UNECE SIC ICWC JSC «Vodstroy» GWP CACENA

Development of Water Information Network in CIS using as an example and with the involvement of the Information System and Water Portal "CAREWIB"

Progress report for 2008

Tashkent-Moscow – December 2008

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Introduction

Water resources management in trans-boundary river basins involves multifaceted interactions among various stakeholders at all levels of water management hierarchy and requires a shared vision of sustainable water resources management and development in Central Asia.

Therefore, since 1991 the newly formed independent states of the Central Asian region have been faced with an acute necessity to develop regional cooperation on water allocation in the Aral Sea basin. Although availability and exchange of information are the key instruments to maintain effective and efficient regional cooperation, limited access to data on water/land resources use and socio-economic situation in the Aral Sea Basin has been an obstacle for making adequate short- and long-term decisions on trans-boundary water resources management and on implementation of relevant policies.

In response to this challenge, an agreement was adopted in 1992 by the five Central Asian governments to establish the Interstate Commission for Water Coordination (ICWC) in charge of the regional water resources management within the Aral Sea basin. The Scientific-Information Centre (SIC ICWC) was subsequently founded as an ICWC executive body to coordinate regional water management cooperation and improve information exchange among the member states.

Despite the complexity of the current socio-economic situation in the Central Asian countries, water resources use and management at on-farm, WUA, canal and irrigation system/basin levels are undergoing positive changes, adapting to current developments, and meeting multifaceted challenges of the transition to participative water management and market economy. By enhancing information exchange in the water sector, the CAREWIB Project has undoubtedly contributed to this favorable development.

Based on good will, mutual understanding and support of ICWC members, the CAWater-Info Portal and Information System have been created during the project Phase-1 to offer unique information products that have no analogues in Central Asia.

CAREWIB Project, Phase-2 is aimed at further improving information support of the water and environmental sectors in Central Asia as started under Phase-1.

The objective of this project is improving main products of CAREWIB project, such as portal and information system through the involvement of Russian-speaking water community in already established and maintained network and the exchange of information and accumulated experience.

Project aims and objectives

1. Facilitating exchange of information and experience between Central Asia, Russia, Ukraine, and South Caucasus in water and environmental areas through the portal CAWater-Info.

2. Establishing a network of information centers in Post-Soviet space.

3. Demonstrating principles and transferring the methodology of CAREWIB to water-management organizations in Russia, Ukraine, Belarus, Kazakhstan, Moldova, Georgia, Armenia, and Azerbaijan in order to improve exchange of information on shared water.

4. Building capacity of Central Asian experts, who are responsible for development and maintenance of IS, through experience of Russia, South Caucasus, and Ukraine.

Project activity over the reporting period

SIC's staff started the project activity in September 2008.

During November-December 2008, the preparation of the workshop "Development of Water Information Network in CIS using as an example and with the involvement of the Central Asian Regional Water Information Base "CAREWIB"" was undertaken:

- An initiative group at the head of academician Polad-zade P.A., which included: Prof. Dukhovny V.A., Sokolov V.I. (GWP CACENA), Beglov F.F. (executive secretary) was established;
- Invitations were disseminated among concerned organizations;
- Workshop date and venue were agreed upon - December 11-12, 2008 in Moscow;
- Hotel and ticket reservations were made for participants;
- Workshop agenda was prepared, agreed and disseminated (Annex 1);
- Key reports/presentations and rationale of network activity were prepared;
- Workshop questionnaire (Annex 3) was developed and distributed;
- A virtual conference launched at forum of the CAWater-Info Portal.

The workshop was held in agreed time with the support of the Moscow State University of Environmental Engineering. The participants were familiarized with the INBO activity, the experience of information system development in water sector - in Central Asia (regional system), Russia, Ukraine, Belarus, Azerbaijan, Kazakhstan, and

Armenia - as well as with the activities of water-management organizations in these countries.

Quite convincing technological and communication achievements of the participants were demonstrated at the workshop.

Center of Scientific-and-Engineering Information of "Meliovodstroy" at the Ministry of Agriculture, Russian Federation (Director N.I.Tupikin) in the last scientific-technical journal "Land Reclamation Issues", No.3-4, 2008 presented results of the Congress of Russian watermen and irrigation engineers held in Moscow and

chaired by N.A.Sukhoy. The Congress has adopted an address to the Russian President D.A.Medvediev. The Center's publications contained an interesting proposal on the development of VNIIG&M Istitute's ideas (D.T.Zuzina) as put forward in the fifties of the last century on organization of the so-called periodical irrigation, which combined and planned regular irrigation and rainfed farming, depending on precipitation in steppe zone. The main point of this method is to determine for each farm the shares of rainfed practices and of regular irrigation, depending on total rainfall.

FSUE Center of Russian Registry of Hydrostructures and State Water Cadastre of the Federal Water Agency (Center of Registry and Cadastre, Director S.Ye.Bednaruk) conducts systematic monitoring and forecasting of water availability in Russia. According to its information, increased water availability is kept in Volzhsky-Kamsk cascade of reservoirs, in Novosibirsk reservoir. The Center's web-site gives free access to unique information products, such as Russian registry of hydrostructures, Information system "Russia's rivers", Hydroeconomic zoning in the Russian Federation".

Information Center "NIA Prirody" (Deputy Director V.A. Omel'yanenko) pays serious attention in its publications to water resources problem. At present, the Nature and Resource Gazette holds a heated discussion on expediency of V. Putin's initiative put forward in 2007 about creation of transboundary system between the Caspian Sea and the Black Sea, which was supported actively by the President of Kazakhstan N. Nazarbayev. The initiative was evoked by insufficient capacity of the Volga-Don canal. The navigation canal project is put forward against the alternative of canal "Volga-Don-2", which would pass parallel to the existing canal. This alternative is advocated by Rostov, Astrakhan, and Volgograd provinces, while Stavropol Territory, Kalmykiya, Dagestan, and Kazakhstan lobby construction of navigation canal. Opinions are divided and a fight, which is as strong as previous one regarding the canal connecting Siberia and Central Asia, is taking place. The Russia's Ministry of Transport (I. Levitin) is for the idea of large canal, while the Director of Federal Water Agency (R. Khamitov) is against this idea. Fisheries Agency opposes Volga-Don-2. The Director of the Institute of Water Problems Prof. V.I. Danilov-Danilyan is against the both options. In short, even address of the Mayor of Moscow Yu. Luzhkov regarding withdrawal of a share of Siberian river flow, fist of all, for own needs is aside, while disputes on the Eurasian canal are very heated!

Institute of Water Problems at the Russia's Academy of Sciences has published an interesting report on water availability of agriculture in Russia (A.P. Demin). In 1980-1992, the quantity of water used in agriculture was 37-41 km^3, whereas since 1993, it has started to decrease, and by 2004 fell down to 21 km^3, as well as freshwater consumption decreased from 25-29 km^3 to 11,3 km^3.

Since 1970, irrigated areas in Russia has extended from 1,9 Mha to 6,1 Mha but in 2000, according to official data, the irrigated area was reduced to 4,5 Mha. Actually, irrigated land area decreased to 2,4 Mha. As a result, irrigation water use decreased

from 20,3 km^3 in 1985 to 16,4 km^3 in 1990 and up to 7,7 km^3 in 2005. Accordingly, withdrawals for agricultural needs were reduced from 4,2 km^3 to 0,74 km^3. In recent years, water use efficiency indicator has improved slightly - agricultural output (in prices of the year 1983) increased from 1.8 roubles/m^3 in 1995 to 3.5 roubles/m^3 in 2005 per 1 m^3 of water used. It is notable that production on irrigated land remains profitable and is 3-5 times higher than in rainfed area. Moreover, all-round reconstruction of irrigated lands has started: in 2002 - 2005, 110 thousand ha were reconstructed. In 2006-2010, it is planned to cover 160 thousand ha.

Ukraine has kept specialized water management under responsibility of the Ukraine's State Committee for Water Resources at the head of V.A.Stashuk. Deputy Head of Division at the Committee O.Lisyuk in his presentation "Basin geo-information system for water management and monitoring along large rivers in Ukraine" demonstrated information systems and developed for Ukrainian water resources management. An excellent example of basin management is the activity of Severskо-Donetsk basin water management authority.

The development of information system in Ukraine, as well as in Belarus runs according to provisions of the European Water Directive.

The major result of the workshop is the agreement of all concerned parties on the establishment of a network of Russian-speaking water organizations under the umbrella of INBO. Membership in this network is voluntary, which is based on professional community and mutual understanding and organized in form of exchange of opinions, experience, and information on various aspects of water-management activities, without any financial contributions.

Workshop resolution

Having discussed the reports and exchanged opinions, the participants have made the following

DECISION:

1. Extend thanks to the UN Economic Commission for Europe and the Government of Russian Federation for the support of this event.

2. Recognize the importance of information and professional union of watermen, water users and stakeholders in the post-Soviet space.

3. Recognize as interesting the experience of ICWC in exchange of information, implementation of IWRM, development of regional and national information systems CAREWIB, etc.

4. Support proposal of the initiative group and INBO on the establishment of INBO network in Russian-speaking post-Soviet space.

5. Request INBO, UNECE, GWP CACENA, and SDC to support the development of this network by supporting trainings and workshops.

6. Establish voluntary nature of the network. The membership in this network is voluntary, which is based on professional community and mutual understanding and organized in form of exchange of opinions, experience, and information on various aspects of water-management activities, without any financial contributions.

7. Establish a permanent Secretariat to coordinate activities of the network. Exchange of information should be provided through the portal CAWater-Info and the Russian-speaking segment of the INBO web-site.

8. Within the framework of existing work group of the Russian NCID, consider it advisable to request the ICID[1] Headquarters to focus activities of this NCID on facilitation of exchange of information on water management, irrigation, and land reclamation in CIS countries.

Lesson learned

Most information systems developed in the countries of former Soviet Union are built on the basin principle contrary to CAREWIB IS, which presents information by province in CA countries. In the future, information should be presented in basin dimension as well. This would be particularly relevant under the wide-scale implementation of integrated water resources management in all the countries of the Aral Sea basin.

Planned work for 2009

1. Establish a Steering Committee of the Russian-speaking network of water-management organizations among representatives of Russia, Ukraine, Belarus, Azerbaijan, and Armenia. Invite Moldova and Georgia to this network of organizations. Get official approval of participation of concerned parties in the network.

2. Establish national contact points on the basis of concerning organizations.

[1] International Commission on Irrigation and Drainage

3. Prepare Statutes for the Network, get information from the participants on the main outputs and information products, open special web-site on CAWater-Info portal.

4. Disseminate information and exchange experience among the above-mentioned countries in area of water sector and environmental conservation through CAWater-Info portal and INBO web-site.

5. Conduct virtual conferences among the Network's participants in order to transfer knowledge and experience.

6. Prepare and conduct workshop-training for the parties in order to review results of work done, exchange knowledge and transfer experience.

7. Improve the information system CAREWIB on the basis of knowledge received as a result of information exchange.

8. Transfer experience received through knowledge exchange to the established national information systems.

Annex 1

Agenda
"Development of Water Information Network in CIS using as an example and with the involvement of the Information System and Water Portal "CAREWIB"»

SIC ICWC, UNECE, JSC "Vodstroy", GWP CACENA

Moscow, 11-12 December 2008

10 December, Wednesday	
	Arrival and accommodation of participants (hotel «Molodiejnaya»)
11 December, Thursday	
9.30-10.00	Registration of participants
10.00-10.25	Opening: - President of JSC "Vodstroy" Polad-zade P.A. Welcome speeches: - Rector of SOU Moscow State University of Environmental Engineering, Prof. Kozlov D.V. - Deputy Director of the Land Reclamation Department, Ministry of Agriculture, Russia, Petrov A.Yu. - Director of SIC ICWC, Prof. Dukhovny V.A. - Chairman of the Union of watermen and irrigators, Russian Federation, Sukhoy N.A. - Chairman of Association of Water-Management Organizations Viksna A.A.
9.20-9.40	Report of Director of SIC ICWC Prof. Dukhovny V.A. «International network of basin organizations (INBO) - an example to follow»
10.40-10.55	Report of the President of JSC "Vodstroy" Polad-zade P.A. «For community of water idea in CIS countries!»
10.55-11.20	Report of leading specialist of SIC ICWC Beglov I.F. «Water and environmental knowledge portal in Central Asia»
11.20-11.40	Report of the Director of Center of Registry and Cadastre, RF, S.Ye.Bednaruk «Russian registry of hydrostructures and information system «Russia's rivers»
11.40-12.00	Report of the Head of Regional Information-Computing Center, SIC ICWC, Sorokin D.A. «Central Asian Regional Water Information Base «CAREWIB»
12.00-12.20	*Coffee-break*

12.20-12.50	Report of leading researcher Sorokin A.G. «Potential of analytical applications of IS «CAREWIB»
12.50-13.10	Report of Deputy Head of Division, Water Resources Committee, Ukraine, Lisyuk O.G. and of Chief Engineer of Seversko-Donetsk BWRA Trophanchuk S.I. «Basin geo-information systems of monitoring and integrated management of large rivers in Ukraine»
13.10-13.30	Report of Deputy Director of Engineering-Consulting Company JINJ Ltd. Melkonyan E. «Water Information System in Armenia»
13.30-13.50	Discussion
14.00-15.00	*Lunch*
15.00-15.20	Report of Deputy Director of Central Research Institute of Integrated Water Resources Use Korneyev V.N. «Water Information System in Byelorussia»
15.20-15.40	Report of Director of Azerbaijan Research Institute of Water Problems Ganbarov E. "Water Information System in Azerbaijan»
15.40-16.10	Report of water use and protection regulation expert, Committee for Water Resources, Kazakhstan, Tanatbayeva S.S. and Deputy Head of Aralo-Syrdarya Basin Inspection on water regulation and protection, Kystubayev O. «Water Information System in Kazakhstan»
16.10-16.30	Report of Deputy Director, SIC ICWC, Sokolov V.I. «IWRM - important potential for better water availability in Central Asia»
16.30-17.00	*Coffee-break*
17.00-18.50	Discussion on follow-up program
18.50-19.00	Summing up
12 December, Friday	
9.00-11.00	Discussion on follow-up program
11.00-11.30	*Coffee-break*
11.30-13.00	Discussion on follow-up program
13.00-14.30	*Lunch*
14.30-16.00	Discussion on follow-up program
16.00-16.30	*Coffee-break*
16.30-17.30	Drawing up of final document
17.30-18.00	Meeting conclusion

Annex 2

List of participants
"Development of Water Information Network in CIS using as an example and with the involvement of the Information System and Water Portal "CAREWIB"»

Moscow, 11-12 December 2008

№	Name	Position, place of work
1.	Asarin A.Ye.	JSC "Gidropro"
2.	Beglov I.F.	SIC ICWC, Tashkent
3.	Bednaruk S.Ye.	Director, Center of Registry and Cadastre
4.	Bessonov N.D.	Chief editor, journal "Land reclamation and water management"
5.	Viksne A.A.	Chairman of Association of Water-Management Organizations
6.	Ganbarov E.	Director, Azerbaijan research institute of water problems, Baku
7.	Grishenko N.S.	Sovintervod Ltd.
8.	Petrov A.Yu.	Deputy Director, Land reclamation department, Ministry of Agriculture, Russia
9.	Dukhovny V.A.	Prof., Director, SIC ICWC, Tashkent
10.	Korneyev V.N.	Deputy Director of Central Research Institute of Integrated Water Resources Use, Minsk, Byelorussia
11.	Kizyaev B.M.	Director, VNIIG&M
12.	Kozlov D.V.	Rector of SOU Moscow State University of Environmental Engineering
13.	Kystaubayev O.	Deputy Head of Aralo-Syrdarya Basin Inspection on water regulation and protection, Kazakhstan
14.	Lisyuk O.P.	Report of Deputy Head of Division, Water Resources Committee, Ukraine, Kiev
15.	Melkonyan E.	Deputy Director, Engineering-Consulting Company 3 JINJ Ltd., Armenia
16.	Mikheyev N.N.	Minister Counselor
17.	Omelianenko V.A.	Deputy Director, Scientific Information Agency "Natural Resources"
18.	Piven' N.N.	Deputy Head of Division, Don BWO

№	Name	Position, place of work
19.	Polad-zade P.A.	President, JSC “Vodstroy”
20.	Svintsov I.P.	Secretary-Academician Russian Academy of Agricultural Sciences
21.	Sorokin A.G.	Head of Division, SIC ICWC, Tashkent
22.	Sorokin D.A.	Head of Regional Information-Computing Center, SIC ICWC, Tashkent
23.	Sokolov V.I.	Regional coordinator, Global Water Partnership for Central Asia and Caucasus (GWP CACENA), Tashkent
24.	Sukhoy N.A.	Chairman, Union of watermen and irrigators
25.	Tanatbayeva S.S.	Water use and protection regulation expert, Committee for Water Resources, Kazakhstan
26.	Trophanchuk S.I.	Chief Engineer, Seversko-Donetsk BWO, Ukraine
27.	Tupikin N.I.	Director, Center for Scientific and Technological Information «Meliovodinform»
28.	Shedrin V.N.	Director, FGNU ROSNIIPM
29.	Lisichkin V.S.	journal “Land reclamation and water management”
30.	Krasnoshekov V.N.	Pro-rector, Moscow State University of Environmental Engineering
31.	Bondarin I.G.	VNIIG&M
32.	Zeliger A.M.	Center for Geo-hydroinformatics, Moscow State University of Environmental Engineering
33.	Kudryashov A.N.	Union of watermen and irrigators
34.	Bulgakov V.I.	All-Russian Research Institute of Irrigation and Rural Water Supply Systems «Radouga»
35.	Kukharyev N.A.	All-Russian Research Institute of Irrigation and Rural Water Supply Systems «Radouga»
36.	Stepanova T.G.	Center for Scientific and Technological Information «Meliovodinform»
37.	Golovanov A.I.	Prof., Head of land reclamation sub-faculty, Moscow State University of Environmental Engineering
38.	Khanov N.V.	Hydraulics sub-faculty, prof., Moscow State University of Environmental Engineering
39.	Roubin M.G.	Deputy Director, Gosecomeliovod

Annex 3

Answers of the participants to questionnaire

1. Which issues need to be addressed in opinion and information exchange?

- state of water resources (quantity and quality); (7)
- integrated water resources management and use; (5)
- quality and prospects of transboundary water objects use; (4)
- water pollution; (2)
- development of e-database of water quality; (2)
- water-conservation experience in integrated management implementation; (2)
- data accuracy in information systems; (2)
- hydrological and water-management modeling; (2)
- standards and regulations; (2)
- environmental security of water use in transboundary systems; (1)
- development of water accounting and regulation system on river basins; (1)
- role of water resources in economic development; (1)
- information about projects and their results; (1)
- about information technologies; (1)
- training, continuous education; (1)
- development of information systems (1)
- hydrogeological information, climatic data; (1)
- water strategy; (1)

2. What do you recommend to include into the general window of the future EECA council of BO?

- full information about environmental measures, advanced technology application, and negative water impacts on all states; (4)
- general information on the state of water resources (quantity and quality); (4)
- measures for environmental improvement; (2)
- ways for solving problematic issues in water sector; (2)
- development of a mechanism of damage compensation among riparian countries; (2)
- information about progress and results of various basin programs; (2)
- water quality requirements; (1)
- setting general goals and adopting agreed measures for their achievement in all the states; (1)
- IT developments for drip and sub-soil irrigation systems on separate basins; (1)
- establishing single public council on water resources of Russia and Central Asia; (1)
- indicators of water use efficiency; (1)
- access to information on water use and water quantity; (1)
- information about all water-management organizations; (1)
- data on the system of training of water professionals; (1)
- system of continuous water-management education; (1)

3. Which measures could be implemented within the network of exchange?

- conduct various seminars, trainings, congresses, and round-tables with participation of different agencies; (15)
- develop strategies of joint use and protection of transboundary water objects; (2)
- water (including wastewater) treatment methods; (2)
- develop actions to ensure secure by-pass of floods; (1)
- survey of advanced technologies; (1)
- rational water use; (1)
- create information centers; (1)
- involve mass media; (1)
- discuss issues on territorial re-distribution of river runoff; (1)
- exchange of data through Internet; (1)
- match software and databases; (1)
- publish collections "Water and Education"; (1)

4. Who in your country could represent watermen within the network of exchange?

- Russian Union of Watermen and Irrigators; (4)
- VNIIG&M; (4)
- JSC «Rosvodstroy»; (3)
- SIC ICWC; (3)
- Ministry of Agriculture and Water Resources, Republic of Uzbekistan; (3)
- BWO; (2)
- RF entities; (1)
- Research institutes; (1)
- Authorized body in area of water fund use and protection; (1)
- Representatives of Water Resources Committee at the Ministry of Agriculture, Kazakhstan; (1)
- Association of Water-Management Organizations of Russian Federation; (1)
- Chairman of the Ukraine's State Water Management Organization; (1)
- Institute of Water Problems; (1)
- Gidroproyekt; (1)
- GWP CACENA; (1)
- S.E.Bednaruk; (1)
- Central Research Institute of Integrated Water Resources Use; (1)
- Center for Scientific and Technological Information «Meliovodinform»; (1)
- Ministry of Agriculture, Russian Federation; (1)

Annex 4

About International Network of Basin Organizations

By Prof. V. Dukhovny, SIC ICWC Director

The International Network of Basin Organizations (INBO) was established in 1994, and over the 14 years, it has made very important contribution to implementation of IWRM and hydrographic management approach all over the world. INBO is a voluntary network, which does not receive any membership fees (unlike all other international water NGOs) from its members, and is simply based on professional integration and mutual understanding, relationships between members and organizations, and wide exchange of opinions, experience and information on various water-management aspects.

The Network's active tools are:

- the network newsletters published once a year (including in Russian);
- INBO web-site;
- organization of and support to international conferences (biennial), regional seminars, conferences and round-tables among network's organizations;
- initiation of training on specific issues of water sector;
- organization of thematic sections at the World Water Forums;
- involving the network' members in various European projects, particularly under framework and specific programs.

Among the most active regional networks are: MEDNBO (network of Mediterranean organizations); CEENBO (network of Central European basin organizations); ANBO (network of Central American basin organizations); CARBO (network of Asian river basins), etc.

SIC ICWC has signed an agreement with INBO Secretariat for translation and dissemination of the network newsletter and web-site. Thus, now the Russian-speaking auditory is able to acquire with INBO's life and activities enough widely. Unfortunately, among dozens of basin organizations located in NIS, only the Irtysh basin (Kazakhstan-Russia) and the Aral Sea basin (five countries of Central Asia) are figured in those publications.

In the preparation process to the 5th World Water Forum, INBO initiated the development of a Toolbox for basin organizations, which can serve as a first step in creating guidelines for establishment, functioning, legal framework, financing and management system of Basin organizations. This document is to be discussed at the respective session during the WWF5, and, in the future, we suppose to develop and improve it further.

Undoubtedly, every water basin is a unique individual and exceptional combination of hydrology, morphology, natural conditions, uses, stakeholders, and common and opposite interests. Therefore, it is unfeasible to find unique solutions for each of the basins; however, blocked approach to building model solutions on individual blocks and their consecutive aggregation is quite possible and would be useful for many BOs. Another question, which is

raised by INBO together with WWC is hardening of international rules and documents (conventions, regulations) on the use of transboundary rivers. Growing (sectoral, national, local) hydroegoism is becoming an obstacle for current water supply of people and environment in all countries at global scale. Virtually, there are fewer real examples of "equitable and sound allocation and use of water resources": USA-Canada Commission; Rhine Commission; Irtysh Commission (Russia-Kazakhstan).

Thus, benefits from the involvement in INBO network are clear and should be derived, while simultaneously enhancing the prestige of the Soviet school of hydraulic engineering and land reclamation, which is underestimated and not realized by present-day leaders.

We consider possibility to establish INBO network for EECCA (Eastern Europe, Caucasus and Central Asia) region as a return to idea of informal union of Russian-speaking water organizations in the post-Soviet space.

At present, when water is attempted to serve as a weapon in global division of sphere of influence, many people think that such organization would be established almost as a political platform. We, watermen, should not think about politics (though its influence on us should not be underestimated), but rather we must think about our professional duty, i.e. serving people, future of which depends on their water supply. From these positions, we should hold together since our aims are:

- better mutually acceptable and equitable decision-making;
- intensified exchange of experience and lessons learnt;
- keeping traditions of the Soviet school of hydraulic engineers and irrigation engineers, which absorbed the best from Russian, Ukrainian, Caucasian, and Central Asian water heritage, and conveying them to growing generation, to youth;
- wider access of our representatives to the work water community and national water forums;
- getting the world familiar with our approaches and presenting the world's tendencies to the region's audience.

To this end, it is advisable during the meeting in Moscow to make decision on the establishment of such organization, registered as NGO, in form of a network of founders with equal rights. We propose to establish this network with a small Secretariat (2-3 people).

Annex 5

Background for network activity

Prof. V. Dukhovny, SIC ICWC Director

Present generation is a successor of the great water development era of 1950–1980, when the region had no peers in rates, volumes and innovations of water development. Water sector and land reclamation were the leading sectors, the drivers of growth and progress. One may contradict that this was one a kind of environmental losses as well. Of course, however, we are not alone in this respect - water development in USA (lake Mono, problems in Colorado, San Joaquin), on Rhine, Danube, in Israel and Turkey - everywhere there was the reverse of the medal, which built up a reputation of "the blighter of nature" for water sector. During the period of USSR, water sector governance was quite strong, professional and well-organized, though it had two major disadvantages: non-participation of public in decision making; and, lack of self-financing.

Present water sector governance has ever more disadvantages, and the most important - weakness of governing tools, instruments, and approaches. This refers to both national, local levels and global level.

As a whole, despite numerous scientific and legal developments, global water governance very weak in order to ensure adequate stability of water supply and protection of water resources. National, local, provincial, and sectoral boundaries and interests create obstacles that prevent from meeting water demands of our clients all over the world. Moreover, this is supplemented by lowering of moral standards, uncertain and unclear legal framework, material interests, distorted comprehension of democracy (as a permissiveness), and pressure of charismatic (and hegemonic) leaders. All this causes shortage of current water governance. This tenuous legal framework is the main limitation in achieving global governance that is required by all spheres of life in the world. Poor capacity of global governance and inadequate postulates of its legitimacy cause damage to joint advancement. In this context, the civil society may contribute to more clear shaping of criteria of national, regional, and global governances and, certainly, advocate those modes of governance that keep to moral, democratic, and legal criteria.

More comprehensive exchange of opinions between colleague-watermen in the post-Soviet space, as suggested by INBO, SIC ICWC, and GWP CACENA, allows using the common features that we have - language, school, level of knowledge and those advantages that were get after separation. They reflect in that instead of common governance system, which we had before, water sector and water use followed quite different ways determined both by socio-economic conditions and by political priorities and specificities of each country. In this context, it is very important to inform regularly the Russian-speaking water community about best practices and achievements, as well as familiarize them with the lessons learnt from failures, problems and experiences of others. Thus, we can help each other!

On the other hand, positive achievement in any regions, zones, and countries allow organizing public discussion and involve society in putting certain pressure on decision makers in order

to shift water governance system to more progressive, water-conservative and efficient one. This will help to make governance system improvement process more clear, accessible and more perceived by the whole society, especially by water users.

The process of water governance improvement proceeds quite difficultly and slowly in the world. This concerns the improvement of international water law, which still has a form of recommendation and non-obligatory nature, and further on more advisory than decisive nature. Meanwhile, at present, when water-related disasters, such as floods and droughts, become more intensive, it is required that such provisions of international water law be elaborated that could regulate water relations and guarantee water security. Therefore, public participation in the improvement of international water law through raising of awareness, organization of disputes, and advocating of new provisions may exert some pressure on global water governance.

Experience of 2007 and particularly of 2008 in Central Asia showed that current provisions could not protect or regulate water rights of downstream and midstream countries under influence of free will and commercial interests of hydropowermen. Such cases can be prevented by elaborating global rules for regulation and clear-cut principles. The rules should be precise – no matter where these are formal or informal, permanent or temporary, attractive or restrictive. However, society – on global or regional scale – should advocate rules that put things right. An example of creating confusion in water governance is the “Dublin Rules”. Seemingly, those were adopted only by experts from several countries at the conference organized by WHO together with WMO, i.e. international institutions that are not legitimate in this respect; nevertheless, their formulation «water is economic good» (by the way, this can be translated as “water is an economic benefit”) is used by moneytarists everywhere in their attempts to turn water into the “oil of XXI century”. Moreover, it is forgotten that the following UN Conference in Rio explained that water is, first of all, a social and natural good and, only then, an economic good.

Just watermen should involve international lawyers in protection of water rights of all users against monetaristic, administrative, departmental hydroegoism in order to make water governance rules a critical tool for people to ensure stability and continuity of water use. Currently, those rules remain behind of society’s demands, especially given the coming global challenges, such as military confrontations, climate change, interracial and international conflicts, financial crises, poverty increase, epidemics, etc.

From this point of view, the general objective of watermen is deeper delving into international and regional experiences. Legislation and practices of the European Union and some provisions of the World Bank and the Asian Development Bank may be a good model. In this context, increase in volume of translated international materials of practical importance would be very useful, and within our network we could distribute tasks on their translation and publication in Internet.

Here arises question about advocating of IWRM effectiveness, especially its two elements contributing to sustainability of water system functioning – hydrographic method and public participation. These two elements taken together under right organization and adequate empowerment of local water self-governance allow demonstrating and contributing to organization and control of water management, especially under large quantity of water users as shown from the experience of IWRM-Fergana project. Moreover, decisions made at their respective level become adequate tool for local governance. It is notable that currently applied

tools of community governance are those methods that were used in Central Asia and in other places over the centuries: institute of elected aryk-aksakals and mirabs; down-top water allocation order; “khoshars” (community-based voluntary work); etc. Here, the major is to regenerate the forgotten public responsibility for water supply.

Return to the above-mentioned public rules is very important in terms of ethical and educational roles of water, and as a way to cultivate moral basis of water use, first, this concerns young generation (children, schoolchildren, students). Our children will live under more intensive water shortage than present one. Whereas now we have 2500-2600 m^3/person/year in Central Asia, in 20 years this value will decrease from 1350 to 1800 m^3/person/year, according to various scenarios. Therefore, the society should foster their successors in the spirit of water holiness and treating water as an invaluable nature’s element. Recently, a special section was opened on CAWater-Info portal - «Clean water space», and a program «Water and education» was developed. Thus, let us together develop these directions.

Orientation to sustainable development and water supply should be associated with understanding that the society changes, it lacks water, and when we speak about protection of water right, previous water right, we cannot speak about constancy of this right. The society should be prepared to the right to water in amounts of technically improved rather than previous water use. Therefore, the obligation of all water users – both sectoral and individual – is to aim towards achieving potential water productivity in each water use. This exactly could be a contribution of the Russian-speaking network to the development of certain fosterage line of conduct and its transfer to a network of education and training. This comprises our serious contribution to water improvement.

Another direction is that through the Russian-speaking network we can initiate public debates on more topical issues of water cooperation and, thus, involve decision-makers in this discussion. The third direction is that we can bridge a gap through wider mass media networks between the community and decision makers and attract global governance entities through international NGOs.