



# Enhancing the Role of Women in Water User Associations in Azerbaijan

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## Acronyms

AIOJSC	Amelioration and Irrigation Open Joint Stock Company
CSU	Central Support Unit
ECA	Europe & Central Asia
FSU	Former Soviet Union
GAP	Gender Action Plan
GDP	Gross Domestic Product
GoA	Government of Azerbaijan
I&D	Irrigation and drainage
IDSMIP	Irrigation Distribution System & Management Improvement Project
ISF	Irrigation System Fee
MDGs	Millennium Development Goals
MOM	Management, operation and maintenance
PDO	Project Development Objective
RSU	Raion Support Unit
SAIC	State Amelioration and Irrigation Committee
WUA	Water users association
WUAP	Water Users Association Development Support Project



## **Preface and acknowledgements**

This Gender report responds to the World Bank's long-standing efforts to promote gender equality in its' engagement with client countries.

Between 2007 and 2010, as part of the Bank's work on gender, the World Bank launched the Gender Action Plan (GAP). The GAP worked to advance women's economic empowerment by funding gender-informed operational and analytical work in the Bank's economic sectors. The plan focused primarily on labour, land and agriculture, private sector development, and infrastructure and funded more than 270 GAP activities. This report is the result of a study funded by the GAP on the enhancing the role of women in Water Users' Associations (WUAs) in Azerbaijan. The establishment of WUAs and the transfer of irrigation management of on-farm irrigation and drainage system to water users has been an essential element of the Bank-financed irrigation and drainage portfolio in Azerbaijan since the end of the 1990s. This focus is continuing under the Azerbaijan Water Users Association Development Support Project (WUAP) which became effective end 2011.

The objective of this report is: (i) to disseminate the knowledge obtained under the GAP-funded study on the role of women in Water Users Associations in Azerbaijan; (ii) provide specific recommendations for integrating gender issues in the new WUAP; and (iii) provide general guidance on how to mainstream gender equity and women's empowerment in WUAs in Azerbaijan and in the Caucasus and Central Asian regions in order to foster for efficient and equitable development and growth through improved irrigation management.

The study report is based on a gender survey at the end of the Bank financed Irrigation Distribution System and Management Improvement Project (IDSMIP, 2003 – 2010) and during the preparation of the WUAP, general analytical work conducted over the life of the project, and on a range of consultations with project stakeholders. The draft report was presented and discussed at a workshop in Baku Azerbaijan with project stakeholders and civil society representatives.

The study report has been developed under the overall guidance of regional management and the direction of Dina Umali-Deininger, Sector Manager Agriculture in ECA by a task team led by David Meerbach, Sr. Water Resources Specialist. Internal project stakeholders from the IDSMIP and WUAP Project Implementation Unit, including Akif Mustafayev, Project Director and Murad Mukhtarov, Monitoring and Evaluation Specialist and from the Raion support units provided comments and information to understand the local situation. Sylvie Dideron, an international rural development specialist contributed generously with experience, ideas and critiques. Peer reviewers of report are Asa Torkelsson, Sr. Gender Specialist, and Aly Rahim, Social Development Specialist. Under the guidance of the task team, research was conducted by Rita Merkle (consultant, France) and four local experts: Aygun Akhmedova, Murad Bagirzadeh, Latifa Jivazadeh and Sabina Rustamova. Last but not least, it were the WUA members and its executive staff who willingly answered all the nitty-gritty questions and gave the research team their confidence, which made this study possible.

## Executive Summary

1. The purpose of this report on enhancing the role of women in Water User Associations in Azerbaijan is to provide guidance for mainstreaming gender in irrigation management projects in Azerbaijan and in the wider Caucasus and Central Asian regions in order to foster efficient and equitable development in irrigation management.
2. When IDSMIP closed, the Bank's supervision team noted that more progress could be made on gender issues. It financed a gender survey that aimed at bringing gender issues more to the fore in the end-of-project evaluation and the Implementation Completion and Results Report (ICR) of IDSMIP and developing detailed recommendations which could be included in the follow-up WUAP.
3. Chapter 1 sets the background relating the themes of gender to WUAs and irrigation agriculture. It provides both the general sector background as well as an introduction of the overall study and research that was undertaken at the end of IDSMIP. Chapter 2 provides the informative basis for enhancing the role of women in irrigation management. It analyses and discusses the role of men and women in irrigation agriculture in Azerbaijan by synthesising the findings of the gender survey. Chapter 3 then provides lessons for WUAs in Azerbaijan on how to promote gender equity and for World Bank projects on how to operationalise gender mainstreaming in irrigation agriculture in the country. It also provides guidance in establishing an enabling environment that will foster gender equity in similar irrigation sector programmes in the wider Caucasus and Central Asian region.

### *Sector and study background*

4. Taking a gender perspective in irrigation agriculture consists of looking at existing and potential differences between male and female water users, their roles and their needs in irrigation management. In many societies irrigation and water management are perceived as masculine tasks, but best practices show that the role of women in it is very important and that their active involvement in management, operation and maintenance (MOM) can improve the efficiency of water use and empower them economically.
5. In Azerbaijan, the agricultural sector is a key component of its non-oil economy. While it only contributed about 8% of GDP in 2010 (compared to 53% for oil), it is the largest employer nationwide providing employment for about 38% of the country's total labour force. It serves as an important source of livelihood for the majority of the rural population and it is the dominant rural employer. Women have an important role in the rural economy with about 40% of the total female labour force employed in agriculture.
6. In Azerbaijan rainfall is scarce and agriculture heavily depends on irrigation agriculture with 76% of the total arable land being irrigated. Effective water resources management is fundamental to ensure that economic development is sustainable. Since the collapse of the Soviet Union, the I&D sector experienced an enormous development including the establishment of water users associations for on-farm systems that started in 1997. Water user associations should eventually take over the responsibility for MOM of on-farm irrigation and drainage systems. In Azerbaijan, WUAs are now responsible for MOM of 95% of the irrigated area in the country on the lowest level of the irrigation system. However, MOM of irrigation sub-systems is still heavily subsidized by the Government and further reform is under way to transfer on-farm I&D systems to water users to enable technical and financial viability of the systems.
7. Although the country fully affirms gender equality and is committed to international norms on gender equality and women's human rights, progress in gender mainstreaming in the agricultural sector is slow. The gender survey, however, showed that there are several factors in rural Azerbaijan that legitimate a higher involvement of women in irrigation management.
8. The gender survey conducted at the end of IDSMIP in June 2010 collected both quantitative and qualitative sex-disaggregated data covering 13 WUAs – WUAs that were rehabilitated under



IDSMIP, WUAs that only benefitted from capacity building measures under IDSMIP and WUAs in the northwestern part of the country which were not included under IDSMIP serving as control WUAs - in 8 districts. In total, the quantitative survey included 131 interviews and the qualitative survey covered about 230 informants.

#### *Gender in irrigation management in Azerbaijan*

9. The control of the household budget is within the realm of women or men and women together and the crop choice is also taken together. And yet, female participation in WUAs is highly underdeveloped. Although there are no formal institutional barriers to women's participation, they are actively involved only in exceptional cases.

10. The active involvement of women is challenged by structural barriers. The gender division of labour in farming and irrigation is rigid with considerable time commitments of women to domestic roles. Furthermore, women are not only involved in the management of household plots, but also in certain farmland activities. They are not only facing these competing challenges, but also social mores that hamper their inclusion in WUA structures.

11. On the other hand, the analysis showed that women are major irrigation water users and that they have irrigation water needs for the household plots which play a significant role in rural livelihoods.

12. The knowledge level of all WUA members on WUA management and decision-making is very low, but there is a gender specific knowledge gap. Women have by far the least knowledge not only when it comes to the general understanding of WUAs, but also on institutional aspects.

13. The knowledge gap is not only gender specific, but also related to the level of project intervention. WUA members in IDSMIP projects who already received capacity building training and information have significantly more knowledge on WUAs than respondents in control WUAs.

14. The perception on "WUA affairs" is influenced by the respondents' knowledge on WUAs and by social mores. A basic view of WUAs dominates the understanding of all water users in which regular WUA members, both men and women, are seen as passive beneficiaries by themselves and by the executive staff, and not as active members who can influence the decision. Moreover, "WUA affairs" are equated to heavy irrigation work on farmland which is under the task of men and therefore women and men tend to relate more participation in WUAs to an increase in physical work and in irrigation operation.

15. The perceived main effect of IDSMIP lies in the improvement in technologies which allowed for a better economic performance. Gender is not a primary concern of respondents, neither men nor women. The actual impact of IDSMIP on gender relations was limited. Awareness raising and training under IDSMIP were gender neutral and did not reach female water users sufficiently.

16. However, the importance of WUAs is recognized and awareness raising activities under the Bank supported IDSMIP turned out to be very effective and had a positive impact on the importance attached to WUAs. Those women who have received capacity training or attended other information meetings are all aware of their importance in WUA management. And all respondents acknowledge that women have better communication skills than men. Those favorable for a further involvement of women in WUA management first of all suggest their participation in tasks that need these communication skills.

#### *Lessons for empowering women in irrigation management*

17. The report provides five recommendations for WUAs and World Bank-supported I&D projects in Azerbaijan to further develop and mainstream gender equity: i) Increase the knowledge of all WUA members and WUA staff on WUA management and decision-making; ii) Specifically increase the knowledge of female WUA members in WUA management and decision-making; iii) Involving women in WUA management and decision-making; iv) Strengthen the gender sensitivity and awareness of Raion Support Unit (RSU) staff; v) Develop a Monitoring and Evaluation system to

monitor project progress on gender. Each recommendation describes the context for the specific recommendation, outlines the approach and proposes concrete measures for action.

18. In a second part, one core recommendation applicable to similar World-Bank financed irrigation projects in the Caucasus and Central Asian region is given. Gender mainstreaming in irrigation projects should take gender issues into consideration throughout the full programme cycle. During project preparation and design, during project implementation and during project evaluation specific measures for action are described.



## Chapter 1 Sector and study background

*This first section sets the background for the study. It relates the themes of gender to WUAs and irrigated agriculture, provides the sector background for these themes in Azerbaijan and information on World Bank supported programs in the I&D sector and the degree of gender mainstreaming in them. It also introduces the research that was undertaken at the end of IDSMIP.*

### 1.1 Introduction - Gender and irrigation agriculture

1. Women's empowerment has become an important issue on the development agenda. Starting with the 1977 United Nations Water Conference at Mar del Plata, the International Conference on Water and the Environment in Dublin (January 1992) then explicitly recognized the central role of women in the provision, management and safeguarding of water. The current International Water for Life Decade (2005-15) has highlighted the importance of increasing women's participation in all water-related development activities, drawing on women's knowledge and capacity as water managers and decision-makers<sup>1</sup>. The Millennium Development Goals (MDGs) also include measures for both women's empowerment and gender equality, on the one hand, and improvement in access to water supply and sanitation, on the other.
2. The importance of irrigated agriculture for the world's food production legitimate and necessitates a gender perspective. Irrigated agriculture provides some 40 percent of the world's food and consumes about 75 percent of the world's renewable freshwater resources (Gender and Water Alliance 2003: 30). In many societies irrigation and water management are perceived as 'masculine' tasks and women have limited access to water management decision-making structures. However, women have water needs, not only for consumptive uses (cooking, cleaning and washing), but they may also share agriculture related water needs for livestock keeping and irrigation of household plots or farmland.
3. Best practices in agricultural water management and the involvement of women have shown that their role in the management of water resources is very important. To state just a few examples: In rural India, wherever training has been given to women in repair and maintenance of hand pumps, ownership of these facilities has improved<sup>2</sup>. In a water management project in Baluchistan, India, a women's solution to build a new water tank on unused land turned out to be far more cost-effective than the alternative proposal put forward by men, and women subsequently became active participants in decision-making<sup>3</sup>. In Bangladesh, were rural women are usually affected in negative ways by flood, gender mainstreaming in a flood-risk programme considerably improved preparedness during floods in 2004 (ibid.). And a study in Jordan has shown that the involvement of women in managing small scale irrigation projects

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<sup>1</sup> See Gender and Water Alliance (2010) : Strategic Plan 2006 – 2010 - Putting gender mainstreaming in IWRM to work: Focus on implementation and impact. Online: <http://www.genderandwater.org/page/10108> (accessed 8 June 2010).

<sup>2</sup> See International Federation of Agricultural Producers (IFAP) (2005): Good Practices in Agricultural Water Management Case Studies from Farmers Worldwide. Online: [http://www.un.org/esa/sustdev/csd/csd13/documents/bgground\\_3.pdf](http://www.un.org/esa/sustdev/csd/csd13/documents/bgground_3.pdf) (accessed 20 December 2011).

<sup>3</sup> Gender and Water Taskforce (2006): Gender, Water and Sanitation. A policy Brief. Online: <http://www.unwater.org/downloads/unwpolbrief230606.pdf> (accessed 20 December 2011).

has improved the efficiency of water use and that they play an important role in improving irrigation management at the farm level<sup>4</sup>.

4. Defining the objectives of an irrigation system is a difficult matter and different parties involved will have different priorities and different interests<sup>5</sup>. Among the many objectives irrigation is expected to achieve are increasing agricultural productivity, increasing political stability, decreasing poverty, achieving national food security or the objective that irrigation needs to contribute to the well-being of all, men and women. It has proven to be a challenge to achieve all of these objectives at the same time.
5. There may be many differences between water users of an irrigation system (based on age, land size, etc.). However, taking a gender perspective to irrigation management consists of looking at existing and potential differences between male and female water users, their roles in irrigated agriculture and their specific needs and priorities in irrigation management. Moreover, agro-ecological cultural contexts are influencing agricultural systems and the roles, rights, relations and responsibilities of men and women who farm. It is therefore crucial in planning and implementing irrigation interventions to be aware of different interests and potential conflicts. Zwarteveen states that “women are often not considered, but there is enough evidence to substantiate the belief that they have specific needs with respect to irrigation.”<sup>6</sup>

## 1.2 General country background

6. Azerbaijan is the largest and most populous (9 million) country in the South Caucasus, with about 52% living in urban areas and the remaining 48% in rural areas (2010)<sup>7</sup>. The labour force comprises about 50% of the population, with about 62% of employment in nonagricultural sectors (2009). Women represented 49% of the total labour force in 2009.
7. The country has one of the strongest economies in the Caucasus region with a rich resource base. Before the global economic crisis Azerbaijan’s economic growth has been impressive. Azerbaijan's high economic growth in the years before the global crisis that began in 2008 has been mostly a result of oil and natural gas exports with an average Gross Domestic Product (GDP) growth rate of 24% over 2005 – 2008, while the growth rate in non-oil sectors was 12%. The impact of the crisis, however, was severe. After 2008, growth declined to 9 % overall, and 3% in the non-oil sectors.
8. The economic growth has significantly reduced poverty in the country but also resulted in greater income disparity. In 2008, some 16% of the population was poor, compared to 50% in 2001 (World Bank, Europe and Central Asia Irrigation and Drainage Sector Note). Urban areas experienced a more rapid decline in poverty than rural areas with about 51% of Azerbaijan’s poor living in rural areas. While Azerbaijan has significant oil and gas reserves, the government is very keen to promote the diversification of the economy, in which agriculture is one of the priority sectors.

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<sup>4</sup> See Al-Naber, S. and Shatanawi, M.. (2006): The role of women in irrigation management and water resources development in Jordan. Online: <http://ressources.ciheam.org/om/pdf/a62/06002407.pdf> (accessed 20 December 2011).

<sup>5</sup> See Zwarteveen, M. (1995) : “Linking women to the main canal : Gender and irrigation management“. Online: <http://pubs.iied.org/pdfs/6068IIED.pdf> (accessed 10 November 2011)

<sup>6</sup> idem.

<sup>7</sup> Unless otherwise noted, data sources for statistical data are World Development Indicators and/or Gender Statistics from World Bank Data.

### 1.3 Agricultural sector background in Azerbaijan

#### *Agriculture in Azerbaijan*

9. The agricultural sector is a key component of Azerbaijan's non-oil economy. While the share of agriculture in the economy has gradually declined accounting for only 8% of GDP in 2010, the sector has been growing at an average annual rate of 6% the past few years. It has a potential for competing on the internal and external markets and an established base for exports, creating trade opportunities.
10. In one of the most comprehensive agrarian land reform programs in the former Soviet Union (FSU), almost all state and collective farms have been disbanded and 97 percent of the total arable land (1.87 million ha in 2009<sup>8</sup>) has been privatized and distributed to 869,000 farm families with about 96% of agricultural output produced on small-scale individual farms<sup>9</sup>. On average, these smallholders have 1 – 3 ha of land and several heads of livestock.
11. Agriculture provides income and employment for about 38% of the country's total labour force. In addition, the sector is seen as a priority by the Government of Azerbaijan (GoA) in the context of food security. Agriculture serves as an important source of livelihood for the majority of the rural population and it is the dominant rural employer. Therefore, agriculture is an important sector to reduce poverty significantly. Women have a significant role in the rural economy with about 40% of the Azerbaijan female labour force employed in agriculture.

#### *Current state of Irrigation and Drainage in Azerbaijan*

12. Irrigation produces benefits in terms of incomes and employment. Irrigated agriculture is more labour intensive than rainfed agriculture. It accounts for about one third of all employment in Azerbaijan. In addition, incomes from irrigated agriculture are typically well above the agricultural average, indicating the poverty reducing impact of irrigation.
13. However, rainfall is scarce and agriculture heavily depends on irrigation. Azerbaijan has nine distinct agro-climatic zones and offers potential for highly diversified agriculture. Since almost all agricultural lands are in (semi-) arid zones, I&D is a vital input to agricultural productivity in the country. Using water mainly from the Kura and Araz rivers, the total irrigated area amounts to 1.43 million ha<sup>10</sup> or 76% of the total arable land, producing 85% of agricultural value added<sup>11</sup>.
14. I&D infrastructure experienced an enormous development. In the last century, irrigation was concentrated alongside the rivers and the construction of large irrigation canals only started at the beginning of this century. In 1913, the total irrigated area was 582,000 ha. This increased to 1.43 million ha by 2010. The country has now over 51,755 km of irrigation canals, of which 2,184 km are main canals, 8,014 km are off-farm canals and 41,557 km are on-farm canals, i.e. the irrigation system at the level of former state and collective farms<sup>12</sup>. Sixty-five percent of the

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<sup>8</sup> Source : World Development Indicators.

<sup>9</sup> See The World Bank: Project Appraisal Document. Irrigation Distribution System & Management Improvement Project. Environmentally and Socially Sustainable Development Sector Unit, Europe and Central Asia Region. May 2003, p.4.

<sup>10</sup> See FAO Aquastat Azerbaijan 2008. Online:  
<http://www.fao.org/nr/water/aquastat/countries/azerbaijan/index.stm> (accessed 28 June 2011).

<sup>11</sup> See The World Bank : Project Appraisal Document. Water Users Association Development Support Project, Environmentally and Socially Sustainable Development Sector Unit, Europe and Central Asia Region. March 2011, p.1

<sup>12</sup> For figures concerning the I&D system of Azerbaijan see "Azerbaijan Irrigation and Drainage Sector Review Azerbaijan" (Final Draft, 2012).



irrigated area is irrigated by surface or gravity flow irrigation, 35% is irrigated with lift irrigation. Forty-seven percent of the irrigated area has drainage networks and 53% of the irrigated area has no drainage systems. At the on-farm level 72% of the estimated total canal length is earthen.

15. ... but still needs to be further developed: Of all the I&D infrastructure approximately 50% is in a poor state of deterioration and is in urgent need of rehabilitation and/or modernization. Over 450 on-farm systems serving more than one million ha require rehabilitation. Rehabilitation of on-farm systems is the Government's top priority for the I&D subsector. In 2001 it was found that 15% of irrigated farmland had poor or no access to water, 41% had access with difficulty and only 25.8% of farmland had good access to water.

#### **1.4 Institutional development and reforms in the I&D sector**

##### *Significant reforms and institutional adjustments*

16. Over the last two decades, significant reforms and investment have taken place. After the collapse of the FSU, the revival of irrigated agriculture has been promoted by reforms aimed at developing profitable agricultural markets, improving farmer incentives through land reform and market liberalization, and developing governance and institutional mechanisms for I&D that ensure the timely availability of water needed for high productivity. Within a framework of a liberalized agriculture economy and private farmland tenure, considerable public investment has been made to stem the deterioration of large scale irrigation infrastructure. The Government's top priority for the irrigation and drainage sector is to rehabilitate dilapidated irrigation and drainage systems, at a minimal cost to the users, and to increasing the sustainability of the sector.
17. ...and institutional adjustments were made. When reforms in the I&D sector started, the GoA entity responsible for the I&D sector was the State Amelioration and Irrigation Committee (SAIC), established in 1993 and in charge of management, operation and maintenance (MOM) of off-farm infrastructure, i.e. I&D infrastructure outside the boundaries of the former state and collective farms. The situation with respect to on-farm irrigation responsibility - of the approximately 2,000 collective and state farms in the country then - was left with a management vacuum with no one taking responsibility for management, operation and maintenance of the on-farm infrastructure. In order to address this problem the infrastructure of the former collective and state farms was transferred to the State Amelioration and Irrigation Committee (SAIC) and it was also decided that part of the maintenance was to be the responsibility of SAIC. In 2006, SAIC was changed into the Amelioration and Irrigation Open Joint Stock Company (AIOJSC) with the essentially governmental roles of providing bulk water supplies to irrigation systems and overseeing the development and management of irrigation and drainage systems in the country<sup>13</sup>. All shares of AIOJSC are state owned.

##### *WUA establishment and legislation in Azerbaijan*

18. WUA establishment in Azerbaijan started in 1997. The process was driven by activities funded by the World Bank through the Farm Privatization Project (FPP) under which six pilot WUAs were created. However, at this time, Azerbaijan did not have an adequate and appropriate legal framework in place for the establishment and sustainable operation of WUAs. There were only a couple of references to WUAs, one in the Law on Amelioration and Irrigation (Law No. 116-IQ, dated June 5, 1996), and others in subordinate legislation. The Law on Amelioration and

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<sup>13</sup> For a detailed list of responsibilities of AIOJSC as stipulated in its charter see the "Azerbaijan Irrigation and Drainage Sector Review Azerbaijan" (Final Draft, 2012).

Irrigation (LAI) contained a provision (Article 24) that farmers could establish WUAs to manage irrigation facilities within the boundaries of the former state and collective farms.

19. At first, WUAs were set up as limited liability enterprises. The law provided no detail as to how WUAs were to be established or operate. As a result the first WUAs were established as companies or, to be more specific, limited liability enterprises established in accordance with the Law on Limited Liability Enterprises, dated December 29, 1998. They were not stakeholder-governed associations focused on management of irrigation systems but were private companies free to undertake any lawful commercial activity and distribute profits among shareholders, including the hired staff, chairman, hydro-technician, accountant and field agents. Under this arrangement hired staff made the decisions and controlled the WUA with no voice or choice from members.
20. In 2004, WUAs were transformed into non-profit associations. After Parliament approved the amendment of the Law on Amelioration and Irrigation (LAI) in 2004, the WUA was transformed from a limited liability company into a voluntary community association responsible for management of on-farm irrigation systems. With the changes and amendments to the LAI, they became non-profit entities based on hydraulic boundaries. The amended LAI made it clear that the WUA had the right to set their own WUA Irrigation Service Fee (WUA-ISF) to cover all costs of management at the WUA level.
21. By January 2010, 546 WUAs covering an area of 1,320,497 ha had re-registered under the LAI<sup>14</sup>. In Azerbaijan, WUAs are now responsible for management, operation and maintenance of 95% of the irrigated area in the country on the lowest level of the irrigation system, i.e. the on-farm level.
22. Within AIOJSC, the raion irrigation departments are not only responsible for planning and implementing bulk water supplies to WUAs at on-farm level, they are also responsible for forming Raion Support Units (RSUs) – under the auspices of a Central Support Unit (CSU) – with the responsibility to establish and build the capacity of WUAs. To strengthen WUAs, training programs for WUAs were done in two parts: in the early phase of IDSMIP, information dissemination and public awareness was conducted to sensitize water users and local governments and win support for development of WUAs. In a second phase, training modules were prepared and delivered on WUA formation and registration; hydraulic boundaries of WUA; WUA organization, governance and farmer participation; roles and procedures for the WUA Council and Assembly; WUA administration and roles of staff; preparation of the Irrigation Service Plan, WUA budget and ISF; collecting and using ISF funds; water distribution; maintenance and repairs; construction supervision; monitoring and evaluation and preparation of annual reports.
23. WUA membership is open to land title owners. During the land reform process, all the land traditionally held by large collectives was distributed to rural households and transferred into private title for free. Both men and women of a household received agricultural land on equal terms. However, different modalities in the issuance of land titles to different types of land were applied (see chapter 2.1).
24. The government has recognized the importance of establishing and strengthening WUAs as the organizations that would eventually take over responsibility for MOM of on-farm irrigation and drainage systems. Responsibility for MOM at the lower levels was progressively transferred to WUAs, which would recover a growing share of the costs of running the schemes through irrigation service fees. However, MOM of irrigation sub-systems is heavily subsidized by the Government. The Azerbaijan Irrigation and Drainage Sector Review therefore notes that it remains to be seen to what extent the GoA will move towards fully self-financed, self-reliant

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<sup>14</sup> According to the AIOJSC Central Support Unit, 547 WUAs have been registered by June 1, 2011.

WUAs, irrigation management transfer and development of long-term arrangements to provide needed support services to WUAs from both the public and private sectors.

25. There are, however, a number of bottlenecks and constraints to restoring productivity in I&D. Azerbaijan faces a massive need for rehabilitation and modernization of its I&D infrastructure, including main, secondary and on-farm canals, gates, chutes, drop structures, hydro-posts, etc. After rehabilitation, on-farm schemes should be transferred to WUAs for management and financing. Despite reforms and investment, irrigated agriculture has only slowly adjusted towards a market-driven approach. The core irrigation reform under way still consists of irrigation management transfer of on-farm I&D systems to water users to enable technical and financial viability of the systems.

## 1.5 The World Bank's contribution to the I&D development in Azerbaijan

### *Past and recent projects*

26. The World Bank has financed three projects so far that have benefitted the I&D sector in Azerbaijan. The already mentioned Farm Privatization Project (FPP, 1997 – 2003) led and helped shape the process of privatization of state and collective farms. It also involved rehabilitation, pilot transfer of management to WUAs and introduction of a new irrigation service fee. FPP was followed by the Rehabilitation and Completion of Irrigation and Drainage Infrastructure Project (RIDIP, 2000 – 2007), which had a focus on rehabilitation and completion of major off-farm conveyance canals, structures and collector drains. The Irrigation Distribution System and Management Improvement Project (IDSMIP) started in 2004 and had two main components: 1) institutional development of WUAs at the on-farm level and 2) rehabilitation at the on-farm level. IDSMIP facilitated development of the amended Law on Amelioration and Irrigation in 2004 and supported re-registering of all 546 WUAs nationwide. In 2007 participatory rehabilitation of irrigation at the on-farm level was started under IDSMIP for 22 WUAs on an area serving 52,000 ha.
27. IDSMIP has been seen as being one of the Bank's most successful projects in Azerbaijan, by the Bank as well as by the Government of Azerbaijan. It supported institutional development of 213 WUAs, and the rehabilitation at the on-farm level of 22 WUAs in Azerbaijan covering 11 raions (see Annex 1: IDSMIP map). The Project rehabilitated systems served 53,124 ha<sup>15</sup>. IDSMIP has yielded several benefits. It showed that rehabilitation of on-farm irrigation and drainage would bring about a 23% increase in yields and >5,200 ha increase in rehabilitated irrigated area with an economic rate of return for investments in irrigation and drainage rehabilitation of 25%. Over 2006-09 budgets of the rehabilitated WUAs increased by more than four times, compared to non-rehabilitated WUAs. In 2009, rehabilitated WUAs had carried out 91 percent of the MOM works agreed in their plans. One third of the non-rehabilitated WUAs have not done any MOM work and are still heavily dependent on Raion Irrigation Departments (under AIOJSC) to carry out such work, but the rate of farmer's satisfaction with the irrigation service within these WUAs has nevertheless increased in comparison to the baseline survey figures from 2005 (37% compared to 23% in 2005).
28. IDSMIP confirmed the principle that both components (i.e. infrastructure and institutions) were a necessary and powerful combination. It demonstrated that Irrigation Management Transfer (IMT) is feasible but capacity building and support services for WUAs would be needed for the long term. Two recommendations of the end-of-project beneficiary survey of IDSMIP for the follow-up WUAP confirmed this need: 1. To continue awareness raising/ promotion activities

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<sup>15</sup> See World Bank. Implementation Completion and Results Report (ICR). Irrigation Distribution System & Management Improvement Project. Environmentally and Socially Sustainable Development Department, Europe and Central Asia Region. March 4,2011.

- in non-project raions with the involvement of the most successful WUAs from the project raions and 2. to involve more farmers into the decision-making process on WUA operation , taking into account a gender equality approach.
29. Following the success of IDSMIP, the World Bank approved a new investment in the I&D sector in Azerbaijan in April 2011, the Water Users Association Development Support Project (WUAP), which became effective in December 2011. The Project Development Objective (PDO) is to improve the effectiveness and financial viability of on-farm irrigation water distribution and management in the project area. The PDO will be achieved through capacity building and support to eligible WUAs, WUA central and raion support units, and the AIOJSC, and through rehabilitation of on-farm I&D infrastructure. The target group is irrigating farmers and WUAs in selected project areas and AIOJSC staff. With a financing envelope of US\$ 114.3 million, the project will support about 34 WUAs on 485,000 ha with rehabilitation, and about 379 WUAs and 760,000 farmers in 27 raions (see Annex 2: WUAP map) with various capacity building measures.
  30. Gender integration in the Bank-supported programs in the I&D sector in Azerbaijan was not defined as a specific topic at the beginning of IDSMIP, but has emerged during the social survey work during IDSMIP implementation to be an issue that needs attention. Similar issues arose at other I&D projects in the region. For example, the social assessment conducted under the Fergana [Farghona] Valley Water Resources Management Project (2005 - 2011) in August 2009, states that there is an insufficient inclusion of women in WUAs. Their involvement in WUAs “falls considerably short of their disproportionate burden of livelihood, the rising trends in female-headed households, and the direct interest they have in the improvement of water provision.”<sup>16</sup> Or in the Kyrgyz Republic, the Additional Financing for the Second On-farm Irrigation Project (2011 – 2013) foresees a dedicated gender survey which will be conducted within the M&E framework in order to identify gender asymmetries in WUA participation and on-farm water management, and to define lessons learnt in order to enhance the role of women in agricultural water management and agricultural production.

## **1.6 Gender in Azerbaijan**

### *Government policy and support for gender*

31. The Republic of Azerbaijan is a country that fully affirms gender equality. It is committed to international norms on gender equality and to women’s human rights. The country has ratified the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1995 and submits reports to relevant agencies on implementation of the Convention; and other required documents as a party to the Council of Europe and OSCE.<sup>17</sup> It is also committed to achieve the MDGs as outlined in the 2000 Millennium Declaration. The GoA has declared gender equality in its constitution (adopted in November 1995) and all legal documents including the Law on Guarantees of Gender Equality, adopted in October 2006.
32. However, in Azerbaijan, like in many other countries, there is a discrepancy between legislative laws and their realization, and gender mainstreaming at the strategic policy formulation and development is progressing, but not being routinely implemented so far.

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<sup>16</sup> See World Bank: Working Paper. Agricultural Activities, Water, and Gender in Tajikistan’s Rural Sector: A Social Assessment of Konibodom, Bobojon Ghafurov, and Yovon. Social Development Department, Europe and Central Asia Region. August 2009.

<sup>17</sup> See UNDP (2007): Azerbaijan Human Development Report 2007. Gender attitudes in Azerbaijan: trends and challenges. New York, USA. Online: <http://hdr.undp.org/en/reports/nationalreports/europethecis/azerbaijan/nhdr2007gendereng.pdf>). See also: United Nations Country Team – Azerbaijan: Country Gender Briefing Kit (2010).

33. The second phase of the State Programme on Poverty Reduction and Sustainable Development (2008-2015), adopted in September 2008, fully incorporates a gender component. Its secretariat added a gender expert to its staff and established a regular collaboration with the UN Gender Focal Point and the UN Gender Theme Group, and as a result the Programme's gender component has been assessed as one of the strongest among Central Asia and Caucasian countries, and proposed as a 'good practice' in the region.
34. In the agricultural sector, however, progress in gender mainstreaming is slow. Important for the agricultural sector is the policy document "State of the Agricultural Sector and Principal Ways of Its Development 2002–2015". The FAO Gender and Land Rights Base states: "It outlines the key problems in the sector and the government's policy and strategies, but it does not address gender issues, even though many of the sectors described in the policy, including farm development, crop production, animal husbandry and food processing, clearly employ significant numbers of women. Nor does the policy consider women's central role within the family as a food producer and provider. Gender issues are neglected at the policy level and, as a result, women's contribution to agriculture is underestimated and their specific needs are ignored in development planning and implementation."<sup>18</sup>

#### *Gender roles in Azerbaijan*

35. Moreover, religious beliefs, customary norms and social practices further hinder gender equality. Although legislation is egalitarian regarding guarantees of property rights and protection of rights to land and other property acquired before and after marriage, the UNDP Human Development Report on gender notes that gender asymmetry can be seen in unequal property ownership: men outstrip women by almost 90 percent in property ownership. Unofficial marriages, including early marriages, result in a decrease of women's share of property<sup>19</sup>.
36. Gender roles are further influenced by pervasive gender stereotypes and attitudes. Gender expectations – the men as the families' main breadwinner and decision maker, the women foremost mothers, nurturers and sustainers - emphasize differences between men and women and prescribe gender-specific roles in employment, education and leisure. In educational materials gender stereotypes are replicated presenting men as leaders in power-related positions (the director of a school, president, etc.) or in male-dominated professions (a soldier, policemen, tailor, tractor operator, sportsman, tool-maker, operator, turner, etc.), whereas women are housewives, teachers, librarians, cleaners, cooks and doctors. Thus, women are highly underrepresented in political decision-making positions in government. This is one of the areas in which gender differences place women at the greatest disadvantage in comparison to men<sup>20</sup>.
37. The Azerbaijani family, although significantly inclined towards patriarchy in terms of expectations from men and women, stereotypes about male and female roles, gender-biased divisions of labour, and attitudes to male and female employment, is an important asset of Azerbaijani society. The UNDP Human Development Report on gender underlines, that the "main challenge in front of the Azerbaijani state, civil society and the citizens now is to improve gender equality within the family without violating intra-family harmony and national identity." And further it states that the direction of change will be determined by developments in the economic sphere.
38. Rural women constitute an important part of the unemployed and economically vulnerable. After independence, women faced the loss of employment within the formal sector and access

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<sup>18</sup> See FAO (2010): Gender and Land Rights Database. Azerbaijan. Online: <http://www.fao.org/gender/landrights/report/?country=AZ> (accessed 21 December 2011).

<sup>19</sup> See UNDP (2007).

<sup>20</sup> See United Nations Country Team – Azerbaijan: Country Gender Briefing Kit (2010).



to social services. This was a consequence of the dismantling of the former state collective farms, on which many rural women were employed and which offered them also an infrastructure of support services such as child care. Therefore, while women have, in principle, retained equality in all fields through their constitutional rights, in reality they lost much of their economic and personal autonomy.

## 1.7 Gender survey: focus and methodology

### *Gender survey background and focus*

39. There was a recognised need for enhancing the role of women in irrigation management. IDSMIP supported institutional development of WUAs, and the rehabilitation at the on-farm level in Azerbaijan. A mid-term review of the project noted that more progress could be made on gender issues. It concluded that the project should emphasize a course of action that respects the existing gender division of labour but ensures that women are more aware of the function and decision-making procedures of WUAs.
40. The gender survey aimed to get a better insight and understanding of the role of women in WUAs and give recommendations for the follow-up project on how to enhance their involvement. In light of the closing of IDSMIP and the preparation of the follow-up project, the survey aimed at developing detailed recommendations which could be included in the follow-up Water Users Association Development Support Project. Its objectives were to: i) help gain a better understanding of women's role in the present irrigation management context; ii) support the formulation of recommendations to increase women's participation in the WUA affairs in the follow-up project; and iii) support the formulation of promotion material for dissemination to WUAs in order to foster awareness-raising of gender issues.

### *Approach and scope of the study*

41. In this report gender refers to the socially-constructed differences between men and women, as distinct from "sex", which refers to their biological differences. In all societies there are attributes and opportunities associated with being male and female and specific socio-cultural relationships between women and men. They are learned through socialization processes and hence context specific and changeable. Gender roles demarcate responsibilities between men and women in social and economic activities, in access to resources and in decision-making authority (World Bank 2010). These roles can and do shift with social, economic, and technological change.
42. To meet the objectives of the survey, a systematic gathering and examination of information on gender differences and social relations was undertaken. The analysis covered the following range of aspects:
  - Participation practices and the role of women in MOM: Understanding the present MOM in irrigation provides the starting point for further development. The survey looked at: (i) the gender division of labour; (ii) production patterns and water needs; (iii) household budgets and its management; (iv) decision-making procedures within households, (v) women's actual role in WUA management; and (vi) water rights and the land tenure system.
  - Knowledge base of stakeholders: To enhance the role of women in irrigation management draws not only on their capacity, but also on their knowledge and the knowledge of male WUA members and managerial staff as water managers and decision-makers. To understand the knowledge of different stakeholders on WUAs the survey asked on respondent's (i) knowledge and understanding of the WUA concept; (ii) their knowledge about the institutional set-up of WUAs; and (iii) their knowledge about the services provided by the WUA.



- Attitudes and perceptions about WUAs: Any recommendations have also to derive from the interpretation of the perceived role of WUAs and the role of women in them. The survey covered questions on: (i) the importance attached to WUAs; (ii) the perceived problems in WUA performance and irrigation management and suggestions to overcome these problems; (iii) the perceived relationship between the overall economic development of a WUA and the active participation of all members; (iv) the perceived roles of women in WUA management and decision making and attitudes on women's participation in WUAs; and the rapid survey further asked (v) the perceived impact of IDSMIP on the farming system and its impact on the role of men and women in this system.
  - Information sources and needs: To adapt gender awareness trainings on the needs of stakeholders, it is useful to understand their needs for information. The survey looked at (i) the willingness of respondents to gain more knowledge, (ii) their sources of information, (iii) their information requirements.
43. Socio-economic data, on the educational background of respondents or the gender of the household head amongst others, were complementing these data.

#### *Survey instruments and sampling method*

44. The survey collected both quantitative and qualitative sex-disaggregated data. Quantitative data provide the hard figures crucial to advocacy, and are useful in showing changes over time. Qualitative methodologies capture people's opinions, attitudes and feelings and enable a more in-depth examination of social processes, social relations, power dynamics and the 'quality' of gender equality.
45. The quantitative study was based on questionnaires that included both closed and open questions (see Annex 3). The questionnaires were filled in during face-to-face interviews by four trained national consultant surveyors. They contained five sections which correspond to the five aspects mentioned above.
46. The qualitative survey was based on focus group discussions and more in-depth open individual interviews with the administrative staff of the WUAs. It took the form of semi-structured interviews based on an interview guide (see Annex 4).

#### *Sampling frame and target groups*

47. The gender survey is a product of intensive field survey and of collaboration amongst project stakeholders in Azerbaijan. It was carried out in May – June 2010 covering 13 WUAs in 8 raions (districts)(see Annex 1: IDSMIP map and Annex 2: WUAP map).
- 5 out of the 11 IDSMIP project raions: Xacmaz in the northern region, Imisli, Agcabadi and Goranboy in the central zone and Nakhchivan Autonomous Republic.
  - 3 control raions which are integrated as new project raions under the follow-up WUAP. These were: Balakan, Zaqatala and Qax in the north-western region.
48. In each of the project raions, rehabilitated WUAs (R) which benefitted from rehabilitation work under IDSMIP and non-rehabilitated WUAs (NR) which only benefitted by capacity building measures were selected. And in each future project raions (C), one WUA was selected.
49. The survey focused on three distinct target groups. These included:
- Group 1: Female WUA members (regular and invisible),
  - Group 2: Regular male WUA members,
  - Group 3: WUA administrative and executive staff, with a focus on higher level "decision makers". Whenever possible, the interview partner was the chairman. This category therefore constituted mainly men, with one exception in Xacmaz raion.

Interviews with staff from the WUAs' Support Units in Raion offices provided the necessary information for understanding the local particularities.

50. The survey was based on different sampling methods. For the women and men sub-groups, stratified random sampling was applied. In every WUA three villages will were selected, one in the upper part, one in the middle part and one at the tail of the WUA irrigation system. The respondents for the quantitative and qualitative survey were equally selected from the identified three villages. For the administrative WUA staff and the Raion Support Unit (RSU) staff a purposive sample procedure was applied.
51. In total, the quantitative survey included 131 interviews covering the three target groups, and the qualitative survey covered about 230 informants. Moreover, the staff of WUAs' Raion Support Unit (RSU) offices were interviewed (see Annex 4: Figure 1 and Table 1 which sum up the sampling methodology and the Sampling Frame).

#### *Data collection and editing*

52. The four national consultants who conducted the survey encountered some problems when searching for regular female WUA members. During the land privatization process every household member received land on equal parts and appeared on the privatization lists. WUA lists are usually based on these lists. However, in the daily WUA work, the WUA staff uses another list which had been created for practical reasons. On these lists only the household head appears, the one who the field agents address when collecting the ISF. They have been revised periodically and changes on household composition are included. On these lists there are between 7 and 30% of women. The formal membership lists with all members, women included, are often not used at all. They are often hidden in cupboards and WUA staff even forgot about its existence.
53. During data collection, therefore, only the women who appear on these lists used for daily work had been chosen. In the case of Sunay WUA, Nakhchivan raion, with 33 members altogether on the list, nine are women. A focus group interview was therefore not possible. The five selected women in this WUA were chosen for the quantitative survey.
54. A rapid survey complemented the comprehensive gender survey. Further field study, conducted in August 2011, clarified some questions which arose after the completion of the gender survey, especially with respect to the household plots which are mainly managed by women. The rapid field study targeted the same stakeholder groups as the comprehensive gender survey comprising about 100 qualitative interviews and covering five WUAs in three raions – 4 WUAs from the former IDSMIP raions Imisli and Xacmaz, and one new WUA which will be part of the WUAP in Qax.
55. In the analysis of qualitative data, when there were different opinions expressed in the focus groups, these opinions were weighted and either expressed in percentage, or after weighting divided by the number of focus groups, so that the qualitative analysis ended up with 19 statements for each question. When there were multiple choice questions, such as listing the problems of WUA development, all statements were counted.<sup>21</sup>

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<sup>21</sup> The survey adapted methods as described in Russell, Bernhard H. (1994): Research methods in anthropology: qualitative and quantitative approaches.



**Photograph 1 : Female focus group discussion in Gala WUA, Imisli (August 2011).**

## **1.8 Study background – Gender and irrigation agriculture in Azerbaijan**

*This section provides a brief overview of the key research findings in order to elucidate why the gender issue is important in irrigation agriculture in Azerbaijan and to allow the reader to have a better understanding of the topics discussed in the subsequent chapters. Based on survey data, the detailed analysis of the survey findings will then be given in chapter 2.*

56. Factors in rural Azerbaijan legitimate a higher involvement of women in WUAs. The increase of women's participation in all water-related development activities, drawing on their knowledge and capacity as water managers and the goals as described in the MDGs concerning women might only be objectives of the western development agenda, but the assessment on the role of women in WUAs in Azerbaijan has shown that there are also factors in rural Azerbaijan that legitimate and necessitate a higher involvement of women in WUAs.
57. There is a general lack of knowledge on WUA management and decision-making of all WUA members. The survey demonstrated the need to enhance the knowledge of all survey groups, regular male and female members and the WUA staff. Although women are least informed, men also lack substantial knowledge on WUA management and decision-making. WUA chairmen and staff are best informed, but they still attribute the right of decision-making to the chairman, which is not entirely according to the WUA statutes.
58. Nevertheless the knowledge gap is gender specific. Women have by far the least knowledge not only when it comes to the general understanding of WUAs, but also on other institutional aspects. They have very limited knowledge on their WUA management and decision making rights and on their responsibilities as WUA members. This lack of knowledge is related to the generally lower educational level of women compared to men, but also to the lack of knowledge among WUA management of gender issues and the existing and potential role of women.
59. The knowledge gap is also WUA-type specific. Respondents in control WUAs which are new WUAs under the WUAP (not having received training), both men and women, have significantly less knowledge than those in former IDSMIP WUAs who already received capacity building trainings and information. Women in these new project WUAs moreover are looking for more knowledge on WUAs and irrigation management.

60. At the same time, the survey could show that there are several reasons why women should be better informed about WUAs and participate more in its management:
- The survey showed that in the majority of households, independent from the region, women alone or men and women together control the household budget and consult each other in decision-making and both are involved in farming activities. Therefore awareness raising among women on institutional and operational aspects of WUAs is important so that they have a solid basis for their decisions. This better understanding will then have a positive impact on the economic empowerment of women.
  - Women have irrigation water needs for the household plots which play a significant role in rural livelihoods. The production on these household plots which are cultivated by women improves household food security by providing sufficient produce for household consumption, including the off-season consumption. Vegetables and fruits are generally not bought on the market and conserved for off-season usage to supplement the daily diet. Moreover, in the majority of households they are important as an additional and a relatively substantial income.
  - Female participation in WUAs is challenged by structural barriers. Despite exceptional examples of women's participation and lack of formal institutional barriers, evidence suggests that women face competing obligations (child care, household work, management of household plots and participation in certain farmland activities) and social mores (traditional gender roles) that hamper their inclusion in WUA structures. Women do not participate in WUAs proportionate to the number of female-headed households or their direct interest in ensuring adequate water provision for household plots.
61. But, a considerable part of women and men (40% on average) state that it is worthy to involve women more in WUA management in the follow-up project. These women want to participate more, even though they might face barriers. Therefore a further involvement would also empower women politically, and, depending on the modalities, economically, for instance if they are provided paid jobs in the WUA administration.
62. Awareness raising and training during IDSMIP were gender neutral and did not reach female water users sufficiently. In the establishment phase of the WUAs, only 13% of women met with WUA Mobilization specialists or village-based organizers versus 59% of regular male members. Capacity training during IDSMIP reached only 3.4% of female water users versus 32% of regular male users and 77% of WUA administrative staff.
63. But, if women were reached, awareness raising under IDSMIP turned out to be very effective. Women in project WUAs who have met with WUA Mobilization specialists or village-based WUA organizers attach more importance to WUAs than those who didn't meet these awareness raising specialists. Also, those women who had received training or attended other information meetings are overwhelmingly aware of the importance of women in WUA management. First of all, they understand that this would benefit their household's living standard through a better knowledge of water affairs concerning their household plots or a paid job opportunity in the administration. Secondly, they are aware of the importance of WUA development and its role in, for example the resolution of water management conflicts. On the other hand, the majority of those women who have not received training think that their role in WUA management is not important.
64. All respondents agree that women have better communication skills than men in conflict resolution, awareness raising activities, and other communication related activities, and accounting. Therefore, to use these specific skills in WUA management could improve the performance and increase the efficiency of WUAs.
65. Land reform modalities differed according to the type of land (formerly collectively owned farmland versus household plots) and land titles attached to these different types of land are differing. Thus, in most cases – female-headed household are exceptions – women do not have any legal ownership rights over the household plots they cultivate. However, as formal WUA

membership rights are based on the land registration for farmland, about half of the members are women and half of them are men. A problem might arise when votes to members are allocated in proportion to the size of a member's land holdings within the service area of the WUA which is one of the possible principles for WUAs in Azerbaijan to determine how to allocate votes. It is therefore important that women (and men) are aware of their membership rights to WUAs on the one hand and the rights attached to land titles on the other hand. For a good operation of a WUA in the long run, women (and men) should be aware of the modalities to water access and the possibilities in decision-making participation. This will empower them politically, and eventually also economically.



## Chapter 2 Knowledge Product - Gender in irrigation management in Azerbaijan

*By considering women as major stakeholders in irrigation management, this chapter seeks to understand the role of men and women in irrigation agriculture in rural Azerbaijan and factors that influence the active involvement of women in irrigation management. It provides a concise synthesis of the most striking and significant findings of the gender and its supplementary survey on: (i) the present irrigation management context and the role of women in it; (ii) the knowledge of WUA members on WUA functioning and decision-making; (iii) the perception of women's role and further involvement in WUAs; and (iv) information sources and needs.*

### 2.1 The role of men and women in irrigation management

*This section gives insights into the present irrigation management system and the role of men and women who farm.*

*Gender division of labour in farming and irrigation*

66. The gender division of labour for farming is rigid with considerable time commitments of women to domestic roles. The lack of interest among women in attending assemblies can partly be explained by their everyday work load. Women have a significant role in the rural economy where agriculture is often the sole rural economic activity. Women do all household related work, including child care.
67. To maintain their households, women work on farmland, household plots and in livestock production. They engage in a wide number of agricultural activities, including work on farmland, helping the men with activities such as sowing, weeding, hoeing, harvesting and storing crop produce. The agricultural production at household plots is mainly managed by women, with help from the men for more physical tasks like irrigation. In case of surplus produce, women also do the marketing. Women have roles in large and small livestock production: they are generally responsible for the finger milking and handling of newly born and young stock and the cleaning of the barn. Moreover, women are responsible for backyard livestock raising, mainly poultry<sup>22</sup>. In the central region, the livestock of the farms consists of 3.65 cattle/cow and 4.57 sheep. The average size of poultry per household amounts to 13.52 heads. In the drier Nakhchivan region, the livestock of the farms consists of 1.98 cattle/cow and 10.83 sheep. The average size of poultry population per household amounts to 13.21 heads<sup>23</sup>.

Men are sometimes aware of the work load of women.

“Women do more work than us. In addition to farming they also do household work, and sometimes they help with irrigation, too, by opening and closing the irrigation furrows using shovel.” (Male focus group participant in Xacmaz).

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<sup>22</sup> A good overview over the gender division of labour in agriculture in Azerbaijan is given in the Project Design Report of the proposed Integrated Rural Development Project of IFAD, p.24ff. Online: <http://www.ifad.org/operations/projects/design/102/azerbaijan.pdf>.

<sup>23</sup> See End-of-project beneficiary survey of IDSMIP. Results are summarised in the IDSMIP ICR.





**Photograph 2 : Interview with female respondent in Xacmaz (August 2011)**

68. Certain activities are always performed by men. There is a distinct and strict division of labour for mechanized operations, irrigation on farmland, pesticide spraying and some highly specialised operations such as pruning and crafting. These activities are considered to be men's work. In the case of female-headed households where men are absent and women do all the work men usually do, they hire labour for the irrigation works on farmland. Of course, exceptions exist, as for example in Xacmaz where large areas of vegetables require more frequent irrigation, so women at times help with the irrigation of farmland.
69. However, when it comes to irrigation on household plots, women are also involved. The physical work of irrigation on household plots is in 40% of all cases done by men, in another 40% women irrigate these plots and in the remaining 20% men and women are sharing this task. So, women do all the farming work on household plots, but men might help in irrigating these plots.
70. Moreover, strict social mores determine the role of men and women in society. As described above, there is a strict gender division of labour, but mentality and social norms also hamper women, for example, from participating in WUA management.

“It is a mentality and specific of Muslim men. They prefer their women to sit at home and not to be too active. (Male focus group participant in Imisli) .

“Women should work in schools, health centers and kindergartens. They should not be involved in irrigation. (Male focus group participant in Agcabadi).

“Women have other responsibilities at home.” (Female focus group participant in Agcabadi)

71. This gender division of labour has several consequences. First, women's daily schedules are organised in a different way and cannot attend meetings during day time or during the evening meal. Second, women have irrigation water needs for their household plot production and third, women are engaged in a wide number of agricultural activities, including activities on the farmland.

*Production patterns, water needs and household plot production*

72. Crop production patterns are very clear. On household plots vegetables are grown as a first priority, and fruits as a second priority. On farmland, a region specific cropping pattern is evident: In the central zone (Imisli, Agcabadi), farmland is almost exclusively used for forage crops (alfalfa), wheat and less often barley. In the north-western part of the country (Qax, Zaqatala and Balakan), besides forage crops and wheat, farmland is also used for growing tobacco and corn or sometimes high value fruit like walnuts. In the northern part (Xacmaz), farmland is first of all used for high-value fruit and vegetables for the market. Sometimes alfalfa is grown for fodder production.



**Photograph 3 : Farmers in Chinartala WUA, Xacmaz (August 2011).**

73. Water needs for household plots are important. In general, deep rooting crops grown on farmland, like cotton, wheat, fodder or orchards, require less frequent irrigation than vegetables grown on household plots. An exception is Xacmaz with its specific cropping pattern on farmland (mainly fruit and vegetables). On the other hand, farmland represents normally more than 95% of the land under cultivation. In Chinartala WUA (Xacmaz) for example, an average household of five persons has approximately 2.5 ha of farmland, the size of the household plot is about 0.1 – 0.15 ha<sup>24</sup>. It was not in the scope of the survey to do an in-depth agro-economic survey which would allow for an analysis of the economic significance of household plots and their relative water needs, so this topic deserves further investigation. What became clear, however, is that water needs for household plots are important.
74. ...and women are major irrigation water users. They not only need irrigation water for the household plots, but the rapid survey showed that in many households canal water is also used for household purposes such as washing or cleaning, but not as drinking water.
75. The production of household plots contributes in most cases to the revenue of a household. Household plots are important for a variety of reasons. They meet most of the vegetables and fruits needs of the households, not only as freshly used products, but also conserved for off-

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<sup>24</sup> The end-of-project beneficiary survey of IDSMIP gives an example for the changes in the crop areas of a R-WUA in the Northern Zone after rehabilitation. The total cultivated area of the WUA increased by 8.6% to 2,531ha of which 2.8% (or 70ha) are household plots. See IDSMIP ICR.

season consumption supplementing the daily diet (potatoes and pastry or bread). The rapid survey showed that they are just as important for additional and relatively substantial income. Although respondents could not tell how much of their income stems from household plots and how much from farmland, they acknowledged that selling the surplus production from household plots is important for half of the households and somewhat important for another third of households.

76. Therefore, if household plots are not sufficiently irrigated, this might lead to: (i) a reduction of the amount of self-produced staples and vegetables; (ii) an increase of the household's food expenditures; (iii) a reduction of the household income; and (iv) a negative impact on the diet of the family.

#### *Household budget management and decision-making procedures*

77. The control of the household budget is within the realm of women or men and women together, but men pay for the significant investments. Although the answers of female respondents in a specific WUA did not necessarily correspond with the answers of the male respondents in the same WUA, the survey showed that in the majority of households (>70%), either women alone or men and women together control the household budget. On the other side, men represent the household to the external world and they are in charge making the significant investments in the farming or in the household. This underlines the importance that women should be well informed about WUA affairs, i.e. on institutional and operational aspects of WUAs. A better understanding would provide them a solid basis for their decisions and hence have a positive impact on their economic empowerment.

“Women save the money, men spend it, but after consulting with women.” (Male focus group participant in Imisli).

“In the family the women is the accountant and the man is the director of the enterprise.” (Administrative staff in Imisli).

78. Generally, men and women take crop choice decisions together. In the majority of households, respondents acknowledge that decisions are taken together. When it comes to crop choice on the household plots, women might take this decision alone since they assume the task of feeding the family with this production. There is no gender difference in the answers.
79. When it comes to decisions on irrigation, however, a gender specific interpretation dominates the issue. For men it is very clear that they take the decisions over irrigation, no matter on which land (household plots and farmland), but women provide a different perspective on this. The women tell a completely other story: in their description either both, man and woman, take the decisions, or men for farmland and women for household plots or even women alone take this decision. Only about 10% of female respondents say that only men take the decision on irrigation. It is difficult to find an explanation for this difference in answers since the survey question clearly aimed at decisions concerning the irrigation of all plots of the household. However, the finding shows that women are convinced that they participate significantly in household decisions concerning irrigation related questions. They should therefore have all the relevant information in order to make informed decisions.

#### *Participation in WUA management and decision-making*

80. In general there is a lack of integrating regular WUA members, no matter if male or female. Even though men's active participation in WUA management is relatively high and information dissemination is directed to male members, half of the regular male WUA member respondents

also feel an exclusion from the decision-making processes in their WUA. A top-down decision-making process is still dominating in WUA management.

“If we, the WUA members, will get our rights according to the WUA statutes concerning the water fee definition, the water plan or the budget control, the WUA’s economic development will increase too. We make suggestions to the WUA administration, but we cannot control the implementation of these suggestions.” (Male focus group participant in Xazmac).

81. Awareness raising activities and trainings which targeted at women are efficient. In Imisli and Goranboy where women were targeted specifically and gender specific information meetings for women were organized they attended these meetings. When not specifically invited, women do not attend assemblies or gender neutral meetings.
82. In general, women’s participation in WUA management and decision-making is highly underdeveloped. Their active participation in WUA management is very limited. Of all the visited WUAs, only in one WUA of Xacmaz raion a women participates in a WUA committee. She is member of the Executive Board. This woman is from a woman-headed household where men are absent<sup>25</sup> (see Box1). In this WUA, due to her participation, respondents admit that the efficiency in terms of conflict resolution and fee collection has increased.
83. There are three other WUAs out of the 547 registered WUAs of Azerbaijan which have female chairmen, one of them also covered by IDSMIP; but they were not in the survey sample<sup>26</sup>. An interesting point would be to compare their efficiency to all-male managed WUAs. This was not within the scope of the survey, but would deserve further investigation.

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<sup>25</sup> There are mainly two cases of women-headed households. Either the women are widows, or the men have migrated working far away.

<sup>26</sup> These WUAs are: Yeni arkh WUA in Goycay raion, Ahmedbeyli WUA in Saatli raion and Yekekhana WUA in Samaxi raion. Written information by the head of the Central Support Unit (CSU) under AIJOSC.

### Box 1 : Women in Chinartala WUA

#### *Women in Chinartala WUA – a local best practice model*

At present, the executive director of Chinartala WUA in Xacmaz rayon is a woman, Mrs. Tamilla Lachinova. She gradually progressed in her career.

After the establishment of Chinartala WUA in 2006, Tamilla, a female household-head, took the initiative and asked for a job as a field agent in this WUA. She had worked more than three years as a field agent for the WUA, when the other staff and the members of Chinartala WUA noted that Tamilla is a hard worker. Due to her dedication, the number of conflicts could have been reduced and irrigation water delivered timely and equitably. According to the WUA's chairman, Mr. Dashdemir Hajiyevev, they could also improve the collection of the ISF due to Tamilla's engagement.

Taking into account all these facts of successful work, the chairman of Chinartala WUA proposed Tamilla the position of the executive director. For more than a year now, Tamilla has been the executive director of Chinartala WUA. And her daughter replaced her as field agent in the WUA.

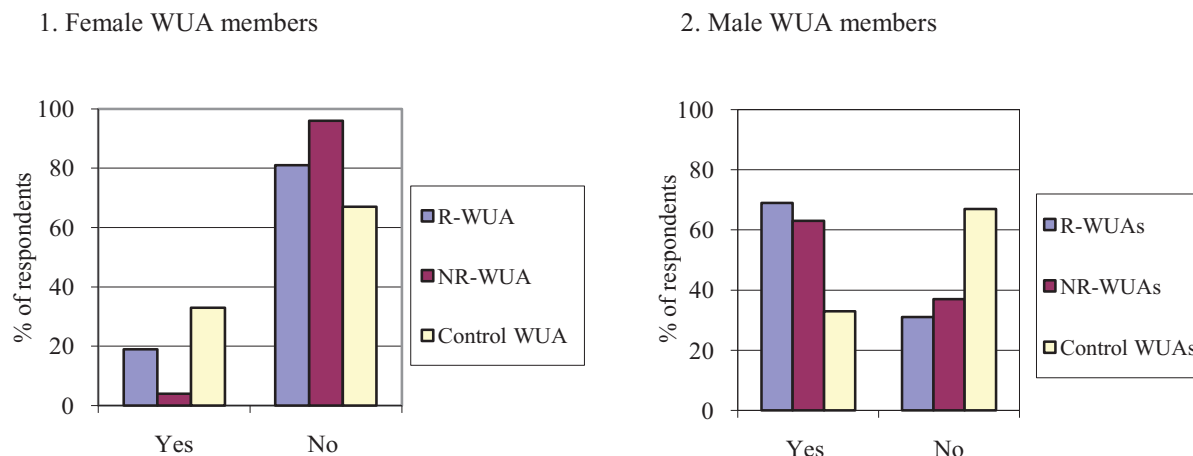
Critical to the involvement of women in this WUA's administrative staff has been the will of the women to participate and the openness of the male WUA staff, especially the chairman, to support them. Once working for the WUA, Tamilla could show her authority and gained the respect of the members of the WUA.

*Source: Qualitative interview, May/June 2010.*

84. If at all, only women from women-headed households participate in meetings. In general, women not even attend general assemblies neither are they representatives in representative assemblies.
85. The active participation of men and women is related to project interventions. When respondents are asked if they actively participate in their WUAs, a project specific pattern emerged. Respondents in WUAs rehabilitated under IDSMIP participate more than those in non-rehabilitated. This is true for men and is even more marked for women. In control WUAs, on the other hand, the majority of men and women say that they do not participate actively (see Figure 1).

On a further probing question on how they participate male respondents mentioned that: (i) they usually attend general assemblies (43%); (ii) they give advices (26%); (iii) they are involved in daily management (24%); and (iv) they criticize (2%). Women usually do not attend general assemblies, but they stated that they give advices (56%) and that they are involved in the daily management (44%).

**Figure 1: WUA participation: Do you actively participate in your WUA? (by gender and by WUA type)**



Source: Field survey (quantitative survey), May/June 2010

*The land tenure system, water rights and membership requirements*

86. In theory, men and women should be equally represented in WUAs, as they have equal membership rights. In practice, however, the survey showed that there is confusion about membership and land titles and more awareness is needed. The situation, as it was identified during the survey, is explained in the following paragraphs of this sub-chapter.
87. Land reform modalities differed according to the type of land. Land titles attached to these different types of land are also differing. Land titles are noted in State acts for formerly collectively owned farmland and in certificates for household plots.
88. Household plots were, in some cases, already given to rural households during the Soviet period. After the beginning of Land reform in 1996, then, land titles were given to these plots in the form of certificates and the remaining household plots have been privatised, too.
89. Formerly owned farmland, namely open fields and high yield income fruit plantations, had been entirely privatised during land reform and land titles had been registered in State acts.
90. Due to different modalities in the issuance of land titles attached to these lands, women and men have different shares of land titles. The issuance of land titles for both, State acts and certificates, is on the name of the head of the household, who, in most of the cases, is an adult man. An estimated 10% of household heads on average are women.<sup>27</sup> However, all farmland was divided equally between all (adult) community members during land reform. Therefore, although the State act is issued on the name of the household head, the names and the land shares of all (adult) household members are noted in it. Thus women and men have equal ownership rights over farmland.
91. The certificates, on the other hand, are issued on the name of the household head who, as already mentioned, in most of the cases is an adult man. Other household members are not noted on this certificate. To someone who is not knowledgeable about the legal status, it can appear that women, if not noted on this certificate, do not have any legal ownership rights attached to household plots.

<sup>27</sup> Oral communication with CSU staff. The end-of-project beneficiary survey of IDSMIP showed that in the WUAs of the central project raions (Agcabadi, Beylagan, Imisli, Saatli, Sabirabad, Zardab, Goranboy) 14.3% of household were headed by women, in the northern region only 1.5%.



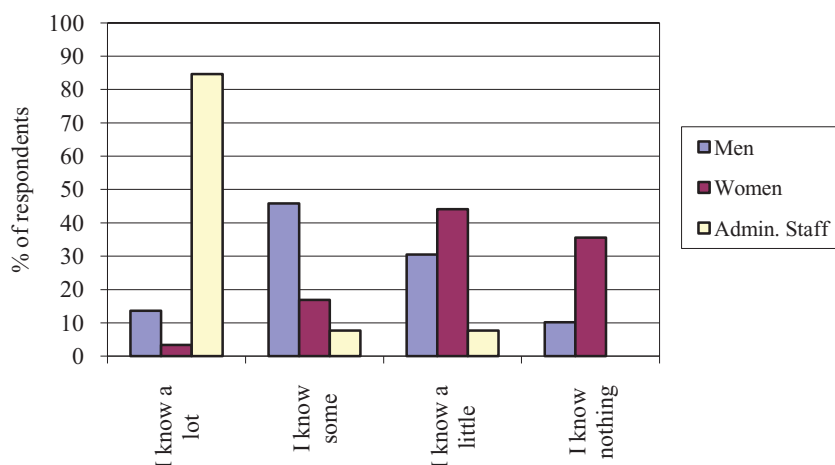
92. Every WUA has two member lists, one with actual membership rights based on land registration for farmland and often hidden in cupboards, a second one for practical purposes in fee collection. This second member list was created by the WUA staff after the establishment of WUAs for practical reasons in their daily WUA work, mainly for fee collection. On these lists only the household head – who are mainly men - appears, the one to whom the field agents address when collecting the ISF. They have been revised periodically and changes on household composition are included. Surveyors found that on these lists between 7 and 30% are women, depending on the WUA. The danger is that these usage practices become so widely accepted that the formal membership based on land shares over farmland might become secondary. Therefore, it should become common practice to make sure all WUA members are noted on these lists.
93. Land titles and land shares do not influence women’s (formal) membership rights in WUAs, but might influence their right of representation. The different ownership rights attached to different land types do not pose any problem with women’s (formal) membership rights to WUAs in general, since these are based on the ownership rights of the formerly collectively owned open fields and fruit plantations. However, a problem might arise when votes to members are allocated in proportion to the size of a member’s land holdings within the service area of the WUA which is one of the possible principles for WUAs in Azerbaijan to determine how to allocate votes during the establishment process. As women do not have any ownership rights on household plots, they might be disadvantaged in this case.

## 2.2 Knowledge on WUAs

### *General knowledge on WUAs and on WUA functioning*

94. The general knowledge on WUAs is very low and gender specific. Figure 2 shows that both, men and women have a low level on WUAs, but women have the least knowledge. The majority of women know nothing or only a little about WUAs whereas men know slightly more. Administrative staff, especially chairmen, are the best informed. However, chairmen are often not aware that their function is to manage the WUA, and not to take over the political decision-making of the WUA according to its WUA statutes and to the decisions made by all members at the general or representative assembly. Many chairmen take these decisions by themselves without proper consultation with the WUA members.

**Figure 2 : Knowledge level of respondents on WUAs: Do you have any knowledge on WUAs? (by stakeholder group)**



Source: Field survey (quantitative survey), May/June 2010

95. This knowledge gap can be explained by the fact that women are often absent from managerial, technical and policy-making levels of the WUA. Regular male members are slightly more aware because they often participate at general assemblies. The good knowledge of the chairmen can be explained by the fact that they had trainings and a very small number of them participated in study tours organised by the project to foreign countries (Egypt, Mexico, Japan and Turkey). So far no woman has participated in such a study tour.
96. The best known aspect of WUAs is its operational water supply and delivery service. For respondents with little knowledge the purpose of a WUA lies in this service. Those who know more about WUAs are also aware of its management responsibilities when it comes to maintenance of the irrigation system. The best informed respondents know that WUAs are self-governed organisations with management rights and responsibilities (MOM) and decision-making rights of all members. Mainly administrative staff, especially the chairmen, have good knowledge of WUAs, but they still attribute the right of taking certain important decisions, such as the amount of water supply, to the chairman and not to all members of the WUA.
97. A basic view of WUAs dominates the understanding not only of water users. In general, the survey revealed that a basic view of WUAs dominates the understanding of all water users. In this view, WUAs are strongly related to the management of water supply and its distribution for which the chairman takes decisions. Women as well as men are seen as passive beneficiaries of the WUAs, by themselves as well as by the executive staff, and not as active members who can influence the decisions. The understanding of WUAs as self-governed institutions where all members could participate, is lacking. This is true for all survey groups.

“With the creation of the WUA, everything has become centralized and we have easy water access. In case of problems, we approach the chairman.” (Male focus group participant in Goranboy).

RSU staff seems to have a solid knowledge basis on WUAs, but express their wish to gain more knowledge, especially on WUA legislation and further development. They want to learn about best practices in other countries.

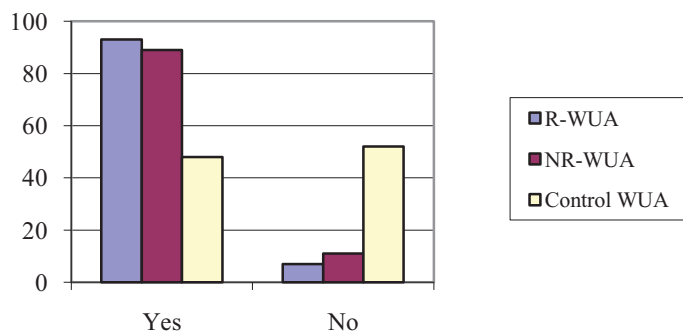
98. The knowledge gap is not only gender specific, but also related to the level of project intervention. Qualitative interviews in the three non-IDSMIP raions showed that the knowledge among male and female members is generally very low. All of them know nothing or only rudimentary aspects of WUAs. In two out of three control raions WUAs female members did not have any knowledge about the WUA, and therefore the questions (What is a WUA and why is it important? What do you expect from the WUA?) had to be asked in a reflective, hypothetical way. This was also the case for men in one of the three control WUAs. Again, the chairmen of these visited WUAs are better informed and two of them have a good knowledge of WUAs, although with the limitation that they are not fully aware of the limitations of their role and the need for consultation with WUA members on critical decisions.

In IDSMIP WUAs, respondents of rehabilitated WUAs (R-WUAs) are slightly better informed than those in non-rehabilitated WUAs (NR-WUAs).

*Knowledge on the institutional set-up is also gender and project specific.*

99. Knowledge on the membership status is project, but not gender specific: In general, about 90 percent of both, men and women in IDSMIP WUAs are aware of their membership status with women only having a slightly lower knowledge which is not significant. In non-project WUAs (Control WUAs), on the other hand, only 48% of all respondents knew about their status. Most of them do not know about it (see Figure 3). This indicates that awareness raising training within IDSMIP was benefitting men and women.

**Figure 3 : Knowledge about one's membership in the WUA: Do you know if you are a (registered) member of your WUA? (by WUA type)**

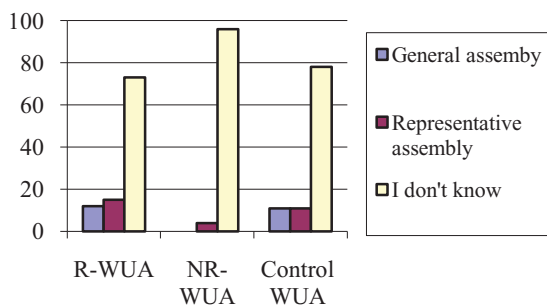


Source: Field survey (quantitative survey), May/June 2010

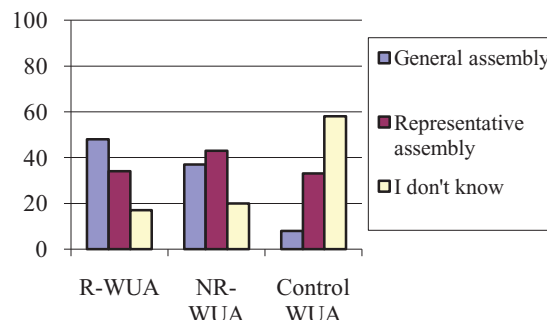
100. However, women's knowledge on WUA institutions is very low, also in IDSMIP WUAs. The knowledge gap is very significant when it comes to knowledge about WUA institutions, such as the existence of the WUA statutes or the WUA assembly<sup>28</sup>. This knowledge is based on a self-assessment by respondents. Taking the assembly as example, women have much less knowledge than men (Figure 4). And again, women in R-WUAs are slightly better informed than women in NR-WUAs.

**Figure 4 : Knowledge on the type of WUA assembly: What type of assembly do you have in your WUA? (by gender and by WUA type)**

1. Female WUA members (in %)



2. Male WUA members (in %)



Source: Field survey (quantitative survey), May/June 2010

101. When looking closer at men's knowledge on this aspect, it was found that men's self-assessment is based on a poor understanding of WUAs. Most of them confuse the

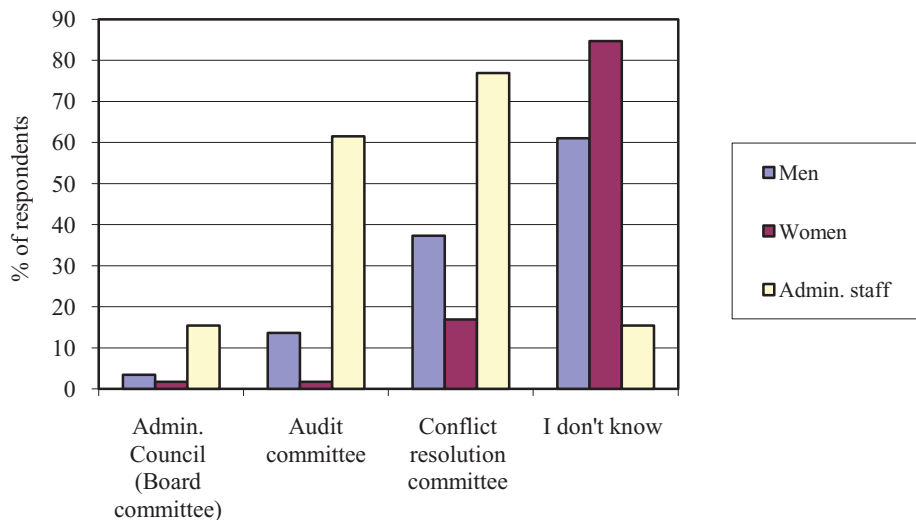
<sup>28</sup> The general assembly (or representative assembly) is the leading body of a WUA which determines the main policies. The assembly is the supreme body of any WUA, and is composed of all members of the association, or in the case of an association with a representative system comprised of all elected representatives. In most WUAs in Azerbaijan there is a representative system in which the representative has one vote (LAI, articles 30-7 and 30-8). The only WUAs that don't have a representative system are smaller WUAs in which it is possible for all members to participate in a general assembly meeting.

general/representative assembly – which should meet once (or at most twice) a year – with other meetings, such as regular committee meetings. Moreover, they are only partially informed about the functions of the assembly. When asked about the function of the general/representative assembly, only 26% of men were aware that it should approve the annual budget.

102. Concerning knowledge about the committees of the WUA, the gender specific knowledge gap is confirmed. According to the WUA Charter, WUAs have at least the following committees: the administrative council (or board committee) with the chairman as head, an audit committee and a conflict resolution committee. But it could have other committees agreed upon by all members. Women have none or at best a very limited knowledge about WUA committees, just knowing about the conflict resolution committee (17%). Regular male members are better informed, but sometimes expressed their need to have more information about the WUA committees (see Figure 5). One third of them are aware of the existence of the conflict resolution committee, and 14% of the audit committee. All chairmen and most of the administrative staff know about these two committees. Overall, the conflict resolution commission is the one which is the most visible for its members.

The qualitative interviews showed that in control WUAs, knowledge on commissions varies a lot. In two of the three control WUAs, committees related to water issues are often associated with the municipality and not with the WUA. In the control WUA of Balakan for example, established in 2009 on a directive of the Raion Irrigation Office, committees were not established at all and water users said that they made their contracts with the Raion Irrigation Office through the municipality office.

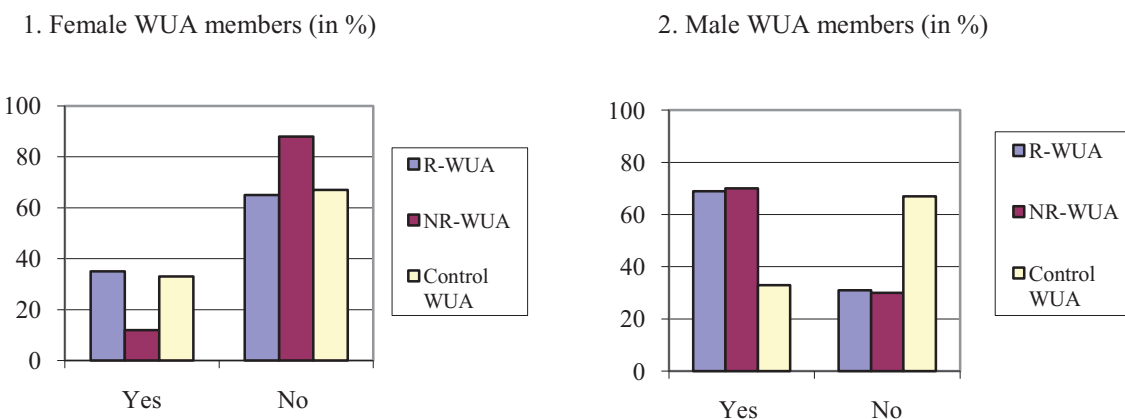
**Figure 5 : Knowledge about WUA committees: Which committees does your WUA have? (by stakeholder group)**



Source: Field survey (quantitative survey), May/June 2010

103. The described gender specific and region specific pattern of knowledge is also evident in the different levels of knowledge about the ISF. Women in IDSMIP WUAs are much less informed than men about the WUAs right to decide on the amount of the ISF. The majority of male respondents in IDSMIP-WUAs know about their right to decide on this issue whereas the majority of women do not know about this aspect. In control WUAs, the majority of men and women do not know about their right to decide on the amount of the ISF (see Figure 6).

**Figure 6 : Knowledge on the right to participate in determining the ISF fee: Do you know that every WUA member can participate in determining the ISF? (by gender and by WUA type)**



Source: Field survey (quantitative survey), May/June 2010

### Knowledge on WUA services

104. Knowledge about WUA services reflects gender differentiated needs and priorities. In general, respondents mentioned financial services, supporting services and MOM services<sup>29</sup>. Women and men identify WUAs to a great extent with the collection of the irrigation fee and MOM services and to a minor extent with other supporting services. Information and communication services were not mentioned at all and apparently are not perceived to be part of the services of the WUAs. Regarding the MOM services, women seem to be more concerned by the water delivery and water distribution whereas men are well aware of the canal maintenance service.

This different awareness about services can be explained by the gender division of labour (see chapter 2.4) and reflects the gender differentiated needs and priorities. Women share irrigation related needs on household plots close to their home, for livestock keeping or washing clothes. Men are more interested in technical aspects, canal maintenance and agronomics.

105. Chairmen mentioned first of all MOM services, especially the maintenance of the infrastructure. This of course reflects the core tasks and issues of the WUA – managing the infrastructure on their balance sheet. The water fee collection, usually collected by field agents, was a service not mentioned by half of them. This shows their predominant understanding of WUAs as MOM service providers and less as financial and supporting service providers. These services might be seen as supplementary, but they are necessary services for the proper functioning of an irrigation system.

### Knowledge is related to education

106. The knowledge is closely related to the educational level of respondents. Respondents with elementary school education or less all have no or very limited knowledge on WUAs, respondents with secondary education level know slightly more, a quarter of them have basic knowledge. Respondents with higher secondary education are the best informed with half of them having basic knowledge. Respondents with university level or above, on the other hand,

<sup>29</sup> The survey question was: “What services does your WUA provide?” Answers were classified in three categories: 1. Financial services: irrigation fee collection, 2. supporting services: conflict resolution, provision of machinery and 3. MOM services: canal maintenance, water supply, timely water provision, water distribution, water delivery efficiency in relation to the reduction of water losses, water plan and water schedule.

are altogether less informed than those with higher secondary education, but much better than those with secondary education.

107. .... and women have a lower education level. These differences find their expression in gender as the majority of women only has secondary school education (60%) whereas the majority of men has higher secondary (52%) or university education (11%). But even those women who are better educated lack the knowledge needed for active participation in WUA management. As it will be explained further down, they have participated rarely in information meetings and capacity building trainings.

### 2.3 Perceptions on women's role and further involvement in WUAs

#### *General perceptions on WUAs and WUA development*

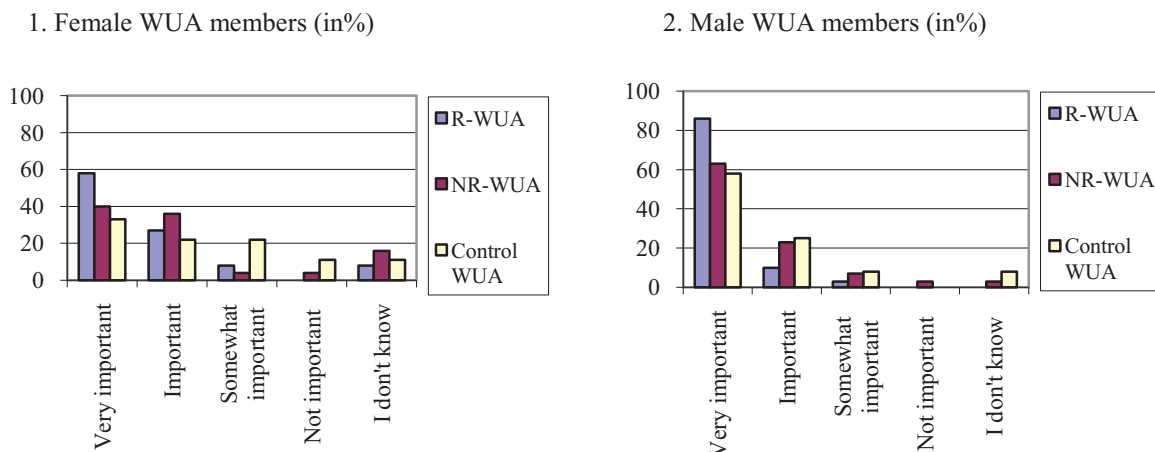
108. The perception on "WUA affairs" is influenced by respondents' knowledge on WUAs. All respondents perceive WUAs first of all as organisations responsible for timely and sufficient water delivery and some also for the maintenance of the irrigation system, first of all on farmland producing high-value crops for the market. Irrigation on these plots is the task of men. Other services including the irrigation water provision to household plots or the financial management of WUAs, are seen secondary and not core "WUA affairs". And as the decision-making function is not known in general by regular WUA members, neither by men and nor by women, it is not a possible "WUA affair" in the perception of respondents. When talking about "WUA affairs", men and women always have this in mind. Women therefore tend to relate more participation in WUAs to an increase in physical work and in irrigation operation. Two statements reflect this perception:

"We are only involved in household plots and do not need to be involved in irrigation» (Female focus group participant in Nakhchivan).

"Under the Soviet system, we were forced to work in the kolxoz, to ride tractors, to open gates on the canals, to do some hard work, etc. Now we are free to choose what to do and we prefer not to be involved in irrigation." (Female focus group participant in Imisli raion).

109. The importance of WUAs is recognized, but project and slightly gender specific. In WUAs included under IDSMIP the importance of WUAs is fully recognized by all survey groups. Although the majority of men and women recognize the importance of WUAs, women are slightly more sceptic than men considering it more often just "important" and less frequently "very important" (see Figure 7). In IDSMIP WUAs, 85% of regular members on average think the WUA is important or very important. In control WUAs, however, male and female respondents are more sceptic as these WUAs only started operations only recently or were not fully operational yet.

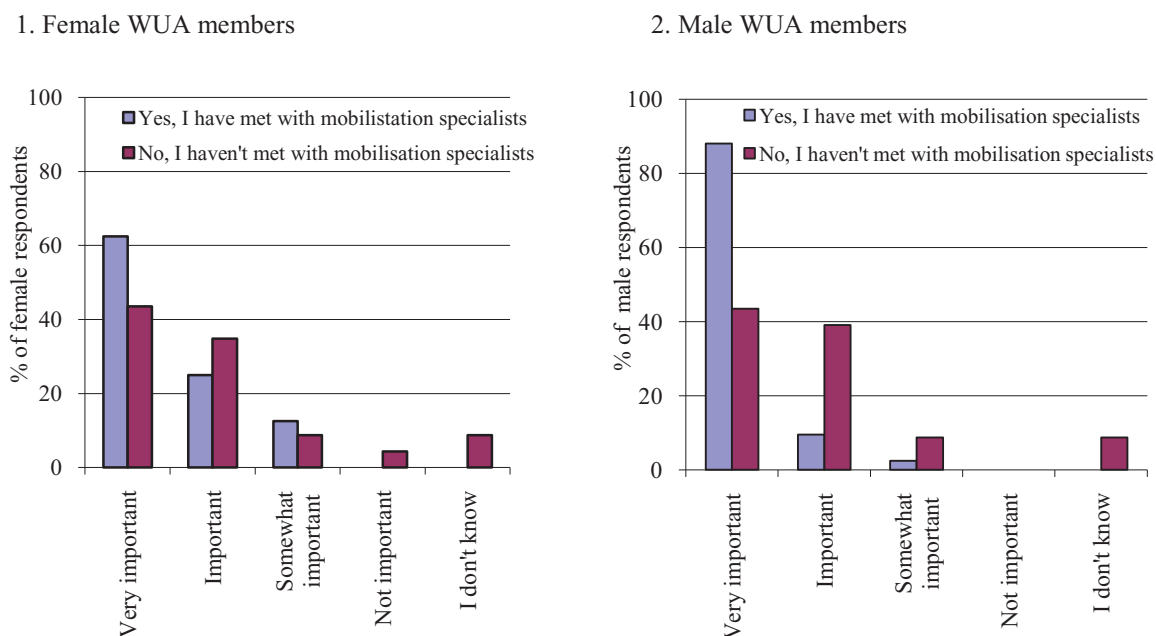
**Figure 7 : Perception on the importance of WUAs: How do you think about the importance of a WUA? (by gender and by WUA type)**



Source: Field survey (quantitative survey), May/June 2010

110. Awareness raising activities in Bank supported IDSMIP raions were effective and had a positive impact on the importance attached to WUAs. Men and women who have met with WUA Mobilization specialists or village-based WUA organizers in the establishment phase of the WUAs (59% of regular male members and 13% of female members) all attach more importance to WUAs than those who didn't meet with these specialists (see Figure 8).

**Figure 8 : Importance attached to WUAs in relationship to participation in awareness raising activities in IDSMIP WUAs: How do you think about the importance of the WUA? (by gender)**



Source: Field survey (quantitative survey), May/June 2010

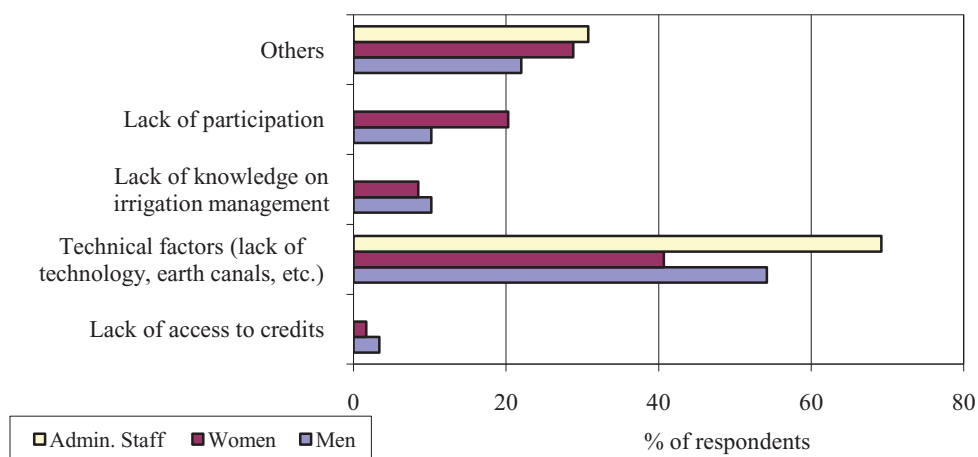
111. Major perceived problems in WUA development are first of all and almost exclusively technical factors. Lack of machinery, lack of transport facilities, lack of technology and the obsolete canal



system are listed as the most pressing problems in overall WUA development<sup>30</sup>. Other factors – socio-economic factors, institutional shortcomings, management related shortcomings or political factors – are only secondary. Women perceive very few problems and almost all of them are related to technology. Men perceive a wider range of barriers. Administrative staff, on the other hand, are all very much concerned about financial aspects and institutional shortcomings related to the collection and level of the ISF. Only they see the lack of an enforcement system for timely and full irrigation service payments as a major constraint in the development of their WUA.

112. Furthermore, the quantitative survey showed that 20% of women consider that a general lack of participation hinders the development of their WUA. Men considered this to be much less of a problem (see Figure 9).

**Figure 9 : Major perceived problems in WUA performance: What are the most important problems that limit the performance of your WUA? (by stakeholder group)**



Source: Field survey (quantitative survey), May/June 2010

113. In the development of irrigation MOM technical aspects and management related problems are perceived as the only challenges. When the question on problems for further WUA development is narrowed down to the question for barriers in irrigation MOM, problems are exclusively related to technical problems and shortcomings in management.
114. Proposed solutions are almost exclusively limited to technical ameliorations, only some female stakeholders suggested training. Logically, the idea that irrigation is mainly dependent on a modern technical irrigation system is prevailing and hence, regular WUA members, both men

<sup>30</sup> The survey question was: “In your opinion, what are the most important problems which limit the performance of your WUA?” Answers were classified in 8 categories: 1. Socio-economic factors: lack of human resources for canal maintenance, salinization of arable land, lack of arable land, lack of sufficient water, lack of electricity, old soviet mentality of people, 2. technical factors: lack of machinery, earth canals (=water losses), long distance to canals in some cases, lack of technology/technical facilities, broken tubes or pumps, lack of transport facilities for field agents. 3. institutional and capacity related factors: insufficient water delivery from Raion Irrigation Office, water conflict with neighbouring WUA; 4. political factors: interference of local government, insufficient support from authorities, negative impact of huge public infrastructure project on canal system, high "social protection tax"; 5. financial factors: insufficient access to credits and high interest rates, lack of financial resources? 6. legal factors: lack of the enforcement system for irrigation fee payments, water fee calculation based on land area and not on volume; 7. management related factors: unadapted time of water delivery (at night), blocked water access by some households for other hh, lack of WUA office to hold meetings, water dispute with neighbouring WUA and 8. natural factors: mice on the fields.

and women, always propose rehabilitation works. Those in already rehabilitated WUAs recommend to replace the remaining earth canals by concrete canals. Development of human capacities to run this system are seen secondary; especially by men. Only a few female respondents suggested to conduct training on irrigation aspects and general training to increase the knowledge of WUA members on the importance of WUAs.

#### *Impact of IDSMIP on WUA development*

115. The perceived main effect of IDSMIP is the improvement in technologies. Not surprisingly, the most important impact of IDSMIP, as perceived by all stakeholder groups in IDSMIP WUAs, was the rehabilitation of the irrigation system.

According to male and female respondents in R-WUAs, the creation of the WUA in coordination with the better water supply (fixed water turn, timeliness of water delivery, rehabilitated canals) led to an increase of farmland under cultivation and consequently to a general increase of income. And men underlined the obvious, i.e. that women also benefit from this economically.

In non-rehabilitated IDSMIP WUAs, the picture was less positive. The majority of men and women consider that the situation did not change or not much. The main effect was seen in the creation of the WUA which provided a better planning for water distribution, thus the water supply became more stable and water turns at night have disappeared.



**Photograph 4 : Rehabilitated canal in Jaferli WUA, Imisli (August 2011)**

116. The actual impact of IDSMIP on gender relations was limited. Respondents, both men and women, almost unanimously state that IDSMIP had none or not much impact on gender relations in irrigation management. This is especially true for non-rehabilitated IDSMIP WUAs. Only in two rehabilitated IDSMIP WUAs some respondents – one male, one female and one chairman - stated that IDSMIP had a positive impact on gender equity. They see a close relationship between general WUA trainings and the increased involvement of women in WUA affairs.
117. However, capacity building during IDSMIP raised awareness and had a positive impact on the perception of women's role in WUA management. Although only 3.4% of women have

received capacity training during IDSMIP (versus 32% of regular male members and 77% of administrative staff), the vast majority of women of IDSMIP WUAs who have attended trainings or other information meetings are aware of their importance in WUA management (67%). On the other side, 51% of those who have not received training think that their role in WUA management is not important. The same is true for men, but they are more critical on the importance of women in WUA management. Only 46% of men who participated in training think that women are important in WUA management, 32% think they are not.

**Figure 10: Perception on role of women in WUA management in relation to received training: How do you think about the role of women in WUA management? (by gender)**



Source: Field survey (quantitative survey), May/June 2010

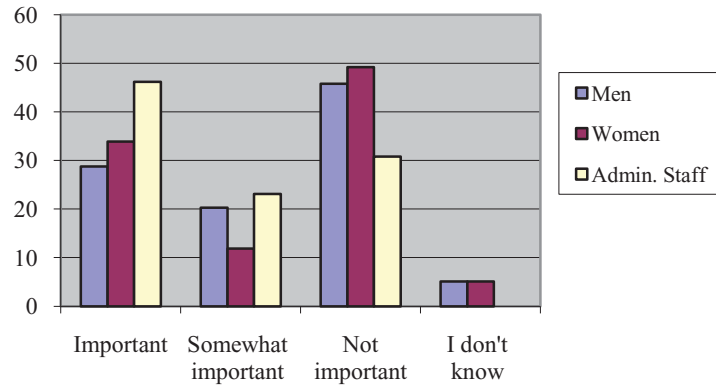
118. .....and gender specific meetings can mobilize women. In Imisli and Goranboy where gender specific meetings for women were organized, adapted also to their daily work organisation, women were willing to attend these meetings. Otherwise, women did not participate in general meetings targeted for all members.

*Perception on women's role and their further integration in WUAs*

119. Gender is not a primary concern of respondents in WUA development, but a considerable part of respondents think that women's role in WUA management is important or somewhat important. Figure 11 shows that 46% of women and 49% of men state that women's role is important or somewhat important. However, as many respondents stated the opposite, namely that it is not important. The administrative staff is the most enthusiastic and realises the importance of women in WUA management best.

RSU staff all underlined the importance of involving women in WUA management and administration.

**Figure 11 : Perceived role of women in WUA management**



Source: Field survey (quantitative survey), May/June 2010

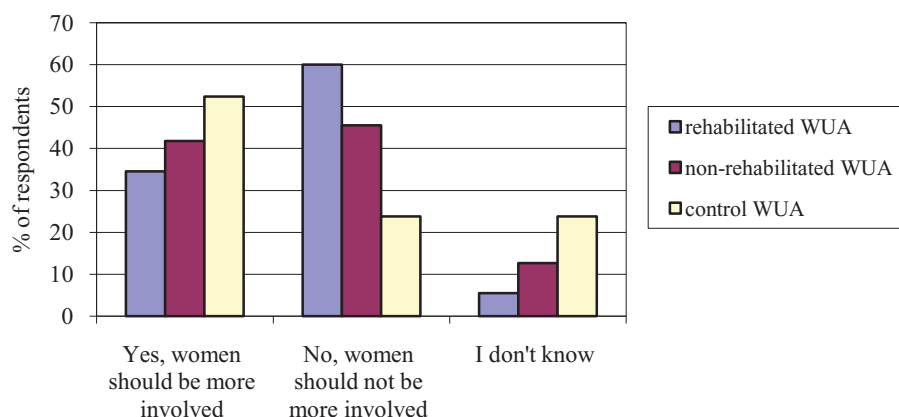
120. However, when being asked directly, the majority of respondents of all sub-groups thought that women's participation is not sufficient. When being asked if it is worthwhile to increase the participation of women in water affairs, a considerable part of women and men are in favour. In the quantitative survey 37% of women, 42% of men and 46% of the administrative staff think it is worthwhile, and about half of them don't think so. In the qualitative survey the majority of women are favourable for a further involvement of women (55%) whereas men are more reluctant.

Those who oppose this idea answered that WUA affairs are men's affairs, women should take care of the family and the home, and confirmed more traditional gender roles.

Two main reasons were given when asked why it is worthy: (i) Women need to be fully aware of water affairs in order to understand all its implications on their household; and (ii) a WUA can only function well if all members do participate and are informed about the decisions. The majority of women who are in favour, gave the first reason, the majority of men the second reason. Women are more concerned about their household, men more about the functioning of the irrigation system.

121. The picture which arises is ambiguous. Almost half of the women think that their role in WUA management is important or somewhat important, the other half does not share this opinion. Likewise, women are divided in their attitude towards more involvement in WUAs. An explanation might be that on the one hand women want to know more about water affairs in order to improve their household situation, on the other hand they fear that a higher implication in WUA affairs which they equate with the heavy irrigation work under the realm of men would increase their physical work load even more.
122. This perception is related to inclusion of the WUA under IDSMIP. Respondents in R-WUAs are most unfavourable to a further involvement of women in WUA management, water users in NR-WUAs are less opposed and in the three control WUAs the majority of respondents is in favour of more involvement of women (see Figure 12).

**Figure 12: Perception of women's further involvement in WUA affairs: Do you think it would be worthy that the follow-up project aims at increasing the participation of women in water affairs? (by WUA type)**



Source: Field survey (quantitative survey), May/June 2010

123. It should be noted the control WUAs are all located in the north-western part of the country where a lot of ethnic minorities live, who are less conservative about the role of women and where the gender division of labour is less rigid. However, this finding sheds some interesting insights into the perception of respondents in IDSMIP WUAs. Apparently, the more developed a WUA is, the less respondents think that the participation of women is necessary. An explanation might be that in well developed WUAs more people have the idea of a WUA as an institution which manages affairs which are part of the male tasks. It might also be the case that in well developed WUAs, which usually function without women, the benefits which could be achieved through including women more are not perceived by the respondents. The benefits of the active integration of all water users in irrigation management are not sufficiently understood.
124. Respondents acknowledge that women have better communication skills than men. Those who favour a further integration of women in WUA affairs, propose several possibilities. These are: involvement in administration and WUA management (such as organisation of meetings, accounting etc.), community mobilization, conflict resolution and awareness raising activities. There is no gender bias in the answers. These suggestions reflect the communication skills of women which are also appreciated by men. To use these specific skills in WUA management could improve the performance and increase the efficiency of WUAs.
125. There were several other suggestions on how to further involve women. Women can be motivated to participate more by proposing them paid positions in WUA management. Another suggestion was to either cooperate with the Women Board – this institution exists in certain villages with the objective to help vulnerable people (it was mentioned in Zaqatala and in Agjabedi raions) – or to create a committee on women's affairs in WUAs. RSU staff proposed that women's involvement could be reflected in the WUA charter and that incentives could be given like a reduction in the irrigation service fee or giving them the first water turn in water delivery. The legality of this suggestion however is ambiguous.

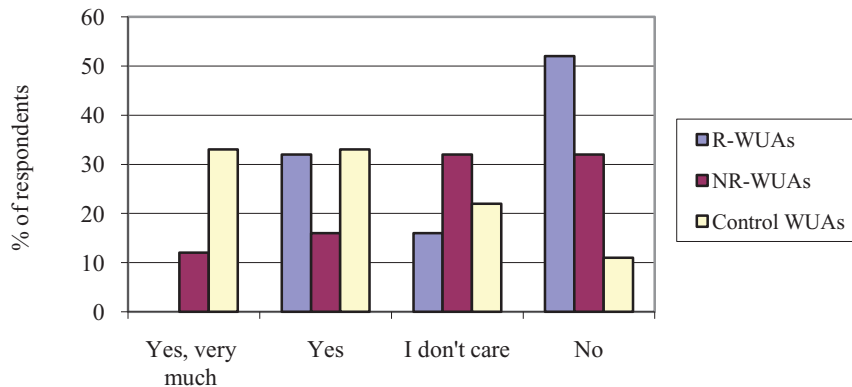
## 2.4 Information needs and sources

126. Women's search for more knowledge on WUAs, however, is not very developed. In correlation to the perception on women's further involvement in WUA affairs, men are very keen to gain more knowledge (80%) on WUAs whereas less than half of the women – again depending on

the survey tool: 49% in the qualitative survey, 37% in the quantitative survey – wants to learn more about WUAs.

127. Again, there is a project specific pattern on the willingness to gain more knowledge. Women in control WUAs are much more curious than women in IDSMIP WUAs. The following figure (Figure 13) shows the wide discrepancy between project WUAs and control WUAs.

**Figure 13: Women’s willingness to gain more knowledge on WUAs: Are you willing to learn more about WUAs? (women, by WUA type)**



*Source: Field survey (quantitative survey), May/June 2010*

128. In the three IDSMIP WUAs where women have received specific training, the majority of them are not interested to obtain more knowledge. This might suggest that either the content (and time) was not adapted to their specific needs, or they feel sufficiently informed after having received those trainings.
129. Women have gender specific information needs and priorities. As the knowledge on WUAs is generally basic or simple, the information requirements of respondents who wish to gain more knowledge reflect this. Women are predominantly interested in learning more about water requirements of different crops, irrigation plans and watering, men are predominantly interested in technical and agronomic aspects.



## Chapter 3 Lessons for empowering women in irrigation management

*The previous part of the report provides an informative basis for enhancing the role of women in irrigation management. It analysed and discussed the role of men and women in irrigation management in Azerbaijan and made a case why a gender sensitive approach in irrigation agriculture is important and why women should be more involved. Although there are some points that need further investigation, the analysis allows to draw specific lessons for WUAs in Azerbaijan on how to promote gender equity and for World Bank projects on how to operationalise gender mainstreaming in irrigation agriculture in the country. It also provides guidance in establishing an enabling environment that will foster gender equity in similar irrigation sector programmes in the wider Caucasus and Central Asian region.*

### 3.1 Lessons learned and operationalisation in Bank's operations in Azerbaijan

*This section provides lessons for gender mainstreaming including specific lessons which can be incorporated in World Bank-financed I&D projects in Azerbaijan, like the WUAP, and more generic lessons which could be considered by WUAs and the Government of Azerbaijan.*

130. The gender survey showed that, at present, women's participation in WUA management and decision-making in Azerbaijan is very limited and constrained by social and cultural factors. In order to counter these trends and mitigate these shortcomings, gender mainstreaming in Azerbaijan's irrigation sector should take the following into consideration:

*1. Increase the knowledge of all WUA members and WUA staff on WUA management and decision-making.*

Context: Although capacity building of WUAs was done under IDSMIP, the analysis demonstrated the need to further enhance and deepen the knowledge of all survey groups, regular male and female members and the administrative staff. Regular male and female members have just basic knowledge about WUAs. Although women are the least informed, men also lack substantial knowledge on WUA management and decision-making. WUA chairmen and staff are best informed, but, in contradiction with the WUA statutes, they still attribute the right of decision-making on core WUA issues to the chairman.

Recommended approach: The WUAP should focus on the provision and follow-up of awareness raising on WUAs and gender-sensitive training and to all WUA members and administrative/executive staff. Specific actions include:

- a. Keep the WUA membership list complete and updated, in order to ensure that all WUA members are invited for training, and not only the head of households.
- b. Capacity building training should be given to all regular WUA members on WUA governance. Training on WUA governance should be gender sensitive and also include legal aspects of WUA membership. This training should be the starting point for all WUA members in order to achieve responsible and equitable water management.
- c. Gender awareness training on the benefits and challenges to the operation of WUAs. Awareness raising should show that good WUA performance under IDSMIP has yielded benefits such as higher rates of fee collection, more equitable and regular water distribution, increased crop yields and incomes and enhanced food security. It should at the same time show challenges to successful WUA operation including deteriorating infrastructure, lack of transparency, insufficient participation of water users in general and women in particular and financial difficulties.
- d. Follow-up and coach training participants. For a sustained impact of the training a follow-up and coach of training participants is recommended. This could be done by project supporting units or Project Implementation Unit staff and after the end of the Bank support by WUA support units under AIJOSC.

- e. WUA staff training on gender. WUA level decision makers should be sensitized to gender issues and integrate this in their operation: Knowledge of WUA level decision makers on gender sensitive issues is critical to enhance the involvement of women in WUAs. It is not sufficient to say that all members have equal rights. WUA staff training is required in order to develop the institutional capacity needed to support the incorporation of gender issues. It is important to understand why women should participate in a WUA, what benefits this can have and how this further involvement can be achieved. In a second step, training programmes to WUA staff should aim to introduce the concepts of socio-economic and gender analysis, to integrate socio-economic and gender issues into the work plan of WUA staff at all levels and to introduce methods to monitor progress and constraints in socio-economic development.

## *2. Specifically increase the knowledge of female WUA members in WUA management and decision-making.*

Context: The gender analysis showed that the knowledge is gender specific with women being much less informed than men. They have very limited knowledge on their management and decision making rights and responsibilities as WUA members. Although this lack of knowledge is partly related to the generally lower educational level of women compared to men, women have participated rarely in information meetings and capacity building trainings (3.4% of women have received capacity training during IDSMIP versus 32% of regular male members) and never in study tours. This lower participation is also related to competing obligations women have within the rural household.

Recommended approach: The WUAP should focus on the provision of training courses only for women on irrigation, WUAs roles and responsibilities and participation of women at study tours. Specific actions include:

- a. The above mentioned capacity building training and awareness raising activity (under recommendation 1.b and 1.c) should be proposed separately only for women participants and further include trainings on subjects women are interested in. They want to learn more about water requirements of different crops, irrigation plans and watering. When providing training, the time constraints of women should be taken into consideration. Short duration events at times women suggested are recommended.
- b. Involving women as participants in study tours within Azerbaijan, and if budget allows, also abroad. Participation of active, well-educated women and women from female-headed households to study tours should be given targeted to get better informed and become more implicated in WUA management. These women can also function as facilitators by sharing their gained knowledge with regular female WUA members who more easily raise their questions with women than with men.

## *3. Involving women in WUA management and decision-making.*

Context: Women's participation in WUA management and decision-making is very limited. The gender analysis found no formal institutional barriers to female participation and exceptional cases of women's active participation in WUAs, but evidence suggests that rural women face competing obligations and social mores that hamper their inclusion in WUA structures. The analysis also showed that women's involvement in the WUA management falls considerably short of their disproportionate burden of livelihood maintenance, the high prevalence of female-headed households or their direct interest in improving water provision.

Recommended approach: The WUAP should provide recommendations to WUAs on a menu of options to involve women in WUA management and decision-making. These options include:

- a. Create a women committee within WUAs. The idea of a women committee, or Women Board, exists in certain villages with the objective to help vulnerable people including women. It was proposed by respondents (a chairman and in two female focus groups) to create such a women committee within WUAs. Its mandate could be to advocate and mainstream women's participation in WUAs. It could for example organise information events/awareness raising campaigns for women or ensure women's inclusion in decision-making.
- b. Create a committee on household plots. Household plots have specific water needs and often require more frequent irrigation. To ensure that the demands of household plots are properly taken into account, a dedicated committee would be useful.
- c. Involvement of women in WUA management and administration in areas that require communication skills such as organisation of meetings, accounting, conflict resolution or collection of ISF. Survey respondents, man as well as women, acknowledged that, in general, women have better communication skills than men. The involvement of women in these areas could increase the performance of irrigation management.
- d. During project implementation, these communication skills can also be used in order to support the transfer of responsibilities of MOM to WUAs, for example mobilizing women to conduct community mobilization activities.
- e. Providing incentives for women's participation. Efforts to increase women's participation have to be careful about increasing women's unpaid work burden, a possibility to mobilize women could be to identify educated women who wish to actively participate in WUA development activities and provide them with employment opportunities in WUAs.
- f. Facilitate increased female representation in the representative assembly. This could be done by external facilitators of the RSUs or through a women committee created within each WUA.

#### *4. Strengthen the gender sensitivity and awareness of RSU staff*

Context: Although RSU staff seems to be well informed about WUAs in general, the project should ensure that they fully understand the concept of gender mainstreaming, and the attitudes and actions required to achieve them. The role of RSUs is to facilitate WUA development by, among others, providing or organising trainings to WUAs. The role of gender-sensitive external facilitators in capacity building and communication processes is critical.

Recommended approach: The WUAP should provide gender training to RSU and CSU staff and/or hire external gender specialists. Specific recommended actions include:

- a. Train the trainers. RSU staff can function as project internal facilitators and provide gender training to WUA staff and regular WUA members. They can moreover review gender issues in all training modules, develop project indicators and generate a data base for monitoring gender impact or assist during general/representative assemblies in order to encourage women to articulate their needs.
- b. Another solution might be to hire gender specialists as external facilitators. This does not mean that RSU does not have to be trained to be gender sensitive.
- c. Develop partnerships with Civil Society Organisations who work on gender issues. Collaboration might be useful to advance the work together on gender and agriculture.

### *5. Develop a Monitoring & Evaluation system to monitor project progress on gender*

Context: In IDSMIP, the gender perspective was recognised late in the life of the project and the project had to some extent excluded women. Although the awareness raising activities were gender neutral, in practice mostly men participated.

Recommended approach: The WUAP should use a limited set of output and outcome indicators to measure the impact of gender training and awareness activities. Specific actions include:

- a. Define clear and gender-sensitive output indicators against which to measure changes. An example for an output indicator is: “Percentage of female WUA members who participated in WUA trainings”.
- b. Definition of gender-sensitive outcome indicators. Examples for outcome indicator is “the number of WUAs which have female WUA staff member”, “the number of WUAs that have established a women committee or a committee on household plots”.
- c. Include gender-specific questions and parameters in the WUA baseline, mid-term and end-of-project survey, including an inventory of farm and household budgets.

## **3.2 Lessons for World Bank’s operations in the Caucasus and Central Asian region**

131. Throughout the Caucasus and Central Asian region, governments have initiated institutional reform programs in the I&D sector based on locally adapted variants of ‘participatory irrigation management’ (PIM), including widespread encouragement of WUAs and progressive transfer of responsibility for MOM of the lower levels of the system. But further development is necessary to finish these reform agendas.
132. The gender analysis which was conducted at the end of IDSMIP can provide guidelines in establishing a favourable environment for gender mainstreaming in similar agricultural water management projects in the wider Caucasus and Central Asian region. The module on Gender Mainstreaming in Agricultural Water Management of the “Gender in Agriculture Sourcebook” (<http://worldbank.org/genderinag>) published by the World Bank, provides very useful guidelines and recommendations for practitioners. One core recommendation applicable to similar World Bank-financed irrigation projects in the Caucasus and Central Asian region is:

*Take gender issues into consideration throughout the full programme cycle.*

Context: IDSMIP adopted a gender neutral approach by targeting all water users as one group. One consequence of this was that few women participated in WUA capacity training. Specific time constraints and specific training needs of women were not taken into consideration. However, the rural household is not a unit of congruent interests, but of varying, sometimes even conflicting interests. To target the rural household as a whole risks to exclude women. In this model women are seen to benefit indirectly as co-farmers through their husbands’ rights and involvement in project and WUA management activities.

Recommended approach: Adoption of a gender-sensitive approach throughout the full project cycle in the WUAP and in similar agricultural water management projects in the region. Specific actions include the following:

*During project preparation and design*

- a. Conduct a gender analysis. Although the types of information required will obviously depend on the scope of the project or programme, an analysis of gender roles (including gender division of labour), and access to and control over resources should always constitute key components of the analysis.

- b. Identify of gender specific indicators, based on the gender analysis and baseline studies, through which the impact on gender equity and women's empowerment can be monitored throughout the project cycle.
- c. Assess the gender capacity of implementing institutions. To integrate gender concerns, additional staff with a different profile might need to be recruited, training courses developed and implemented, or administrative procedures modified in order to enable the project or programme to provide the necessary conditions for gender mainstreaming.

During project implementation:

- d. Provide gender awareness training for all WUA members and strengthen gender capacity of support unit staff (see chapter 3.1).
- e. Provide specific training just for female farmers on issues they are interested in (see chapter 3.1.).
- f. Detail gender-sensitive and, if possible, gender-disaggregated data in progress reports. This will enable project revisions and ensure that gender issues are not forgotten in the course of project implementation.

During project evaluation

- g. Apply the defined gender-sensitive indicators in the evaluation making sure that the evaluation report reflects both gender-related shortcomings and successes.
- h. Assess gender awareness and skills among policy-making, management and implementation staff. This is important for the sustainability of the intervention.

## **Annex 1 – Map of IDSMIP project districts**

MAP IBRD 32319



## **Annex 2 – Map of WUAP project districts**

MAP IBRD 38270

# Annex 3 – Questionnaire for quantitative survey

## QUESTIONNAIRE FOR FEMALE WUA MEMBERS

Idem for Regular male members

Idem for WUA staff

**ATTENTION:** Data assessed from this questionnaire **ARE COMPLETELY CONFIDENTIAL/ SECRET.**

INTERVIEWER : FILL OUT THE FOLLOWING SECTION YOURSELF

Rayon and Town / Village where the survey is taking place

Rayon/District :..... Code (.....)

Village :.....Code (.....) (.....)

Name of WUA .....

Name of the Respondent :.....

FOR WUA STAFF ONLY:

Position .....

Member in the WUA since .....

Date of Survey

(.....) (.....) 2010  
day month year

Duration of interview: .....hours, from .....o'clock to .....o'clock

Interviewer's Name .....

Interviewer's Signature .....

NOTES .....

# 1 Knowledge about WUAs

1.1 Do you have any knowledge about WUAs?

1. Know a lot	2. Know some	3. Know a little	4. Know nothing

IF LITTLE OR MORE KNOWLEDGE, GO to 1.2. IF “NOTHING”, GO to 1.3.

1.2 What is the purpose of a WUA?

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

1 = I don't know

2 = To take over management responsibilities (operation and maintenance works)

3 = To take over the decision-making of water management

4 = Both

5 = Others. (Please specify)

1.3 Do you know if you are a (registered) member of the WUA?

1. Yes	2. No

1.4 Do you know if your WUA has a constitution?

1. Yes	2. No

IF THE ANSWER IS “YES”, GO to 1.5, IF “No” GO to 1.6.

1.5 Can you specify the main content of the constitution? (List up to four)

1	2	3	4

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

1 = I don't know

2 = Basic roles and structure of WUA

3 = WUA Mission Statement

4 = Legal status

5 = Basic rights and obligations of the WUA and its members

6 = Criteria for membership

7 = Structure of leadership

8 = Total land area of WUA (area under jurisdiction)

9 = If others: PLEASE SPECIFY

1.6 Who is taking the important decisions in your WUA?

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

1 = I don't know

2 = The Chairman

3 = The general/representative assembly

4 = The Administrative Council (Board committee)

5 = Others: please specify

1.7 **Do you know the name of your Chairman?**

1. Yes	2. No

1.8 **Do you know the function of the Chairman?**

1. Yes	2. No

IF YES: **Please specify:** IF "No", GO to 1.9

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

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1 = Decision-making

2 = Taking the daily responsibility for irrigation

3 = In charge of the overall planning of WUA affairs

4 = Others. Please specify.

1.9 **What type of Assembly do you have in your WUA?**

--

1. General Assembly

2. Representative Assembly

3. I don't know

IF THE ANSWER IS 1. GO to 1.10, IF 2, GO to 1.11.

1.10 **How many representatives do you have in the Assembly?**

1. Number	99. I don't know

1.11 **In 2009, how many times the WUA General / Representative Assembly met?**

98. Number	99. I don't know

1.12 **What is the function of the General / Representative Assembly?  
You can give several answers.**

--	--	--

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

1 = I don't know

2 = Discuss and approve the Operation and Maintenance (O&M) plan

3 = Discuss and approve the water distribution plan

4 = Approve the annual budget

5 = Others (please specify)

1.13 **Which committees does your WUA have? Please list them.**

1	2	3	4

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

1 = *I don't know*

2 = *Administrative Council (Board committee)*

3 = *Audit committee*

4 = *Conflict resolution committee (Arbitration Committee)*

5 = *Others (please specify)*

1.14 **Do you know the composition of the Irrigation Service Fee?**

1. Yes	2. No

IF "Yes" GO to 1.15, IF "No", GO to 1.16.

1.15 **Please specify:**

(O&M = operation and maintenance, includes salaries, taxes, costs for Building maintenance, etc.)

1. Water tariff	2. O&M Fee	3. Both	4. I don't know

1.16 **Do you know that every WUA member can participate in determining the ISF?**

1. Yes	2. No

## 2 Perception / Attitudes

2.1 **How do you think about the importance of a WUA?**

--

1 = Very important

2 = Important

3 = Somewhat important

4 = Not important

5 = I don't know

6 = I don't want to answer

2.2 **What do you think are the advantages of being a member of the WUA? You can tell me several advantages. (List up to three)**

--	--	--

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

- 1 = Increased water availability, hence increased yield levels
- 2 = Increased reliability of water supply / better water service
- 3 = Clear water rights, hence less water conflicts
- 4 = Improved irrigation system maintenance, hence reduction in water losses
- 5 = If others: PLEASE SPECIFY

2.3 **To increase your agricultural production what are the three most important barriers for you? Please rank your choices according to their importance:**

1 = First	2 = Second	3 = Third

- 1 = water for irrigation
- 2 = poor quality of fertilizers and pesticides
- 3 = lack of agricultural machinery
- 4 = access to market
- 5 = lack of manpower
- 6 = lack of knowledge
- 7 = bad extension services
- 8 = lack of credit
- 9 = bad agro-processing facilities
- 10 = lack of information on WUA decisions
- 11 = others: please specify
- 12 = There are no barriers

2.4 **In your opinion, what are the most important problems that limit the performance of your WUA?**

--

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

- 1 = Lack of access to credits
- 2 = Lack of vehicles
- 3 = Lack of knowledge on irrigation management
- 4 = Lack of participation
- 5 = If others: PLEASE SPECIFY

---



2.5 **Do you think that the active participation of all WUA members is important for the overall economic development of your WUA?**

1 = Yes. It is very important

2 = It is somewhat important

3 = It is not important

4 = I don't know

5= It depends more on external factors such as government policies, natural disasters (flood etc.), the overall economy etc.

2.6 **Do you think that you are well informed about operational issues (such as the scheduled water distribution) in your WUA?**

1 = Yes

2 = No

3 = This is within the tasks of my husband (IF FEMALE RESPONDENT) / my wife (IF MALE RES.) and doesn't concern me

IF "No", GO to 2.6.1 and then 2.7. IF "Yes", GO to 2.6.2 and 2.7.

2.6.1 **Why? Please specify.**

---

2.6.2 **About what kind of operational issues are you well informed?**

--	--	--

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

1 = *Daily scheduled water distribution / allocation of water*

2 = *Annual water plan*

3 = *Water application (aimed at reducing water losses)*

4 = *Irrigation systems operations*

5 = *Irrigation costs*

6 = *WUA budget*

7 = *Others. Please specify.*

2.7 **The Irrigation System Fee (ISF) consists of two components: a water tariff for field irrigation and a fee for operation and maintenance (O&M). Do you think it is important to fully understand the composition of the ISF?**

1. Very important

2. Important

3. Somewhat important

4. Not important

5. I don't know

2.8 **Are you satisfied with the amount of the Irrigation Service Fee?**

1 = Yes

2 = No

3 = I don't know

IF NOT: Please specify.

---

---

2.9 **How do you think about the role of women in WUA management?**

- 1. Very important
- 2. Important
- 3. Somewhat important
- 4. Not important
- 5. I don't know

2.10 **Do you think it would be worthy to increase the participation of women in water affairs?**

- 1 = Yes, I do
- 2 = No, I don't
- 3 = I don't know

IF "Yes", GO TO QUESTIONS 2.12, 2.13, 2.14 and 2.15.

IF "No", GO TO 2.11

IF "I don't know", GO TO 3.1.

2.11 **Why do you think it is not worthy to do it? (Several answers possible)**

- 1 = Our WUA does work very well, no need to increase the participation of women.
- 2 = WUA affairs are men's affairs, women should take care of the family and the home.
- 3 = Or do you have any other reason for your opinion? Please tell us!

2.12 **Why do you think it is worthy to do it?**

- 1 = Women need to be fully aware of water affairs in order to understand all its implications on their household.
- 2 = A WUA can only function well if all members do participate and are informed about the decisions.
- 3 = Or do you have any other reason for your opinion? Please tell us!

2.13 **What advantages could they gain in participating more?**

---

2.14 **What do you think could be done to make women participate more in a WUA? (up to three)**

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

---

*1 = I don't have any idea*

*2 = Invite them explicitly to general assemblies*

*3 = Send trained community mobilisers*

*4 = Provide extensive consultations for women*

*5 = Others. Please specify*

---

2.15 **In what kind of WUA tasks would an increased participation of women be useful?**

--	--	--

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

- 1 = *I don't have any idea*
- 2 = *Awareness raising activities*
- 3 = *Communication, such as computer work*
- 4 = *Accounting*
- 5 = *Others. Please specify.*

### 3. Participation practices in management and operation

3.1 **What tasks are under the responsibility of men and what under the responsibility of women in daily labour division?**

20. Male

30. Female

- 1 = Child care
- 2 = Washing and cleaning
- 3 = Food preparation
- 4 = Managing and controlling the household budget, taking financial decisions
- 5 = Irrigation
- 6 = Small livestock keeping

- 7 = Large livestock keeping
- 8 = Farming
- 9 = Buying agricultural input
- 10 = Marketing output
- 11 = Employment outside the household
- 12 = Others. Please specify.


3.2 **Do you participate actively in the WUA?**

- 1 = Yes
- 2 = No

IF "Yes" GO to 3.3, IF "No" GO to 3.4

3.3 **How do you participate?**

- 1 = I usually attend general assemblies
- 2 = I am involved in the daily management. In this case please specify:
- 3 = I give advices
- 4 = I criticize
- 5 = Others. Please specify.

3.4 **Have you ever attended WUA training seminars?**

- 1 = Yes
- 2 = No

IF "Yes", GO to 3.4.1, IF "No" GO to 3.5.

3.4.1 **Which one(s)?**

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3.5 **What are the benefits of these trainings? (list up to three)**

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THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

- 1 = *Increased knowledge on irrigation*
- 2 = *Increased knowledge on functioning of WUAs*
- 3 = *Management skills*
- 4 = *Accounting skills*
- 5 = *Co-operation skills*
- 6 = *Planning skills*
- 7 = *Others. Please specify*

3.6 **Have you met WUA Mobilisation Specialists and local village-based WUA organizers?**

- 1 = Yes, I do
- 2 = No, I don't
- 3 = I don't know

3.7 **Have you or your representative attended WUA general assembly meetings?**

- 1 = Yes (please indicate how often: .....)
- 2 = No
- 3 = I don't know

3.8 **Are there any constraints about women's participation in the WUA affairs?**

- 1 = Yes
- 2 = No
- 3 = I don't know

IF "Yes", GO to 3.8.1, IF 2 and 3, GO to 3.9

3.8.1 **Please indicate which ones.**

THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

- 1 = *Lack of knowledge in management*
- 2 = *Lack of knowledge in operation & maintenance works*

3 = Lack of availability since they care for the home

4 = Others. Please specify.

3.9 **Who in your family is responsible for paying the Irrigation Service Fee?**

3.10 **Would you be willed to pay more Irrigation Service Fee?**

1 = Yes

2 = No

3 = I don't know

IF "Yes", GO to 3.10.1, IF 2 AND 3 GO to 3.11.

3.10.1 **How much more?** (NOTE ALSO THE ACTUAL FEE AS REFERENCE)

3.11 **Would you like to participate more in your WUAs affairs?**

1 = Yes

2 = No

3 = I don't know

3.11.1 IF YES: **What would you like to do?**

## 4. Information

4.1 **Which are your most important information channels about WUA affairs and irrigation management?** (Multiple choices)

1 = Radio

2 = Television

3 = Newspapers, newsletters and magazines

4 = Officials of Belediye government and extension personnel

5 = AIOJSC (formerly SAIC) personnel

6 = Friends and relatives

7 = Local charismatic leader (Aksakkal)

8 = Training course

9 = RSU personnel, RSU blackboard newspaper or wall papers

10 = WUA chairman

11 = other WUA staff (e.g. field agent)

12 = Others: (Please indicate)



**Please rank your 4 most important information channels according to their importance**

Importance	No.	Contents of the information
1		
2		
3		
4		

4.2 **How often have you received training programs and information about WUA affairs in recent years?**

- 1 = Often
- 2 = Sometimes
- 3 = Seldom
- 4 = Never
- 5 = I don't know

4.3 **Are you willing to learn more about WUA?**

- 1 = Yes, I am willing to learn more very much.
- 2 = Yes, I am.
- 3 = I don't care.
- 4 = No, I don't.

4.4 **Which information would you need about WUAs and their management? (up to three)**

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THE INFORMANT MIGHT GIVE THE FOLLOWING ANSWERS:

- 1 = Annual Cycle of water activities
- 2 = Water distribution planning
- 3 = Annual Budget and Irrigation Service Fee
- 4 = Annual Maintenance Plan
- 5 = WUA organisation, including e.g. role of WUA Council
- 6 = WUA administration and the roles of different staff members
- 7 = Individual water distribution schedule
- 8 = Exchange knowledge with other WUAs
- 9 = Others. Please specify.

4.5 **Do you have any suggestions and comments about how women can become better aware of WUA affairs? What are they?**



## 5 Socio-economic profile of informants

### 5.1 Sex

1 = Male

2 = Female

### 5.2 Married Status

1 = Married

2 = Not married

3 = I don't want to answer

### 5.3 Ethnicity:

1 = Azeri

2 = Russian

3 = Lezgian

4 = Talysh

5 = Turkish

6 = Jewish

7 = Other. Please specify.

### 5.4 Age

1 = 18-29

2 = 30-39

3 = 40-49

4 = 50-59

5 = more than 60

### 5.5 Education level: (single choice)

1 = Illiteracy or know few words

2 = Elementary school

3 = Secondary school

4 = Higher secondary school (technical secondary school, middle technical school, technical high school)

5 = University and above

### 5.6 Your households' last year's income is approximately:

(single choice, unit: AZM)

1 = Less than 1,000

2 = 1,001-2,000

3 = 2,001-5,000

4 = 5,001-10,000

5 = 10,001-20,000

6 = 20,001-30,000

7 = More than 30,000

QUESTIONS ON PERSONAL CHARACTERISTICS OF HOUSEHOLD MEMBERS



**Where are they working?**

5.9

Table: Family members working outside their own farm

	Number of Temporarily Working Family members		Number of Permanently Working Family members	
	Number	Position in the family (Husband, wife, children)	Number	Position in the family (Husband, wife, children)
In the village				
Neighboring villages				
Raion center				
Other raions				
Baku				
Outside of Azerbaijan				

5.10 **What type of agricultural land does your household have? Can you give us information about the size of land that you own? (in ha)**

Land owned *	Land hired	Land leased	Other	Total Farm land

\*Including farmer's garden

## **Annex 4 – Questionnaire for qualitative survey**

### **Interview Guide for focus group discussions and WUA staff interview (female WUA members, regular male members and Chairman)**

#### **First part: General questions:**

1. What is a WUA and why is it important? What do you expect from the WUA?
2. What services does your WUA provide (*this is to know the actual situation*)?
3. Are the WUAs useful as they are now? Or in other words: What do you think are the advantages of being a member of the WUA?
4. What commissions do you have in your WUA? What is their work? (*Please ask also about General Assembly, if respondents don't mention it, clarify if General Assembly or Representative Assembly*)
5. In your opinion, what are the most important problems which limit the performance of your WUA?

#### **QUESTION 6 ONLY FOR WUA STAFF (CHAIRMAN):**

6. What capacities need to be enhanced to improve your WUA's work?

#### **Second part: Role of men and women in daily life and WUA affairs**

7. How is the labour division organised? What things are doing women, what men? *Please ask especially: Who is managing the household budget? And who is taking the decisions in the family? Are women consulted at decision making?*
8. Do you think that the participation of all WUA members is important for the economic development of your WUA?
9. What role do women play in your WUA (*if any, a specific role, or same as men, ...*)? How do they participate (*officially, un-officially, not at all*)? How do you find their participation?
10. What has your WUA done to inform women about operational issues (such as water plans, the distribution of water, the cost-sharing mechanisms etc.) of the WUA? What has the RSU done in this aspect?
11. Do you think it is worthy to increase the participation of women in water affairs? If yes, what do you think could be done to make women participate more in a WUA? And how? If not, why?

12. Do you wish to gain more knowledge about WUAs? If yes, what kind of information do you want to gain? From which information channels would you like to gain this information? Why? And how will you use it?
  
13. Any other suggestions on WUA and the role of women in them?

# **Annex 5 – Proceedings of Gender Workshop in Baku**

## **Introduction**

The workshop was held in the Natavan Room of the Park Inn Azerbaijan Hotel on 19 December 2011, from 0900h to 1245h, followed by lunch. There were 28 participants, representing a wide variety of different stakeholder groups, including WUAs, PIU, government units and NGOs (see list of participants below).

The task team leader of WUAP, David Meerbach, opened the workshop with introductory remarks and the Director of the Project Implementation Unit of WUAP, Akif Mustafayev, introduced the World Bank's contribution to the development of the I&D sector under IDSMIP and the way ahead under WUAP which became effective in December 2011. Participants then introduced themselves – a “round table”. Mrs Aygun Akhmedova led the discussion in the first half of the workshop in which Dr. Rita Merkle summarised the findings of the gender survey. The second half of the workshop, chaired by David Meerbach, was devoted to the presentation and the discussion of lessons learned from the gender survey. The workshop participants are invited to discuss the draft report in order to seek critical suggestions for the final report.

## **Study and report background**

Dr. Rita Merkle explained the background of the report which represents a response to the World Bank's long-standing efforts to promote gender equality in its' engagement with client countries. The report has three main objectives: (i) to disseminate the knowledge obtained under the GAP-funded study on the role of women in Water Users Associations in Azerbaijan; (ii) provide specific recommendations for integrating gender issues in the new WUAP; and (iii) provide general guidance on how to mainstream gender equity and women's empowerment in WUAs in Azerbaijan and in the Caucasus and Central Asian regions in order to foster for efficient and equitable development and growth through improved irrigation management.

The report is a product of intensive field study conducted at the end of the Bank financed IDSMIP (2003 – 2010) and of collaboration amongst project stakeholders in Azerbaijan. The survey methodology was explained very briefly. Participants stressed that the survey methodology and approach should be explained in more detail in order to clearly set the frame of the study. The survey instruments and the sampling frame need further explanations.

## **Gender survey findings**

Workshop participants all agree that the report covers all the important issues. It became clear how dynamics work, but more knowledge would still be needed on some agro-economic aspects such as crops watering on different land plots, i.e. farmland and household plots. Two points were in the focus of the discussion: i) The role of women in WUA management and ii) the issue of membership and land titles.

A participant from the CSU pointed out that the important role of women in the management of household plots and in decision-making on crops to be cultivated is well described, however he stresses that this does not mean that they should be involved actively in WUA management and decision-making. On the contrary, women's realm is the family, men's realm is WUA management.

Participants from NGOs also confirm the findings and stress that women face competing obligations and social mores that hamper the inclusion in WUA structures, but conclude that a balanced participation to women should be provided.



Participants from WUAs agree with this point of view, but their statements reflect the findings of the gender survey. They have very general needs such as canal maintenance and sufficient water supply and are not preoccupied with the involvement of women in WUA management.

The discussion on membership and land titles revealed that confusion prevails on this issue. CSU staff is convinced that only about 10% of women, namely those who are on the list for irrigation service fee collection, are members of the WUAs. A hot debate on the issue of membership titles and rights followed showing that the topic needs more awareness, not only on the side of local stakeholders but also on the side of World Bank staff.

One participant from a WUA noted that there is a need for the empowerment of women at the level of national government bodies which would then change the overall situation at the local and grassroots level.

### **Lessons learned**

The lessons of the draft report resonate with the priorities and needs of WUAs. Again, it became apparent that WUA representatives have very basic needs, also in terms of training: general training on the WUA concept and WUA functioning is demanded and should be rejuvenated. This is especially important against the background that WUAs changed structures since the implementation of IDSMIP in 2003 and the training WUA managerial staff then received. Participants therefore ask for a new set of general training taking into consideration these changes. Some of the male WUA chairmen underline that women should be included and that they should be aware that they have the same rights. One suggestion was to create a special position within a WUA responsible for household plots, but another chairman remarked that this might be complicated because water users have land titles for both, farmland and household plots. Nevertheless, they agree that it is a must to imply women in household plots management.

NGO representatives suggest to involve municipalities in training since they are regarded as an authority in rural areas which could best defend the rights of women. Another suggestion is to involve young people in awareness raising campaigns in order to stop rural depopulation.

### **Workshop Conclusion**

The workshop produced valuable input for further refining the report and strengthened the importance to enhance the role of women in WUA management based on a real need.

## List of Participants

Name	Title	Organisation
Yusif Maharramov	Representative	WUA, Khachmaz region
Rza Rzayev	Representative	WUA, Saatli region
Tamilla Lachinova	Representative	WUA, Khachmaz region
Vagif Imanov	Representative	WUA, Imishli region
Yusif Rahimov	Representative	WUA, Imishli region
Khalid Asgarov	Representative	WUA, Gakh region
Gahraman Mammadov	Representative	WUA, Zagatala region
Shahrucz Muradov	Representative	WUA, Goranboy region
Taptiq Hasanov	Representative	WUA, Agjabadi region
Shahin Bayramov	Representative	WUA, Agjabadi region
Bahija Aliyeva	Gender Specialist	UNFPA
Yulia Aliyeva	Gender Specialist	CRRC Center
Farida Amirova	CWD project Manager	World Vision
Radjab Sattarov	Director	International Center for Social Research
Samira Mammadova	Representative	Women's Association for Rational Development
Aida Ibragimkhalilova	Executive Director	Gender Equality and Public Association of Women's Initiatives
Gulchin Huseynli (055 72997 96)	Representative	Citizens' Labor Rights Protection League
Gulara Efendiyeva	Representative	Empowering Education
Gulnara Ismaylova,	Representative	<i>"Progress" social and Economic Investigations Public Union</i>
Zemfira Agayeva		<i>"Progress" social and Economic Investigations Public Union</i>
Ilgar Agassiyev	Chief of Party	Counterpart International Women's Participation Program
Muhtarov, Murad	M&E Specialist	AzWUAP, PIU
Mustafayev, Akif	Director	AzWUAP, PIU
Matlab Guliyev	Head of the dept. for the coordination of WUAs in the regions	Azerbaijan Amelioration and Irrigation Open Joint Stock Company (AIOJSC)
Ravane Mammadova		AIOJSC
Akhmedova, Aygun	National consultant	Consultant to the World Bank

<b>Name</b>	<b>Title</b>	<b>Organisation</b>
Meerbach, David	Task team Leader, AzWUAP	World Bank
Merkle, Rita	International Consultant, main author of the report	Consultant to the World Bank
Majidova, Sabina	Program Assistant	World Bank







