm	150	119.2	118.6	99.5	79.1
2. Karakalpakstan	500	261.8	232.2	88.7	46.4
3. Dashoguz	150	150	150	100.0	100.0
Beside that					
Surkhandarya province	200	140.4	196.1	139.7	98.1

Over the river sites established limits use is as follow:

upstream – 86,9 %;

middle stream – 105,7 % including the Republic of Uzbekistan - 117,8 %, Turkmenistan - 99,1 %;

downstream - 113,6 % including the Republic of Uzbekistan - 109,3 %, Turkmenistan - 41,7 mln m^3 (without limit allocated).

Water supply to Aral Sea and coastal zone is fulfilled on 242,6 % (2426 mln m^3 against 1000 mln m^3).

Favorable water conditions at the beginning of non-growing period were improved during last three months that is confirmed by the following:

1. Actual water availability of the first three months of the non-growing period is found to be higher than predicted one and was 136,9 % of norm, including: October - 131,0 %, November - 140,2 %, December - 141,1 %.

According to preliminary calculations water availability is expected 19,0-20,0 km^3 or 129,6-136,4 %.

2. In Tuyamuyun reservoir water stock achieved 5476 mln m^3 at 01.01.2000 (last year - 5615 mln m^3).

In Nurek reservoir water stock was 8302 mln m^3 (plan - 8213 mln m^3).

[1] Information on the first question of the ICWC meeting agenda

In in-system reservoirs water volume was 3037 mln m^3 (last year - 3115 mln m^3). It is worth to note that in Turkmenistan growth on 495 mln m^3 was found and Uzbekistan - 573 mln m^3 less than last year.

Favorable conditions permit to provide water consumers within the framework of established limits presented below:

- Tadjikistan - 2887 mln m^3;
- Turkmenistan - 6500 mln m^3;
- Uzbekistan - 5965 mln m^3.

Totally for AmuDarya basin - 15352 mln m^3.

Besides, BWO proposes to remain previously approved sanitary-epidemiological releases to irrigation systems:

- for Dashkhovuz veloyat- 150 mln m^3.
- for Khorezm veloyat – 150 mln m^3.
- for Karakalpakstan - 500 mln m^3.

Due to high water availability and climatic conditions Tuyamuyun reservoir operation correction has been made taking into account filling peak achievement in the first decade of February 2000.

BWO "AmuDarya" offers amplificated regime of Tuyamuyun reservoir operation for non-growing period under water availability of 132.7 % (19.45 km^3) (table 2), which supposes optimal reservoir performance.

BWO "AmuDarya" together with Center "Energy" have amplificated Nurek reservoir operation regime for non-growing period of 1999-2000 (table 2).

Taking into account water availability forecast at Kerki gauging station upstream Karakum canal water intake volumes including sanitary-epidemiological releases to irrigation canals, water volume in reservoirs it is proposed to establish water supply to the Aral Sea and coastal zone for non-growing period in volume of 3000 mln m^3, including river flow 2500 mln m^3.

BWO "AmuDarya" suggests to approve reservoirs cascade operation regime, water intake limits, sanitary-epidemiological releases, water supply to the Aral Sea and coastal zone for non-growing period of 1999-2000.

Table 1

WATER SUPPLY TO THE ARAL SEA AND AMUDARYA DELTA
FOR OCTOBER-NOVEMBER 1999-2000

Name	October	November	December	January	February	March	Water supply since 01.10. till 01.12.1999		Percentage
							plan	fact	
Samanbai gauging station	876	397	686	0	0	0	750	1959	261,2
Total release from canals Kyzketken and Suenly system	0	51	182	0	0	0		233	
Collector-drainage water	76	70	88	0	0	0	250	234	93,6
TOTAL: Incremental	952 952	518 1470	956 2426	0 2426	0 2426	0 2426	1000	2426	242,6

Remark. Water supply data are agreed with Glavgidromet of Uzbekistan.

Table 2

Nurek and Tuyamuyun reservoirs operation schedule
since October 1999 till March 2000

(on 01.01.2000)

Nurek reservoir	Unit	Fact			Forecast			TOTAL
		October	November	December	January	February	March	
Inflow	m^3/s	364	288	234	177	165	196	3759
Water losses	m^3/s	2	8	-10	32	-1	2	86
Volume: at the beginning of the period	mln m^3	10541	10096	9335	8302	7297	6420	10541
at the end of period	mln m^3	10096	9335	8302	7297	6420	5964	5964
Accumulation(+), release (-)	mln m^3	-445	-761	-1033	-1005	-877	-456	-4577
Altitude: end of period	m	906,10	898,58	886,93	874,7	863,09	857	
Release from reservoir	m^3/s	528	574	630	520	515	365	8250

(on 01.01.2000)

Tuyamuyun reservoir	Unit	Fact			Forecast			TOTAL
		October	November	December	January	February	March	
Inflow	m^3/s	807	801	1025	797	523	526	11836
Water losses	m^3/s	132	170	119	46	38	76	1534
Volume: at the beginning of the period	mln m^3	3684	4044	4968	5476	6089	5563	3684
at the end of period	mln m^3	4044	4968	5476	6089	5563	4146	4146
Accumulation(+), release (-)	mln m^3	360	924	508	613	-526	-1417	-462
Altitude: end of period	m	126,83	128,6	128,78	129,28	128,88	125,2	
Release from reservoir	m^3/s	541	275	717	535	695	979	9841

ABOUT SYRDARYA BASIN OPERATION DURING NON-GROWING PERIOD OF 1999-2000 AND NARYN-SYRDARYA RESERVOIR CASCADE OPERATION REGIME AND WATER INTAKE LIMITS FROM SYRDARYA ON FEBRUARY-MARCH 2000 AMPLIFICATION[2]

Cascade operation regime and water intake limits are approved by ICWC on the meeting in Kzylorda (Protocol No 24, 23.10.1999). At the same meeting cascade operation and water intake limits amplification were foreseen.

It worth to note that during two thirds of past non-growing period actual natural inflow to three upper reservoirs was less different from predicted value than the same parameters for river trunk and its main tributaries (table 1).

Table 1

Parameter (since 1/X.1999 till 3I/I.2000)	Forecast, mln m^3	Fact, mln m^3	Percentage
Inflow to upper reservoirs:			
Toktogul	2427	2516	104
Andijan	669	743	111
Charvak	914	949	104
Ugam river	92	144	156
Sub-total	4102	4352	106
Lateral inflow:			
Toktogul – Uchkurgan	322	335	104
Uchkurgan, Uchtepe – Kairakkum	2308	3152	137
Andijan – Uchtepe	1671	2075	124
Kairakkum – Chardara	1843	2217	120
Gazalkent - Chirchik	535	536	100
Sub-total	6679	8315	124
Total	10781	12667	117

It is worth to add that lateral inflow within the river site Kairakkum – Chardara is 40 % higher than forecast. It will significantly increase loading on Chardara.

Most serious deviation from approved cascade regime is caused by lack of traditional annual interstate agreement on compensation deliveries between Uzbekistan, Kazakhstan and Kyrgyzstan. Because of that release from Toktogul reservoir was 5642 mln m^3 instead 4374 mln m^3 and water stock at February 1, 2000 was 13215 mln m^3 instead of 14305 mln m^3.

Toktogul reservoir operation changes reflected in channel reservoirs filled with higher speed ahead of schedule (tables 2 and 3).

[2] Information on the first question of the ICWC meeting agenda

Table 2

Reservoir	Reservoir volume, mln m^3			
	on 1.X 1999	on 1.II 2000		on 1.II 1999
		schedule	fact	
Toktogul	16272	14305	13215	12223
Andijan	1043	1193	1334	1422
Charvak	1466	1310	1132	1113
Kairakkum	2018	2698	3389	3031
Chardara	768	4025	4713	4517
Total	21567	23531	23783	22306

Table 3

Reservoir	Releases, mln m^3	
	schedule	fact
Toktogul	4374	5642
Andijan	491	413
Charvak	1058	1231
Kairakkum	7118	8710
Chardara	4562	4140

Kairakkum reservoir was filled to the end of December. Water supply to the Aral Sea and coastal zone was less compared with planned because of late "ice tube" formation for water passage.

In tables 4, 5 information about water intake from SyrDarya is presented for non-growing period.

Table 4

Republic, area	ICWC limit, mln m^3	Fact	Percentage
Kyrgyz Republic	20	32,3	161,5
Republic of Uzbekistan	2350	2262,5	96,3
Republic of Tadjikistan	200	77,6	38,8
Republic of Kazakhstan (Dustlik canal)	373	30,9*)	8,3

*) Leaching was started on January 15, 2000.

Besides:

Table 5

Parameters	Schedule, mln m^3	Fact
Inflow to Chardara reservoir	7945	9175
Water supply to the Aral Sea	1845	1164

Actual regime of Naryn-SyrDarya cascade during growing period is presented in table 6. It is apparent that release to Arnasay depression would exceed 4 km^3 if interstate agreements will not be concluded.

Table 6

SCHEDULE-FORECAST
of Naryn-SyrDarya cascade for October 1, 1999 - March 31, 2000

	Unit	October	Novemb.	Decemb.	January	February	March	TOTAL mln. m^3
		fact	fact	fact	fact			
Toktogul reservoir								
Inflow to reservoir	m^3/s	303	247	212	184	175	181	
	mln m^3	812	640	568	493	423	485	3421
Volume: beginning of period	mln m^3	16272	16324	15606	14533	13215	12080	
end of period	mln m^3	16281	15561	14531	13220	12080	11177	
end of period: fact	mln m^3	16324	15606	14533	13215	-	-	-
Release from reservoir	m^3/s	298	540	612	674	644	518	
	mln m^3	798	1400	1639	1805	1558	1387	8588
Kairakkum reservoir								
Inflow to reservoir	m^3/s	478	920	1044	949	949	838	
	mln m^3	1280	2385	2796	2542	2296	2244	13543
Volume: beginning of period	mln m^3	2018	2022	2454	3442	3389	3418	
end of period	mln m^3	1962	2505	3011	2865	3418	3418	
end of period: fact	mln m^3	2022	2454	3442	3389	-	-	-
Release from reservoir	m^3/s	499	744	849	1184	953	857	
	mln m^3	1337	1928	2274	3171	2306	2296	13312
Chardara reservoir								
Inflow to reservoir	m^3/s	374	922	1003	1154	1056	1077	
	mln m^3	1002	2390	2686	3091	2555	2885	14609
Volume: beginning of period	mln m^3	768	774	1908	3604	4713	4445	
end of period	mln m^3	832	1852	3569	4634	4445	5110	
end of period: fact	mln m^3	774	1908	3604	4713	-	-	-
Release from reservoir	m^3/s	333	494	375	360	360	420	
	mln m^3	892	1280	1004	964	871	1125	6137
Release to Kzylkum canal	m^3/s	5	2	3	3	5	5	
	mln m^3	13	5	8	8	12	13	60
Release to Arnasay sink	m^3/s	0	0	0	406	801	399	
	mln m^3	0	0	0	1087	1938	1069	4094
Water supply to Aral Sea	m^3/s	147	188	69	104	104	133	
	mln m^3	394	487	185	279	252	356	1771
fact	m^3/s	95	112	116	115	-	-	1163
Charvak reservoir								
Inflow to reservoir	m^3/s	107	94	84	72	67	81	
	mln m^3	287	244	225	193	162	217	1327
Volume: beginning of period	mln m^3	1466	1295	1275	1188	1132	1107	
end of period	mln m^3	1310	1269	1258	1095	1107	1117	
end of period: fact	mln m^3	1295	1275	1188	1132	-	-	-
Release from reservoir	m^3/s	164	103	90	106	77	77	
	mln m^3	439	267	241	284	186	206	1624

	Unit	October	Novemb.	Decemb.	January	February	March	TOTAL mln. m^3
		fact	fact	fact	fact			
Kairakkum reservoir								
Inflow to reservoir	m^3/s	75	75	70	60	55	78	
	mln m^3	201	194	187	161	133	209	1085
Volume: beginning of period	mln m^3	1043	973	1021	1243	1334	1414	
end of period	mln m^3	970	1042	1200	1396	1414	1513	
end of period: fact	mln m^3	973	1021	1243	1334	-	-	-
Release from reservoir	m^3/s	102	48	3	3	22	41	
	mln m^3	273	124	8	8	53	110	577

ABOUT SCADA SYSTEM OPERATION EXPERIENCE ON DUSTLIK CANAL[3]

One of the main reasons of the Aral Sea crisis is poor water management within the basin. Because of that Governments of Central Asian countries under financial support of the World Bank have proposed strategy of situation stabilization in which main directions of sustainable water supply achieving are determined taking into account economic development of the region along with solution of environmental problems.

Program 7 is included as one of water saving and rational use programs. Its title is "Water resources management and control in the Amu Darya and Syr Darya basin". It will help to do the following:

to provide the region's countries with water in accordance with limits established by ICWC;

to develop plans of water reservoirs and water intakes operation, developing systems of management, communication and information.

For these objectives realization is assumed to equip BWO's by updated means of control and management of water structures, communications and information transfer.

This program implementation was started in 1995 by Canadian UMA Engineering Ltd jointly with SIC ICWC, BWO "Syr Darya", BWO "Amu Darya" and water-related organizations of Central Asia thanks to initiative and support of the Canadian International Development Agency (CIDA).

Feasibility study has been done in close co-operation with Canadian partners to perfect management of the river basin. As the first stage of the project Dustlik canal's headwork automation was performed.

Study carried out by the UMA Engineering Ltd. showed that BWO need updated SCADA systems permitting effectively manage the basin's water resources and, as consequence, to save water. Software used by UMA was successfully tested on hundreds of structures in Canada, USA, Mexico, Australia and India.

In order to demonstrate SCADA advantages UMA Engineering Ltd together with BWO "Syr Darya" designed, provided and installed automatic system of control and management of head work of the Dustlik canal supplying 220 th. ha of irrigated lands of Kazakhstan and Uzbekistan. This system can be expanded in order, if necessary, to include more control and intake structures.

Main control point and communication system's center of the SCADA system is located in territorial division of BWO "Syr Darya" in Gulistan.

Operator from this center can observe and manage Dustlik canal's headwork.

Main functions of SCADA system are the following:

remote measurement of water level, discharge and salinity as well as water structures gates opening;

continuous collection, storage and processing of measurement data on computers of the headwork and dispatch office;

automatic regulation of water level and discharge on water structures;

remote (up to 50 km) and manual management by gates and groups of gates from dispatch office and headwork;

[3] Information on the third question of the ICWC meeting agenda

remote revealation and elimination of SCADA and water structures breakages.

System is in operation since beginning of 1999 up to date fulfilling all main functions.

Main advantages of the system are as follow:

improvement of water level, discharge and salinity measurement accuracy as well as hydrostructures gates opening due to application of modern technical means and water resources accounting (decrease of measurement discrepancies from 5-10 to 2-3%);

improvement of information provision due to continuous collection, storage and processing of measurement data for water level and discharge in computer;

improvement of operativeness and accuracy of water resources management due to speed increase in information receiving and processing as well as decision making;

improvement of operativeness of equipment and structures breakage revealation and elimination.

SCADA system installation cost is 300 th. USD. During the growing period of 1999 - 95 mln. m^3 of water were saved which cost is 570 th. USD.

SCADA application allowed to make operational staff labor easier and simultaneously to improve water management. Analysis of the system operation showed its high effectiveness. At present time negotiations about continuation of co-operation with CIDA are being conducted. Unique experience of joint work with Canadian partners allows to apply it to other water-related structures in the Central Asian region.

PROTOCOL OF WORKING MEETING OF REGIONAL AND NATIONAL COORDINATORS OF WARMAP-2 PROJECT

February 2, 2000 Tashkent

Attendees:

V. Sokolov –WARMAP-2 Regional Coordinator (SIC ICWC).

N. Kipshakbayev – National Coordinator in Kazakhstan (SIC ICWC Kazakh Branch Director).

K.Kulov – Deputy National Coordinator in Kyrgyzstan (KyrgyzNIIirrigation Director).

N. Nasyrov - National Coordinator in Tadjikistan (SIC ICWC Tadjik Branch Director).

S. Navruzov – Leader of Tadjik National Group on WARMIS (TadjNIIGiM collaborator).

V. Krochmal - National Coordinator in Turkmenistan (Turkmengiprovodkhoz Chief Engineer).

S. Aganov – Leader of Turkmen Work Group on WARMIS (Turkmengiprovodkhoz Leading Specialist).

D. Sokolov - Leader of Uzbek Work Group on WARMIS (MAWR Computer Center Director).

Agenda

1. About WARMAP-2 Project results.
2. Proposals on WARMAP-3 Project.

Participants have decided:

On the first question

1. WARMIS eight centers have been created: three regional (SIC ICWC, BWO "AmuDarya" and BWO "SyrDarya"), and five national (SIC ICWC Branches). WUFMAS six centers have been created (regional in SANIIRI and five national), which carry out practical works on 9 experimental farms. All centers have trained staff and farms are provided with necessary equipment.

2. Efforts in legal base creation resulted in interstate agreements' main provisions being laid in the foundation of Agreement about Statute of International Fund for Aral Sea saving. This Agreement was signed by Head of states in April 1999 in Ashgabat. On October 1, 1999 President S. Niyazov has signed Provision of EC IFAS, which is legal base for EC activity.

3. International seminar was held on December 21-22, 1999 in Almaty where text of two agreements were agreed:

Agreement No 1 "About strengthening of organizational structure of management, protection and development of transboundary water resources in the Aral Sea basin".

Agreement No 4 "About information exchange and formation of national, basin and regional database on transboundary water resources use and protection in the Aral Sea basin".

These two agreements were submitted to Interstate Conference for approved.

4. WARMIS Information System at the regional level is workable. It includes the following components:

- Database Management System including tabular information (ACCESS);
- Geographic Information System (GIS) containing spatial data and tools for work with map (ArcView, ArcInfo);
- Users interface for data input and output;
- Set of tools containing components for system work, data checking, data exchange and storage, users access, etc.;
- Three program modules for data analysis: water-salt balance module for planning zone, river site and hydro-power engineering;
- Set of mathematical models: optimization model for planning zone, river basin and operative water resources management.

5. WUFMAS program gives clear picture of agricultural and economic situation in experimental farms with regard for transition to market economy and water use. WUFMAS-99 has demonstrated regional water use and its expanding would allow to show real achievable water saving with regard for sustainable economic development and ecological situation improvement.

6. Seminar's participants expressed their gratitude to EU and all foreign experts for their significant contribution in water sector development.

On the second question

1. Taking into account information about WARMAP-3 Project participants recommend to the technical commission preparing ToR to base on local specialists groups at the regional and local level formed before.

2. Main ideology of WARMAP-3 Project should follow the next logical chain:

2.1. Ecological problems of the region (water resources quality worsening, water bodies degradation, including Aral Sea) can be solved by measures on social-economic conditions improvement and, mainly, through proper water resources management.

2.2. Major aspects in water resources management should be: a) legal base, regulating integrated water use and protection at the regional, basin and national level; b) institutional perfection of management system at all levels; c) information base strengthening especially at national level.

2.3. Legal base perfection should include juridical documents development: interstate agreements, national water and environment legislation.

2.4. Institutional perfection should include training system, preparation of leaflets, etc.

2.5. Information base strengthening should include computers and software update, WARMIS broadening by development of ecological sub-base. Development of tools for decision making (models and program modules) is necessary at the national level.

Regional Coordinator - V. Sokolov

National Coordinators:

From Kazakhstan – N. Kipshakbayev
From Kyrgyzstan – K.Kulov
From Tadjikistan – N. Nasyrov
From Turkmenistan – V. Krochmal
From Uzbekistan – D. Sokolov

INFORMATION CENTER FOR SUSTAINABLE DEVELOPMENT

Just at the beginning of 70-s the world society started to aware ecological problems globalization and the real threat of the whole planetary environmental crisis. Firstly, developed countries faced ecological «explosions» of different force as a result of natural resources over-use in previous intensive development process. These countries initiated sustainable development's new models creation, solutions search of sustainable balance between consumption, population and earth ability to support life.

Agenda 21 appeals to governments to undertake national programs of sustainable development and pay attention partnership in global scale which will bring more safe and well being future to all people in the world.

With regard to above-mentioned Scientific-Information Center of International Commission of Sustainable Development of International Fund for Aral Sea Saving (IFAS SIC ICSD) establishing in Ashgabat is well timed for Central-Asian countries. According to IFAS Executive Committee decision SIC ICSD Central Board from October 1, 1999 started its activity in correspondence with «Scientific-Information Center Statute» of August 9, 1995 (Ashgabat).

The following SIC ICSD structure is approved:
Director - Kh.I.Atamuradov
Deputy Director - Ch.O.Muradov
Head of Scientific-Technical Problems and International Cooperation Department - A.G.Babayev
Head of Social-Economic Problems Department - O.A.Soyunova
Head of Informatics, Data Bank and Legal Department - P.Esenov
Head of Environment and Biodiversity Department - T.Gedemov
Scientific Secretary - I.D.Mamiyeva
Head of ICSD Secretariat - B.A.Annayev
ICSD Secretariat Chief Specialist - B.M.Tashliyeva

SIC division leaders:
the Republic of Kazakhstan - Prof. V.P.Logachev
the Kyrgyz Republic - Prof. V.M.Lelevkin
the Republic of Tadjikistan - N.M.Safarov
the Republic of Uzbekistan - A.A.Rafikov

SIC ICSD financing is executed at the expense of Turkmenistan fees; SIC divisions financing in Central-Asian states - at the expense of state-founders fees transferred to EC IFAS branches according to IFAS Board decision of March 12, 1998 (Tashkent).

ICSD Chairman A.Sh. Khabibullayev has approved ICSD and SIC working plan for 2000.

SIC ICSD priority objectives are as follow: Regional Concept elaboration on Central-Asian states sustainable development, which will be a base for strategy development as well

as Central-Asian states sustainable development Convention.

At present this issue is very important. SIC ICSD scientific-practical staff capacity will allow to fulfill this task during short period.

One more priority is database of experts formation for Central-Asian states sustainable development. All SIC ICSD divisions are responsible for preparation of proposals related to Aral Sea basin sustainable development problems.

SEMINAR ON JURIDICAL ASPECTS «WARMAP» PROJECT

In accordance with EC IFAS meeting decision of December 20-21, 1999 in Almaty work on the draft agreements on the regional institutional structure and information exchange and ecological sustainability support in the region was continued.

With regard to comments presented after meeting in Almaty by Minselvodkhoz of the Kyrgyz Republic, Minvodkhoz of the Republic of Tadjikistan and Minselvodkhoz of Turkmenistan expert group from states of the region jointly with international expert on water right conducted preparation work.

January 18-19, 2000 in SIC ICWC office next meeting of expert group was held with participation of Prof. V. Dukhovny (SIC ICWC), N. Kipshakbayev (SIC ICWC Kazakh Branch), K. Batyrkanov (MAWR of Kyrgyzstan), A. Kamolitdinov (MAWR of Tadjikistan), Sh. Rakhmanov (MAWR of Uzbekistan), D. Simonov (BWO "SyrDarya"), I. Alster (WARMAP Project).

Set of agreements developed within WARMAP project framework includes the following agreements:

Agreement about institutional structure strengthening on transboundary water resources development, conservation and management in Aral Sea basin;

Agreement about information exchange and national, basin and regional data bases formation of transboundary water resources development, conservation and integrated use in the Aral Sea basin.

Expert group members have prepared these draft agreements taking into account proposals and comments received from five states in order to direct them to ICWC members for consideration.

SEMINAR "WUFMAS DATABASE DEMONSTRATION"

On February 2-3, 2000 in Tashkent the seminar "WUFMAS Database Demonstration" was held. WUFMAS Sub-project National Coordinators, representatives of the ministries and departments of the Central-Asian states - created database's potential users – took part in the seminar. The chairmen of the seminar - Mr. Kollin Scott and Mr. Michael Khorst.

The seminar purpose - Database opportunities demonstration and users training to obtain necessary skills of available information further analysis and estimations of influence both physical and social-economic factors on agricultural production efficiency.

WUFMAS database contains information collected since April 1, 1996 in sub-base frameworks on 360 (since 1997 on 240) typical fields in the Aral Sea basin region, on which agricultural production factors actual use and agricultural crop yield obtained were measured and estimated. Value of these measurements and estimations - in the uniform methodological approach. Farms and fields chosen in various natural-climatic conditions, were in essence actual situation indicators of agricultural production. Created WUFMAS Database has allowed to analyze the basic tendencies in irrigated agriculture of the region's countries and to develop a set of recommendations on available resources use improvement and production profitability providing.

WORKING SEMINAR OF COMPONENT A-2 NATIONAL MONITORS

On February 1, 2000 in Tashkent a working seminar of Component A-2 national monitors (observers) "Participation in water saving" (GEF Project) has been held.

National monitors of competition "Water saving" (from Kazakhstan - KazNIIVH department Head A. Bazarbayev, from the Kyrgyz Republic – KyrgyzNIIirrigation Director K. Kulov, from Tadjikistan - Reclamation department Head of Minselkhoz of the Republic of Tadjikistan G. Togaimuradov, from Uzbekistan – SANIIRI, leading researcher Sh. Mukhamedjanov) have submitted preliminary reports with the competition estimations for the growing period of 1999.

After presentation of preliminary reports for the growing period of 1999 discussion of non-growing period monitoring tasks and competition new stage preparation has been held. Discussion was carried out by the monitoring chief from GEF Project Mr. Peter van den Hoven, regional monitor Mr. M. Khorst, regional organizers of competition Mr. Toktosunov (Osh province) and Mr. T. Uzenbayev (Jelalabad province).

In "Water saving" competition conducted since April 1, 1999 in eight provinces of the states of Central Asia, 142 managing subjects of four categories - regional water organizations, water users associations, agricultural cooperative societies/associations, peasant farms/ took part.

The competition basic purposes:

- revealing of water saving best methods and rational water use as well as premises promoting application of data, specific methods for specific conditions of the countries of Central Asia;
- revealing of ideas and initiatives of water organizations and water users in looking for water saving reserves;
- study and estimation of potential opportunities of water saving positive experience distribution as well as rational water use and conditions, promoting this, in wide scales.

Geography and competition participants' tasks were rather extensive: the objects are presented from flow formation zones (Jelalabad and Osh provinces of the Kyrgyz Republic, Khatlon province of Tadjikistan) up to lower reaches (Kzylorda province of Kazakhstan). As for the upstream countries it is necessary to show, besides water saving effects, irrigation erosion reduction, problems of the downstream ones it is soil salinization on shallow ground water background. In each country-participant irrigated lands privatization processes are now at different stage (the most active in the Kyrgyz Republic and Kazakhstan). There are specific institutional (Water Users Associations in the Kyrgyz Republic and Kazakhstan) and legal forms of agriculture and water management interaction (water consumer payment for water volume unit delivery in the Kyrgyz Republic and Tadjikistan; land tax including services in certain water volume supply in Kazakhstan; penalty for extra irrigation water release in Uzbekistan).

Total amount of saved water during vegetation period was 1356 mln. m^3 or 2 th. m^3/ha. More than 50 % of water saving (706 mln. m^3) corresponds to Makhtaaral department (406 mln. m^3) and other water organizations of South-Kazakhstan province. Here a principle, according to which water was supplied ready for irrigation of at least 75 % of areas, is very important to prevent unproductive losses.

During monitoring competitors initiatives were revealed, important for developed Regional water strategy:

- surface releases in-contour reuse;
- organic fertilizers application mixed with irrigation water;
- estimation of sowing rotation main agricultural crops actual water consuming with regard to accounts on fields-"indicators".

Acquaintance with the participants and situation on competition objects has shown in the whole good level of preparation, promoting competition purposes and tasks performance.

In the second half of March final provincial seminars are planned, on which the participants who have achieved the best results in water saving, will be encouraged with the premiums.

PROTOCOL No 5
OF COORDINATION GROUP MEETING ON DEVELOPMENT OF OPTIMIZATION MODELS OF NARYN-SYRDARYA CASCADE

January 21, 2000 Almaty

Agenda

1. Review of model development progress (information of regional organizations leaders responsible for model components development).
2. About Technical Group meeting (January 18-19, 2000).
3. About model's components development within the ToR and prospective of further development of modeling on Naryn-SyrDarya cascade operation regime optimization.

Participants have decided:

On the first question

1. To accept information of E. Rozhnov (ODC "Energy"), M. Khamidov (BWO "SyrDarya"), V. Dukhovny (SIC ICWC).
2. To note that plan on components "River" and "Energy" of ToR is being fulfilled.
3. To propose to V. Dukhovny to submit information on "Planning zone" to Coordination Group.

On the second question

1. To accept information about consideration by Technical Group January 18-19, 2000 works on model's components.
2. To adopt Technical Group's work on model of Naryn-SyrDarya cascade optimization and to note that proposals from national organizations are analyzed in detail and taken into consideration.

For instance, the following proposals and components are taken into account:

N. Kipshakbayev (Kazakhstan) on water resources quality inclusion;

B. Yusupov (Uzbekistan) on usage of Naryn-SyrDarya operation experience.

S. Navruzov and A. Artyukhin (Tadjikistan and Kyrgyzstan) about editing ToR text on "River" components, etc.

3. To carry out discussion of Tadjik side proposals with "River" model's developers.

On the third question

1. To continue work with "River" and "Energy" components according to ToR.
2. To accept V. Dukhovny's statement about submission of the report on "Planning zone" model to EPIC Program and Coordination Group at February 10, 2000.

3. To adopt proposal from Tadjikistan (G. Petrov, S. Navruzov) about final report completion and report content taking into account above proposals and components. To charge EPIC/USAID to define executors and terms of fulfillment within a week.

Next meeting to be held within 10 days after Technical Group meeting up to the first decade of March.

From the Republic of Kazakhstan	V. Borisovsky
From Kyrgyz Republic	A. Zyryanov
From the Republic of Tadjikistan	G. Petrov
	S. Navruzov
From the Republic of Uzbekistan	A. Preigel
	B. Yusupov
From BWO "SyrDarya"	M. Khamidov
From EDC "Energy"	E. Rozhnov
From SIC ICWC	V. Dukhovny
From EC CAES	N. Aitmurzayev

PROTOCOL No 3
OF TECHNICAL GROUP MEETING ON MODELING OF NARYN-SYRDARYA CASCADE OPERATION REGIME OPTIMIZATION

March 6, 2000 Tashkent

Agenda

1. Reports of specialists from national organizations about models' component development.
2. Reports of specialists from regional organizations about models' component development.

Participants have decided:

On the first question

1. To accept presentations of E. Antipova, A. Artyukhin, S. Navruzov, Sh. Khisoriyev, S. Zaitseva, A. Tasybayev, Sh. Kuchkarov on work done in model's national part of components in the following directions:

- development of the model of Toktogul hydropower cascade and energy systems water-power regime optimization (E. Antipova);
- model of Chu river water resources management (A. Artyukhin);
- optimization models of upper reservoirs management in SyrDarya upstream (S. Navruzov);
- model of energy regime optimization on example of Dushanbe-Vakhsh energy system "Barki Tochik" (Sh. Khisoriyev, S. Zaitseva);
- model of irrigation-river system taking into account water quality (A. Tasybayev);
- model of optimization of the Andijan reservoir and Karadarya river system operation regime (Sh. Kuchkarov).

2. Participants have noted that specialist's of national groups jointly with the EPIC/USAID experts have achieved good results which component regional components and help to define clearly national interests, national requirements and restrictions to the regional models as during their development so under practical use in water and power resources management in the basin.

3. To note that A. Artyukhin's work on Chu river is of big interest with regard to Agreement between Kazakhstan and Kyrgyzstan on hydrostructures joint use operation and maintenance.

To ask Coordination Group to consider necessity of work in Chu basin continuation.

4. To consider as necessary the following:

on E. Antipova's work - to develop interface to model's power part and output table; to define necessary volume of fuel to provide power generation according to the model; to design various options;

on S. Navruzov's work - to receive information on Andijan and Toktogul reservoirs including curves of relationship and morphological data; to organize consultation with developers of BWO "SyrDarya" model in order to consider within the framework of model tasks proposed by Tadjik specialists;

on Sh. Khisoriyev-S. Zaitseva's work - to provide joint work within 2-3 days in Dushanbe, to develop interface to the model developed;

on A. Tasybayev's work - to collect additional data on river and return waters' volume and salinity or to test model on retrospective data;

on Sh. Kuchkarov's work - to develop model for Chirchik river similar to Karadarya river.

5. To ask EPIC/USAID to assist in implementation of 3, 4 items' work including reimbursement of developers' business trips.

6. To ask specialists from national groups to submit to EPIC/USAID electronic copies of programs developed not later March 24, 2000.

On the second question

1. To accept presentations of A. Leshansky, E. Rozhnov and A. Tuchin about work progress on model's "River", "Energy" and "Planning zone" components.

2. To note that specialists of regional organizations BWO "SyrDarya" and ODC "Energy" jointly with EPIC/USAID experts fulfill work in accordance with ToR.

3. To note that work on "Planning zone" component is being fulfilled with significant delay.

To offer A. Tuchin to accelerate development of model itself and submit the first results to the end of March 2000.

4. Participants consider expedient to continue modeling and ask Technical Group to prepareand give proposals on further modeling activity.

Next Technical Group meeting is to be held on April 18-20, 2000 in Tashkent.

For national organizations:

Kazakhstan	A. Tasybayev
	S. Zaitseva
Kyrgyzstan	A. Artyukhin
	E. Antipova
Tadjikistan	S. Navruzov
	Sh. Khisoriyev
Uzbekistan	Sh. Kuchkarov

For regional organizations

BWO "SyrDarya"	A. Leshansky
ODC "Energy"	E. Rozhnov
	M. Mikhnevich
SIC ICWC	A. Tuchin

MEETING OF THE WATER COUNCIL OF THE REPUBLIC OF UZBEKISTAN

At the Water Council meeting on January 7, 2000 issue «Professionals preparation and educational planning in TIIMSH at the modern level». A.Jalalov, First Deputy Minister of Agriculture and Water Management of the Republic of Uzbekistan was as a Chairman.

With regard to Laws of the Republic of Uzbekistan high education is organized in two stages: postgraduate education and magistrate based on secondary academic and technical education.

TIIMSH Hydroreclamation Faculty prepares bachelors for specialties «Water management and reclamation», «Water-related construction», «Hydromeliorative works mechanization», «Farms organization and construction» since 1994.

On base of own and foreign experience since 1999/2000 post graduate education is established on three directions: «Water management and reclamation», «Hydroengineering» and «Farms organization and technical service». Standards of Uzbekistan, standard educational plans and educational process schedules for 4-year study have been developed and approved.

Two-year study on Hydroreclamation Faculty's magistrate is supposed on 23 specialties as postgraduate education. Reception to the magistrate will be limited with respect to real requirement for professionals.

With regard to given issue extended decision has been made with specific directives and proposals directed to elimination of disadvantages in specialists preparation by TIIMSH.

Council members' information about international forums has been heard.

R. Ikramov, SPA SANIIRI General Director presented information about IV USA-CNS Conference «Hydrology at the threshold of XXI».

Prof. M. Khamidov, TIIMSH Hydroreclamation Faculty Dean made a report about specialists and scientists of Uzbekistan delegation visit to USA from NGOs with purpose to acquaint with water management and use experience at on-farm level.

Water Council has approved proposal on illustrated brochure issuing and its distribution among water management specialists and TIIMSH students.

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