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INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE

WORKING GROUP ON IRRIGATION AND DRAINAGE IN THE STATES UNDER SOCIO-ECONOMIC TRANSFORMATION (WG-IDSST)

Updated Scoping Document

1. Introduction

WG-IDSST was established after successful completion of the mandate of the Special Work Team on Aral Sea Basin (ST-ARAL) and taking into account the aspirations of some countries in transition to join the new WG to consider mutual problems and cooperate to solve them. The countries in transition in the Central Asia and Europe faced tremendous challenges of economic, political and social nature, especially in rural areas since last two decades (1990–2010). These challenges include reduction in the government subsidies to the agricultural sector and lack of investment, not only in the further development of irrigation and drainage infrastructure, but also in the maintenance of the existing structures. Consequently, there was a drastic reduction in the irrigated areas in these countries resulting in demoralization of institutions responsible for supporting the infrastructure for irrigation. These challenges resulted in poor water management services and in the lack of interest of young professionals in irrigation and drainage sector.

Given above, a new WG, named as WG-IDSST, was set up in 2009 with broader objectives, such as: (1) to develop and strengthen the network among the countries in transition; (2) to organize monitoring and evaluation of common problems in the states in transition; (3) to create database and information exchange on the changing situation in Irrigation and Drainage in these States and to attract global and national attention to the existing trends affecting global and national food security and wellbeing of rural population; (4) to summarize the experiences in overcoming negative tendencies in organizing public-private partnerships, implementation of IWRM and involving stakeholders; (5) to monitor the ecological situation in the transition states, including problems of closed basin (the Aral Sea, the Caspian Sea), salinization and waterlogging, etc.; (6) to develop appropriate advanced irrigation and drainage technology in transition states and its dissemination through capacity building; and (7) to promote farmer's training to create awareness about irrigated and drained agriculture.

The WG-IDSST, however, could not mobilize needed financial resources to carry out the planned activities of the WG. But, in spite of the challenges as above, the WG leaders VPH Peter Kovalenko and VPH Victor Dukhovny successfully organized partnerships between their basic organizations SIC ICWC, as well as the Network of Basin Water Organizations from Eastern Europe, Caucasus and Central Asia (EECCA NWO) and GWP for Caucasus and Central Asia (GWP CACENA) with the annual support of UNECE for many representatives from the far allocated states from the EECCA region to participate in meetings of WG. Nigeria, India, Hungary, Australia, South Africa, and Chad showed their interest in some focus areas of our activities, particularly in the development of information system, training, water governance, farmers consulting service, IWRM etc.

Given above, the ICID President and members of the group and some observers from the developed states (Japan, USA, World Bank) thought appropriate to renew the focus areas of WG-IDSST in broader terms, taking into account the specific features of many different states with rather low level of national income in transitional economy.

2. Specifics of the present needs and problems of the states under socio-economic transformation in the irrigation and drainage sector

The list of challenges below is not finite and exhaustive. Nevertheless, it more or less covers the major challenges for enhanced focus of the WG:

- a. **Strong reduction in the irrigated area** was a result of extreme cutting of the subsidies for implementation, operation and maintenance of the irrigation network, mostly equipped by sprinkler systems. According to the data collected within the area of the former Eastern block, such land exceeds 11 million hectares, excluding the land facing continuous or periodical water scarcity. For instance, the Province of Karakalpakstan in Uzbekistan and the Kzyl-Orda province in Kazakhstan during the water scarcity period of 2000 -2001 lost one fifth (about 30%) of actual irrigated areas, which have been rehabilitated for a long time.
- b. **Lack of financial capacity of the states** to cover irrigation network costs and weak capacity of water users to contribute their shares. It is typical for the states with a rural orientation and with a GNI less than US\$ 4000 per capita.
- c. **Institutional structure** is characterized by a combination of inertia left from the previous administration and lack of willingness to adapt to the IWRM approach.
- d. **Need to focus on the improvement of water and land productivity** through using soft methods (control of management losses, use of cheap but effective methods for water use and allocation, involvement of public initiatives at large and so on).
- e. **Brain drain in the water sector and lack of knowledge among the new farmers** is not compensated by strengthening of information network and training.
- f. **Irrigation lost its key role** as a priority for rural development as a result of changing governments focusing on short term issues and neglecting long-term needs.
- g. **Neglecting climate change**, lack of knowledge and capacity development for newer adaptations.

3. Objectives

3.1. Relevance of the Working Group

The activities of the WG are very relevant to ICID as activities under Item 2 (a) and 2 (d) above contribute to Goal 1 of the ICID Action Plan under Vision 2030. Overcoming challenges shown in Item 2 (c) and 2 (e) will contribute to Goals 3 and 6 of the Vision 2030 and the developmental activities emerging from Item 2 (b), 2(f) and 2 (g) will give inputs for Goal 4 and 6 of the ICID Vision 2030.

3.2 Existing gaps that the Working Group is expected to fill in:

- by merging the activities of WG-IDSST and Network of Basin Water Organizations from Eastern Europe, Caucasus and Central Asia (EECCA NWO) to involve more public participation representatives from the states to overcome the existing problems of the capacity building and the financing of activities in the field of mutual interests.
- by enhancing the collaboration with GWP for Caucasus and Central Asia (GWP CACENA) to help fill gaps in capacity development and financial resources.
- by inviting some donors to strengthen the areas of e-learning and developing the tools for water diplomacy and so on.

4. Promoting Partnerships

- 4.1. There is a real need to promote partnerships among governments, and agricultural and environmental organizations, as well as local authorities that work at different levels in each of these states under socio-economic transition. The specialists from such institutions can serve as a resource persons for bringing in new information, best practices, different ideas and accumulated experiences.
- 4.2. Such specialists can be the academicians who work in different universities related to water use and water management, experts from training centers in water, environment and irrigation/drainage sectors, institutions of CGIAR system, especially IWMI and ICARDA,

international educational water and environment centers, such as IHE-UNESCO, Dundy Law Center, McGill University and so on; various IFIs and bilateral agencies like the organizations of UN system (UNDP, UNEP, UN-Water, UNESCO, UNIDAD, Doctors without Borders, and so on; international NGOs related to the similar activity areas as WWC, IWRA, IWA, ICOLD, INBO and so on.

5. Mandate of the Working Group

The mandate of the working group is:

- a. to develop and strengthen the network among the countries of transition on the basis of establishment of monitoring and evaluation of common problems in the States and bring it to the attention of decision-makers in states;
- b. to create database and exchange of information about changing situation in Irrigation and Drainage in these States and to attract global and national attention to existing trends affecting global and national food security and wellbeing of rural population; especially related to climate change and ability to adapt to it;
- c. to promote implementation of IWRM and broad-basing of stakeholders by popularizing the case studies and best practices explaining the real content of IWRM principles;
- d. to monitor the ecological situation in the transition states, including problems of closed basin (Aral Sea, Lake Chad, Lake Victoria, Caspian Sea), rivers deltas, salinization and water logging, land desertification etc.;
- e. to collect appropriate advance irrigation and drainage technology for use in transition states and its dissemination through capacity building; to promote involvement young specialists as providers of these innovations; pay specific attention to use of RS technology in I&D;
- f. to promote farmer's and WUAs training to create awareness about agricultural water management.
- g. to increase the efficiency and functioning of the WG, intensify collaboration with other countries to share best practices and experience for development of irrigation and drainage in the States under socio-economic transformation.

6. Scope

The WG is expected to investigate, analyse, and disseminate information on new developments and to formulate recommendations as per activities listed in **Annex 1**. The WG will generally focus on the future situation of I&D in the states in transition, water governance principles, collecting the reports and publications on the states' food security, updating the status of IWRM in the states, state's activities in the maintenance of environmental situation, publishing the book on 'Introduction to modern water management and irrigation, and preparing a manual on 'Risk management in irrigated agriculture' etc.

7. Timeline

It is proposed to achieve the mandate of the new WG-IDSST in about six years.

Activities to be undertaken by the Working Group

Following activities are proposed to be taken up by the working group during its tenure –

- 1. Future situation of I&D in the states in transition**
 - 1.1 Preparing a list of potential states–partners from the members of ICID and providing them with a possible list of activities of the WG-IDSST.
 - 1.2. Preparing a brief note on the future situation of I&D in the states in transition.
 - 1.3. Preparing a simple list of monitoring indicators and disseminating them among the potential participants/partners.
 - 1.4. Collecting this information annually (once a year).
 - 1.5. Publishing the results of the monitoring and evaluation on the EECCA NWO Portal in cooperation with UNECE.

- 2. Water Governance principles**
 - 2.1. Increasing focus on the Water Governance principles of OECD.
 - 2.2. Learning and collecting the existing and new proposals related to the improvement of institutional arrangement.
 - 2.3. Organizing a workshop for promoting the UNECE Convention 1992 as a tool of global importance for legal strengthening of water collaboration between MOU and UNECE
 - 2.4. Analyzing the best practices and possible ways for their dissemination among the states. Preparing the recommendations on the improvement of institutional and legal frameworks.
 - 2.5. Collaborating with UNECE on the involvement of the states in transition in the 1992 Water Convention.

- 3. Information exchange**
 - 3.1. Organizing a joint workshop (or even a Conference) along with UNECE and INBO for establishing an annual system of exchange of information on the dynamic patterns of principal indicators of water sector and I&D sustainability.
 - 3.2 Information exchange as a part of EECCA NWO Portal activity managed by SIC ICWC. Publishing the annual Policy Brief presenting the results of the information exchange.
 - 3.3. Systematically reviewing and publishing the information on climate change, expected forecast and implementation of measures for mitigation and adaptation to climate change.
 - 3.4 Periodically collecting the reports and publications on the states' food security.

- 4. Status of IWRM in the states**
 - 4.1 Updating the status of IWRM in the states, keeping in mind the difference between the creation of IWRM slogans and the actual implementation of IWRM and its outcomes in water use efficiency and water savings.
 - 4.2 Summarizing the results of IWRM implementation in different states.
 - 4.3 Reporting about the comparison of “nexus approach” and IWRM based on the field cases of UNECE and SIC ICWC work in the Fergana Valley.
 - 4.4. Generalizing the results and experiences through preparing the recommendations (SIC ICWC) at national levels.
 - 4.5 Considering the specifics of IWRM implementation in small river basins.
 - 4.6 Preparing the guidelines on IWRM indicators for the different levels of water and I&D hierarchy.

- 5. Environmental situation**
 - 5.1. Analyzing the experiences of the states regarding the best environmental compliances according to the EWFD.
 - 5.2. Disseminating the WWF experiences on the maintenance of river environmental flows – possible support in report preparation by UNEP with recommendations.

- 5.3 Up-scaling the experiences gained under the LaVacca Project on the use of remote sensing methods for the assessment of land degradation dynamics.
- 5.4. Reviewing the situation of soil salinity and preparing the recommendations for its control through improving drainage infrastructure and selecting salt resistant crop varieties as demonstrated in Uzbekistan.
- 5.5. Collecting the results of different state's activities in the maintenance of environmental situation through the stabilization of close basins degradation.

6. Publication and training

- 6.1. Reviewing appropriate advanced irrigation and drainage technologies in the states in transition and disseminating the results through training and publications.
- 6.2. Organizing a conference of young professionals among the states in transition and other European states.
- 6.3. Publishing the book on "Introduction to modern water management and irrigation".
- 6.4. Gathering young professionals' experience in the use of RS methods for determining land and water use – WUEMoCA tool dissemination.

7. Disseminating the experiences

- 7.1. Publishing the results emerging from cooperation among GWP, SIC ICWC and ICARDA through agricultural extension services for WUAs and farmers.
- 7.2. Preparing a manual on "Risk management in irrigated agriculture"
- 7.3. Reviewing and disseminating the experiences of different states on implementing the agricultural extension services.
