Specificity of gender processes in water sector in Central Asian and Caucasus

Stulina Galina, Torguzova Antonina

Introduction

The international practices show that one of the important conditions for development of democratic civil society is protection of human rights at all levels and, particularly, of woman rights.

In 2000, the UN General Assembly adopted the Millennium Declaration. The Declaration reflects further obligations regarding "rights and responsibilities" stated in UN By-laws, as well as in other ratified treaties, conventions and agreements of the United Nations.

The Declaration provides the basis for removing obstacles to global human development. Adoption of the Declaration is a significant step in the international cooperation history. The recognized fundamental values necessary for international development in the twenty first century are: **freedom, equality, tolerance, respect to nature, and responsibility**.

The Millennium Development Goals (MDGs) embody eight concrete objectives, and one of them is "to promote gender equality and strengthen the role of women".

To a large degree, this is shaped as protection of the interests of both men and women; first, focus is placed on progressive promotion of gender as a many-sided challenge, and, second, on a need for guaranteed and open approach to gender as to an integral element in achieving the MDGs¹.

In order to achieve gender balance, it is necessary to consider gender as an interdisciplinary issue. Otherwise, it would lead to unequal society development. Attention should be paid to opportunities of supporting the ideas of gender equality. Collection of data, monitoring, and reporting are the most complex aspects is research of strategies for effective gender promotion.

In this context, development of specific indicators at national and local levels allows countries to develop their own Millennium Development Goals based on their own unique socio-economic development². Formulation of national and local plans represents another possibility for statistics and data collection in order to reveal the actual state of men and women.

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 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 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 altered* if it has become out-of-date and does not meet demands of the times. 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 society³.

Gender aspects in water sector and agriculture

Gender issues have been raised for several years in Central Asian region and Caucasus. At present, these issues are addressed in many sectors but in agriculture and, consequently, in water sector those are insufficiently uncovered. Moreover, taking into account that agriculture is the main water

¹ Additional information on relations between gender and MDGs can be found in the following publications:

[&]quot;Millennium Development Goals: national reports, view through the prism of gender" (2003) UNDP; "Progress of women in the world 2002: gender equality and Millennium Development Goals" (2003) UNIFEM; "Gender Equality and Millennium Development Goals" (2003) the World Bank; "Gender, MDGs and Health" (2003), WHO.

² For example, specific objectives and indicators could be developed for MDG3. Besides, while developing national MDGs, countries may formulate their own objectives aimed at achievement of gender equality and enhancement of woman's role that are particularly urgent in local and national contexts.

³ http://www.pcgi.ru/PCGP4/gender042.htm

user all over the world and that the extent of gender studies in water sector is close to zero, this research which was conducted under support of GWP and CIDA in 2004-2005 was very important and appropriate.

Most population lives in rural area (Table 1). Rural population amounts to 72 % of total population in Tajikistan, 66 % in Kyrgyzstan, 63 % in Uzbekistan, and 55 % in Turkmenistan. In Caucasus and Kazakhstan, this indicator is opposite, i.e. rural population is minor in total population of the republics. This reflects the high specific weight of industry and construction in general production pattern.

Tuble 1 Relation, 70											
	Year	Azerbai	Armenia	Georgia	Kazakhs	Kyrgyzs	Tajikis	Turkme	Uzbekis		
		jan			tan	tan	tan	nistan	tan		
Percentage of rural population	2000	48	33	44	44	66	72	55	63		

Table 1 Rural population, %⁴

As is well-known, women are largely occupied in agriculture, where traditions and prejudice are stronger than in any other area (Table 2). Therefore, to a great extent, distortion in gender terms is observed in rural area. Limitations of rural women are mainly reflected through economic dependence on their husbands and other family members. These women have no rights to command family budget on their own, besides many of them cannot even spend their own earnings independently.

Table 2 Number of men per 100 women⁴

	Azerbaijan	Armenia	Georgia	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan
Mean number of men per 100 women	97	94	91	94	96	99	98	99

These limitations become apparent with increase in non-paid labor in farmland plots. Besides, poor level of public utilities has negative effect on women by increasing load on them.

Women are involved in agricultural works on seasonal basis, and, moreover, they are busy with more time-taking and low-paid work. For more detailed consideration of woman's contribution to crop production, Figure 1 shows where woman labor is used in CAR countries.



Fig. 1 Woman's occupational pattern in agriculture⁵

⁴ Statistical data are based on information from Britannika encyclopedia, POPIN (UN), WHO, The World Factbook (CIA), Russian State Statistical Committee, etc.

The figure shows that the percentage of women busy with managerial activities ranges from 10 % in Tajikistan to 25 % in Kyrgyzstan. Share of woman technicians varies from zero in Turkmenistan to



Fig. 2 Share of women occupied with rough labor⁵

16 % in Uzbekistan. The percentage of women as permanent and seasonal workers varies from 38 % to 71 %; this means that women are involved mainly in unskilled and rough labor (Fig.2). There is too minor share of Central Asian women who became the heads of households and, consequently, who have the right to use land and make decisions regarding finance and water distribution (Fig.3). The situation is different in counties of Caucasus. For example, the share of woman-head of household is 52,1% in Georgia and 39% in Armenia. The recognition of Georgian women as heads of households can be as a proof that a woman in Georgia was at the high level of the social hierarchy over centuries; and a woman has the indisputable authority being a subject of general respect and worship.



Fig. 3 Ratio of men and women - heads of households

In Armenia, woman's limitations are not so acute and one can consider, in general, that rural women are not subjected to discrimination regarding taking available opportunities. The population in eight studied regions, to a greater or lesser extent, is aware of real women's problems rather than the gender theory. Men's views on this problem 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 by 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. Men and women 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, religion 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. This is exemplified in woman's status from standpoint of both men and women themselves (Fig.4).

Most men in countries practicing Islam consider role of woman as subordinate. Christian countries like Georgia and Armenia show smother attitude toward woman's status. Mentioned problems are aggravated by economic hardships that limit the financial stability of men and women, and, in addition, restrict access of women to control of their own livelihood. So, men command family budget (Fig.5). Economic problems are primarily reflected in lack of money raised by members of family



Fig. 4 Subordinate woman' status in the family, %

from all kinds of their activities. Income per capita can be used as an indicator of the standard of living (Fig.6). The Figure shows that, in terms of income level, Azerbaijan, Georgia, Tajikistan, and Uzbekistan can be referred to poor countries since daily income per capita is less than 1 US dollar, i.e. is below the poverty line. The earned funds are used for a number of items necessary for supporting the family's life that consist of the following:

- foodstuff;
- non-food items;
- household needs;
- medicine;
- public utilities services;
- education; and
- others.

Expenses for foodstuff are a very important indicator of family's welfare. If these expenses exceed 20 percent of family's incomes then its incomes cannot be considered as satisfactory (Fig.7).

However, there are no doubts that poverty affects men and women in different ways both in the context of living in poverty and in context of other key problems related to living in poverty.



Fig. 5 Men's right to command family budget, %

It should be noted that in all studied regions women practically no nothing about gender issues and do not have skills in water conservation and water management. However, many of them have potential and are ready to master and apply mentioned methods in situ.

The quality, composition, and quantity of foodstuff consumption as well as access to good education and qualitative medical services may be indicators that reflect the poverty rate. Consumption of meat us well below

the biological rate practically in all the

countries (Fig.8). The same relates to lean ration of rural population. Thus, the diet cannot be considered as balanced.

People who legally have the different rights without economic support do not have any opportunity to use them. The high unemployment in countries under consideration has baneful consequences for women. Women make up about two-thirds of the total number of unemployed in these countries; and women who are working are basically engaged in unpaid or low-paying occupations. Women are the especially vulnerable group since they are engaged in low-paying and temporary works.

Conditions of employed women are also problematic since they are engaged in the economic sectors with traditionally low wages – public health and education. Even greater problems exist in the agricultural and informal sectors where women's labor is not practically 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's labor.

On average, 80% of men and women think that only a man

- allocates lots for vegetable gardens
- has access to agricultural machinery
- has access to market
- has priority in obtaining a credit
- has land and water use rights
- makes decisions on cropping patterns in farm
- has real access to production distribution.



Fig. 6 Monthly income per capita, \$US



Fig. 7 Food expenditure, % of budget

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 wish of entrepreneurs to hire women.



Fig. 8 Meat consumption, kg/month

Rural women are mainly engaged in producing agricultural output for provision of their own families and for sale. Therefore, they are concerned by problems of marketing for their agricultural output, 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 activity. less access agricultural to knowledge, and less professional skill in order to establish own business. 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 skill for rural entrepreneurial activity.

Rural women burdened with house keeping and care of child, ill and old family members do not practically have any time for valuable leisure. Woman spends most of her time for household chores that cannot be estimated in money equivalent (Fig.9).

Nevertheless, women occupied both with social production and with housekeeping feel that they have potential to achieve goals leading to both family welfare and active social life. Women specified courage, education, good breeding, honesty, and adherence to principle as merits necessary to achieve success (Fig.10).

This indicates that their potential abilities are rather high; however, the existing conditions do not allow putting their professional skill in practice in full measure. It is necessary to note that most men and women who have higher and special secondary education are people at the age more than forty years and have adult children. They completed their education prior to the 1990s. Due to current conditions, most of them do not have the possibility to use their skill in the proper field of activity. Some of them are obliged to learn again in order to gain such a profession, which is called for at present. Women, for example, learn accounting, tailoring, etc. However, many people could not find possibilities for applying their professional skill, and should practice heavy manual agricultural work.



Fig.9 Time spent by men and women for housekeeping, hour/week



Fig. 10 Rural population having higher education, %

District water management organizations offer services on domestic-potable water supply to the population, institutions, and organizations. Irrigation water distribution in main canals is under responsibility of district irrigation system authority, while on-farm water distribution is provided by land-reclamation services (irrigators). Water supply services are not always accessible, and available systems do not ensure continuous operation. Degree of provision with water is directly related with season (Fig.11), for example, in winter and autumn electric energy is often cut, and, as a result, artesian and drainage pumps, if available, do not operate.



Fig. 11 Seasonal restrictions in water supply, %

Figure 11 shows the share of respondents believing that there are seasonal limitations in water supply. In general, it can be claimed that water supply services are quite unequal and irregular. Only few farms can use water pipeline system in full. However, if available, these systems are out-of-repair due to lack of funds and spare parts. Farms are not able to provide the timely repair of water-supply systems. Therefore, the measures of the State are necessary to replace water pumps and equipment that now are out of operation in order to improve water supply. The population pays for drinking water supply. However, rural citizens are so poor and are not always able to pay for those services. Therefore, they are getting into debts.

There are not practically the sources of potable water in some villages. Inhabitants of these villages



Fig. 12 Households with running water, %

deliver water using various means including cars, cartage, bicycles, and specially equipped handcarts.

Types of household water supply are shown in Figures 12 and 13.

Figure 12 shows that not all residents have running water. Certain part of the population (Fig.13) needs to use water from open sources drainage wells. opinion or In of SanEpidemNadzor (Center of Sanitary Supervision & Disease Control), this water is not allowed for drinking due to its poor quality, though, according to respondents, water which they actually use for drinking has not been checked by SanEpidemNadzor at all.

Rural population stores water in buckets, cans, and churns. Some of them use standard reinforcedconcrete tanks placed on the ground. Such tanks are used by more well-to-do families that can pay for water transportation by water carrier. Women are mainly responsible for distribution, control, and regulation of water consumption for drinking and domestic needs, at the same time, men are engaged in water delivery using cars, cartages, or bicycles. The process of water delivery itself and water storing do not meet due sanitary standards. Water delivery in the autumn-winter season at the time of snowfall or rains is dangerous for life, especially of women and children since most of streets in villages are not lighted and have not asphalt pavement.

Women consume more water for domestic needs (washing, laundering, cleaning, and cooking), and men for irrigation that is seasonal activity.

District environmental services and SanEpidemNadzor are responsible for protection of water from pollution. District environmental services and SanEpidemNadzor are responsible for protection of water from



Fig. 13 Residents using water from aryk, canal or well, %

pollution. Recently, rural citizens and, particularly, women have begun to pay more attention to water pollution problem. District irrigation system authorities regulate irrigation water supply at inter-farm level. Land-reclamation services distribute water at on-farm level. There are conflicts between the residents and the farms during water distribution in summer season, and often those conflicts need to be settled with assistance of community. Priorities are defined through consensus, mutual agreements, first of all, based on degree of necessity and importance. Even in critical periods, water supply priorities are not set depending on sex, nationality or social status.

Practically, all respondents agreed that currently it is necessary to apply water conservation technologies both in household and in irrigation spheres. However, no one could explain clearly what such water conservation would consist in. Rural residents have some information about watermeters for households and flow-measuring structures for irrigation; however, this information is insufficient.

Gender problems are closely related to water use problem. Limitations of rural women regarding access to and management of water resources has direct negative effect on general status of women and on their social status. Though women identify and understand problems of water use and of poor drinking water quality, they do not have adequate knowledge and opportunities to improve the situation. Law ignorance and lack of information prevent them from applying to authorities that are responsible for supervision of water quality, for juridical and legal issues. At present, non-governmental organizations were established in the republics that deal with rural woman's problems, their education and protection of their rights. Conclusion

The analysis of collected data has shown that certain discrimination of rural women that becomes apparent, principally, in economic dependence from their husbands and other members of the family takes place practically in all countries of Central Asia and Caucasus. As has been abovementioned, only 7.6 percent of women in countries of Transcaucasia and 3.2 percent of women in countries of Central Asia possess the right to manage the family budget independently, however, most women cannot spend money earned by women 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 shows in increase of unrequited labor on garden plots; in addition, the low level of utilities services negatively affects women 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.

We revealed that a share of women having higher and special secondary education amounts to 28.3 percent in countries of Transcaucasia and 14.8 percent of women in countries of Central Asia. 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 37 percent in countries of Transcaucasia, and 55 percent in CAR. Neglecting personal interests owing to fear to loss the opportunity for working and earning money, women agree to be engaged in low-status and low-skill occupations without possibilities to improve their professional skill.

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 and the systems of crediting and transport-cargo 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) to satisfy only the momentary needs of their families. Both men and women treat to developing the female business positively, 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;
- restricted access to education,

Dynamic revival of such traditions as earlier marriage and isolated life, and decline in 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 market of high-skill labor in the regions. It is necessary to note that basic concerns for children and aged people lay on women's shoulders, and, in turn, strengthen workload on women and do not enable them to use existing opportunities for self-realization and self-perfection.

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 is topical; and it may be considered that most of rural women are restricted in realizing their opportunities. Findings of our gender survey testify that revising 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:

- 1. "the time deficit" due to intensive and non-payable housekeeping labor that reduces considerably the women's potential;
- 2. the lack of proper conditions of life (running water, power cut, and irregular gas supply) that aggravates the problem of housekeeping;
- 3. 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;

- 4. the low level of representation of women in local governments predetermined the fact that rural women did not practically participate in privatization of enterprises;
- 5. agricultural activity 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;
- 6. 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 almost generate income. It means that women are mostly busy in producing non-market agricultural output;
- 7. traditional views on gender-based social roles negatively affect social and income-generated activity of women in rural regions. Incidents of family violence with respect to women take place.
- 8. increase in the workload on women that is related to bringing up their children under conditions of decline in the social security and the number of infant schools since along with children, disabled workers and veterans, and pensioners, women are major consumers of social services.
- 9. the low level of access to education and in this connection the lack of high professional skill do not promote women to be more active at the labor market;
- 10. limited opportunities for proper leisure and entertainment owing to the lack or non-functioning of rural cultural centers.

Proposed measures

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 the complex of measures, including the following actions:

- 1. conducting the 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 developing and improving their sanitary conditions; and
- 5. organizing workshops for exchanging of the experience in the field of water use with invitation of water professionals and representatives of the regions where WUGs were already established and successfully operate.

It is necessary to promote forming the budget plans and seeking additional off-budget 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 closer to cooperate with activists of non-governmental organizations created in the regions, whose activity addressed to gender problems.

It is needed to establish the Gender Study Centers, the purpose of which will be promotion of public awareness with respect to gender problems, 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 research programs and pilot projects