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## **GWANET - Gender and Water in Central Asia Network**

**TA 6219-REG: Promoting Effective Water Management Policies and Practices (Phase 4)— Collaboration Between ADB and Scientific Information Center of the Interstate Commission for Water Coordination in Central Asia for the Establishment of Gender and Water Network (GWANET) in Central Asia and Capacity Development of Sector Organizations on Gender Mainstreaming**

# **Project Completion Report (PCR)**

**May 2008**

**Prepared by  
Scientific Information Center of  
Interstate Commission for Water Coordination in Central Asia**

## ABBREVIATIONS

ADB	-	Asian Development Bank
ASB-mm	-	Aral Sea Basin management model
ASB	-	Aral Sea basin
ASBP	-	Aral Sea Basin Program
BWA	-	Basin Water Authorities
BWO	-	Basin Water Organization
CAR	-	Central Asian Region
DFA	-	Dehkan farms associations
ECO-GIS Center	-	Ecological Geographic Information System
FAO	-	Food Agricultural Organization
GWP CACENA	-	Global Water Partnership of Caucasus and Central Asia
HHME	-	Hydrogeological-meliorative expeditions
ICSD	-	Interstate Commission for Sustainable Development
ICWC	-	Interstate Commission for Water Coordination in Central Asia
IFAS	-	International Fund for Aral Sea Saving
IS	-	Information System
MAWR	-	Ministry of Agriculture and Water Resources
MDG	-	Millennium Development Goals
MICS	-	Multiple indicator cluster survey
NCP	-	National contact point
NGO	-	Non-governmental organization
NIS	-	National Information System
SDC	-	Swiss Development and Cooperation
SIC	-	Scientific Information Center
TIMI	-	Tashkent Irrigation and Land Reclamation Institute
UNECE	-	UN's Economic Commission for Europe
Upradik	-	Water-management organization under umbrella of the Federal Ministry, responsible for republican water allocation in river downstream, according to objectivity concept
WUA	-	Water User Association

## Glossary

**Gender** is the culturally specific set of characteristics that identifies the social behaviour of women and men and the **relationship** between them. Gender, therefore, refers not simply to women or men, but to the relationship between them, and the way it is socially constructed. Because it is a relational term, gender must include women **and** men. Like the concepts of class, race and ethnicity, gender is an analytical tool for understanding social processes (Status of Women, Canada, 1996).

**Gender Analysis** is a systematic way of looking at the different roles of women and men in development and at the different impacts of development on women and men. Essentially, gender analysis asks the 'who' question: who does what, has access to and control over what, benefits from what, for both sexes in different age groups, classes, religions, ethnic groups, races and castes? Gender analysis also means that in every major demographic, socio-economic and cultural group, data are separated by sex and analysed separately by sex. A gender focus - that is looking at males and females separately, is needed in every stage of the development process. One must always ask how a particular activity, decision or plan will affect men differently from women, and some women or men differently from other women and men (Rani Parker, 1993). Looking at how water management tasks are divided across the sexes and age groups shows for example on which aspects water projects need to work with women or with men, as within families, different categories of women, and men, tend to have different tasks, decision-making power and knowledge (van Wijk, 1998).

**Gender Equality** means that women and men enjoy the same status. Gender equality means that women and men have equal conditions for realizing their full human rights and potential to contribute to national, political, economic, social and cultural development, and to benefit from the results. Gender equality is therefore the equal valuing by society of both the similarities and differences between women and men, and the varying roles that they play as for example the different roles of women and men in water resources management.

**Gender Equity** is the process of being fair to women and men. To ensure fairness, measures must often be available to compensate for historical and social disadvantages that prevent women and men from otherwise operating on a level playing field. Equity leads to equality. In the water sectors gender equity often requires specific policies that focus on the technical capacity development of women and the hiring and promotion of women in water resources management to address their historical disadvantage in decision making in these sectors.

**Gender Mainstreaming** is the process of accessing the implications for women and men of any planned action, including legislation, policies and programmes in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres, so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality [by transforming the mainstream] (ECOSOC, 1997, emphasis added).

**Gender Relations** constitute and are constructed by a range of institutions such as the family, legal systems, or the market. Gender relations are hierarchical relations of power between women and men and tend to disadvantage women. These hierarchies are often accepted as "natural" but are socially determined relations, culturally based, and are subject to change over time.

**Integrated Water Resources Management** or IWRM is a process which promotes the coordinated development and management of water, land, and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. (Global Water Partnership/Technical Advisory Committee.)

**Stakeholders** are those who have an interest in a particular decision, either as individuals or as representatives of a group. This includes people who influence a decision, or can influence it, as well as those affected by it.

**Vulnerability** defines a set of conditions and processes resulting from physical, social, economic and environmental factors which increase the susceptibility of a community to the impact of hazards

**Gender and Water Alliance (GWA)** is informal network of 500 organizations and individuals from 83 countries. Governed by an independent steering committee and directed by a secretariat based in the Netherlands, the GWA program is funded by the UK DfID and Dutch DGIS

## CONTENTS

	<b>Page</b>
<b>I. EXECUTIVE SUMMARY</b> .....	6
A. Background and scope of project.....	6
B. Organization and assessment.....	6
C. Principal activities of Project.....	7
D. Project Components.....	7
E. Project Outputs.....	7
F. Recommendation.....	8
<b>II. BACKGROUND AND SCOPE OF PROJECT</b> .....	9
A. Background/linkage to regional strategy.....	9
B. Organization and assessment.....	10
C. Principal activities of Project.....	11
D. Project Outcomes.....	11
E. Project Components.....	11
F. Project Outputs.....	11
G. Project success.....	20
<b>III. FINDING</b> .....	22
A. Legislative framework on gender in the republics.....	22
B. Gender situation in Ministries of Water Resources and Agriculture, Water Sector Departments, and BWO.....	27
C. Gender situation in educational institutions.....	37
D. Gender situation in agriculture, WUA, farmers.....	45
<b>IV. KEY FACTORS FOR SUCCESS</b> .....	53
<b>V. RECOMMENDATION</b> .....	54
Annex 1. Detailed Work Plan	
Annex 2. Terms of References	
Annex 3. Uzbekistan Report	
Annex 4. Kyrgyz Republic Report	
Annex 5. Tadjikistan Report	
Annex 6. Turkmenistan Report	
Annex 7. Kazakhstan Report	
Annex 8. International exhibition “Integrated Water Resources Management”	
Annex 9. Media Tour and Round Table for Journalists	
Annex 10. Press Release N2 2008	
Annex 11 International congress "ECWATECH-2008.	
Annex 12. Focus group discussions report	
Annex 13. Nesletters .	
Annex 14. GWANET members .	
Annex 15 Comment on the project .	
Annex 16. . Leaflet.	
Annex 17. Seminars	

## **I. EXECUTIVE SUMMARY**

### **A. Background and scope of project:**

**1.** The Central Asian region (being a part of CIS) is comprised of five states located in the Syrdarya and Amudarya river basins:

Those are Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The total area of Central Asian states located within the Aral Sea basin is about 4 Mkm<sup>2</sup>. Out of this total area about 590 thousand km are cultivable, of which only 10 Mha are actually used. The irrigated land area is 8 Mha. Population size is 41 million people that mostly live in rural areas of CAR.

Each of these states is trying to find and follow its own way of economic development. However, one of the common challenges for the new developing democratic societies is women's status in this region. The studies carried out in 2000-2006 by ICWC jointly with GWP, CIDA, ADB, and McGill showed that men had the prime rights for use of land and water, access to credits and decision making in management of agricultural production.

Currently reforms in water sector of Central Asia are characterized by the ongoing transition from the command and control system to a market oriented principles of water management based on hydrologic rather than administrative boundaries. This entails creation and capacity building of new water management structures, such as Joint River Commissions, Basin Water Management Organizations, Water Users Associations (WUA), and strengthening capacities of existing regional, national, and local water management bodies.

The water sector reforms also include introduction of financial tools in water allocation and use, such as water delivery fees, water quality control, sharing of operation and maintenance costs, etc. The uneven pace of water sector reforms across the Central Asia hampers cooperation among the countries.

Gender relations cut across all these processes. Water shortages have impacted women through: (i) limited employment and income opportunities, (ii) reduced independence within the households, (iii) adverse health impact. Gender-sensitive approach to water management at the regional and national level should be a starting point for sustainable development. The CARs confirm this through endorsing Millennium Development Goals (MDGs) and including gender as crosscutting issue in their national strategies. The MDGs are incorporated in the national poverty reduction strategies, and the MDG 3 is specifically focused on gender equality in all sectors. National PRSPs highlight the following priority gender interventions: (i) improve employment opportunities for women, especially in the rural areas; (ii) promote women's business skills to increase their competitiveness in the labor market; (iii) increase social role of women

**2.** The goal of this project is to promote gender equality in the water resources management in the region through establishment of Gender and Water Network in Central Asia (GWANET). The purpose is to: (i) raise gender awareness among the water sector stakeholders at the regional, national and local levels; (ii) strengthen the capacity of the water sector stakeholders for incorporating gender dimensions into the decision-making process, (iii) prepare special program for women of water sector - specific role women in water and agriculture.

### **B. Organization and assessment**

**3.** The Project has been carried out by SIC ICWC jointly with the Ministries and Departments of Water Resources and Agriculture of all five Central Asian Republics. Scientific-Information Center of the Interstate Commission for Water Coordination of Central Asia (SIC ICWC) was established by ICWC's decision in 1992. SIC is an executive body of ICWC along with ICWC Secretariat, Basin Water Organizations (BWO) of Amudarya and Syrdarya, and Coordination Metrological Center (CMC). SIC ICWC is collaborating with a network of

scientific and design organizations of the five countries. SIC coordinates joint activities in the region; provides information to all ICWC members about all changes in the field of water management; contributes to capacity building; strengthens collaboration in water resources management and use based on the up to date world experience; initiates and coordinates regional projects; and, organizes activities of the Training Center and its branches. SIC ICWC implements the international projects oriented on the strengthening of collaboration between the states. One of the directions is promotion of gender and water issue.

### **C. Principal Activities of Project**

4. From May 2007 to April 2008 the project covered all territory of Central Asia with participation of all republics. On May 2007 ADB signed a Letter of Agreement with the SIC ICWC to establish a Gender and Water Network (GWANET) in CARs in order to improve gender awareness among the water sector stakeholders at the regional, national and local levels, and strengthen their capacity in incorporating gender issues into the decision-making process. Working Groups headed by the National Coordinators have been created under the Ministries of Water Resources in each republic. Their task was to arrange GWANET national focal point.

5. The Regional Group comprising the head and two managers was responsible for leadership and coordination of activities on gender aspects in water resources management, recommendation for decision makers on how to incorporate gender into the development agenda in the water sector and prepare gender related sector policies in the CARs.

The Regional Group worked in the SIC ICWC office. The National Working Groups carried out their activities in the republican organizations. Exchange of information has been carried out on the Internet, during workshops, and through forum. Group of designers were responsible for preparation of printed materials.

6. The Project has been implemented through workshops, discussions in focus groups, presentation of outputs. In accordance with LoA the following reports have been prepared:

Project Inception Report - July 2007

Project Mid-Term Report - November 2007

Project Completion Report - May 2008.

7. The monthly bulletins were published from May 2007 to May 2008.

### **D. Project Components**

8. The project had two components: (i) Gender awareness promotion and (ii) Capacity building of water sector organizations. The first component has been implemented through focus group discussions and training for the water sector stakeholders at the regional, national and local levels, including dissemination of the training materials through TV programs, radio broadcasts and newspapers. The second component included participatory workshops and hands-on training to mainstream gender at the decision-making level.

### **E. Project Outputs:**

9. The project outputs are as follows:

(i) awareness and understanding of gender issues by water sector stakeholders increased, including regional and national water management organizations, basin and canal administrations, water users associations; (ii) capacity of the water sector institutions for mainstreaming gender at the decision-making levels strengthened; (iii) women's participation in planning and implementation of decisions related to on-farm water management increased; (iv) sharing experience and lessons learnt on promoting gender equality among the CARs;

**10.** The following results achieved: (i) GWANET established based on the existing water network of ICWC and GWP CACENA with the gender focal points in the five CARs; (ii) 25 staff trained on GAD issues in the water sector; (iii) 155 water specialists improved their knowledge and skills on water and gender issues through 6 workshops, distribution learning materials; (iv) 12 newsletters (more than 120 copies each month), series of publications, booklets and brochures published and disseminated among the GWANET members; (v) one regional TV program and five radio programs broadcasted; (vi) gender and water website and e-forum developed; (vii) report on the GWANET project activities prepared and disseminated among the stakeholders.

**11.** All information, documents and lessons learnt during the project implementation widely disseminated in the form of brochures, leaflets, posters and other published materials among the national water authorities, concerned NGOs, rural communities and WUAs. The project activities have also been published and broadcasted in the local mass media and posted on the SIC-ICWC web-site: [WWW.CAWATER-info.net](http://WWW.CAWATER-info.net). More than 500 people visited this window each month

**12.** As a result, a set of recommendations prepared and submitted to national and local government authorities on how to incorporate gender into the development agenda in the water sector and prepare gender related sector policies in the CARs.

**13.** Sustainability of GWANET is ensured by building on the existing water network of ICWC, GWP CACENA, national water authorities and NGOs. The project completion has generated a sufficient experience and capacity to continue post-project operation on a sustainable basis without external support. GWANET cooperated with several development organizations, joined the Gender and Water Alliance and continues the following ongoing projects: (i) GWP CACENA funded activity on national planning for IWRM; (ii) CAREWIB project to mainstream gender dimensions; (iii) SIC ICWC's Central Asian Information Network on water and environmental issues; (iv) IWRM-Fergana Project addressing water management issues at the canal, WUA and farm levels; (v) ICWC TC facilitated gender promotion initiatives.

## **F. Recommendation**

The results of discussions, resolutions of workshops, and analysis of situations in the republic from the national reports are summarized in the following proposals:

**14. Macro level:** (i) to conduct a gender expertise of water-related laws and normative acts; (ii) to amend water codes to ensure their gender responsiveness; (iii) to establish a coordination group on "Gender and Water" in Central Asia with the representatives from the country's Ministries.

**15. Medium level:** (i) to expand GWANET; (ii) to prepare special training courses on Gender and Water and incorporate them into curricula; (iii) to continue support of the GWANET's web-site (fundraising activity); (iv) to provide an "adaptation study" for men and women.

**16. Micro-level:** (i) to raise GAD awareness among farmers; (ii) to develop special trainings for farmers (based on Tajik experience); (iii) to develop a course of professional training for women-farmers (different modules).

## II BACKGROUND AND SCOPE OF PROJECT

### A. Background/linkage to regional strategy

1. The “Gender and Water” issue has been considered by the Interstate Commission for Water Coordination in Central Asia (ICWC) in a number of projects in order to reveal impact of this Factor on sustainability of water and land use:

The “Gender aspects in the context of access to and management of water resources” Project has been carried out by the Interstate Commission for Water Coordination in Central Asia (ICWC) jointly with the McGill University (Canada) with support from the Canadian International Development Agency (CIDA) in the Republics of Uzbekistan, Kazakhstan and Tajikistan (2003-2004);

“Features of gender processes in agriculture and water sector of the Central Asian republics and Caucasus” Project has been carried out by the Global Water Partnership (GWP) together with ICWC (2005). This project comprises development of procedure and questionnaires for identification of target audience, collection of main socio-economic information, data entry in a database and their processing, and preparation of the final report. Study results have been summarized in the paper "Gender aspect in water resources management, Tashkent, 2006. (Survey of representative households in Azerbaijan, Armenia, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan). The purpose of this work was to demonstrate the current real situation in the region. The existing laws that allow men and women the equal rights to education, access to land and water, etc, are not always implemented due to local conditions, mentality and economic problems. Such situation was also observed in the past. However, current decrease in the national income in the rural areas of the entire region's republics has severe strain first of all on women. Specific situation during period of transition economy in the region's countries is characterized by the temporary migration of men to the other countries in search of job and increase of women's responsibility for survival of their families.

Gender issues are being raised in the Central Asian countries for several years already. However, in agriculture and water sector these problems are not sufficiently identified. The accomplished studies have been of a high priority and showed their importance and expediency. Surveys have revealed that only 3.2% of women on average have rights to control the family budget. Less than 5% of women have got access to land ownership through establishment of private farms. Survey has revealed that 90% of respondents think that only men should:

- have rights to use land and water;
- have access to agricultural machinery and market;
- have priority in getting credit;
- make decision on what crops to grow in the farm;
- have real rights to make decision regarding use and marketing of agricultural production.

Currently the water sector reforms in Central Asia are characterized by the ongoing transition from the command and control system to a market oriented principles of water management based on hydrologic rather than administrative boundaries. This entails creation and capacity building of new water management structures, such as Joint River Commissions, Basin Water Management Organizations, Water Users Associations (WUA), and strengthening capacities of existing regional, national, and local water management bodies.

The water sector reforms also include introduction of market based principles in water allocation and use, such as water delivery fees, water quality control, sharing of operation and maintenance costs, etc. The uneven pace of water sector reforms across Central Asian hampers cooperation among the countries.

Gender relations cut across all these processes. Water shortages have impacted women through: (i) limited employment and income opportunities, (ii) reduced independence within the households, (iii) adverse health impact. Despite the women's active role in the agriculture, they lack decision-making power in the water resources management and currently women's representation is less than 10%. Gender-sensitive approach to water management at regional and national level should be a starting point for sustainable development. The CARs confirm this through endorsing Millennium Development Goals (MDGs) and including gender as crosscutting issue in their national strategies. The MDGs are incorporated in the national poverty reduction strategies, and the MDG 3 is specifically focused on gender equality in all sectors. National PRSPs highlight the following priority gender interventions: (i) improve employment opportunities for women, especially in the rural areas; (ii) promote women's business skills to increase their competitiveness in the labor market; (iii) increase social role of women

## **2. Scope of work.**

The Central Asian region (being a part of CIS) is comprised of five states located in the Syrdarya and Amudarya river basins.

Those are Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The total area of Central Asian states located within the Aral Sea basin is about 4 Mkm<sup>2</sup>, of which: Kazakhstan - 2717 thousand km<sup>2</sup>; Kyrgyzstan – 198,5 thousand km<sup>2</sup>; Tajikistan – 143,1 thousand km<sup>2</sup>; Turkmenistan – 488,1 thousand km<sup>2</sup>; and, Uzbekistan – 448,8 thousand km<sup>2</sup>. Out of this total area about 590 thousand km are cultivable, of which only 10 Mha are actually used. The irrigated area is 8 Mha. Population size is 41 million people that mostly live in rural areas of CAR. Rural population amounts to 72 % of total population in Tajikistan, 66 % in Kyrgyzstan, 63 % in Uzbekistan, and 55 % in Turkmenistan. In Kazakhstan this indicator is opposite, i.e. rural population is minor (44%) in total population of the republic. This reflects the high specific weight of industry and construction in general production pattern.

Each of these states is trying to find and follow its own way to economic development. However, one of the common challenges for new developing democratic societies is women's status in this region.

This project raises gender awareness among the water sector stakeholders at the regional, national and local levels and provides recommendations for decision makers at the all levels of hierarchy.

## **B. Organization and assessment**

**3.** The Project has been carried out by SIC ICWC jointly with the Ministries and Departments of Water Resources and Agriculture of all five Central Asian Republics. Scientific-Information Center on water issues at the Interstate Commission for Water Coordination of Central Asia (SIC ICWC) was established by ICWC's decision of 1992. SIC is an executive body of ICWC along with ICWC Secretariat, Basin Water Organizations (BWO) of Amudarya and Syrdarya, and Coordination Metrological Center (CMC). According to the Decision of the Heads of State and the Board of IFAS, ICWC was included in the International Fund for Saving the Aral Sea (IFAS) and have got the status of an international organization. SIC ICWC is collaborating with a network of scientific and design organizations of the five countries. SIC coordinates joint activities in the region; provides information to all ICWC members about all changes in the field of water management; contributes to capacity building; strengthens collaboration in water resources management and use based on the up to date world experience; initiates and coordinates regional projects; and, organizes activities of the Training Center and its branches.

SIC ICWC implements the international projects oriented on the strengthening of collaboration between states. One of the directions is promotion of gender and water issue.

### **C. Principal activities of Project**

4. From May 2007 to April 2008 the project covered all territory of Central Asia with participation of all republics. On 18 May 2007 ADB signed a Letter of Agreement with the SIC ICWC to establish a Gender and Water Network (GWANET) in CARs in order to improve gender awareness among the water sector stakeholders at the regional, national and local levels, and strengthen their capacity in incorporating gender issues into the decision-making process. Working Groups headed by the National Coordinators have been created under the Ministries of Water Resources in each republic. Their tasks were to arrange GWANET national focal point, arrange an awareness meeting at the national levels, conduct focus group discussions and identify key direction for actions at the macro, intermediate and field levels and prepare and deliver reports to the project managers, collect and prepare gender and water relevant information at the national levels (laws, scientific articles) ( **Annex 1-2**)

The Regional Group comprising the head and two managers was responsible for leadership and coordination of activities on gender aspects in water resources management, examination of current gender problems in water management and use at the macro and intermediate levels through conducting focus group discussions with different stakeholders, collection of information at the macro and intermediate levels from focus group discussions and national coordinators and generalization of this information in the form of recommendation to decision makers on how to incorporate gender into the development agenda in the water sector and prepare gender related sector policies in the CARs

5. The Regional Group worked in the SIC ICWC office. The National Working Groups carried out their activities in the republican organizations. Exchange of information has been carried out on the Internet, during workshops, and through forum. Group of designers were responsible for preparation of printed materials.

6 The Project has been implemented through workshops, discussions in focus groups, presentation of outputs. In accordance with ToR the following reports have been prepared:

Project Inception Report - July 2007

Project Mid-Term Report - November 2007

Project Completion Report - May 2008.

7. The monthly bulletins were published from May 2007 to May 2008.

### **D. Project Outcomes:**

8. Women's role in water decision making increased by the establishment of (i) GWANET based on the existing water network of ICWC and GWP CACENA with the gender focal points representing (ii) introduction of women participation in the project's activities; (iii) elaboration of GWANET's development strategy; (iv) sharing experience and lessons learnt on promoting gender equality among the CARs;

### **E. Project Components**

9. The project had two components: (i) Gender awareness promotion and (ii) Capacity building of water sector organizations. The first component was implemented through focus group discussions and training for the water sector stakeholders at regional, national and local levels, including dissemination of the training materials through TV programs, radio broadcasts and newspapers. The second component included participatory workshops and hands-on training to mainstream gender at the decision-making level.

### **F. Project Outputs:**

## 10. The achieved project outputs are as follows:

(i) awareness and understanding of gender issues by water sector stakeholders increased, including regional and national water management organizations, basin and canal administrations, water users associations; (ii) capacity of the water sector institutions strengthened for mainstreaming gender at the decision-making levels; (iii) women's participation increased in planning and implementing decisions related to on-farm water management; (iv) sharing experience and lessons learnt on promoting gender equality among the CARs;

## 11. Gender Awareness Promotion Component

This component has been implemented through existing water network of the ICWC and GWP CACENA with the gender focal points represented by one water specialist and one NGO in the five CARs. National coordinators submitted reports (Annexes 3-7).

The activities includes focus group discussions and training of the water sector stakeholders at the regional, national and local levels, dissemination of training materials, newspapers, brochure.

Familiarization with gender and water subject, with experience in this area and dissemination of relevant research results and then given project results were completed in different ways: through seminars, conferences, discussions with specialists, and meetings with staff of different projects.

### *a Awareness meetings for the water sector stakeholders at the regional, national and local levels*

The materials prepared within the Project framework, including bulletins, have been presented by the Project team at a number of conferences, shows and workshops. Project's demonstration materials have been disseminated.

The program of activities "Gender and Water" in Central Asia was presented at the International exhibition "Integrated Water Resources Management" held in Osh (Kyrgyzstan) on 7-8 September 2007 (Annex 8). Representatives of all CA republics took part in the exhibition. GWANET bulletins were distributed there

A workshop dedicated to integrated water resources management (IWRM) in the Zaravshan river basin was held in Samarkand city on 19-20 November 2007. The workshop was attended by representatives from all water-related organizations and agencies. At the workshop, The Gender and Water theme was addressed there in the presentation of the project's national coordinator Akhmedkhojayeva I.A. (Annex 3). After the presentation, there were heated debates on the subject and many views and examples were given. It first caused perplexity of some participants. They could not understand relation between gender and water. After explaining the heart of the problem, all the participants agreed that indeed it was a very topical issue under conditions of acute water deficit and pollution in the region.

In December 11-12, 2007, an International Conference "Bishkek+5: challenges and prospects of sustainable upland state development" was held in Bishkek (Annex 4). The following reports generated great interest in 9th section "Water use problems in Central Asia":

- «Water use problems in Central Asia»,
- «Results of gender analysis in upland and valley zones in the Kyrgyz Republic» (Sakhvayeva Ye.).

Representatives of Water Resources Department, Institute for Water Problems, Institute of Hydropower, and Irrigation Research Institute of Kyrgyzstan participated in the section. As a result of lively discussion, it was decided to include in Conference's Resolution the following point:

«Undertake measures to involve women in natural resources management process».

In March 2008, a workshop on integrated water resources management was held in ECO-GIS Center at the Institute for representatives of provincial branches of the State Environmental Committee and 20 undergraduates in ecology. The national project coordinator I.Akhmedkhodzjayeva delivered a lecture on gender mainstreaming in water management in Uzbekistan. (Annex 3). The participants demonstrated their interest in the lecture and upon completion they continued asking questions on this problem and giving examples from their lives and practices. The participants agreed unanimously that the gender equality issue was very topical and gender awareness should be raised everywhere, starting from family, local community, school and institute.

Within the framework of the preparatory process toward the 5th World Water Forum, International Conference “Climate change, Water Resources Management, Governance and Capacity Building Issues in Central Asia” took place in Bishkek on 28-29 May 2008, with the participation of more than 200 people from 13 countries.

The conference brought together ministries and chiefs of water management organizations in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Turkey, representatives of Azerbaijan, Armenia and Georgia, and delegations from the 5th WWF Secretariat, EC IFAS, SIC ICWC and CWP for Central Asia and Caucasus.

Galina Stulina made a report on “Gender and Water Network in Central Asia - First Steps” during the session “Capacity Development and Education” (Annex 10), where she showed GWANET project results. It is planned to organize a section on Gender and Water during the 5th World Water Forum. In this context, the presentation generated interest.

In Moscow at the International Conference in June 3-6, Stulina G. presented project results and successes on Gender and Water Network establishment during the INBO session and demonstrated a need for further expansion and maintenance of the network (Annex 11),

Media Tour and Round Table for Journalists and Ecologists on “How Should Water Resources Be Managed” was Organized within the framework of the “Ecological Knowledge – for the Mass Media and Society” Project by the Tashkent Information Center “Sreda Obitaniya” (grant of the Fund for Support of NNOs of Uzbekistan) on 29 March 2008. Journalists from 36 periodicals, newspapers, journals, and radio took part in the Media Tour.

The partners in organization of the media tour and the round table were:

- Scientific-Information Center of Interstate Commission for Water Coordination in Central Asia (SIC ICWC)
- Global Water Partnership (GWP) for Central Asia and Caucasus
- Basin Water Organization (BWO) “Syrdarya”
- International Water Management Institute (IWMI).

Stulina G. held discussion on Water Resource and Gender (Annex 9).

Every opportunity is used to hold awareness raising meetings

Furthermore, discussions were held at different levels: at the level of WUA and farms and of Water Department, Ministry and NGO.

### **At the macro level:**

Meetings and discussions on gender and water were held with:

Dr. John Lamers, coordinator of joint German-Uzbek research project “Economic and Environmental Re-structurization of Land and Water Use in Khorezm Province” and with Uzbek project partners – Mr. Ruzimboy Eshchanov, head of Urgench University and Mr. Nazar Ibragimov, coordinator of project’s field studies.

Mrs. Salomat Erdjanova, manager of “Soglom avlod uchun” Fund’s Urgench branch. The discussion was focused on women and children health under environmental degradation and poor water quality conditions in Prearalie.

Tyubeyev Moldabek, technical manager of WUAs' Union, Kyrgyzstan, about activity of farmer-women and their participation in irrigation.

Nina Vashneva, chief specialist of the Department for State Sanitary and Epidemiological Supervision, Kyrgyzstan, about a need to develop schemes of sanitary protection zones of water intakes for drinking needs and ensure their maintenance.

Fatima Mendikulova, expert of Partnership Initiative for Development, about work with children, their attitude to water in Kyrgyzstan.

Kasymova Rano, expert of NGO Parastor, on participation of women in rural drinking water supply project in Tajikistan (Dushanbe, Tajikistan).

Irgasheva Sakhiba, leader of Business Women's Association "Tadbirkor Ayel", Kokand branch (Fergana, Uzbekistan), whose experience in work with rural women should be disseminated.

Yunusova Aliya, member of Legislative Chamber, Parliament of the Republic of Uzbekistan, about a need to enhance gender movement in Uzbekistan, including in light of agricultural re-structurization and recognized status of woman-farmers

As to manpower training for water sector and gender composition of students, a discussion was held with the Head of Women's Committee at Tashkent Institute of Irrigation and Land Reclamation G.Pulatova, who raised concern about decrease in quantity of female graduates working after graduation from the institute.

Participation in the Media Tour made it possible to have a discussion with many journalists. Communication with the press revealed that the gender concept has wrong interpretation even among informed journalists. This indicates to a need for higher educational level of people who raise society's consciousness.

### **At the micro level**

Discussions were held with farmers in villages - the most interesting for us focus-group

The results are show in the report. (Annex 12).

Tajikistan. There are 10 women per 1 man in rural area in agriculture. All men left their places in search for a job. Those men, who remained, worked in construction sector or in cities, and some of men do not work at all.

Women work in the field, and there earnings are 40 somon (10\$) at best or often they receive produced yield instead of salary. Hard cash is available only during cotton harvesting.

There is great problem with water. Farmers do not want to take land loans as there is no guarantee of water availability.

"In various regions, contrary situations can be observed regarding relations between men and women, status of women and her right to participate in community life and to work, her right for skilled work and management positions. For instance, in Spitamen rayon, rural woman takes initiative and becomes the leader of dehkan farm; however, in such rayons as Dj.Rasulov and Kanibadam, woman is only a cheap workforce, without a voice, without a right for choosing a good job and for skilled work."

Uzbekistan. Farmer-women stressed great difficulties in communicating with governing bodies due to lack of economic and legal knowledge. Since water is crucial in their work, farmers suffer from lack of knowledge on water planning for their lands, water distribution, irrigation depths and dates.

There is big problem with drinking water. People have to bring water from the rayon's center, which is about 10 km far from their homes. Water from canals is not suitable for drinking as it is very dirty, full of pollutants from irrigation. There is one well, which diverts water from deep aquifers but it is often non-operational due to electricity supply breakdowns.

Kyrgyzstan."Traditional way of rural life and status of woman are practically unchanged. Women are responsible for household chores – cooking, washing-up, cleaning, shopping, and

child-care, kitchen garden keeping, and livestock nursing. Rural woman spends almost 5 to 6 hours for household chores, while man only 1 hour for similar activity. During the field season, woman's workload increases considerably but the results of joint work are usually attributed to man as the head of family."

"Men have the senior right for land- and water use in all WUAs."

By present, the following problems had been identified in the CA region:

- Decrease in number of male population in rural area;
- Unskilled work of women in rural area;
- Low earnings in rural area and poor profitability of agricultural production;
- Quality of water – drinking and irrigation (chemical laboratories)
- Water supply
- Poor skills of woman-waterers
- Lack of extension services in rural area
- Lack of professionals in area of irrigation and water supply (among women)
- Education level of rural woman
- Awareness about gender among rural men and women

Ways for solution

- Establish quotas from Governments on education of woman-water professionals
- Develop programs for safe drinking water supply
- Disseminate info-leaflets, involve professionals
- Implement government programs in rayons
- Explore employment opportunities for women in rural area
- Exchange experience on gender issues
- Coordinate extension services for solving agricultural and irrigation and drainage problems.

Short-term actions

- Develop and disseminate info-leaflets in rural area
- Inform population about on-going national development programs
- Explore job placement for women in rural area
- Establish a group of consultants (with legal expert)
- Develop network/e-discussions.

Activity results on given issue are shown in GWANET-Newsletters (Annex 13)

***b. Focus group discussions to reviewing current gender and water related problems,*** identifying key direction for actions Furthermore, discussions were held at different levels (Table 1).

***c. Establishing and supporting network*** (meetings with various governmental agencies, NGOs etc to expand GWANET members and coverage area)

Monitoring of organizations, which are interested and involved in water and agricultural sectors and give coverage to gender issues was carried out in order to expand communication, coordinate joint actions and exchange information,.

There are many governmental and non-governmental organizations highlighting gender issues in all the countries of the region. However, there are few organizations covering and studying gender issues in rural areas, and just a handful studying issues related to gender and water, water in the wide sense, both drinking and agricultural water. Below are listed main organizations with which close collaboration was established.

Community Association "Payvandi Shakrvandi"

A meeting with Public Association "Payvandi Shakrvandi" took place on 4 December 2007 in Kanibadam, Tajikistan. This organization is headed by a woman, Musharraf Rakhimova. It was established in March 2003. The mission of organization is to support in civil society

construction through providing economic, social, legal, humanitarian and other assistance to vulnerable levels of the population. This organization carries out an intensive activity for enhancing the status of rural woman.

Canadian Centre for International Studies and Cooperation (CECI), Sogd province, Tajikistan.

A meeting with manager of the gender division Zumrad Normatova was held in July. The principal activity of the Center is to promote agrarian reform and marketing in Sogd province, improve and maintain the well-being of rural population, and expand agricultural production. The main issues under study include gender aspects in rural areas. Since June, CECI cooperates with the GWANET project in studying gender problems in rural areas. Major Gender- and water-related issues and problems in rural areas have been identified by taking joint actions. On this basis, after a meeting with rural women, it was decided to organize preparation and dissemination of bulletins for rural women on all issues of interest to them related to solving the existing problems.

Non-governmental organization “Rivoj”, Urgench, Uzbekistan

Mission of the organization: improve social living standards; provide social and legal assistance to all levels of the population in rural and urban areas. The Head of the organization is Nargiza Palvanova.

The organization has got into close contact and cooperation with the GWANET project. Based on cooperation, NNO “Rivoj” has carried out a number of activities to study gender and water-related problems in rural areas for the last months. While meeting representatives of various rayon organizations for irrigation system management, including Water User Associations (WUA), we had an opportunity to have talks both with water staff and farmer-water users. Conditions of WUAs, current problems, and presence of member-women in WUAs were discussed during the meeting.

Registration form to join GWANET worked out  
GWANET consists now of 67 members (Annex 14)

***d. Expanding international communications with relevant organization*** (Gender and Water Alliance, etc)

Contacts are kept with GWA. In April, the project manager G.Stulina met with the GWA Secretariat.

Feedback about project work was received. (Annex 15)

Example

“The leaders of the Water Resources Department gave a comprehensive help for conducting this project and for promoting the gender subjects at various conferences and seminars.

I consider that it is necessary to express gratitude to the Asian Development Bank’s assistance, under which members of the Interstate Commission for Water Coordination and experts of the Scientific Information Center have considered for the first time the gender equality problem in the water sector.

Koshmatov, Director General, Department of Water Resources, Kyrgyz Republic.

***e. Developing a concept, creation and maintenance of a knowledge base***

65 documents in Russian and 24 documents in English were added to the project information base.

***f. Maintaining a web site <http://www.gender.cawater-info.net>***

Updates of the project website - added news, publications and information about workshops held, the project, and general information on gender issues

***g. Maintaining a forum <http://www.forum.cawater-info.net/>***

A new section “Support of GWANET activities”, with subject “Status of rural woman” was open on 13 November 2007 on the portal’s forum.

A hypertext knowledge base was created on gender and water, including list of classification headings, thesaurus, and bibliography.

A special CD contains project materials for dissemination of accumulated experience.

***h. Producing and mailing newsletters (monthly)***

Developed design of «GWANET Network Bulletin» Monthly publications of «GWANET Network Bulletin» in English and Russian. During June 2007-May 2008, 12 bulletins were published in total. (Annex 13).

j. Collection, preparation, replication and dissemination of publications (awareness materials) the bulletins are:

- published in hard copies (more than 120 copies each month)
- disseminated through mailing list (62 subscribers)
- placed on the project website.

Two collections of regulatory documents (international and national) in area of gender equity were prepared. The collections were published (50 copies of each collection). Their electronic versions were posted on the project website.

A leaflet of the network was prepared in Russian and English (Annex 16). 200 copies of the leaflet were published and disseminated.

Four articles were prepared for publication. Two case-studies were incorporated into the bulletins (Annex 13).

3 articles were published in republican periodicals

- In water professionals’ newspaper – «Water, Land, People», the readers of which include nearly five thousand representatives of water sector,
- E-publication «Ecois», information project Milliocontact (Director Wouter Prongh, the Netherlands), with nearly 800 visitors,
- Newspaper «Agropress» of the Ministry of Agriculture, Water Resources and Processing Industry, Kyrgyz Republic (February, 2008).

## **12. Capacity building of water sector organizations**

This component has been implemented by the SIC ICWC and included participatory workshops and hands-on training for water sector organizations in the CARs to mainstream gender at the decision-making level with the aim to achieving a 30% quota for women’s participation in the water-related activities. As a result of the project completion a set of recommendations has been prepared and submitted to the national and local governments on how to incorporate gender into the development agenda in the water sector and prepare gender related sector policies in the CARs.

***k. Participatory workshops and hands-on training for water sector organizations*** in the CARs to mainstream gender at the decision-making level with the aim to achieving a 30% quota for women’s participation in the water-related activities.

6 workshops were held under the project:

**1. Urgench** – familiarization workshop for Amudarya lower reaches with participation of Uzbekistan, Turkmenistan, Kazakhstan, and Kyrgyzstan, 28-30 June 2007 (Annex 13, Newsletter 2, and Annex 17)

17 persons, including 4 men, took part in the workshop.

The Urgench city was not selected randomly for organization of the first meeting. The Khorezm province of the Republic of Uzbekistan is located in the lowlands of Amudarya River, being one of the most socially tense regions in the Aral Sea basin. The major

destabilizing factor in the lowlands is unstable water supply and diversion and increasing water shortage aggravated by unequal water distribution, particularly in low water-level conditions. Another problem of those zones is poor attention to and often ignorance of environmental demand. This has led to desertification and deterioration of natural delta conditions and to pollution of water sources. All those factors, first of all, affect population. The representatives of water-management institutions, NGOs and research organizations took part in the workshop. The minutes of the workshop are included in the GWANET Bulletin. The participants identified problems and highlighted ways to promote gender equality in water resources management.

## **2. Bishkek** – familiarization workshop for Kyrgyzstan, 2-3 August 2007

31 persons, including 11 men, participated in the workshop. (Annex 13, Newsletter 3, Annex 17)

Woman-leaders were invited to take part in the workshop. The Director General of the Department for Water Resources in Kyrgyzstan B.T.Koshmatov took part in the workshop as well. Based on discussions, the participants suggested the following ways to solve the problems:

- raise awareness of decision makers and water users regarding direct relationship between gender equality and economic development.
- Taking into account the above mentioned, provide reliable information on basic gender differences and impacts on policy
- enhance cooperation among governmental organizations, non-governmental organizations and the civil society
- mainstream gender in the development of regulatory and legal documents.

## **3. Tashkent** – training for 20 trainers from all the five republics, 25-29 September 2007

The workshop was held in form of training. All Central Asian republics were invited to the workshop. 26 persons, including 6 men, took part in this event. (Annex 13, Newsletter 4, Annex 17)

The training was held by a trainer - Director of Gender Center - during four days. Training material included gender theory and gender aspects in water sector.

Finally, each participant prepared an individual work plan. In such plans the participants planned monitoring of gender balance in water-related agencies, lectures, trainings in focus groups, discussions in situ on the topic “Water and gender”, extension of GWANET network, writing of articles, and contributions to the project web-site.

To questions of a questionnaire:

1. “Which presentations were interesting?” most participants answered “all presentations”
2. “Which problems, in your opinion, are the most topical and need deeper studies in the context of Central Asian region?” the participants gave the following answers: “Qualitative and quantitative methods of gender analysis”; “Education and job placement of woman-water workers”, “Role of women in water-related system management”, “Irrigation water saving and WUA development, women participation”, “Quality of teaching staff”, “Stereotypes regarding roles of women in the society and industry”, “Statistics in water resources use and management”, and “Gender statistics in water sector”.

### 3. Which directions should address additional training at the macro-level?

All the participants answered that it is necessary to raise awareness of leaders and decision-makers at all levels, including local administrations, ministries, and water management organizations. There is a need to inform the leaders about the results of social polls on gender aspects. It was proposed to hold training on gender and water for the members of the Interstate Commission for Water Coordination (ICWC).

### 4. What do you propose for holding such trainings in the future?

“Holding trainings in each republic, at rayon level, with involvement of farmers and wider representation of men”.

The participants marked high professional level of the training workshop in their workshop evaluation questionnaires.

#### **4. Khodjent** – familiarization workshop in Tajikistan, 19-21 October 2007

31 persons, including 13 men, participated in the workshop. (Annex 13, Newsletter 5, Annex 17)

Present situation in the country creates many problems for both women and men. Absence of working places has initiated men population migration from the majority of rural areas to Russia and Kazakhstan in search of employment. As a result, more than 60% of households are now run by women. The remaining men keep leading positions in local public bodies. Their connections, positions, better knowledge of law and rules give them more privileges as compared with women. Women in turn are more responsible for wellbeing of their families; therefore they have to care not only about children, cooking, and housekeeping, but for water delivery as well. This became one of the heaviest obligations.

Suggested actions:

- Assistance of ministries, agencies and public organizations for entrance to higher education institutions;
  - Information leaflets on existence of the program, raising public awareness; Awareness of women of gender issues in districts and provinces of the republic;
  - Establishing groups of consultants and solving problems at local level  
Representatives of CECI, NGO PARASTOR involved actively in water delivery and gender aspects in water supply projects took part in the workshop as well.
1. Preparation of a set of recommendations on how to incorporate gender into the development agenda in the water sector and prepare gender related sector policies in the CARs

#### **5. Almaty** - familiarization workshop in Kazakhstan, 2-3 April 2008

The seminar "Gender and water in Central Asia" was held on 3 April in Almaty, Kazakhstan. The seminar was attended by 31 people. (Annex 13, Newsletter 11, Annex 17)

Kazakhstan is a republic where the gender legislation is developed and valid.

The institutional mechanism to guarantee the gender equality was developed. But until now there is a difference: economically inactive population is 61.8% among women and 38.2% among men with the human development index is higher for women than for men; the average monthly earnings for women is 61% of earnings for men. The selective survey data of the Population Time Budget (PTB) are characterized by the inequality of the gender distribution of the timing budgets and allow drawing a conclusion about the existing gender disparities in the society:

- The time distribution structures reflect the national stereotypes of the distribution features of gender's roles in housework.
- Women bear the main responsibility for carrying out the everyday domestic chores. Their homework is not paid but their contribution to ensure the household functioning is more than that of men.
- The family responsibilities turn women to a less profitable labor force and do not allow them to be competitive in the labor-market like men.
- Unpaid work reduces the leisure-time and affects the health of women. Maintenance of the subsistence farming requires unpaid work by all family members, especially by women, for the crop processing and for cooking. In the less provided households this takes more time than in the more wealthy ones, which can buy food with money.

- Unpaid work of women in the market conditions replaces a large number of social services earlier provided by the State (care for the sick, children, etc.), which leads to the decreasing aggregate demand for services and products from poor families.

#### **6. Ashgabad** - familiarization workshop in Turkmenistan, 6-7 May 2008

A workshop «Gender aspects in water resources management in Turkmenistan» was held on 6-7 May in Ashkhabad, Turkmenistan (Annex 13, Newsletter 12, Annex 17) 25 persons, including 4 men, participated in the workshop.

Turkmenistan has well-developed legal framework to ensure gender equality.

The analysis of gender balance survey in water and land resources management and use, as conducted using FAO methodology, in representative farms of two velayats (provinces) show that situation in Turkmenistan is closely approximated to that in other region's countries:

- Women in agriculture form the basis of food production and family nutrition, as well as of family's income
- Women are extremely concerned with health, education, and employment.
- In low-income families, woman contributes a lot of her time (up to 70%) to reproductive area (child delivery and upbringing, child and household care, etc.).
- Women's labor is neglected and low-paid in many cases.

#### Workshop resolution

Participants of the workshop have agreed that

- At present, gender mainstreaming in developing, implementing, and analyzing projects is still led by donor agencies mainly.
- While medium and higher level professionals have general idea about gender mainly through their participation in international workshops, the lower level and the general public are far from understanding of the role of gender approaches as a whole and, in particular, in water management.
- Despite awareness on gender approaches, few specialists (including decision-makers) share opinion on their importance.
- Lack of general access to Internet services and professional/technical literature on gender issues reduces opportunities for gender mainstreaming.

In order to overcome this situation, the following needs to be done:

Establishing a technical resource center/Center of technical information/ for water professionals and the public.

Center's prospects:

Depending on size and mechanism of financing and/or co-financing and on Center's status, the following work could be undertaken additionally by the Center:

- Organization of courses for training in gender issues, in partnership with invited/international leading specialists.
- Thematic lectures for the public in partnership with international lecturers.
- Preparation and implementation of exchange programs.

### **13. General conclusions from all seminars**

1. All the republics have developed and adopted a legal framework regulating gender balance, protecting women's rights in the election system and labor legislation.
2. However, actually there is gender imbalance in water and land resources management and use.
3. There exists a direct link between the agro-socio-economic indicators and poverty in CAR countries and the status of women under prevalent conditions.
4. Furthermore, it is necessary both to raise awareness of stakeholders and improve their professional knowledge in area of land and water management. This will allow improving family's living standards in eradicating poverty.

5. Taking into account prevalent situation in the republics and the change in women's role, it is necessary to focus on work with women.

### **G. Project success**

The established network supports discussions with stakeholders for identification of water management problems and ways of their solution and sharing of experience in promoting gender balance. The network posts all gender-related news throughout the region and results of workshops on Gender and Water in its newsletter, which is published and disseminated on monthly basis through printed copies (more than 120 copies each month) and GWAnet-ICWC window. More than 500 people visited this window each month. Besides, each month, groups of field advisors, who work with farmers and give them recommendations (on technology of growing, time and rate of irrigation water application, etc.) disseminated 1000 copies of the newsletter through mobilisers in Andijan, Ferghana and Sogd provinces. The monitoring is organized in two ways: through mobilisers in the provinces for efficiency of using field recommendations and through feedback on the newsletter on [WWW.CAWATER-info.net](http://WWW.CAWATER-info.net). Here is one of examples: "I read your newsletters with a keen interest. I would like to thank all people who were dealing with its publication. Thank you for interesting, timely and informative materials. Your newsletter makes actual and sizable contribution to the promotion of gender equality. Unfortunately, apart from this one we have very few information sources of such type!"

The project held seminars with participation of 155 people. Project training prepared 25 trainers in order to promote further dissemination of knowledge and awareness about gender equality in water management.

The network involves professionals at all levels

The target groups are represented by:

- Macro-level – decision-makers
- Medium level – water professionals, researchers, NGOs
- Village level – rural people (women and men)

### III. FINDINGS

#### A. Legislative framework on gender in the republics

In order to address global human problems, in 2000 the United Nations at the World Johannesburg Summit adopted a program named as Millennium Development Goals (MDG) to eradicate poverty and globally improve standard of living. The program was adopted by 147 heads of state and by representatives of 189 countries. Given program provides for solution of gender issues in the world as well.

##### **Kazakhstan**

Kazakhstan pays great attention to gender issues. This is reflected in national policies.

Kazakhstan adopted strategies and programs aimed at achieving gender equality in the country: Concept of National Policy for Improvement of Women's Status in Kazakhstan (1997); National Action Plan for Improvement of Women's Status in Kazakhstan (1999); Concept of Gender Policy in Kazakhstan (2003); Concept of Gender Policy and Millennium Development Goals (2004); Concept of Education Development (2004); 2006-2016 Strategy for Gender Equality in Kazakhstan (2005).

In 1999, a National Action Plan for the improvement of women's status was approved.

In 2004, a Concept of gender policy in the Republic of Kazakhstan was adopted. The Concept sets major principles, priorities and objectives of gender policy in Kazakhstan. The major principles provide for constitutionally backed equal rights and freedoms for men and women. The Kazakhstan's gender policy objectives include: reaching balanced involvement of women and men in government agencies; ensuring equal opportunities for economic independence, business and career development; creating conditions for equal exercising rights and obligations in families; and, freedom from sex-based violence.

In 2005, the Kazakhstan's Gender Equality Strategy for 2006-2016 was approved by President's decree.

The Strategy is a fundamental document served for gender policy, a tool for implementation of this policy and its monitoring by the Government and civil society, and important factor of democratic development.

The Gender Equality Strategy will be promoted by conditions created for exercising by women and men of their right to life, which is free from sex-based discrimination.

In 2005, the twenty six meeting of the Antiparliamentarian Assembly of CIS state-members adopted a Model Law about state guarantees for equal rights and opportunities for men and women.

There exists also a decree of the Kazakhstan's President "About National Commission for Family Affairs and Gender Policy at the President of the Republic of Kazakhstan" of February 1, 2006. The decree provides for the establishment of the National Commission as an advisory body.

An institutional mechanism for gender equality has been developed. However, there is still a difference: economically inactive population is 61.8% among women and 38.2% among men, while the human development index for women is higher than that for men, and average monthly earnings of women amount to 61% of that of men. Data of the sampling survey show unequal time distribution between men and women, and make it possible to conclude that there are gender disparities in the society:

- Time distribution patterns reflect **national stereotypes**, characteristics of roles distribution between women and men in subsistence farming.
- **Women** bear primary responsibility for fulfillment of **household tasks**. Their contribution to unpaid labor for activity of a household is **greater than that of men**.

- Family duties make **women less profitable labor force** and don't allow them to be competitive on labor market along with men.
- **Unpaid labor reduces leisure time** and influences women's health. **Subsistence farming** requires unpaid labor of all family members, especially women, for harvest crop processing and food preparation. **Less provided households** spend **more time** for that than more provided ones, which can buy food.
- **Unpaid labor of women** in market conditions **substitutes** a great number of **social services** earlier provided by the government (care for sick, children, etc.), which leads to recession in aggregate demand of poor families for services and products.
- Differences in men and women **time distribution** patterns are the cause for **different status of men and women** on labor market and in economic domain.
- **Women** have not only **less opportunity** on labor market, but also **less free time**, which they could use to invest in their human capital assets.

Finally, one may note that in 2007, among women in the Kazakh Government, two or 11.7% held minister positions. There are no women among heads of provinces and cities. Women account for 12.9% in the Parliament, and 17% in the local councils (so-called maslikhats). 50,000 women are in the public service, representing about 57% of public servants in the country. Women account for 11% of political state officials, of which 9.7% serve in central offices. Women serving as administrative officials represent about 59%, of which up to 60% serve in central offices.

### **Kyrgyzstan**

There are more than 40 different international documents ratified by now in the Kyrgyz Republic, in which an idea of protection of rights and elimination of any women discrimination forms stands out. A National Council on Women, Family and Gender Equality at the President of the Kyrgyz Republic was established in 2001 by the President's Decree. The tasks of the Council are to coordinate actions for implementation of national policy and strategy for gender equality, and monitor observance of international commitments concerning gender development, including the United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), by the Kyrgyz Republic. A National Gender Equality Action Plan 2002-2006 of the Kyrgyz Republic was confirmed by the Decree issued by the President of the Kyrgyz Republic on 2 March 2002. A recently developed Gender Equality Action Plan 2007-2012 was approved at the meeting of the Government. The statistical digest dedicated to the position of women and men in our republic has come out the tenth year.

Despite this, issues of gender development and gender equality, especially in water sector and agriculture in Central Asian countries as a whole and, particularly, in Kyrgyzstan have been addressed within this project for the first time.

In 2003, Kyrgyzstan adopted Law about basic state guarantees ensuring gender equality. Given law regulates relations concerning equal rights and opportunities of men and women in social, political, economical, cultural and other spheres of life. The law is dedicated to protect men and women against sex-based discrimination and aimed at establishing democratic relations between men and women on the basis of national traditions.

Provision on the Commission for gender expertise of regulations was approved in 2004.

The Commission at Secretariat of the National Council for Women, Family and Gender Equality was established at the President of the Kyrgyz Republic in order to make gender examination for the improvement of legislation and the implementation of the Kyrgyzstan's Law about basic state guarantees ensuring gender equality.

In 2007, the President issued Decree "About National Action Plan for reaching gender equality in the Kyrgyz Republic for 2007-2010.

Given Action Plan is a fundamental document setting the national gender policy, its aims, objectives and principles, directions and priorities within the framework of the 2007-2010 National Development Strategy. This plan shall ensure coordination of efforts undertaken by legislative bodies and executive authorities with all organizations of the civil society, particularly with non-governmental organizations, activities of which relate to social programs, fighting against sex-based discrimination, protection of human and family, motherhood, fatherhood, and childhood rights as higher human values. The Table below shows ratio of men and women employed in public authorities.

**Ratio of servants in public authorities according to their positions (%)  
As of November 1, 2005**

	Total		top		chief		senior		junior	
	wome n	men	wome n	men	wome n	men	women	men	wom en	men
Total	41,9	58,1	14,4	85,6	29,7	70,3	38,5	61,5	45,4	54,6
Zhogorku Kenesh of KR	41,7	58,3	-	100	42,0	58,0	41,5	58,5	-	-
Kyrgyz Government	41,5	58,5	-	100	-	-	30,8	69,2	51,4	48,6
MAWR&PI*	19,7	80,3	-	100	7,4	92,6	5,3	94,7	27,5	72,5

\* Ministry of Agriculture, Water Resources and Processing Industry

As it can be seen from the table, the ratio between men and women employed in governmental authorities in the republic amounts to 58% and 42% respectively, where this ratio is characteristic for both the Zhogorku Kenesh and Government. Moreover, given ratio was typical for the former membership of Zhogorku Kenesh and for the Government. However, for the agriculture and processing industry, the employed men account for 80.3% and women only 19.7%. Notably, at all positions in the agricultural sector whether top, chief, senior or junior, men have a leading status. Leader women are completely absent in the Government and Zhogorku Kenesh of the Kyrgyz Republic.

Present situation has changed slightly. New membership of Zhogorku Kenesh includes 23 women (30%).

### **Tajikistan**

The principle of equal rights and opportunities is legally fixed in the Tajikistan's Constitution, Article 17: «All people are equal before the Law and the Court».

Recent national legislation regulating political and economic spheres reflects liquidation of disproportion in representation of women and men and builds the basis for gender-balanced policies.

The Government of Tajikistan has signed global programs for development. Since independence, a number of measures and official acts have been developed and adopted to raise women's role and status and to ensure equal rights and opportunities for men and women:

- The Republic ratified international Conventions and thus took on international obligations to overcome gender inequality.
- The Tajik Government approved a National Action Plan for Raising Women's Role and Status in Tajikistan for 1998–2005.
- The President issued Decrees for democratization of the society and rising of women's role in it.
- A program “Major Directions of the National Policy for Ensuring Equal Rights and Opportunities for Men and Women in Tajikistan for 2001–2010” and amendment to it concerning “Access of rural women to land” were adopted.

- A number of program acts in area of motherhood, childhood, and reproductive health protection were adopted.
- In March 2005, the Government approved the Law of the Republic of Tajikistan «About state guarantees for equal rights of men and women and equal opportunities for their exercising».

Widening of rights and opportunities and empowerment of women in development, organization, and implementation of programs resulted in some changes in gender policy. However, since women have not yet gained equal rights with men in most fields, achievement of gender equality implies raising women's status up to men's one.

The main priority tasks for achieving gender equality linked directly with the major tasks of socio-economic development include raising public awareness about sexual and reproductive health, about access of rural women to land, rendering assistance in job placement of women, promoting participation of women in policy making, fighting violence against women, and providing institutional support or system-based measures at all levels of public service, including law machinery, schools, and health centers.

### Number of managers and senior staff in the regions, 2006

	Specific weight, %	
	Men	Women
Republic of Tajikistan	59,1	40,9
Gorno-Badakhshan autonomous province	57,1	42,9
Sogd province	48,1	51,9
Khatlon province	71,1	28,9
City of Dushanbe	62,0	38,0
Rayons subordinated to the Republic	54,5	45,5

In 2006, women accounted for 40.9% among managers and senior staff; 8.7% higher as compared to 2000.

A Coordination Committee on Gender Problems (CCGP) was founded in 2001 at the Ministry of Labor and Social Protection (Order #100). The committee determined priorities in response to Government Program for Equal Rights and Opportunities for Men and Women (hereinafter Government Program for Equal Rights): organize employment agencies for women, establish a network of social business centers, assist in promotion of NGOs dealing with the problems of unemployed women, coordinate and facilitate support from donors and NGOs.

### Composition of deputies in Majlisi Milli, Majlisi Oli, Majlisi namoyandagon, and Majlis of People's Deputies Republic of Tajikistan, 2005

	%	
	men	women
Majlisi Milli	88,2	11,8
Majlisi namoyandagon	82,5	17,5
Majlis of People's Deputies - provincial	82,1	17,9
Majlis of People's Deputies - city	85,8	14,2
Majlis of People's Deputies – rayon	84,4	15,6

In context of political line adopted by the Republic towards the achievement of gender equality, obviously the present representation of women in decision making is not adequate.

### Turkmenistan

According to the Turkmenistan's Constitution, Article 31, all citizens have a right to work, right to select profession, occupation, and job at their own convenience. Hired persons have a

right to remuneration corresponding to job efforts and quality. In the total labor resources, women account for 49.5%, including those occupied in economic sectors– 42.5%.

According to official data, the share of women in administration and management is 17% in Turkmenistan. Gender equality was studied by various international and national agencies in Turkmenistan. The more comprehensive study was conducted within the framework of joint project by UNDP Turkmenistan and the National Democracy and Human Rights Institute affiliated with the President of Turkmenistan.

Turkmenistan has adopted a Law about State Guarantees of Women's Equal Rights.

According to Turkmen national traditions and universal values, the Law is aimed at implementing basic principles of the Turkmenistan's policy in the area of human rights, ensuring all-round development and progress of women and establishes state guarantees for exercising by women of human rights and freedoms in political, economic, social, cultural, and other spheres of life on a par with men.

Woman occupies a fitting place in many spheres of national activity: public authority, local authorities, community, economics, science, literature, and arts. Women play leading roles in health-care and education.

On 25 November 1997, Mejlis (Parliament) of Turkmenistan adopted new laws about elections to the superior public authority - People's Council (Khalk Maslakhaty) and to local authorities - Gengeshi. In December 1998 and April 1999, the Mejlis amended the Law about election of Parliament delegates by new provisions that extended democratic principles of the electoral system, according to internationally-accepted regulations. Another important step was the adoption of laws about the Central Election and Referendum Commission of Turkmenistan and about securities of people's suffrage.

The new election law completely corresponds to international documents on elections, including the involvement of women in this process.

There are no any formal quotas for election of women in Turkmenistan. Since the beginning of election process, women take an active part in it. The fact of women's involvement in politics is proved by the following: Mejlis delegate women - 26% (quite high number according to world's standards); representatives of khalk vekilleri – 7%; gengeshi – 14%. Many women occupy leadership positions, including ministers, representatives in UN, etc.

Once again I would like to emphasize that Turkmenistan has well-developed legal framework of gender equality, and currently there is a task to establish an economic basis to ensure gender equality as provided for in the National Constitution and guaranteed by the President of Turkmenistan. The success of this endeavor largely depends on women, who represent people's interests in the national Parliament.

### **Uzbekistan**

In the Republic of Uzbekistan, the principle of equal rights is fixed in the National Constitution, which clearly sets that all citizens are equal before the law.

The President of Uzbekistan issued a Decree “On measures for enhancing the role of women in state and public construction in the Republic of Uzbekistan” in 1995 in order to involve women in socio-economic and cultural development, empower them in state and public administration, enhance social security system of family, motherhood, and childhood, as well as coordinate activities of ministries, departments, territorial administrations, and community organizations in this direction.

This Decree makes provision for a new position of Deputy Prime-Minister of Uzbekistan, who shall supervise matters related to enhancement of women's role in the society. Moreover, the Deputy Prime-Minister appoints the Chairman of Women Committee of Uzbekistan.

The President of Uzbekistan issued a Decree “On additional measures to support activities of the Women Committee of Uzbekistan” in May 2004.

Given Decree is aimed at improving activities of the Women Committee, ensuring their full role in socio-political, socio-economic, and cultural spheres of life, and promoting self-enrichment and intellectual growth of women and youth.

Within the project, in order to raise gender awareness and estimate gender situation in water sector, the following measures were planned:

- clearing up situation concerning gender equality in legislation of Uzbekistan;
- estimating gender balance in manpower training, for example, of water professionals in the Tashkent Irrigation and Land Reclamation Institute;
- exploring gender balance in water organizations.

According to the special recommendation of the UN Commission on the Status of Women, the critical threshold for women participation in decision-making should be no less than 30% of positions at national level as it gives women an opportunity to influence the character of made key decisions and be equal partners with men. Understanding the significance of participation of women occupying leading positions in state and public construction, amendments have been made to the following laws:

- Law of the Republic of Uzbekistan “On elections to the Oliy Majlis of the Republic of Uzbekistan”, re-edited with amendments, dated 27 August 2004;
  - Law of the Republic of Uzbekistan “On elections to provincial, district and city Kengashs (Councils) of people’s deputies”, re-edited, dated 27 August 2004;
- Which stipulate introduction of a 30%-quota for women in nominating them as candidates for deputies of political parties.

In 1994, 52 (8%) of 634 candidates for elections to the Oliy Majlis were women and only 15 (6%) passed; in 1999, 171 (14%) of 1242 candidates for deputies were women and 18 (7%) passed; and in the 2004 elections the number of woman candidates reached 159 (32%) out of the total number of nominated candidates.

According to the results of the 2004 elections, 21 women (18%) were elected to the lower chamber – Legislative Chamber of the Oliy Majlis. Senate – upper chamber of the Oliy Majlis, where women account for 15% of 100 senators, was first founded in the Republic of Uzbekistan.

In early 2005, women accounted for 16% in higher bodies of state authority, 15.2% in legislative and representative authority, 3.4% in executive authority, and 22.7% in judicial authority.

The gender equality principle was also promoted in the national legislation, for example: in Family, Civil, Criminal, Labor and other codes. Furthermore, in such laws as “On nationality”, “On health protection of citizens”, “On education”, “On elections of President of the Republic of Uzbekistan”, “On guarantee of voting rights of citizens”, “On courts”, “On public prosecutor’s office” and others.

## **B. Gender situation in Ministries of Water Resources and Agriculture, Water Sector Departments, and BWO**

During the Soviet period, until 1987, the key role in regulation and management of water resources in the Amudarya river basin was played by the USSR’s Ministry for Water Resources, Republican Water Ministries and Upradik (water-management organization under umbrella of the Federal Ministry, responsible for republican water allocation in river downstream, according to objectivity concept). At present, Upradik is a part of BWO “Amudarya”. Since the collapse of USSR, water management structure has changed significantly. Each republic has Ministry (Department) and water resources (and agriculture) that are responsible for protection, allocation, and supply of water resources.

In August 1987, by an order of the USSR’s Ministry for Water Resources it was decided to establish an Amudarya Basin Authority for the inter-republican water allocation

(Uprovodkhoz “Amudarya”), with its headquarters in Urgench city. Later on, the Uprovodkhoz was renamed as the Basin Water Organization (BWO) “Amudarya”.

The legal framework for joint management of water resources and their allocation among users in the Aral Sea basin is an Agreement on cooperation in joint water management, use, and protection of five international sources. This Agreement was signed by the Central Asian countries in February 1992.

The basic tasks of BWO are as follows:

- Water supply to each of five states in the region, according to norms set by ICWC;
- Development of plans of reservoir operation and water diversion for approval by ICWC;
- Development of systems for water management, information collection, and communication;
- Water delivery to river delta and the Aral Sea.

To perform those tasks, BWO is busy with the following:

- Collection and processing of data;
- forecasting of runoff;
- Monitoring and control of water quality;
- Operation of head intakes and some large canals.

The Table below shows data on gender situation in BWO “Amudarya”. It is clear that women in technical and engineering staff amount to 20 %, and among 80 managers only 7 are women, i.e. less than 10 %. Number of women with higher and secondary technical education is 7 % and 15 %, respectively. Larger share of women is in BWO directorate (40%) and in Verkhnedarya Department (35%), and the smallest share is in Upradik (10%).

**Gender situation in BWO “Amudarya”**

№	Name of organization	Total staff	including		Engineering and technical staff (total)	including		Managers	including		Higher educated		Secondary technical educated	
			men	women		men	women		men	women	men	women	men	women
1	Verkhnedarya department (VDD)	84	63	21	71	46	25	7	7	-	2	-	4	-
2	Srednedarya department (SDD)	129	106	23	75	63	12	15	13	2	11	1	2	1
3	Nizhnedarya department (NDD)	146	114	32	104	86	18	22	21	1	13	1	6	-
4	Updik	325	262	63	109	98	11	26	24	2	18	1	5	1
5	BWO Directorate	29	15	14	25	15	10	8	7	1	7	1	-	-
6	Tashauz branch	8	6	2	5	4	1	2	1	1	1	-	-	1
	<b>TOTAL</b>	<b>721</b>	<b>566</b>	<b>115</b>	<b>389</b>	<b>312</b>	<b>77</b>	<b>80</b>	<b>73</b>	<b>7</b>	<b>52</b>	<b>4</b>	<b>17</b>	<b>3</b>

**Gender Situation in BWO “Syradarya”**

Name of Organization *	Staff Number		Number of Specialists in Agriculture and Water Resources Management		Number of Managers		With College Education		With Higher Education		With Degree in Science	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Head Office in Tashkent	25	26	5	14	1	9	15	11	10	15	-	-
NKWA	33	231	8	46	-	15	8	67	7	48	-	-
GWA	60	204	2	14	3	21	15	42	6	30	-	-
UCWA	22	63	3	17	1	10	10	15	-	10	-	-
CRA	12	41	-	2	-	1	4	8	-	6	-	-

\* - HO – Head office in Tashkent

NKWA – Naryn-Karadarya Waterworks Administration, Kunganyar town, Andidjan Oblast.

GWA – Golodnosteppe Waterworks Administration, Gulistan town, Syrdarya Oblast.

UCWA – Upper Chirchik Waterworks Administration, Chirchik town, Tashkent Oblast.

CRA – Charvak Reservoir Administration, Chrvak town, Tashkent Oblast.

## Kazakhstan

According to the Water Code of the Republic of Kazakhstan, the Committee for Water Resources (hereinafter Committee) is an authorized body in charge of water resources use and protection in the Republic of Kazakhstan. The Committee is a part of the Ministry of Agriculture of Kazakhstan, and belongs to it in compliance with the hierarchy of state authorities.

The Committee is managed by Chairman and two deputies. The Central Office of the Committee is represented by three departments and six divisions, which deal with water resources management; control and supervision; operation of waterworks facilities, water supply and land reclamation systems; and financial and economic issues.

34 people work in the Central Office of the Committee, including 14 women (41%), two of which working at decision-making level (5.8%).

### COMMITTEE FOR WATER RESOURCES

Department	Actual staff number	Specialists			Women	
		chiefs of department, chiefs of division	top	senior	Total	At decision-making level
Department for regulation, use and protection of water resources	10	3	5	2	5	1
Department for organization of waterworks facilities operation and land reclamation	10	3	5	2	3	
Department of financing, investment and organizational-legal activities	11	3	6	2	6	1
<b>TOTAL</b>	31	9	16	6	14	2

The Committee has territorial bodies in the major eight basins in the country, Basin Water Authorities (hereinafter BWA). The main objective of BWA is to carry out state management in water resources use and protection within respective basin. The actual staff number of eight BWAs is 176 people, including 80 women (45.4%). Two of eight BWAs are headed by women (Balkhash-Alakol BWA and Tobol-Torgai BWA) (25%).

### Basin Water Authorities

Organization	Actual staff number	Education			Women
		higher	specialized secondary	incomplete higher	
Aral-Syrdarya BWA	22	20	2		5
Balkhash-Alakol BWA	31	20	7	4	13
Nura-Sarysui BWA	19	16	3		13
Tobol-Torgai BWA	18	15	3		12
Shu-Taklas BWA	16	15	1		5
Ural-Caspian BWA	21	19	2		8
Ishim BWA	25	25			14
Irtys BWA	24	21	3		12
<b>TOTAL</b>	176				80

The Committee has republican state-run enterprises (RSE) in each province, which maintain and operate waterworks facilities of inter-provincial and national significance. The total staff number is 1196 people, including 430 women (about 40%).

### Republican state-run enterprises

Organization	Actual staff number	Education			Women
		higher	specialized secondary	incomplete higher	
RSE "Atyrauvodkhoz"	59	32	25	2	16
RSE "Aktyubvodkhoz"	16	12	4		5
RSE "Astana su"	32	18	8		11
RSE "Vostokvodkhoz"	29	25	4		9
RSE "Zapadvodkhoz"	30	18	11	1	10
RSE "K. Satpayev Canal"	381	232	104		205
RSE "Kostanaivodkhoz"	26	19	7		12
RSE "Karagandavodkhoz"	32	21	9	2	18
RSE "Severvodkhoz"	32	18	13	2	13
RSE RD "Severvodstroy"	27	8	5		5
RSE "Tarazvodkhoz"	31	17	1		7
RSE "Mangystaivodkhoz"	9	2	3	1	3
RSE ODSP "Aral"	29	26	3		11
RSE "Sarkand KhRU"	14	12	2		6
RSE "Yesil su"	183	70	75	7	67
RSE "Yugvodkhoz"	276	171	88	12	32
<b>TOTAL</b>	<b>1196</b>				<b>430</b>

*\* without considering workers*

Furthermore, the Committee comprises state institutions "Hydrogeological-meliorative expeditions" (HHME) and RMC "Kazagromeliiovodkhoz" with total staff number of 154 people, including 57 women (37%). These state institutions monitor the condition of irrigated lands, and make recommendations and conclusions on keeping and improvement of reclamation condition of lands.

Name of organization	Actual staff number	Education			Women
		higher	specialized secondary	incomplete higher	
RMC "Kazagromeliiovodkhoz"	16	15	1		6
Zhetusu HHME	55	43	7		19
South Kazakhstan HHME	50	37	11		22
Kzyl-Orda HHME	33	23	10		10
<b>TOTAL</b>	<b>154</b>				<b>57</b>

*\* without considering workers*

Women are mainly employed in state management of water resources in the field of control and inspection, water accounting, and organizational and legal activity (about 50%), less women work at republican state-run enterprises, which deal with operation of waterworks facilities and hydraulic structures (about 40%).

Based on the above-mentioned, it can be concluded that gender balance is kept in the water sector in Kazakhstan.

## Kyrgyzstan

In terms of human development index, Kyrgyzstan takes 116 place out of 177 countries in the world.

Overall, the ratio between women and men being heads of enterprises in the country amounts to 19.8% and 80.2%, respectively.

Let consider the state of affairs concerning gender equality in water sector (see data for 2006).

### Total quantity of staff in each division

	Total quantity	of which women		of which men	
		persons	%	persons	%
Water Resources Department	29	15	52	14	48
State Water Inspection	23	5	22	18	78
<b>Total</b>	<b>52</b>	<b>20</b>	<b>38</b>	<b>32</b>	<b>62</b>
Basin water authorities					
Chu	445	172	39	273	61
Zhalalabad	847	81	10	766	90
Osh	671	92	14	579	86
Batkent	427	25	6	402	94
Naryn	533	84	16	449	84
Yssykkol'	494	124	25	370	75
Talas	430	95	22	335	78
Design and development institute "Vodavtomatika"	35	14	40	21	60
<b>Total</b>	<b>3882</b>	<b>687</b>	<b>18</b>	<b>3195</b>	<b>82</b>
Reservoir authority					
Ortotokoy	65	27	41	38	59
Kirov	62	13	21	49	79
Papan	114	10	9	104	91
<b>Total</b>	<b>241</b>	<b>50</b>	<b>21</b>	<b>191</b>	<b>79</b>
<b>Grand total for the sector</b>	<b>4175</b>	<b>757</b>	<b>18</b>	<b>3418</b>	<b>82</b>

As is seen, women account for only 18% out of total staff employed in the sector. Moreover, this proportion is characteristic for Basin water authorities as a whole. The lowest percentage of employed women is in three southern Basin water authorities - Batkent, Osh, and Zhalalabad. As to central administration, here, on the contrary, women slightly prevail over men - 52%.

Data on positions in Central administration show that women are employed mainly as senior, leading, and first-category specialists, and are not present in the leadership of Central administration.

	Total	of which women		of which men	
		pers.	%	pers.	%
<b>Total</b>	<b>52</b>	<b>20</b>	<b>39</b>	<b>32</b>	<b>61</b>
Director General	1			1	100
First deputy Director General	1			1	
Chief of operation division, deputy Director General	1			1	
Chief of State Water Inspection (SWI)	1			1	
Deputy chief of SWI	1			1	
Chief engineer of SWI	1			1	
Chief accountant of SWI	1	1			
Heads of divisions	6			6	
Senior specialist	10	7	70	3	30
Accountant	1			1	
Leading specialist	13	8	61	5	39
Provincial inspector	6			6	100
District inspector	5	1	10	4	90
First-category specialist	4	3	75	1	25

As a result of discussions and conversations with people having more than forty-year experience in water sector, the following conclusions can be made:

- During the whole period of national water sector functioning, gender equality issues have not received adequate attention;
- There are only isolated instances of leader-women;
- Similar situation remains at present. Women in the sector have no possibilities for career growth.

Even professionals with huge experience start to understand that a woman dedicating herself to this sector should have opportunities of career and personal growth.

However, some specialists and even management think that gender equality issue is artificially created, and there is no such problem in Kyrgyzstan. This opinion is not correct, and this is proved by studies carried out under this project and their results.

All this indicate that issues of gender awareness and equality still remain and need to be solved.

### **Uzbekistan**

Despite the formal equality of women rights in professional field secured by legislation, there is actual inequality of opportunities between men and women in selecting a profession, getting fixed up in a job, advancing in career and so on. The main obstacles are double standard of society and overexploitation of women in household that doesn't give them opportunity for personal professional growth.

According to data on the Zaravshan Basin Authority, the number of employees working in this Authority is 4419, among them engineers and technicians are 1688, of which women amount to 234 or 13.9%.

The Basin Authority includes 10 organizations; the largest share of women is in directorate (71.5%) and Uzgiprovodkhoz Institute (47.1%). There is no female personnel in Samvodind and Zerdolvodkom.

For transboundary water management in such a vast area, four departments for operation of intake structures, hydroschemes, and interstate canals were established under umbrella of BWO "Amudarya" with the headquarters in Kurgan-Tyube (Tajikistan), Turkmenabad (Turkmenistan), Urgench (Uzbekistan), and Takhiatash (Karakalpakstan).

The territorial coverage of the departments is as follows:

- Verkhnedarya Department - river upstream. The Department operates 8 intake structures, controls water diversions from such rivers as Vakhsh, Pyandzh, Kafirnigan, and a 246 km section of the Amudarya River up to Kelif gauging station. The established diversion limit for the Department for a hydrological year is 10.4 km<sup>3</sup>.
- Srednedarya Department controls water diversions in a 552 km midstream section of the Amudarya River, located between the gauging stations Kelif and Darganata. The Department is responsible for 9 large intake structures. The established diversion limit for the Department for a hydrological year is 24.1 km<sup>3</sup>.
- The Department of Amudarya inter-republican canals (Upradik) operates 11 intake structures, 52 hydrostructures located at main canals, and operates and maintains 341 km of main canals. It controls diversion in a downstream river section from Tuyamuyun hydroscheme up to gauging station Kipchak (section length - 167 km). The established diversion limit for the Department for a hydrological year is 9.7 km<sup>3</sup>.

Three large irrigation systems are under command of Upradik:

- Tashsaka;
- Klychniyazbai;
- Kipchak-Bozsu.
- Nizhnedarya Department operates Takhiatash hydroscheme, head intakes of canals

**In Samarkand province, data on the number of people working in Zaravshan Basin Authority as of 1 November 2007**

No.	Name of organization	Total people	including		Percentage (%)		Engineers and technicians (total)	including		Percentage (%)		Chiefs	With higher education	With secondary technical education
			men	women	men	women		men	women					
1	BAIS	319	260	59	81,5	18,5	120	92	28	76,6	23,4	5	58	52
2	Irrigation system	1764	1593	171	90,3	9,7	937	844	93	90	10	24	280	470
3	Main central system	472	413	59	87,5	12,5	203	169	34	83,2	16,8	3	73	111
4	UNSE - S - NSO	1107	1025	82	92,6	7,4	209	170	39	81,3	8,7	3	76	100
5	Hydro reclamation field station	87	70	17	80,46	19,54	85	69	16	81,2	8,8	3	30	55
6	Uzgiprovodkhoz Institute	40	25	15	62,5	37,5	17	9	8	52,9	47,1	2	11	6
7	Directorate	19	8	11	42,1	57,9	14	4	10	28,5	71,5	2	10	4
8	Trust and branches	433	421	12	97,2	2,8	92	86	6	93,5	6,5	4	38	46
9	Samvodind	160	130	30	81,25	18,75	6	6	-	100	-	11	6	-
10	Zerdolvodkom	18	16	2	88,9	11,1	5	5	-	100	-	1	2	3
<b>TOTAL</b>		<b>4419</b>	<b>3961</b>	<b>458</b>	<b>89,6</b>	<b>10,6</b>	<b>1688</b>	<b>1454</b>	<b>234</b>	<b>86,1</b>	<b>13,9</b>	<b>58</b>	<b>584</b>	<b>847</b>

Khan-yab and Dzhumabaisaka, control all diversions from the river in a downstream section from the gauging station Kipchak to the Aral Sea (section length - 283 km). The established diversion limit for the Department for a hydrological year is 9.4 km<sup>3</sup>.

BWO "Amudarya" includes 6 organizations, with the total staff of 721 people, including 389 people of senior water staff.

### Tajikistan

The level of men's employment in public authorities is well higher than that of women in Tajikistan. In 2006, men's employment was 70.2% and women's employment was 29.8% in public authorities.

#### Distribution of servants in public authorities, 1 January 2007 (%)

	Men	Women
Majlisi milly Majlisy Oly	59,3	40,7
Majlisi namoyandagon Majlisy Oly	65,9	34,1
Ministry of Justice	74,7	25,3
Ministry of Agriculture	68,2	31,8
Ministry of Nature Conservation	63,8	36,2
Ministry for Foreign Affairs	72,5	27,5
Ministry of Education	77,4	22,6
Ministry of Land Reclamation and Water	63,2	36,8
Ministry of Health	63,0	37,0
Ministry of Culture	56,9	43,1
Ministry of Energy	76,4	23,6
Ministry of Industry	75,6	24,4
Ministry of Communications	44,0	56,0
Committee for Women and Family Affairs	28,6	71,4
Agency for construction and architecture	67,9	32,1
Agency for land management, geodesy and cartography	79,7	20,3

An important fact that employment of women in public authorities is not enough high is that recently education has declined in some republics. Though today education has been given rapt attention, certain sections of the population could only dream of it.

### Turkmenistan

The percentage of women involved as permanent or seasonal workers, mainly, in common labor and hard physical activity is substantial in Turkmenistan. At present, there are no women referring to category "specialist". (Share of farmer-women is minor and refers to category "other" in statistical reports).

The analysis of gender balance survey in water and land resources management and use, as conducted using FAO methodology, in representative farms of two velayats (provinces) show that situation in Turkmenistan is closely approximated to that in other region's countries:

- Women in agriculture form the basis of food production and family nutrition, as well as of family's income
- Women are extremely concerned with health, education, and employment.
- In low-income families, woman contributes a lot of her time (up to 70%) to reproductive area (child delivery and upbringing, child and household care, etc.).
- Women's labor is neglected and low-paid in many cases.

These data show that to unlock the potential of women, the latter should be empowered so that they could be involved in decision-making at national level as engineering specialists.

### C. Gender situation in educational institutions

During the World Summit in September 2000 the heads of state adopted the UN Millennium Declaration, which among its eight MDGs included the promotion of gender equality.

This issue was addressed at UN XXIII General Assembly's special session "Women in the year 2000: equality between men and women, development and the world in XXI" (June, 2000). This session recommended to participant-representatives of national governments to take measures in order to ensure equal access for and full involvement of women in all spheres of life and at all levels. The same refers to education. Women often do not have a chance to complete higher education institutes or colleges and sometimes schools. Women often have to abandon their studies since their families need additional earnings.

Information about education and gender in educational institutions is given below for each republic.

#### **Kazakhstan**

The gender policy concept in the Republic of Kazakhstan (hereinafter, Concept) determines main principles, priorities, and objectives of gender policy in Kazakhstan.

According to 1999 population census, the population's literacy at the age of 15 and above is 99.5%. Education accessibility index increased from 0,927 in 1999 to 0,947 in 2003. In the total population at the age of 15 and above, 33,8% of women and 40,3% of men have general secondary education and 24,6% of women and 19,7% of men have specialized secondary education. The share of women completed higher education institutes is 13,9%, while that of men is 11,7%. At the beginning of the school-year 2003/2004, the total coverage of people at the age of 6-24 in schools, vocational schools, colleges, and higher education institutes was 74%, including women - 76% and men - 72%.

As a whole, the educational system is feminized. Teacher-women (80%) dominate in general secondary education. Fosterage and teaching in infant schools is done by women. There are 6 women (37.5%) out of 16 heads of provincial and city (Astana and Almaty) Departments of Education.

The coverage of pupils and students (from 6 to 24) is as follows: 81.1% - females; 70.9% - males. The share of boys, who have incomplete general secondary education, is twice as high as the share of girls.

In the system of elementary vocational training for service sector, girls account for 99,8 % in such professions as secretary, housekeeper, seamstress, cook, hairdresser, etc.

Manuals of secondary schools were examined in terms of gender. As a result, a gender asymmetry, which is fixed and reflected in children's perceptions, was identified. Archaic stereotypes in roles of boys and girls are adopted.

Curricula on gender education were developed for preschool (6-7 years), 1-4 forms and for students. Such curricular were developed for 5-11 forms as well in 2005. Relevant teaching aids and tutorials are developed for teachers, pupils and students. In order to mainstream gender in the higher education system, a tutorial package "Introduction to gender theory" was adopted for students.

The Institute of Social and Gender Studies was established at the Kazakh State Women's Pedagogical Institute. The former developed tutorial "Fundamentals of Gender Education" in Kazakh and Russian for students - future teachers, as well as gender indicators for the whole system of education.

A gender education project is implemented within the framework of the program "Education for All" under UNESCO's support. Gender courses are provided in the Kazakh National University named after Al' Farabi (in sociology, psychology, pedagogics, history, law, and philology departments), Almaty University, the Kazakh State Women's Pedagogical Institute, and Universities in Karaganda, Ust'-Kamenogorsk, Ural'sk, Taldykorgan, Semipalatinsk, Kostanai, etc.

**However, all undertaken measures are fragmented. A well-designed policy on gender education and legal training of the population is needed.**

### **Kyrgyzstan**

The republic is notable for the high level of literacy among population, which is 98, 7% and by large education coverage of children - 95%. However, education is degrading, particularly in rural area, and maintenance and development of school infrastructure represent growing problem: - 32, 6% of schools are heated poorly, - more than 56% of schools have not access to water-supply system or suffer from irregular supply.

At present, nearly 35% of urban school budget and 25% of rural one are formed by additional sources. Moreover, contribution of schoolchildren's parents in the Bishkek city averages about 100 \$US a year. In rural area this figure is much lower but constitutes a substantial share of family budget. In family expenses, education accounts for a considerable share. In absolute expression, those expenses are higher in well-to-do families, whereas as a share in the total family budget, education expenses are much higher in poor families (in extremely poor families – 20, 1%, in non-poor families – 9, 3%).

The ratio of girls to boys in primary and lower secondary education shows that the number of girls going to basic school (classes1-9) is smaller than boys. However, girls more often acquire education within complete secondary school (classes10-11), while boys leave education system after class 9 more rapidly, which can be explained by that young men pass to professional lyceums, secondary professional education institutions or short-time courses preparing to soonest entry to labor market.

#### **Share of pupils in incomplete secondary school (1-9 grades) in the total number of children of respective age, at the beginning of school year, %**

	School year:						
	1996 /1997	2000 /2001	2001 /2002	2002 /2003	2003 /2004	2004 /2005	2005 /2006
Kyrgyz Republic	89,2	95,9	95,0	94,6	94,6	94,9	95,6
boys	89,4	88,9	95,5	94,9	94,9	95,4	96,2
girls	88,9	88,9	94,4	94,2	94,6	94,5	95,6
Batken province		98,9	97,2	94,8	93,6	92,6	92,6
boys		101	98,0	94,4	93,5	93,1	87,9
girls		96,8	96,3	95,2	93,7	92,1	97,6
Zhalalabad province	89,3	96,9	95,9	95,3	94,8	94,6	95,1
boys	88,7	96,4	95,5	95,4	94,8	94,9	91,6
girls	90,0	97,5	96,4	95,1	94,7	94,2	98,6
Yssykkol' province	89,0	94,0	93,7	94,4	96,3	96,7	97,6
boys	88,9	99,0	97,1	94,8	98,8	98,3	94,3
girls	89,1	88,8	90,2	93,9	93,9	95,0	100,9
Naryn province	91,2	98,6	97,3	97,6	96,8	96,8	96,1
boys	89,9	98,0	96,9	98,0	97,1	97,4	93,3
girls	92,5	99,2	97,8	97,3	96,4	96,1	99,0
Osh province	122,1	96,3	95,0	93,4	90,0	89,3	88,8
boys	122,3	96,4	95,2	93,6	90,6	90,3	85,6
girls	121,9	96,2	94,9	93,1	89,5	88,4	92,0
Talass province	91,9	97,8	96,5	96,3	96,3	96,2	96,5
boys	90,9	97,5	97,0	96,6	96,0	96,2	93,7
girls	92,9	98,0	96,1	96,0	96,6	96,3	99,5
Chu province	87,1	95,6	95,7	98,0	100,8	103,0	106,4
boys	89,8	96,3	97,0	98,4	100,8	103,7	101,8
girls	84,4	95,0	94,3	97,6	100,8	102,1	111,2
Bishkek city	80,8	89,7	88,7	74,2	90,0	93,2	98,2
boys	82,0	91,0	88,7	75,0	89,0	91,4	98,8
girls	79,5	88,5	88,8	73,4	91,0	95,0	97,5
Osh city							
boys	-	-	-	-	104,4	104,6	102,0
girls	-	-	-	-	110,0	105,4	110,1

In recent years, there have been observed almost equal ratio of boys and girls in the incomplete secondary school in the republic. In school year 2005/2006, the coverage ratio of boys at lower secondary school is slightly lower as compared to girls in practically all provinces. The highest value of this ratio is registered in Chui, Batken and Jalalabad provinces, amounting to 9.4, 9.7 and 7%, respectively.

**Standard of education at the age of 15-24 (according to population census, %)**

	<b>1989</b>	<b>1999</b>
<b>Kyrgyz Republic</b>	<b>99,52</b>	<b>99,54</b>
<b>men</b>	<b>99,50</b>	<b>99,47</b>
<b>women</b>	<b>99,55</b>	<b>99,61</b>
Batken province	99,55	99,52
men	99,53	99,47
women	99,57	99,57
Zhalalabad province	99,53	99,54
men	99,52	99,48
women	99,54	99,60
Yssykkol' province	99,47	99,44
men	99,49	99,29
women	99,45	99,59
Naryn province	99,45	99,38
men	99,45	99,24
women	99,45	99,54
Osh province	99,63	99,67
men	99,59	99,63
women	99,67	99,69
Talass province	99,10	99,15
men	99,07	99,01
women	99,12	99,30
Chu province	99,23	99,18
men	99,23	99,08
women	99,23	99,29
Bishkek city	99,82	99,85
men	99,78	99,82
women	99,86	99,89

The first national population census of 1999 shows a practically equal education level between women (99.61%) and men (99.347%), and this tendency is observed in all provinces. However, the education level among youth has reduced as compared to 1989. The proportion of women and men at the age of 15-24 and with specialized secondary education has reduced by 2.3 and 3.4 times, respectively. Young men limit their education by secondary school. This can be explained by the fact that the system of secondary professional education experiences difficulties in the post-soviet period.

**Conclusion: over the last years, standard of education has decreased among the youth, especially among women.**

### **Tajikistan**

Access to education is a right of every child as stressed in the UN Millennium Development Goals. At the same time, education for girls is a necessary investment in all countries all over the world. It often gives the most tangible returns. The study of girls' education in Tajikistan in November-December 2003 was aimed at examining factors that impact attendance through questioning of girls who abandoned their studies, of parents, teachers and other pupils.

**Education level at the age of 15-24 (2000 population census, %).**

	2000
Republic of Tajikistan	99,9
girls	99,9
boys	99,8
Gorno-Badakhshan autonomous province (GBAP)	99,7
girls	99,7
boys	99,7
Khatlon province	99,9
girls	99,9
boys	99,9
Sogd province	99,8
girls	99,8
boys	99,8
Dushanbe city	99,9
girls	99,9
boys	99,9
Rayons subordinated to the Republic	99,8
girls	99,8
boys	99,8

**Infant schools in the Republic of Tajikistan (2003-2004)\***

№		Number of infant schools	Quantity of places	Quantity of children									
				Quantity of children	of which girls	age distribution							
						0-3	of which girls	3-5	of which girls	6	of which girls	7	of which girls
1	GBAP	19	1723	1619	848	306	164	1018	508	163	100	132	76
2	Khatlon province	95	11715	11460	5427	2160	1088	5950	2833	2126	993	1224	513
3	Sogd province	165	22112	19713	9211	4233	2038	10194	4804	3406	1532	1880	837
4	Dushanbe city	96	13430	15117	6888	2589	1104	8599	4058	2811	1238	1118	488
5	Tursunzade town	8	1482	805	403	208	100	386	200	156	74	55	29
6	Raghun town	2	540	126	62	3	1	96	56	27	5		
7	Vahdat town	17	2300	1969	995	284	176	1095	543	322	150	268	126
8	Rudaki rayon	8	1445	787	435	100	58	411	197	143	92	133	88
9	Gisar rayon	8	930	528	206	161	63	272	111	68	20	27	12
10	Shakhrinav rayon	2	142	122	67	19	11	89	50	2		12	6
11	Nurabad rayon	1	100	60	28	5	3	35	17	12	6	8	2
12	Faizabad rayon	1	230	230	123	45	25	103	56	40	21	42	21
13	Dzhirgital rayon	1	232	160	85	10	3	65	32	35	19	50	31
15	Rasht rayon	1	40	11	4			7	2	2		2	2
<b>Total</b>		<b>424</b>	<b>56421</b>	<b>52707</b>	<b>24782</b>	<b>10123</b>	<b>4834</b>	<b>28320</b>	<b>13467</b>	<b>9313</b>	<b>4250</b>	<b>4951</b>	<b>2231</b>

### **Multiple indicator cluster survey (MICS)**

According to 2000 MICS data, the attendance rate of elementary school was 82.9 %, while in 2005 MICS data this rate was 5.8% higher and amounted to 88.7%. The rate of attendance of elementary school by girls is well lower than by boys (2005 MICS) and accounts for 88.2% (boys - 89.1%). At the regional level, the difference towards the larger share of boys in attendance of elementary school varies from 1.6% in Sogd province to 3.2% in GBAP. In rayons subordinated to the Republic, the rate of attendance by girls is higher than that by boys (girls – 82.3%, boys – 80.4%).

#### **School-leavers (thousand people)**

	2005	2006
Number of school-leavers with certificate of senior secondary education, including:		
boys	149,8	158,3
girls	81,6	88,7
Number of school-leavers with certificate of intermediate (full) general education, including:		
boys	68,2	69,6
girls	79,6	79,2
boys	48,9	48,6
girls	30,7	30,6

In the school-year 2006/2007, out of total number of students in specialized secondary education institutes women accounted for 57%. Most of them acquire such professions as health-care, physical culture and sport (72%), education (67%). At the same time, female students' share is very low in agriculture (3%), industry and construction (16%).

#### **Share of female students in higher vocational education institutes in Republic's regions (Beginning of school-year, %)**

	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007
Republic of Tajikistan							
men	76,3	75,7	75,1	75,2	74,2	73,2	72,6
women	23,7	24,3	24,9	24,8	25,8	26,8	27,4
Gorno-Badakhshan autonomous province							
men	37,2	39,4	42,4	41,7	37,2	36,8	37,5
women	62,8	60,6	57,6	58,3	62,8	63,2	62,5
Khatlon province							
men	80,0	80,9	79,6	78,2	78,9	76,6	72,7
women	20,0	19,1	20,4	21,8	21,1	23,4	27,3
Sogd province							
men	70,5	70,4	69,6	68,7	66,5	65,3	63,2
women	29,5	29,6	30,4	31,3	33,5	34,7	36,8
City of Dushanbe							
men	80,0	78,6	78,1	78,5	77,6	76,7	76,9
women	20,0	21,4	21,9	21,5	22,4	23,3	23,1

In the school-year 2006/2007, the share of female students in higher vocational education institutes increased by 3.7% as compared to the school-year 2000/2001. High unit weight of women is observed in GBAP (62.5%) and Sogd province (36.8%).

**Number of students in higher vocational education institutes in the school-year  
2006/2007**

	Total students, persons	of which, women	Unit weight, %	
			men	women
Total students	146219	40102	72,6	27,4

Women learning in higher vocational education institutes prefer such areas as education – 37.4%, health-care, physical culture and sport – 29.6%, industry, economics, arts and cinematography – more than 19%. At the same time, the lowest share of women is observed in transport area – 6%, and agriculture – 9.6%.

### **Turkmenistan**

Education system in Turkmenistan is aimed at raising educational and cultural level of the population, improving quality of children upbringing and training, reviving and developing national spirituality.

The system functions according to the National Constitution and the Law about Education in Turkmenistan that guarantee free education for all citizens irrespective of their nationality, social background, property status, and sex. Affordability of education results in high level of population's literacy. According to 1995 population census, literate population at the age of 9-49 accounted for 99.8%; 15 years and above, 98.8%. In Turkmenistan, per 1000 people at the age of 15 and above 92 people have higher education, 9 people - incomplete higher education, 116 people - specialized secondary education, 477 people - general secondary education, 183 people - incomplete secondary education, and 48 people - elementary education.

Full coverage with elementary and secondary education was reached as early in the Soviet period. The right to free secondary education is guaranteed now by the Turkmenistan's Constitution.

Education and professional training of young generation is one of important factors of both present and future national well-being. The Turkmenistan's education system has the following objectives for the period 2015-2020:

- ensuring the development of national education model and its integration into international education space;
- developing efficient system, which provides people at large with high-quality (at international level) education programs.

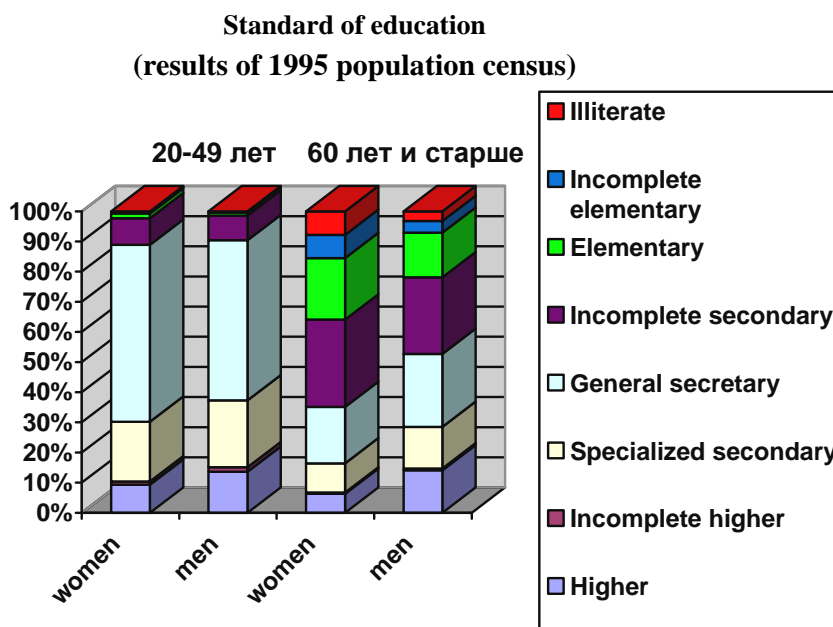
Despite difficulties related to the transition period, the country maintained quite high level of the whole education system. The Turkmenistan's government spending in education averages more than 5 % (2001 – 6.1%) that corresponds to level of state education charges in Western Europe.

	1991	2000	2015
<i>Secondary education coverage - total (%)</i>	93,0	96,0	100
<i>Higher education coverage – total (%)</i>	11,0	4,0	17,0

The strength of Turkmenistan's policy in education is its particular orientation towards education of women. Legally, there is no any discrimination against women and girls related to education, free choice of profession, and equal rights to enter educational institutions.

Free and affordable education contributes to high level of education and literacy of the population. According to 1995 population census, literacy of the population at the age of 15 and

above is 98.3% among women and 99.3% among men, and amounts to 99.8% at the age of 15-24 both among women and men. Thus, the rate of literate men and women in Turkmenistan is very high and practically the same. Gender differences in literacy at the age of 15 and above are explained by longer lifetime and larger specific weight of old women.



In 2002, there were 49.3% of girls and 50.7% of boys out of the total number of pupils in elementary school. Minor surplus in boys' share in elementary school is explained by their larger specific weight in the number of children of this age: 103.7 boys per 100 girls. Similar situation is observed at the second stage of education. Specific weight of girls is 49% and that of boys is 51% in secondary school. There are 104 boys per 100 girls among children of this age.

Considerable gender differences are observed at the third stage of education (vocational training, secondary professional education institutes, higher school). In 2002, there were 35.2% of women and 64.9% of men among pupils and students, i.e. 1.8 times more men study than women. Moreover, the number of men at the third stage of education is only 3% higher than the number of women.

### **Uzbekistan**

Regarding development of manpower for water sector, a discussion was held with G.Pulatova, Chairman of Women's Committee at the Tashkent Irrigation and Land Reclamation Institute.

Under transition conditions, our republic keeps mainly the public training system. Uzbekistan has favorable conditions for women to get education and advanced training. Every second specialist having higher or secondary education is a woman. There is high level of students and no gender parity problem in education. In terms of human investments, Uzbekistan approaches leading countries in the world.

Widespread development and application of information and communication technologies (ICT) as one of globalization aspects has an effect all over the world and in Uzbekistan, in particular, on empowerment of women and girls and facilitates gender equality.

Women in Uzbekistan possess high educational level: the share of women with higher and specialized secondary education is more than 50%. The public system of advanced training and re-training includes 23 institutions uniting 16 departments and 4 centers, including 14 training courses.

Currently, the Institute prepares water specialists in the Republic of Uzbekistan. Our graduates work in all fields of water sector and agriculture, and many of them contribute to the progress in these sectors.

The Table below shows division of the Institute's teaching staff by gender.

**Teaching staff of the Tashkent Irrigation and Land Reclamation Institute  
In gender dimension**

In 2006 - 2007, 575 girls were trained in the Institute.

	Total (persons)	Men (persons)	Women (persons)	% of the total
Total teachers	341	178	163	47,8
Doctors of Science, incl. professors	25	21	4	16
Candidates of Science, incl. lecturers	139	115	24	17,2
	107	84	23	21,5

One basic goal in the education system is gender mainstreaming. The teaching staff should be trained so that further to disseminate knowledge among the students.

The Institute hosted repeatedly round-tables, where Dinara Alimdjanova, Coordinator of gender programs at the Eurasia Fund held a training in gender education, explained the concept of "gender equality" (equal rights and opportunities), and told about gender problems of socio-economic development in Uzbekistan.

In March 2008, a workshop on integrated water resources management was held in ECO-GIS Center at the Institute for representatives of provincial branches of the State Environmental Committee and 20 undergraduates in ecology. The national project coordinator I.Akhmedkhodzayeva delivered a lecture on gender mainstreaming in water management in Uzbekistan. The participants demonstrated their interest in the lecture and upon completion they continued asking questions on this problem and giving examples from their lives and practices. The participants agreed unanimously that the gender equality issue was very topical and gender awareness should be raised everywhere, starting from family, local community, school and institute.

One way to solve this problem is to organize clubs in all education institutions that would focus on girls' leadership development and improvement. The Institute regularly holds competitions "Leader women". 10 female students from the Institute participated in such competition in 2007.

In order to build new society, it is necessary to foster new values in respecting a person and avoid foisting a role, which is preferred by men, on women. Our society is comprised of families, where exactly woman is the main source of all social values in forming intellectual and moral ideology, in fostering the younger generation. Therefore the place and role of women are very important in development of the society. Only self-independent, intellectually mature woman is able to foster free and gender-sensitive person and thus, contribute to stronger citizenship. Gender courses should be incorporated into curricular in all fields: human and natural, engineering sciences to build social consciousness and activity. This will promote gender sensitivity, positive changes and gender balance in the society as a whole.

A study showed that the rate of school attendance by children from rural families directly depends on degree of family's material well-being. It is found that school attendance by children under 15 remains high (99%), then it decreases. The respondents explained that elder children have many household duties and have to earn money for family. No particular difference in attendance between women and men was identified – the average attendance of school by children above 15 is 92% for girls and about 94% for boys.

Thus, it can be concluded from the above-mentioned that standard of education has decreased visibly in recent years. This has negative effect on employment of the population.

## D. Gender situation in agriculture, WUA, farmers

Agriculture is the main field of rural employment in Central Asia. At present, 60% of rural population is employed still in agriculture; therefore, well-being of this sector is of importance here. Since ancient times, prosperity of Central Asia as an agrarian region was dependent on land use. In this context, fertile soil formed a basis for well-being of working population. Given the total land area of 154.9 Mha, 59.1 Mha are suitable for cultivation and only 10 Mha are used actually. Half of actually cultivated land is located in oases (which are naturally drained and have fertile soil). The other half of lands needs complex and expensive reclamation measures that include both drainage, leveling and soil structure improvement in order to be usable. Lands are distributed unevenly between the countries: Kazakhstan and Turkmenistan have enough lands, while the other three countries lack them.

### Kazakhstan

Specific weight of women is 51.8% and that of men is 48.2%. Women prevail among those who have higher and specialized secondary education (62%), among retirees (66.5%), widowed (14.7% women and 2.9. % men) and divorced (8.2% women and 4.4% men) persons. Men have numeral superiority over women in wage work (52.4% - men, 47.6% - women) and among married people (62.3% - men, 55.6% - women). Among households headed by a parent, mother-headed households prevail (444.8 thousand households headed by mothers and 42.4 thousand households headed by men).

Altogether 346 Water Users Associations (hereinafter WUA) and Rural Water Users Cooperatives (hereinafter RWUC) have been founded in the republic, including 54 in Almata, 23 in East Kazakhstan, 62 in Zhambyl, 3 in West Kazakhstan, 1 in Karaganda, 40 in Kzyl-Orda, 1 in Kostanai, 2 in Pavlodar, 160 in South Kazakhstan provinces, in a total area of 629,652 ha, while in 2006 there were 119 RWUCs and WUAs with a served area of 255, 700 ha.

Significant work on training future members of water users cooperatives in irrigated areas is being done by the EU Project “Assistance to the Ministry of Agriculture in establishment and development of water users cooperatives in the Republic of Kazakhstan”, the results of which helped to establish units of methodological support for establishment and development of RWUC in the provinces, which carry out awareness raising among farms.

The EU Project “Assistance to the Ministry of Agriculture in establishment and development of water users cooperatives in the Republic of Kazakhstan” provided technical assistance to 5 pilot provinces, where irrigated agriculture is the main area of activity: Almata, Kzyl-Orda, Zhambyl, South Kazakhstan and East Kazakhstan provinces.

Province	Registered WUC	Being registered	Total
Kzyl-Orda	13	7	20
South Kazakhstan	6	5	11
Zhambyl	12	4	16
Almata	26	8	34
East Kazakhstan	10	11	21
<b>TOTAL</b>	<b>67</b>	<b>35</b>	<b>102</b>

According to project data, 67 WUCs (Water User Cooperative) were registered in total.

It should be noted that the support from the Kazakh Government as grants and subsidies significantly influenced the activation of integrating water users into rural water users cooperatives.

Altogether in the republic:

Province	Number of established RWUC	Used lands in province (ha)	Irrigated area served by RWUC (ha)	Irrigated lands coverage ratio (%)
Almata	54	512,400	81,000	15,8
East Kazakhstan	23	59,560	21,630	36,3
Zhambyl	62	117,450	100,000	85,0
West Kazakhstan	3	2,180	2,180	100
Karaganda	1	53,840	1,530	3
Kostanai	1	3,780	0,000	0
Kzyl-Orda	40	149,450	106,070	71,0
Pavlodar	2	7,300	4,750	65
South Kazakhstan	160	458,090	312,660	68,0
<b>TOTAL REPUBLIC</b>	<b>346</b>	<b>1378,480</b>	<b>629,820</b>	<b>45,7</b>

### Kyrgyzstan

Major occupation of rural population in Kyrgyzstan is farming and cattle breeding. As a whole, condition of women is worse in the south than in the north, and relations in family largely depend on traditions, with subordinate woman's position, implicit obedience to senior family members and strict family hierarchy. Northern and southern people differ from clothes that wear, dialect and even communication with each other.

Traditional way of life in rural area and condition of women remain practically unchanged. Women are responsible for household chores – cooking, washing-up, cleaning, shopping, and child-care, kitchen garden keeping, and livestock nursing. Rural woman spends almost 5 to 6 hours for household chores, while man only 1 hour for similar activity. During the field season, woman's workload increases considerably but the results of joint work are usually attributed to man as the head of family.

Since 2000, Water User Associations (WUA) - voluntary community units - is established actively in the republic. By January 2007, the total quantity of WUAs was 450, with the irrigated area of 719, 07 thousand ha or 70 % of the total one. Out of 450 WUAs, 436 ones are legally registered, with the command area of 716,494 thousand ha.

In 2006, a project "Pricing system and cost compensation mechanism study" was implemented under ADB's support. First question to ask was involvement of women in water management through their participation in WUA management. To this end, four pilot canals were selected:

- Levoberezhny canal, Talas province (4 WUAs),
- Kulunda canal, Batkent province (5 WUAs),
- Yuzhniy canal, Osh province (5 WUAs),
- Sovkhozny canal, Chu province (8 WUAs).

The analysis of WUA's governing body composition showed the following.

In a system of Levoberezhny canal, Talas province no woman was found among 30 members of WUA Management Boards, while two women were accountants.

There are no women at all among 15 members of WUA Management Board and in administration of WUA "Kulundu-Razzakov" along Kulunda canal.

Along Yuzhniy canal, Karasu district 5 WUAs including 31 members were studied. Only in WUA "Rakhmat" there were two women among 9 members of WUA's Management Board and three accountant-women.

Along Sovkhozny canal, Chu province, 8 WUAs were studied. Five women were elected into WUA's Management Boards consisting of 53 members. In all WUAs position of accountant is taken by woman.

Within the preparatory stage of the on-going WB's Water Resources Management Improvement Project (WRMIP) (7) it was found also that among 26 studied WUAs only 6% of the total staff are women. Moreover, it is interesting that the highest percentage of women

is in WUA's Ak-Suu-Karabak, Batkent province – 37, 2%. The smallest share of women among WUA's members is in Osh and Dzhahalabad provinces.

What is the share of women in the meeting of representatives?

It is found that the mean of female representatives for 15 WUAs is 5 persons or 7% of the total representatives, whereas 5 WUAs do not have female representatives at all.

The data show that attention is not paid to participation of women in WUA management, and not having examples of leaders, women do not try to enter into Management Boards or become WUA managers.

**Based on the study, it was recommended that the Meeting of representatives had female representatives proportionally to actual quantity of member-women in WUA's command area.**

It was proposed also, as one option for involving women in WUA activities, to establish Women's council, with the following probable functions:

- dealing with all matters related to development and management of on-farm irrigation system, as well as planning and implementation of actions aimed at agricultural development;
- handling specific interests and problems of female households concerning irrigation system management and irrigated agriculture development;
- developing recommendations for specific problems that female water users face.

In order to consider specific women's interests in WUA's activities, it is recommended that:

- Meeting is held among WUA member-women so that to estimate a need for representation in the Meeting of representatives and for establishment of women's WUA Council;
- In case when female members voice a need for their direct representation in the Meeting, a Management Board should be convoked so that to discuss formulation of internal rules on election of women to the Meeting of representatives and, at least, of one woman to Management Board;
- support Management Board in preparing respective internal rules;
- If women show their interest, support WUA in establishing and training the Women's council;
- give support and consultations to Women's council in identification, planning, and implementation of specific women's actions in irrigated agriculture.

**Conclusion:**

**Rural women spend a lot of her time on unproductive, household chores.**

**During field season, workload on women increases substantially, but the results of joint work are usually attributed to man as the head of family.**

## **Tajikistan**

According to 2000 population census data, the economically active population (including external labor migrants) was 2218,2 thousand people. The share of women in the total working population was 45%. The largest share of working women - 83% (out of total employed women) - is in rural area, and only 17% of employed women work in urban area. The share of women in the total unemployed is 46.8%. Unemployed women account for 51.7% in urban area and 48.3% in rural area. The general unemployment rate was 9.4%, including 9.6% among women and 9% among men.

**Shares of men and women in the total economically active and working population in 2004 (labor force survey's data, %)**

Region	Both men and women	Economically active population		Working population	
		men	women	men	women
Republic of Tajikistan	100	55,4	44,6	58,8	41,2
Gorno-Badakhshan autonomous province	100	53,2	46,8	53,4	46,6
Sogd province	100	57,7	42,3	58,3	41,7
Khatlon province	100	55,3	44,7	55,7	44,3
City of Dushanbe	100	40,7	59,3	72,3	27,7
Rayons subordinated to the Republic	100	61,9	38,1	62,2	37,8

Development of various ownership patterns led to changes in employment patterns in dimension of sectors and economic branches. The number of working population is reduced in public sector and increased in private sector. Thus, employees were reduced by 3.8% in public sector and increased by 34.8% in private sector since 2000 to 2006. According to 2004 labor force survey's data, population employed in private sector accounted for 61%, including 59.4% of men and 40.6% of women. The public sector employed 27.5% of population, of which 37.3% - women, 62.7% - men. Public-private sector employs 11.1%, including 55% - women, 45% - men.

Most people are occupied in agriculture (55.9%) out of the total number of working population. Women account for 55.7% among them. The share of men occupied with agriculture is 20.4% lower than that of women. Agriculture is the main field of occupation for women - 75.5% of all working women. Other economic branches with prevalent women's share are health-care (64%) and education (51.9%); however, these branches are the lowest paid ones.

**Allocation of dehkan (individual) farms among the Tajikistan's regions, 2006**

	Unit weight, %	
	men	women
Republic of Tajikistan	86,6	13,4
Gorno-Badakhshan autonomous province	100,0	-
Sogd province	90,3	9,7
Khatlon province	80,7	19,3
Rayons subordinated to the Republic	90,9	9,1

In 2006, as compare to 2004, the number of dehkan (individual) farms increased by 28.2%; moreover, farms headed by men increased by 29% and those headed by women increased by 23.5%. Out of the total number of farms, the share of man headed farms was 86.6% and that of woman headed farms was 13.3%.

The Tajikistan's Ministry of Land Reclamation and Water Resources provides on-farm irrigation infrastructure management and water supply services for WUAs (water user associations) and DFA (dehkan farms associations).

In total, 147 WUAs were established in the republic. Those WUAs serve 187 thousand ha of irrigated land.

Sogd province - 47 WUAs (63 thousand ha); Khatlon province - 74 WUAs (113 thousand ha); GBAP - 2 WUAs (0.8 thousand ha); and, RSR - 8 WUAs.

Contracts were signed with DFAs as well (as of 20.04.08):

Sogd province 848 DFAs – 192.3 thousand ha

Khatlon province 4793 AIX – 260.0 thousand ha

RSR 483 DFAs – 41.1 thousand ha  
GBAP 69 DFAs – 14.9 thousand ha.

### Quantitative description of beneficiaries for 2007:

Indicator	Total, persons	women	men
Total beneficiaries in the republic (WUA)	586	32	554
Number of farm heads (WUA)	147	4	143
Number of beneficiaries among Tajikistan's regions:			
Sogd province	184	8	176
Khatlon province	198	12	286
GBAP	8	2	6
RSR	96	10	86
Number of beneficiaries in dimension of services:			
1) water supply	586	32	554

WUA “Zainab” was established in August 2004, while WUA “Oby ravon” was created in 2005. Their service areas are 1300 ha and 750 ha, respectively. WUA “Zainab” serves more than 227 dehkan farms dealing with farming. The farms are headed by men mostly. Women are not considered to be capable of being at the head of farm.

Roles of women and men in agriculture: Given issue is studied in WUA “Zainab”. Three women work in administration of this WUA. The Chairman of WUA is woman (Khusainova Sh.), the other two women hold positions of chief accountant and field supervisor. Due to re-allocation of land in private individual farms, an urgent need arose for equitable distribution of water resources between users. A wish of women to participate in agricultural water management has resulted in the improvement of water use. Earlier, this WUA has faced an acute problem of water use and distribution between the users. WUA’s Chairman Khusainova contributed a lot to solution of this problem. In the field, for equitable water distribution among dehkan farms, the field supervisor woman, who collects fees for water services, plays a key role. WUA “Zainab” shows the following dynamics in collection of fees for water services: 2004 - 150 somoni; 2005 - 5000 somoni; 2006 - 8000 somoni; 2007 - 27000 somoni. This example indicates to a remarkable contribution of women to agricultural water management.

Security of rural people and, particularly, priority of men and women in this issue.

The priority tasks include: making women more active and developing their leadership qualities; implementing planned measures on reproductive health protection; integrating health services on reproductive health protection into primary medical care services and making public awareness efforts.

Another task is to hold training for public health staff, social workers, teachers and law workers in protection of women against any forms of discrimination and in supporting women who got into trouble.

Women do not have opportunities to find job in higher paid and career areas. Women are considered to be incapable of being at the head of farm despite their considerable contribution to agricultural production. This even greater reduces their access to privatized agricultural land. For instance, 30% of women are the heads of farms in WUA “Zainab”. Rural women perform traditional female functions of wife and mother, staying at home and rarely showing themselves. Most girls complete only 9 years in school. Major problems in educating rural people, especially women, are financial, social, and traditions-related ones. Those problems contribute to vulnerability of women to poverty: without taking into account the difference in education, it is found that earnings of women are lower than those of men in all labor activities, including agriculture.

It is very difficult to provide employment of rural population in national public organizations. Due to lack of job places, many young people in rural area have to go outside the republic in search for a job. Women go out the republic like men. For example, we consider a role of woman in rural water management: women hold chairman positions in 3 WUA (or 2.4%). There are 26 women or 0.19% among WUA's members. For instance, in WUA "Zainab", besides the chair-woman, 2 women or 40% are members of WUA out of the total quantity of 5 members. Participation of women in water management in WUA "Zainab" is practically 50% to 50%.

Rural women holding managerial posts.

In rural dzhamoat "Zanababod", Rudaki rayon (rayon subordinated to the republic), the chairman is women. Female staff in the dzhamoat accounts for 43%. There are two NGOs functioning under the dzhamoat, and chairmen and staff of the NGOs are women. For example, NGO "Mothers of many children fight for equal rights" deals with social issues. A role of women in water-management agencies is insignificant in decision making. There are only 7 women or 15% in water management organization.

Woman's role in solving social problems at village and rayon levels is minor.

NGO "Mothers of many children fight for equal rights", the chairman of which is Mavjuda Dzhamolova, has the following tasks:

- raising awareness and gender mainstreaming as an integral element in the region;
- achieving better understanding of gender issues in water management and use;
- sharing gender experience and best practices, implementing gender concepts in practice;
- creating a basis to promote gender topics and a platform to make women's voices heard in governing bodies in the region;
- creating a foundation for further cooperation, which would lead to successful water management based on gender equality;
- establishing a network of contacts among concerned institutions and stakeholders at national and regional level in order to promote cooperation.

By linking gender issues faced in the studied WUAs with water use issues, it is concluded that limited access of rural women to water and water management has direct negative effect on women's status in the society. In order to reach better understanding of gender aspects in access to and management of water resources, a set of measures needs to be undertaken. In this context, it would be advisable:

- holding a number of educational events (trainings) in water use for target groups consisting mainly of women. The training program should include gender issues, water conservation and water resources management skills.
- promoting establishment of water users' groups, where women, who got training, should be the key actors.
- supporting initiatives that contribute to protection of water sources from pollution, to their betterment and sanitary improvement. Undertaking relevant activities among pupils and young people.
- organizing workshops on water use experience sharing, with involvement of water professionals.

### **Turkmenistan**

In 1991-1997, the Turkmenistan's national economy and, hence, GDP were subjected to great variations due to price policy of raw stuff export since independence. Agrarian focus determined a high share of agriculture in GDP - 40%. The share of industry in GDP was 17%, including 80% of mining industries.

In 1999-2007, industrial share in GDP amounted to 33-34%.

Cultivation of own land plots called often as personal subsidiary plots (PSP) is a considerable source of livelihoods for rural area and of employment. According to ADB's survey of living standards, 84.5% of population is at active working age, 6% - senior citizens, and 9.5% - under the active working age. Occupation with PSP is 5 times higher in rural area than in urban area. In dimension of national regions, occupation with PSP varies from 22% in Akhal velayat to 57% in Lebap velayat.

In gender terms, women (56%) are mainly busy with PSP; men account for 56% among the population of active working age. Households consisting of more than 5 members account for 66% of those busy with PSP, households with 4 members - 15%, 3 members - 9%, 2 members - 6%, and 1 member - 5%.

Based on the above-mentioned, no WUA was established in Turkmenistan.

### **Uzbekistan.**

The implemented reform in agriculture is continuing on the principle of increasing the interest of land and property owners - the number of functioning farms in the country achieved 222 thousand which members are 1 million 293 thousand people, 84.2 thousand people of them are hired workers.

More than 5 million 824.8 thousand hectares of lands have been leased; one farmer has 26.2 hectares at the average.

The share of farms in gross agricultural production of the country amounts 25.0% on July 1, 2008 (this indicator in peasant farms is 72.8% and in agricultural enterprises is 2.2%).

Demand for timely and qualitative service of market and industrial infrastructures is increasing from producers of agricultural products.

Statistical data regarding women's participation and the number of farmers-women is absent.

### **Situation in the CA republics as a whole**

The comparison of three pilot WUAs in the Kyrgyz Republic, Tajikistan, and Uzbekistan showed that despite activity of women (especially in Uzbekistan), their representation in WUAs is low. This can be explained by both current conditions of land and water use and poor awareness and knowledge among women about their rights. In this context, one of key challenges is capacity development of rural women in both legal aspects and agricultural production, in communication with different services, etc.

The International Fund for Agricultural Development emphasizes that women, being the heads of most farms in the developing world, have to cultivate the land and earn their living without having legal rights to water and land. Women grow a half of world's food (in contrast to commercial crops). In addition, rural women grow 60-80% of food in most developing countries. At the same time, women own less than 2% of lands. This circumstance makes some researchers to conclude that, for instance, "women are less interested in application of water-conservation technologies than men". Moreover, studies show that agricultural productivity increases considerably when women have access to land/water and technologies. Thus, ensuring equality of men and women is needed also in order to get important economic benefits.

Besides differing access to and control over use of resources, it is necessary also to tell apart access to and control over benefits got from mobilization of these resources. For example, it is argued that women, even having access to water and land, cannot make use of benefits from their production. Decisions on budget distribution are made mainly by men; moreover, women do not spend practically money for their personal needs. Data on farmers' spending in Uzbekistan and Tajikistan indicate that most money is spent for foodstuffs (67.1 and 71.1 %, respectively).

Division of labor between men and women in agricultural production varies greatly, depending on crops: men grow commercial crops, while women are responsible for food

crops for consumption by their families. Thus, water use priorities are divided in the same way: men – irrigation, women – domestic use and subsidiary plots.

Though the share of women in agriculture is higher than that of men, decision-making positions are held mostly by men, especially in cotton sector, which accounts for over 50% of irrigated area. In the first place, women are busy with small subsidiary plots, whereas men control larger plots, though women constantly work in the field. This indicates to a need for rethinking of a role of women and their treating as land and water users for production purposes, not only for domestic needs.

### **Conclusion**

Thus, it is clear from the above-mentioned that all the five republics have legislative systems that ensure equal rights of women and men. Nevertheless, in practice, the top echelons of power show gender tension. Still, women face difficulties in taking top managerial positions. The ratio of men and women employed in public authorities and governing bodies in Kazakhstan is 58 and 42%, respectively; moreover, this ratio is valid for both Zhogorku Kenesh and the Government. However, in agriculture and processing industry men amount to 80.3%, while women only 19.7%. At present, the situation has changed slightly. The newly elected members of Zhogorku Kenesh include 23 women or about 30%. And this is observed in all the republics. A National Action Plan of Tajikistan for 1998–2005 aimed at raising women's role and status was adopted in 1998. It was a first document designed to solve gender inequality problems, but it mainly addressed women status rising rather than gender inequality problems in all spheres of life. The President of Tajikistan issued in December 1999 a decree on raising woman's role in society aimed to assist in the implementation of the National Action Plan. Other key documents are the Law on Reproductive Health and Reproductive Rights (2002) and PRSP (2002).

Some omissions of the Presidential Decree of 1999 were taken into consideration in the Government Program. A further amendment to the Government Program concerning "Access of Rural Women to Land" was approved in 2003, following the recommendations made in the UNIFEM-funded survey on women's access to privatized lands.

#### **IV. KEY FACTORS FOR SUCCESS**

The development of the web-site and the establishment of GWANET allows for:

- Raising awareness and promoting gender mainstreaming in the region
- Attaining more knowledge and understanding of gender issues in water management
- Exchanging experience and best practices on the matter, translating theoretical concepts on gender into action
- Building profile for the need of gender sensitization and a platform for women's voices within the governance structures of the region
- Laying the foundation of further cooperation leading to successful gender sensitive water management
- Creating the network among concerned agencies and individuals to facilitate further cooperation both national and regional level

## V. RECOMMENDATION

### Basic proposals

The results of discussions, resolutions of workshops, and analysis of situations in the republic from the national reports are summarized in the following proposals:

#### At macro-level.

1. Present imbalance in water sector indicates to a need for auditing water laws (or water codes) regarding reflection of gender aspects in water access and management rights.
2. Amend water law (code) to ensure gender balance in rights for water and water management.
3. A coordination group “Gender and Water” in Central Asia should be established on the basis of SIC ICWC under support of GWP, with national representatives in national Ministries.

#### At medium level.

1. Maintain and expand GWANET network with depending it on the local levels/
2. Keep raising gender awareness and gender literacy.
3. Prepare special training courses “Gender and Water” and incorporate them into curricula of education and organization. Prepare package of documents for training “Gender and Water” should be developed in scope of IWRM. Complete sectoral manual SEIGA Irrigation. Apply training materials of GWA.
4. Specific guidance for “Woman- leaders of WUA s” training activity need to be created on the base experience implementation IWRM.
5. Maintain web-site GWANET for experience dissemination and exchange and communication.
6. Taking into account rapidly changing socio-economic conditions in the region (disaggregation of farms, re-structurization of water agencies, application of water charges, change in agricultural product and energy carrier prices, and intensive migration of men outside the region), organize study of adaptation capabilities of men and women.
7. Conduct survey of various target groups in order to identify their features and aspirations for the elaboration of specific work plan for each group.

#### At micro-level.

1. Raise gender awareness among farmers.
2. Prepare special training for farmers. Take into account Tajik experience and choose simple method of communication with audience (theatre, film).
3. Hold training with theatrical performance for farmers in each republic.
4. Develop a course of professional training for farmer-women.
5. Hold courses of professional training for farmer-women in area of agricultural production, water use, including water accounting, legal issues, crediting, etc. in all the republics.

## REFERENCE

1. Bulletins «Gender and Water in Central Asia» for 2007, SIC ICWC publications
2. Climate and Water Dialog (UNO, 2001) and Adaptation to Climate Change (SIC ICWC, CIDA, 2001-2003).
3. Country development strategy (2007-2010), Bishkek, 2007.
4. Damages in the Littoral Zone of Aral Sea (INTAS, 2000-2004).
5. Economic Assessment of Joint and Local Measures Aimed at Reduction of Socio-Economic
6. “Gender Aspects and Integrated Water Resources Management”, 2006.
7. “Gender Aspects Relating to Access to and Management of Water Resources”, 2003-2004.
8. Gender equality aspects in Kyrgyzstan, Sakhvayeva Ye.P., article in newspaper ZVL №53, November 2007.
9. Report on WUA and farmer survey, project WRMI, July 2005.
10. Population forecast in the Kyrgyz Republic. Trends and prospects, Bishkek, 2002.
11. «Studying pricing and cost compensation system in irrigation», ADB’s final report, 2006.
12. Water Resources Management Improvement in the Kyrgyz Republic, results of questionnaire survey of WUAs in Batkent province.
13. Women and men in the Kyrgyz Republic, National Statistics Committee, Bishkek, 2006.