Gender Aspects of IWRM

G.V. Stulina, D.R. Ziganshina, Sh.Sh. Mukhamedjanov

Water is an economic, social and ecological good granted for the welfare of all the people without any exception. Considering the IWRM systems, the UNDP links water with four key areas of activities: i) struggle against poverty; ii) life support; iii) environmental protection; and iv) gender equality. A community consists of individuals and groups with different rights, welfare, power and abilities to express their needs and rights; and this fact should be taken into consideration while managing water resources.

As a rule, the extent of participation, interests, priorities and responsibilities of women and men are different in the governance of water resources. There are also gender differences in access to water resources and in water rights. Gender inequalities of women and men are evident in terms of knowledge and various experiences in such areas as water services, water policy and water availability. Any initiative in the water resources management sphere needs to be assessed concerning its impacts on women and men in order to understand clearly all the effects and to avoid negative consequences. Mainstreaming gender in IWRM strategies and plans has three key entry points [2]:

- 1. While developing new initiatives and programs, it is necessary to carry out a good gender analysis to specify the differences in their perceptions by women and men. Ideally, both women and men should be involved in carrying out the gender analysis;
- 2. Based on findings of this analysis, all initiatives have to take into account perspectives, needs, and interests of both men and women; and to promote a more active role of women to reduce the level of gender inequality, if possible;
- 3. It is necessary to use participatory approaches, facilitating the equal participation of women and men in water resources management, especially at the level of decision-making.

Key provisions of the gender theory

The gender theory has originated from social sciences more than thirty years ago and, by now, spread all over the world. One of its fundamental provisions is differentiation in applying such terms as "sex" and "gender". In social sciences, the term "sex" refers to the biological -anatomic structure of a human being. At the same time, the term "gender" is used to specify differences between male and female social roles and their emotional characteristics that society prescribes to people according to their sexual distinctions. A hierarchical structure that considers a male as the dominating factor and a female as the subordinated factor underlies gender differentiations. As a result, both men and women are "victims" of the traditional system of social norms and stereotypes. It is necessary to remind that gender relations may be quite different in various cultures; and as our survey has revealed, relations between women and men in countries under consideration are drastically different. It follows from this that gender is the cultural, social, and historical concept, and at the same time, gender relations are inter-changeable in time. This is not a rigid framework into which willy-nilly we have to squeeze ourselves in, obeying its rules; however, this is the system, which needs to be changed, if it has become out-of-date and does not meet demands of the times. The gender theory and methodology provide to scientists new analytical tools for investigating society and enables

them to discover social and cultural mechanisms that form gender disparity in traditional society. However, the fundamental values necessary for development of countries and their residents independently of gender differentiation encompass the following concepts:

Freedom: Men and women have equal rights to prosperous life and parenting of children without fearing famine, violence, oppression, and inequity. The democracies, based on people's will, ensure these rights in the best way.

Equalit:. No human being in the country has to be deprived of the opportunity to use advantages of democratic development. Men and women should be provided with equal rights and opportunities.

Tolerance: Given all, there are many religions, cultures, and languages, which people have to respect by each other. One should not fear or suppress differences between people; vice versa, it is necessary to keep them for future generations.

Respect to nature: Prudence should be displayed in all aspects including the attitude towards natural resources (water and land). Only in this manner, we can preserve and hand over immense wealth granted by nature to our descendants. Out-of-date and inefficient production and uses should be eliminated in the interests of our descendants.

Responsibility: Responsibility for managing economic and social development in countries.

Gender analysis carried out in the water sector in Central Asia and the Caucasus

In 2005, with the assistance of GWP CACENA, the researchers from Kazakhstan, Tajikistan, Turkmenistan, Kyrgyzstan, Armenia, Azerbaijan, Georgia, and Uzbekistan took part in a study monitoring gender equality aspects in countries of Central Asia and Caucasus [2]. The researchers were authorised to select specific regions within their countries, which would ensure the representative sample of all types of household management (in private farms, agricultural cooperatives (shirkats), family (dekhkan) farms etc.). The gender survey was conducted in the form of filling the questionnaires by interviewers based on answers of owners and members of rural households.

Data of questionnaires were entered into the database and then analyzed. With results of these analysis, reports that reflected the current situation with respect to gender relations were prepared for each country.

The population in the regions under consideration, to a greater or lesser extent, is aware of real problems faced by women rather than the gender theory. Men's views on these problems differ from those of women. In other words, the question how "an oriental man" treats gender problems and whether he is ready to be at the one social level together with a woman remains traditionally topical. Traditionally, many explain the difference in social status of men and women and disparity in their rights through biological reasons. However, the analysis of historical, ethnographic, and cultural facts reveals that major causes of antithesis of women and men are social ones, i.e. norms of behavior established (designed) by society. Therefore, these social and cultural norms are in the focus of our studies, which were conducted in rural areas, where mentioned traditions are the most conservative. We attempted to review whether society deals with men and women in different ways, and why they have unequal opportunities for self-realization in public and personal spheres despite the fact that the equality is legally recognized in all legal documents adopted by the states. However, religious principles, centuries-old traditions, and way of life in countries under consideration, primarily presume the gender disparity with respect to the female population in these countries. Georgia is the only exclusion to the general rule, where the attitude toward women always differed from generally accepted norms in the oriental countries.

Mentioned problems are aggravated by economic hardships that limit the financial stability of men and women, and, in addition, restricts women's access to control their own livelihoods. However, there is no doubt that poverty affects men and women in different ways. The quality, composition, and quantity of food consumption as well as access to good education and qualitative medical services may be indicators that reflect the poverty rate. People who legally have various rights, do not have any opportunity to use them without economic support. The high unemployment in countries under consideration, including the latent unemployment caused by domestic circumstances, has baneful consequences for women. Women make up about two-thirds of the total number of unemployed and those who are working are basically engaged in unpaid or low-paying occupations. Underemployment remains the critical and real indicator of poverty in the countries. Women are the especially vulnerable group since they are engaged in low-paying and temporary works. Gender challenges in the field of labor and employment also can depend on the current legislation on women's social security, which very often limits entrepreneurs' who wish to hire women. Conditions of employed women are also problematic since they are being engaged in the economic sectors, where traditionally wages are low: public health and education. Even greater problems exist in the agricultural and informal sectors where labor of women is practically not protected by the state in the form of social guarantees, and therefore there is high likelihood for violation of human rights and for wrongful exploitation of women labor.

Gender disparity in the field of employment is observed at all hierarchical levels. Existing gender disparity restricts access of women to specific economic sectors and their professional promotions. The likelihood to find a proper job is very low; usually this is low-paid, low-skill, and seasonal work. Currently, the number of women seeking jobs at informal labor market is considerably increased in the region.

It is necessary to note that women actively participate in agricultural production. Rural women are mainly engaged in producing agricultural outputs for provision of their own families and for sale. Therefore, they are concerned with problems of marketing for their agricultural products, of its hauling, and prices. Banks unwillingly grant credits on the security of property preferring to deal with entrepreneurs that already have profitable farms, and these are usually men.

Rural women have less time for marketing activities, less access to agricultural knowledge, and less professional skills in order to establish their own businesses. Reforms of the rural sector, privatization of agricultural enterprises, and establishing private farms are implemented without due participation of women because of their low representation in local governments and the lack of funds and skills for rural entrepreneurial activities. Taking into account these aspects, we would like to recommend developing programs on financing and training, which are targeted at women-farmers, or women, who wants to become entrepreneurs.

The curriculum on gender issues is valuable for students and teachers at colleges of social sciences and secondary schools, because it covers both discussion and analysis of problems, which affect each of us: a person and his relations with the world, freedom and its limitations, differences between people and the need for observing equal rights (despite differences), marriage, the family, relations between spouses and children, traditional and democratic values, and many other things. In other words, the gender curriculum should be aimed at: (i) development of social responsibility of each person; (ii) forming of the system of humanitarian values and sense of equity; and (iii) protection of human rights. The idea of equal secondary education for girls and boys is supported by less than 40 percent of women; at the same time, 60.7 percent of women speak in support of different curriculums depending on gender. Most male and female respondents consider that such subjects as mathematics, physics, technical and legal knowledge, and sports are more important for boys, at the same time, such subjects as housekeeping, history, literature, ethics, psychology of the family life, and sexual education are more important for girls. Based on traditional stereotypes with respect to roles of women and men, the adults themselves who suffer from gender disparity unknowingly bring up their children in the same spirit. Schools often follows this path. It is necessary to stop this process and to propose people a new democratic outlook.

Therefore, the need in changing consciousness of men and women is extremely topical today. None of the respondents pointed gender equity as a social value. However, any social changes are starting with shift in consciousness.

The analysis [2] has shown that certain discrimination of rural women that becomes apparent, in principal economic dependence from their husbands and other members of the family, takes place practically in all Central Asian countries. As was mentioned, only 7.6 percent of women in countries of Transcaucasia and 3.2 percent of women in Central Asian countries possess the right to manage the family budget independently. And, most women cannot spend money earned by themselves at their own discretion. A negligible amount of women has received access to land resources for establishing a farm as a proprietress. Discrimination of women is observed in the increase of unrequited labor on garden plots; in addition, the low level of utility services negatively affects women negatively by increasing their physical inputs. Mass involvement of women in agricultural works in farms of Tajikistan, Uzbekistan, and Turkmenistan is seasonal, and at the same time they carry out the most labor-intensive and low-paid works.

The survey revealed that a share of women having higher and special secondary education amounts to 14.8 percent of all women in Central Asian countries. However, most women are engaged in low-paid budget sectors, and therefore, according to data of the survey, the gender gap in input to the family budget makes up 55 percent in the CAR. Neglecting personal interests owing to fear of loosing the opportunity to work and earn money, women agree to be engaged in low-status and low-skill occupations without opportunities to upgrade their professional skills.

There are certain obstacles for developing business undertakings among women. An overwhelming number of women-entrepreneurs operate in the field of small retail trade without access to infrastructure, systems of credit and transport services. Therefore, they have to sell small lots (of goods), in general, (this is quite a labor-intensive occupation taking into account remoteness of markets) only to satisfy the momentary needs of their families. Both men and women treat positively to the development of female business, although men are more cautious in their assessments. Respondents mentioned the following causes that impede active involvement of women to private business (in descending order):

- lack of money to start-up businesses;
- bureaucratic barriers;
- lack of specialized knowledge and education;
- lack of professional skill for business management; and
- restricted access to education.

Dynamic revival of such traditions as early marriages and isolated life, and declined prestige of education has resulted in decreasing a share of female students in higher education institutions and colleges. In turn, this has resulted in low representation of rural women at the high-skill labor markets in the regions. It is necessary to note that basic concerns for children and aged people lie on "women's shoulders", and, in turn, increase workload on women and do not enable them to use existing opportunities for self-realization and self-perfection. This analysis has sufficiently supplemented the earlier studies related to evaluating the gender situation.

On the initiative of the project "Adaptation to Climatic Changes" that is jointly implemented by the SIC ICWC and McGill University (Canada), the study "Gender Aspects of Water Resources Management" was undertaken in pilot districts in Uzbekistan, Kyrgyzstan and Tajikistan to specify the vital problems in

private farms in various areas including public health, education, culture, access to resources, employment, income-generating activities etc. Gender problems related to access to and management of water resources were analyzed. Gender inequality in such areas as the rights on land use, access to water, control over resources, participation in governance of water resources in the agricultural sector, access to markets and commercial services is obviously observed in the water and agricultural sector. A substantial target of this study is also the collection of reliable information on basic issues of gender disparity.

On the initiative of the GWP CACENA and ICWC, in 2004, with the Business Women Association (the Kokand Branch, Uzbekistan) using PRA methods conducted a field survey and analyzed gender problems in the water and agricultural sector in the region (in Kuva District of Fergana Province). The general conclusion from this study is that problems of rural women, such as access to water, land, financial, and material resources and to education and culture, are topical and it may be considered that most of rural women are restricted in realizing their opportunities. Findings of our gender survey testify that revision to the social policy, in respect to rural women should be done. It is necessary to initiate a transition towards practical implementation of tasks aimed at decreasing the level of gender discrepancy.

This gender survey has shown that redistribution of gender roles in the family take place in the rural areas. Men are losing the status of "bread-winners"; at the same time, search for job forces many rural inhabitants to leave their households for other regions. All these factors considerably affect the social stability and result in imbalance within households and families. The status of rural women is aggravated by greater workload resulted from non-paid housekeeping labor and traditional possession of many children. A few major factors that strengthen the rural women's vulnerability were specified, and among them the following:

- "the time deficit" due to intensive and non-payable housekeeping labor that restricts considerably the women opportunities;
- the lack of proper conditions of life (running water, power cut, and irregular gas supply) that aggravates the problem of housekeeping;
- as long as women, in considerable less extent, occupy leading management positions in the agricultural sector, they have less organizational skill. At the same time, the gender survey has shown that women are more active in comparing with men in matters of introducing a new agricultural practice and principles of self-organization;
- the low level of representation of women in local governments predetermined the fact that rural women did not practically participate in privatization of enterprises;
- agricultural activities presumes the greater participation of women. At the same time, women are engaged in low-paying and low-skill works with the low level of labor efficiency;
- women have to spend more time on their garden plots to supply foodstuff to their families. Output produced in households due to the lack of machinery, insufficient funds, undeveloped market and sale system does not generate any income. It means that women are mostly busy in producing non-marketable agricultural products;
- traditional views on gender-based social roles negatively affect social and income-generation activities of women in the rural regions. Incidents of family violence with respect to women take place.

- increase in the workload on women that is related to up-bringing of their children due to decline in the social security and the number of nursary schools; along with children, disabled workers, war veterans and pensioners are major consumers of social services.
- the low level of access to education and in this connection the lack of professional skill do not promote women to be more active at the labor market; and
- limited opportunities for proper leisure and entertainment due to the lack or non-functioning rural cultural centers.

Gender Aspects of the IWRM-Fergana Project

One of the IWRM tools is social mechanisms. This includes i) training of younger generation; ii) involving water users and other stakeholders in water resources management; iii) training water users and other stakeholders; iv) public participation; v) partnership of governmental and community-based organizations; vi) establishing good relations between stakeholders and WMOs; vii) use of traditions and public experience; viii) water ethics; ix) social mobilization; x) guarantees of water supply to the poor; and xi) public awareness. Each of above mentioned mechanisms should be reviewed from the gender aspects.

Gender analysis implemented under the IWRM-Fergana Project has shown that yet there is gender imbalances in water resources management (Table 5.45).

There were 2157 people participated in the trainings and seminars, out of which only 166 were women. Following was the gender distribution over the training components: i) water distribution on pilot canals – 520 men and 52 women; ii) WUAs' activities – 373 men and 17 women; iii) farm practice – 1047 men and 91 women. A percentage of women, who have attended the training seminars amounts to 7% on average. This percentage is ranging from 3% to 12% over the countries (Figure 5.46).



Figure 5.46 Participation of Women in Training Activities of the IWRM-Fergana Project

However, it is necessary to note that the level of women's business activities is rising in rural areas; and women-leaders are appearing. For example, Mrs. Masturkhon Sayfutdinova is the chair of the Canal Water Users Council that was established for the first time in Central Asia. Such leaders, having the considerable experiences in agriculture and governance, crush the social stereotypes of perception of women as housewives who do unskilled works in a field. Changing social conditions force many women to manage their farms without any assistance. In Uzbekistan, for instance, women head 17,000 out of 212,000 private farms. Their social activeness should be supported by raising their gender awareness and professional development.

In the Akhunbabaev District of Fergana Province in Uzbekistan, about 10% of the executive positions, such as Deputy Khakim of the District, chief editor of the daily newspaper, municipal chief engineers, chief bookkeepers, are women. Women make a considerable contribution into the family budget. Taking into account that income from smallholdings amounts to 19% of the total, this share of incomes can mainly be referred to as result of female labor.

In Jabbar-Rasulov District in Soghd Province, women are mainly responsible for the potable water supply since only 14% of households have running water in their courtyards. Other 86% of residents carry water using bicycles and handcarts or buckets. Out of these women provide 95%. It would be interesting to know what the right to distribute water in households belong to women (82.9%), at the same time, in private farms – only 9.7%! However, at present, due to considerable migration of men for labor (migrant workers), the number of women playing the role of irrigators and water managers has drastically increased.

Measures recommended providing gender equality in Center Asia

The gender survey enabled us to make a conclusion that discrimination of rural women in access to water resources and water management negatively affect the general social status of women. To improve this situation it is necessary to implement a complex of measures, including the following actions:

- 1. Conduct training courses covering matters of water use and management for the groups consisting mainly of women. The curricula for these courses should include learning water-saving technique and methods of water management;
- 2. promoting establishment of water users' groups, at the same time, women who participated in the training courses should be initiators of establishing water users' groups (WUGs), and their major actors;
- 3. conducting the campaigns that popularize the ideas of establishing rural WUGs, practical application of water-saving technologies, installation of water-metering devices etc.;
- 4. supporting initiatives, which facilitate protection of water sources from pollution, their development and improving their sanitary conditions; and

5. Organizing workshops for exchanging experiences in the field of water use with invited water professionals and representatives of the regions where WUGs were already established and successfully operate.

It is necessary to promote formation of budgets seeking additional financial resources for social aid to rural residents. Rural women should be considered as a specific target group. At the same time, it is necessary to take into account diversity of social groups living in specific regions and conditions of their life, and closely cooperate with activists of non-governmental organizations created in the regions, whose activities address gender issues.

There is a need for Gender Study Centers, the purpose of which will be promotion of public awareness with respect to gender issues, dissemination of knowledge produced by social and humanitarian sciences regarding gender aspects, developing the gender curriculum for educational institutions, as well as implementing the gender educational programs and pilot projects.

At present, the website "Gender and Water" on the Internet portal "CAWATER" and the project "GWANET" (the Central Asian Gender and Water Network) that was initiated by the SIC ICWC and financed by the ADB, with the purpose of establishing informal network for disseminating knowledge, analyzing gender situation in the water sector and to forward problems and proposals to decision-makers can be considered as a substantial progress in raising awareness on this topic in Central Asia.

Gender Balance

Indicator	Country					Total						
	Uzbekistan			Tajikistan		Kyrgyzstan						
	male	female	total	male	female	total	male	female	total	male	female	total
Project personnel	104	11	115	24	1	25	23	2	25	151	14	165
Training participants:												
Topic: CC activities										520	52	572
Topic: WUA's activities	231	8	239	69	2	71	73	7	80	373	17	390
including:												
Council Chairman	8	-	8	2	-	2	1	-	1	11	-	11
Chairman	54	1	55	3	-	3	7	-	7	64	1	65
WUA director	-	1	1	-	-	-	5	-	5	5	1	6
WAG leader	106	1	107	32	-	32	29	1	30	167	2	169
WUA members	40	3	43	16	2	18	15	6	21	71	11	82
WMO	586	40	626	235	37	272	226	14	240	1047	91	1138
Topic: Activities at the farmers' level	30	4	34	10	1	11	11	1	12	51	6	57
TC of the SIC												
Board composition of the	6	1	7	5	0	5	7	0	7	18	1	19

Indicator	Country							Total				
	1	Uzbekistar	zbekistan Tajikistan			Kyrgyzstan						
	male	female	total	male	female	total	male	female	total	male	female	total
CWUC												
Composition of branches' boards	62	2	64									

I. Composition of Project Team

No	Specialists	Number of members	Incl.: women
1	Regional group	13	2
2	Local groups (total):	34	4
	including:		
	- in SFC command area	19	2
	- in AAC command area	8	1
	- in KBC command area	7	1
	Total:	47	6

II. Composition of Training Seminars' participants¹

No	Year	Number of participants	Incl.: women
1	2005	53	4
2	2006	264	31
3	2007	255	17
	Total:	572	52

III. Composition of Boards of the Canal Water Users Unions

No Pilot Canal Number of members Incl.: women

¹ Since May 1, 2005 until September 15, 2007

1	SFC	7	1
2	AAC	7	
3	КВС	5	
	Total:	19	1

IV. Composition of Branches' Boards of the SFC Water Users Union

No	Hydro-operational site	Number of members	Including: women
1	K-1	5	
2	Aravan	7	
3	Khamza	7	
4	Besholish	9	
5	Margilan	5	
6	Fayzabad	7	1
7	Palvantash	5	
8	KFC	7	
9	Akbarabad	7	1
10	Shalhrikansay	5	
	Total:	64	2