

Gender Assessment

FP075: Institutional Development of the State Agency for Hydrometeorology of Tajikistan

Tajikistan | ADB | GCF/B.19/22/Rev.02

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Gender documents for FP075

Attachment 6 – Gender Action Plan

1. The Agency of Hydrometeorology currently employs 251 female staff (just under 40%) out of a total of 708 staff (see Table 1 below). Out of these 251, there are the following senior management staff: 1 Chief of Department (out of 3), 1 Deputy Chief (out of 3), 1 Chief of Center (out of 8) and 1 Deputy Chief of center (out of 3). The rest are at various professional and technical levels including support personnel and workshop / technical managers. At senior management level (Director and Deputy Director) all three directors are male.

Table 1. Overview of Hydromet staff positions

№	Staff positions at the agency of Hydrometeorology	№ of staff (approved by government)	№ of working staff	Gender	
				Male	Female
1.	Director	1	1	1	
2.	Deputy Director	2	2	2	
3.	Chief of Department	4	4	3	1
4.	Deputy Chief of Department	4	4	3	1
5.	Chief of Center + Groups	8+31	8+25	7+14	1+11
6.	Deputy Chief of Center	6	4	3	1
7.	Head of Unit	24	22	19	3
8.	Head of Laboratory	3	3	1	2
9.	Head of Hydromet Stations	58	52	42	10
10.	Chief Specialists	42	41	18	23
11.	Lead Specialists	51	38	17	21
12.	Specialists	73	58	31	27
13.	Technicians	319	253	162	91
14.	Observers	108	105	87	18
15.	Workshop/Technical-Managers	23	20	4	16
16.	Support Personnel	75	68	43	25
	Total	832	708	457	251

Source. Hydromet March, 2017

2. The draft gender action plan (GAP) of the project is presented in Table 2 below, to be finalized upon project fact-finding. The project will ensure that among the beneficiaries in the project areas, women are trained and consulted in an equitable manner to support gender-sensitive design and provision of forecasting and warning services.

Attachment 13 - Poverty, Social, and Gender Assessment

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1. INTRODUCTION

This Poverty, Social and Gender Assessment (PSGA) has been prepared for the Institutional Development of the State Agency for Hydrometeorology of Tajikistan. The purpose of the PSGA is to assess the social and gender issues relevant to agriculture, water resource management, and climate change in Tajikistan, and identifies actions to address these issues. It builds on the previous PSGA prepared for the ongoing Water Resources Management in the Pyanj River Basin project. Based on analysis of most recent available data, this document assesses the needs, capacities, and constraints of affected people and groups, particularly women. An in-depth gender analysis is undertaken to examine the different roles, needs, and opportunities of women and men in relation to water resource management and climate change. This analysis will feed into the project Gender Action Plan (see Attachment 6).

1.1 Country Overview

Tajikistan is the smallest country in Central Asia and is one of the most vulnerable to food insecurity due to its limited arable land, underdeveloped agriculture, poor rural–urban connectivity, and limited capacity to respond to climate-induced shocks¹. Its mountainous terrain, which comprises 93% of its total land area, limits the availability of agricultural land, the major source of livelihood of its population. Compared with other Central Asian countries, Tajikistan has one of the lowest per capita availability of irrigated land.² While the country has limited productive agricultural land, the population is predominantly rural and largely dependent on agriculture. The proportion of the labor force in agriculture accounts for 75% of total employment.³ Almost 80% of the country's working poor live in the rural areas, and half of the working poor are in agriculture.⁴

The country has abundant water resources, but there are often shortages both for irrigation and for drinking water. Only about 2/3 of the population have access to safe drinking water, with the rate considerably lower in the rural areas. Poor irrigation is a major constraint to agricultural productivity. Water management is poor, and much of the infrastructure and networks for both drinking water and for irrigation are over fifty years old. Aging infrastructure results in high levels of leakage and system failure.⁵

In addition, high dependency on glacier-fed rivers for water supply and irrigation makes the country highly vulnerable to climate change. Tajikistan has over 14,000 glaciers, covering about 8% of the country's territory⁶. Melting glaciers could lead to severe decline in water supply, with potential adverse impacts on agriculture, household consumption, and energy production.

¹ ADB. 2016. *Sector Assessment (Summary): Agriculture and Natural Resources*. Country Partnership Strategy – Tajikistan 2016 – 2020. Manila.

² United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), Poverty-Environment Initiative Phase II (PEI). 2016. *Tajikistan Water Public Environmental Expenditure Review*. Dushanbe.

³ Mukhamedova, N.; Wegerich, K. 2014. *Land reforms and feminization of agricultural labor in Sughd Province, Tajikistan*. Colombo, Sri Lanka: International Water Management Institute (IWMI).

⁴ ADB. 2016. *Report and Recommendation of the President to the Board of Directors - Proposed Loan, Grant, and Administration of Grant and Technical Assistance Grant Republic of Tajikistan: Water Resources Management in Pyanj River Basin Project*. Manila.

⁵ UNDP, UNEP, PEI. 2016. *Tajikistan Water Public Environmental Expenditure Review*. Dushanbe.

⁶ UNDP, UNEP, PEI. 2016. *Tajikistan Water Public Environmental Expenditure Review*. Dushanbe.

1.2 Project Overview

Helping the country improve its capacity to manage water resources to boost food production and climate change adaptation capabilities is highlighted as a priority in the Asian Development Bank's (ADB) Country Partnership Strategy with Tajikistan, 2016-2020.⁷ In 2013, ADB supported the *Building Climate Resilience in the Pyanj River Basin Project (PRB)*.⁸ Building on this project, ADB approved the project *Water Resources Management in Pyanj River Basin* in 2016. This ongoing project aims to address issues of water resources management (WRM) at river basin, water supply, and water user levels in the Pyanj River basin in southern Tajikistan. The overall goal of the project is to increase agricultural production, food security, and water supply, and improve water use efficiency, in the Chubek Irrigation System in the Pyanj River basin.⁹

The project is being proposed for Green Climate Fund (GCF) to support the country's forecasting entity, the State Agency for Hydrometeorology (Hydromet), to help make it a sustainable and well-resourced institution that produces timely and accurate forecasting of extreme weather events particularly in the PRB. Currently, disaster risk mitigation and response in vulnerable communities, as well as broader climate change adaptation efforts, are hampered by low capacity in forecasting of weather, hydrometeorological, and climatic conditions. Hydromet faces many challenges such as limited budget, decaying infrastructure, and poor staff retention. The project will (i) modernize Hydromet's campus and associated facilities [Component A], (ii) support legal and organizational transformation and capacity building of Hydromet into a government entity with flexibility to set staff salaries and retain additional entrepreneurial revenue [Component B], (iii) undertake capacity building for improve forecasting and warning of extreme weather events [Component C], and (iv) support development and implementation of a viable business model including marketing of fee-based services [Component D].

2. SOCIO-ECONOMIC ASSESSMENT

Tajikistan ranks 129th out of 188 countries and territories in the United Nations Human Development Index, placing the country in the medium human development category.¹⁰ The country has made significant progress in economic development, and its economy has improved much compared to the 1990's. Economic growth after independence in 1991 was stalled by a 5-year civil war that resulted in the lowest level of economy, with a gross domestic product (GDP) of -20.2% from 1990-1994. The country gradually recovered in 1997 with a GDP of 1.7% and an 8.3% economic growth in 2000. Acceleration of the country's GDP was noted in 2010 with a GDP growth of 6.5%, 6.6% in 2011, and increased by 7.5% in 2012.¹¹

Growth rates during 2005–2014 were marked by increased susceptibility to volatile international commodity prices and trajectory of the Russian economy, which hosts up to 90% of the 1 million Tajik migrant workers. The country has always been heavily reliant on exports of raw cotton and unwrought aluminum, which account for more than two-thirds of total exports, and remittances

⁷ ADB. 2016. *Country Partnership Strategy – Tajikistan 2016 – 2020*. Manila.

⁸ ADB. 2013. *Report and Recommendation of the President to the Board of Directors: Proposed Administration of Grant to the Republic of Tajikistan for Building Climate Resilience in the Pyanj River Basin Project*. Manila.

⁹ ADB. 2016. *Report and Recommendation of the President to the Board of Directors - Proposed Loan, Grant, and Administration of Grant and Technical Assistance Grant Republic of Tajikistan: Water Resources Management in Pyanj River Basin Project*. Manila.

¹⁰ UNDP. 2016. *Human Development for Everyone – Human Development Report 2016*.

¹¹ EPTISA Servicios de Ingenieria S.L. 2016. *Final Feasibility Report for ADB TA 8647-TAJ: Water Resources Management in Pyanj River Basin (Appendix 14 - Poverty, Social and Gender Assessment)*. Tajikistan.

from Tajik migrant workers.¹² During 2005–2015, large price swings hit cotton and aluminum, affecting the whole economy. In addition, with the slowdown of the Russian Federation economy starting from 2014, remittances declined by 33.3% by December 2015. This fall in remittances, combined with weak global demand for Tajikistan’s main exports, slowed down GDP growth to 6.7% in 2014 and further to 6.0% in 2015.¹³

The economy has undergone substantial structural changes since 2000, with service sector expanding by over 60%, and around 2/3 of GDP now coming from services, primarily driven by construction, telecom and trade.¹⁴ With the increasing remittance inflows from 2005, the contribution of services to the total GDP rose to 79.4% during 2005–2014, while, the contribution of agriculture shrank to 21.7% during the same period.¹⁵ However, in terms of employment, Tajikistan remains agriculture-based. The share of agriculture in total employment increased from 44.7% in 1991 to 65.6% in 2014, while the share of services decreased from 34.8% to 30.3%, and the share of industry was reduced from 20.5% to 4.1%.¹⁶

While the official unemployment rate in the country is low at 2.4% in 2014, this counted only registered unemployment, or those registered to receive unemployment benefits, which is only a fraction of the likely actual total. The calculations based on the *2009 Tajikistan Living Standards Survey* show that overall unemployment is as high as 21%, with urban unemployment higher than rural.¹⁷ Limited employment opportunities, combined with high wage differentials between domestic labor markets and the Russian Federation and lenient entry policies, triggered the out-migration of workers.¹⁸

2.1 Migration

Tajikistan has an increasing number of migrant workers. From 2010 to 2011 alone, there was an increase of 2,733 migrants.¹⁹ As of August 2015, about 1 million Tajik workers have left for the Russian Federation.²⁰ Most of the migrant workers are males, with the vast majority working in the construction sector. Women traditionally work in housekeeping, caring and other service occupations. The share of women migrants, mostly married older women, and younger women with higher education²¹, rose from 2007 to 2009. Consequently, increase in caring, sales and service occupations among the migrants has been noted.²²

¹² ADB. 2016. *Country Partnership Strategy – Tajikistan 2016 – 2020*. Manila.

¹³ ADB. 2016. *Tajikistan: Promoting Export Diversification and Growth - Country Diagnostic Study*. Manila.

¹⁴ UNDP, UNEP, PEI. 2016. *Tajikistan Water Public Environmental Expenditure Review*. Dushanbe.

¹⁵ ADB. 2016. *Tajikistan: Promoting Export Diversification and Growth - Country Diagnostic Study*. Manila.

¹⁶ ADB. 2016. *Country Partnership Strategy – Tajikistan 2016 – 2020*. Manila.

¹⁷ ADB. 2016. *Tajikistan: Promoting Export Diversification and Growth - Country Diagnostic Study*. Manila.

¹⁸ ADB. 2016. *Country Partnership Strategy – Tajikistan 2016 – 2020*. Manila.

¹⁹ EPTISA Servicios de Ingenieria S.L. 2016. *Final Feasibility Report for ADB TA 8647-TAJ: Water Resources Management in Pyanj River Basin (Appendix 14 - Poverty, Social and Gender Assessment)*. Tajikistan.

²⁰ According to the 2016 ADB country diagnostic study *Tajikistan: Promoting Export Diversification and Growth - Country Diagnostic Study (op. cit)*, accurate data on migration are scant, in part due to large numbers of illegal workers abroad. The Agency on Statistics under the President of Tajikistan estimated that 750,070 Tajik workers, including 86,773 women, were working abroad in 2011. Data from the Federal Migration Service of the Russian Federation estimates 978,940 Tajiks as of August 2015.

²¹ Khuseynova, Gulchekhra. 2013. “Social and economic impacts of labor migration on migrants’ households in Tajikistan: working out policy recommendations to address its negative effects”. *School of Public Policy Capstones*. Massachusetts: University of Massachusetts – Amherst. Available at http://scholarworks.umass.edu/cppa_capstones/26

²² EPTISA Servicios de Ingenieria S.L. 2016. *Final Feasibility Report for ADB TA 8647-TAJ: Water Resources Management in Pyanj River Basin (Appendix 14 - Poverty, Social and Gender Assessment)*. Tajikistan.

Since 1991 up to the present, labor migration from Tajikistan has been a common process. International Monetary Fund (IMF) estimated that by 2005, almost every family in Tajikistan has had a migrant worker travelling abroad²³. More than one million Tajik citizens worked abroad in 2012, mostly in Russia, and it is likely that actual figures are higher because most of the migration is seasonal and temporal, which is difficult to track accurately.

Remittances significantly contribute in reducing poverty in Tajikistan. The proportion of families whose income mostly depends on remittances from labor migrants stands at 83%. Households heavily depend on remittances, with much of it used for private consumption and used immediately, and are not invested or deposited as savings. Since the size of average remittance amounts remained relatively small, limited portions of inflows were channeled to productive sectors. Research on effects of the remittances indicates that they did not have positive effects on investments, but increased consumption expenditures.²⁴

Even with the fluctuations and considerable drop during world economic shocks, remittances flowing to Tajikistan account for a significant share in the GDP. In 2003, remittances and other transfers to households ranked as a second largest income source after wages²⁵. Remittance inflows from migrant workers rose from 6.4% of GDP in 2002 to a high of 49.6% in 2013.²⁶ In its 2015 *Migration and Development Brief*, World Bank ranked the country as the most remittance-dependent country in the world.²⁷ By that year however, remittances have already started to decline. In the 2017 World Bank report, Tajikistan registered a significant decline in remittances and slipped to sixth position. The decrease was mainly due to the downturn in the Russian economy, and the slight depreciation of the euro against the dollar.²⁸ The Russian Federation tightened regulations for reentry and by December 2015, 333,391 migrant workers were given reentry bans for 3–5 years.²⁹ This decrease is particularly painful for Tajikistan, since remittances are an important part of its overall economy. This demonstrates the economy's vulnerability to external vulnerability to external economic developments.

2.2 Poverty

The country experienced sustained reduction in income poverty rates for the past years, from 81% in 1999, 47% in 2009, down to 35.6% in 2013³⁰, and 31% in 2015³¹. Data from 2003 to 2009 showed that labor earnings, remittances, and pension payments were factors that reduced poverty. However, the benefits of growth have not been evenly distributed. Regional disparities

²³ As cited in Khuseynova, Gulchekhra. 2013. "Social and economic impacts of labor migration on migrants' households in Tajikistan: working out policy recommendations to address its negative effects". *School of Public Policy Capstones*. Massachusetts: University of Massachusetts – Amherst. Available at http://scholarworks.umass.edu/cppa_capstones/26

²⁴ ADB. 2011. Remittances and Household Expenditure Patterns in Tajikistan: A Propensity Score Matching Analysis. *Asian Development Review*. 28 (2). pp. 58–87.

²⁵ Justino, P. and Shemyakina, O. 2012. "Remittances and Labour Supply in Post-Conflict Tajikistan". *IDS Working Paper 388*. UK: Institute of Development Studies. Citing World Bank 2004.

²⁶ ADB. 2016. *Country Partnership Strategy – Tajikistan 2016 – 2020*. Manila.

²⁷ World Bank. 2015. *Migration and Development Brief 24*.

²⁸ World Bank. 2017. *Migration and Development Brief 27*.

²⁹ International Organization for Migration (2016), as cited in ADB. 2016. *Country Partnership Strategy – Tajikistan 2016 – 2020*. Manila.

³⁰ ADB. 2016. *Country Partnership Strategy – Tajikistan 2016 – 2010. Poverty Analysis (Summary)*. Manila.

³¹ Global Partnership for Effective Development Cooperation. 2016. Monitoring Profile: Tajikistan, October 2017. Available at http://effectivecooperation.org/wp-content/uploads/2016/10/Tajikistan_14-10.pdf?s, accessed November 9, 2017.

remain a cause for concern, with higher poverty incidence in rural areas. The incidence of rural poverty is estimated to be over 49%, hence, almost half the rural population lives in poverty. High poverty rates, combined with heavy reliance on agriculture and natural resources, increase vulnerability of the rural households to environmental degradation.³²

In terms of non-income poverty, progress has been slow. Food security and undernourishment remain critical issues. A 2014 study showed that despite improving food security in recent years, only 20 percent of Tajikistan's rural population is food secure, 52% are mildly food insecure, 24% are moderately food insecure, and 4% are severely food insecure.³³ The 2016 global food security index ranks Tajikistan at 92nd out of 113 countries in terms of food affordability, availability, quality, and safety.³⁴ The 2017 global hunger index of the International Food Policy Research Institute that covers the percentage of undernourished population, under-five underweight children, and under-five mortality rate, ranks Tajikistan 96th out of 119 countries, which is considered within the *serious* range.³⁵ Primary education enrollment reached universal levels and completion rates have increased, but gender discrepancies remain at the tertiary education level. Poverty situation in selected areas, especially in the rural communities, is characterized by inadequate and/or weak infrastructure, poor service facilities, and weak organizations. Access to safe drinking water has lagged and coverage rose from 58% in 1993 to 72% in 2012.³⁶

2.3 Water and Agricultural Resources

In Tajikistan and other parts of Central Asia, social and economic conditions are more closely related to water than in other locations. The country is rich in water resources, and this has shaped much of the country's socio-economic development, with extensive hydropower resources, economic reliance on water intensive agricultural crops (wheat and cotton), and water/energy intensive aluminum smelting. Agriculture, which accounts for a quarter of Tajikistan's GDP and export revenues and 39% of tax revenues, is the largest consumer of water, accounting for over 90% of the national total water consumption. Agriculture is dominated by two highly water intensive crops – cotton and wheat. The country is also a major producer of hydropower, which accounts for 98% of the country's energy balance.³⁷

However, despite having access to extensive water resources, the country faces numerous challenges. Much of the population is indirectly dependent on irrigation and drainage systems for food production, but the irrigation network is poorly maintained due to inadequate financial resources and weak management. Mostly, irrigation relies on large-scale systems built in the 1930-1980 period, and the aging infrastructure is in urgent need of rehabilitation and replacement. Lack of drainage is leading to salinization and land degradation, and about one third of irrigated arable land is not used because of the deterioration of infrastructure.³⁸

³² UNDP, UNEP, PEI. 2016. *Tajikistan Water Public Environmental Expenditure Review*. Dushanbe.

³³ As cited in EPTISA Servicios de Ingenieria S.L. 2016. *Final Feasibility Report for ADB TA 8647-TAJ: Water Resources Management in Pyanj River Basin (Appendix 14 - Poverty, Social and Gender Assessment)*. Tajikistan.

³⁴ The Economist Intelligence Unit. 2016. *Global Food Security Index 2016 - An annual measure of the state of global food security*.

³⁵ International Food Policy Research Institute. 2017. *2017 Global Hunger Index – The Inequalities of Hunger*. Washington, DC / Dublin / Bonn

³⁶ ADB. 2016. *Country Partnership Strategy – Tajikistan 2016 – 2010. Poverty Analysis (Summary)*. Manila.

³⁷ UNDP, UNEP, PEI. 2016. *Tajikistan Water Public Environmental Expenditure Review*. Dushanbe.

³⁸ UNDP, UNEP, PEI. 2016. *Tajikistan Water Public Environmental Expenditure Review*. Dushanbe.

In terms of access to drinking water, while access rates have been increasing, currently, only about 2/3 of the population uses safe drinking water. Although donor and government investment efforts have been focused on improving access in urban areas and rural areas with the most acute supply issues, still over half the rural population (around 3.5 million) does not have access to safe drinking water, and there is virtually no access (0.2%) to sanitation facilities in rural areas.³⁹

These issues are exacerbated by the country's vulnerability to climate change. In 2015, the country experienced serious flooding caused by heavy rainfall and unusual melting of the glaciers. Higher temperatures cause increased melt and thus, increased river flows, floods, landslides and avalanches.⁴⁰

The original Water Resources Management in the Pyanj River Basin project seeks to improve WRM and address climate-related extreme weather risks, through improved water resources monitoring, climate-proofed infrastructure, and agricultural management. The project outputs include: improved WRM system in the Tajikistan and effective joint regional management of the Pyanj River Basin; modernized and climate-proofed Chubek Irrigation System water resources management infrastructure fully operational; and farm management capacity and water use skill improved.

The Pyanj River Basin is the largest river basin in the country. The PRB's WRM will affect the country's economy as it (i) covers the majority of Khatlon province, which has the largest population and agriculture production; (ii) includes the most food-insecure zone among the country's irrigated area; and (iii) is the country's poorest river basin (55% of the population is poor).

2.4 Climate Change

Climate change is highly likely to present a threat to the economy, well-being and the environment in Tajikistan. The frequency and intensity of floods has been increasing for the last few decades. About 95% of the country is vulnerable to environmental degradation, including the risk of floods, landslides, soil salinity, water and soil erosion, and desertification.⁴¹

A 2014 ADB study indicates that the melting of glaciers has accelerated since the Little Ice Age due to the gradual climate warming.⁴² The largest mountain glacier in the world (Fedchenko Glacier) is located in the Pamir Mountains in Tajikistan, and it has thinned by 1 meter per year, its surface area has decreased by 11 square kilometers, and it has lost about 2 cubic kilometers of ice. The intensive melting of glaciers could result in extreme decline in water availability in the country. Water shortages will negatively impact the country's agriculture and hydropower, and pose serious threats to energy and food security.⁴³

Climate vulnerability is particularly acute in the districts along the Pyanj River Basin (PRB), the primary tributary to the Amu River in the south of the country, which are among the country's poorest and comprise a wide range of geographical and climatic conditions.

³⁹ *Ibid.*

⁴⁰ ADB. 2016. *Sector Assessment (Summary): Agriculture and Natural Resources*. Country Partnership Strategy – Tajikistan 2016 – 2010. Manila.

⁴¹ ADB. 2012. *Addressing Climate Change and Migration in Asia and the Pacific*. Manila. Quoting Khakimov and Mahmadbekov, 2009.

⁴² ADB. 2014. *Climate Change and Sustainable Water Management in Central Asia*. Manila.

⁴³ UNDP, UNEP, PEI. 2016. *Tajikistan Water Public Environmental Expenditure Review*. Dushanbe.

Early warning systems and flood protection interventions are needed to help the communities prepare and adequately respond to extreme weather events. The lack of sufficiently timely and accurate hydrometeorological forecasting, particularly of floods, are still among the key challenges faced by the population. Future extreme weather events, which are expected to become more frequent and larger in magnitude due to climate change, may adversely affect infrastructure and livelihoods. Thus, strengthening capacity of hydrometeorological forecasting would help enhance and sustain the WRMPRB project outcomes and impacts, by supporting the climate-related disaster awareness and preparedness of the project beneficiaries.

3. GENDER ASSESSMENT

While Tajikistan registered dramatic growth rates for the past decade, significant gender disparities remain. Tajikistan ranks 65th out of 159 countries in the 2015 Gender Inequality Index, which reflects gender-based inequalities in three dimensions – reproductive health, empowerment, and economic activity. Maternal mortality has been reduced from 64 in 2008 to 44 in 2013, but it is still currently high at 32 deaths for every 100,000 live births. There was a marked rise in adolescent birth rate (births per 1,000 girls aged 15–19) from 28.4 in 2010 to 42.8 in 2014, although it slightly dropped to 34.1% in 2015. The percentage of women older than 25 years with at least some secondary education slightly dropped from 93.2% in 2010 to 89.9% in 2014, but it rose to 98.1% in 2015, as compared to 88.2 percent for their male counterparts. The proportion of women occupying seats in the parliament is still very low at 14.7%. Labor force participation remains skewed in favor of men at 77.5 compared to 59.4 for women.⁴⁴

3.1 Legal and Institutional framework

Tajikistan has set up a legal framework that enshrines principles of equality and non-discrimination. Article 17 of its Constitution explicitly states that men and women have equal rights (Article 17), which lays the legislative basis for the promotion of gender equality in the country. A number of specific laws related to gender issues have been passed, the most important being the 2005 Law “On State Guarantees for Equality between Men and Women and Equal Opportunities for Their Realization”. The main objective of this law is to provide protection against gender discrimination in all areas of life. The law highlights the duty of the government to provide equal opportunities for men and women through regulations, procedures and other measures against discrimination, including in the governing of the state. It also requires educational institutions to ensure equal conditions for men and women in obtaining general, secondary, vocational and higher education. This is significant because education remains one of the obstacles to gender equality due to the increasing number of young women leaving school prior to graduation.⁴⁵

The country has also adopted a number of other gender-related laws, policies, programmes and measures, including: the Presidential Decree of 1999 “On Strengthening the Role of Women in Society”; introduction by the President of a quota system for the education of girls and boys in schools in remote areas (1997, 2006); State Program on “Main Directions of the State Policy aimed at Promotion of Equal Rights and Opportunities for Men and Women for 2001-10”; 2002

⁴⁴ All the 2015 data are from UNDP’s 2016 Human Development Report. The older indicators are from ADB’s 2016 – 2020 CPS with *Tajikistan (Gender Analysis)*.

⁴⁵ EPTISA Servicios de Ingenieria S.L. 2016. *Final Feasibility Report for ADB TA 8647-TAJ: Water Resources Management in Pyanj River Basin (Appendix 14 - Poverty, Social and Gender Assessment)*. Tajikistan.

Law “On Reproductive Health and Rights”; “Strategy on Poverty Reduction in Tajikistan for 2007-2009 and 2010-2012”; 2006 “State Program on Education, Selection and Appointment of Leading Cadres from Capable Women and Girls in 2007-2016; 2012 “National Strategy for Activation of Women for 2011 – 2020; and the “National Plan for the Implementation of Gender Policy.” The government incorporated separate gender equality sections into the Poverty Reduction Strategies (PRS) 2007-2009 and 2010-2012. Issues related to gender are also included in the 2007 “National Development Strategy of the Republic of Tajikistan until 2015”, the first time that gender was integrated into medium and long term socio-economic planning. However, the practical means for their implementation have, not been fully developed.⁴⁶

Recent amendments to the country’s Land Code enabled expansion of the norms of joint property provided by the civil and family legislations onto land use rights. This secures rural women’s ownership rights in case of divorce. The Civil, Family, Penal and Labour Codes also touch on issues related to gender equality in the country.

The national coordinator of the country’s gender policy is the Committee on Women and Family Affairs (CWFA), which was founded in 2001. Coordination task is implemented through the Gender Focal Points assigned in every line ministry, and who, in their turn, are supposed to report on ministry’s progress with regards to implementation of Government’s Gender Policy. The Committee is also part of the coordinating council on Prevention of Violence against Women, which consists of representatives from the Ministry of Justice, Ministry of Labour and Social Security, Ministry of Health, Ministry of Internal Affairs, court officials, representatives of the General Prosecutor’s Office and NGOs.

At the international level, Tajikistan ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1993, the Convention on the Political Rights of Women, and the UN Covenant on Civil and Political Rights (1999).

Despite these measures and the government’s commitment to advance gender equality, lack of harmonization of laws and regulations and weak institutional mechanisms hamper the full implementation of these laws and policies. Poor stakeholder coordination and incomplete gender mainstreaming in ministries and departments further pose challenges in the promotion of gender equality in the country.

3.2 Gender in Agriculture and Water Resource Management

Women make up a significant proportion of the agricultural labor force in Tajikistan, with estimates ranging from 31% to 85.5% of women active in the sector. ADB estimates that women account for 53% of the economically active population in agriculture,⁴⁷ but the figure could be higher if all the unpaid women working alongside their husbands were counted. This is attributed to land reforms and widespread out-migration of male Tajik workers, which have led to what is called the “feminization” of the agricultural production sector⁴⁸.

⁴⁶ EPTISA Servicios de Ingenieria S.L. 2016. *Final Feasibility Report for ADB TA 8647-TAJ: Water Resources Management in Pyanj River Basin (Appendix 14 - Poverty, Social and Gender Assessment)*. Tajikistan.

⁴⁷ ADB. 2016. *Sector Assessment (Summary): Agriculture and Natural Resources*. *Country Partnership Strategy – Tajikistan 2016 – 2020*. Manila.

⁴⁸ Mukhamedova, N.; Wegerich, K. 2014. *Land reforms and feminization of agricultural labor in Sughd Province, Tajikistan*. Colombo, Sri Lanka: International Water Management Institute (IWMI).

However, women's agricultural work is characterized by seasonal, low-wage, and low-paid or unpaid positions, job insecurity, back-breaking conditions, lack of access to and control over productive resources, limited participation in decision-making activities and low technical and specialized knowledge. Women's tasks are largely restricted to field labor, such as weeding, sowing, transplanting, and harvesting, which do not require decision-making, whereas the selection of seeds, fertilizers, and plant protection materials is controlled by men.⁴⁹ Further, although both men and women are involved in livestock-raising, it is men who decide on the purchase, sale and other operations linked to its management.⁵⁰

Women are often responsible for managing drinking water resources and providing drinking water at home. They are therefore disproportionately affected by the deteriorating water infrastructure, which has resulted in many areas facing water shortages for irrigation and personal consumption, and many rural people and agriculture suffering the effects of rising water table and increasing soil salinity. Most rural households spend less than 30 minutes per round trip to collect drinking water, but it is common for women and girls to make 4 or 5 trips per day if carrying containers by hand and to travel several kilometers. Women are also in charge of storage and treatment, which is usually done by boiling, since they are the primary users of water for cooking, cleaning, washing clothes, bathing children, and making coal or dung briquettes for fuel.⁵¹ A survey conducted under ADB's 2016 CGA in Tajikistan (specifically in Sughd *viloyat*) revealed that most households source their water from irrigation canals, streams, or rivers, but they also use wells and springs, as well as collected rainwater.⁵²

Despite their significant involvement in agricultural work and water management, this has not resulted to women's empowerment. There have been observations that the agricultural sector is in fact one of the most exploitative sectors.⁵³ Gender imbalances in access to and control over productive resources, limited decision-making, and discrimination characterize agricultural work. In practice, women are denied access to local decision-making on water resource management, and are unlikely to participate in water user associations. Considering their new responsibilities as heads of households, women's limited involvement in community-based water management initiatives is not proportionate to their burden of livelihood maintenance, the rising trend of female-headed households, or their direct interest in improving water provision.⁵⁴

Despite many men being absent from rural areas because they have emigrated for work, they are overwhelmingly dominant in water users' associations (WUAs). Based on the findings of the PPTA team's Poverty, Social, and Gender Assessment for *the TA 8647-TAJ: Water Resources Management in Pyanj River Basin*, women's participation in WUAs is very low. The community consultations carried out in the project target districts revealed that, for instance of 7 Water Users Associations in Hamadoni district, none of them are managed by women. Women also do not represent the management of WUAs in any of the districts. Nevertheless, FGDs conducted in the Project target districts reveal that women are willing to participate in the Water Resource Management in their respective neighborhood.

⁴⁹ EPTISA Servicios de Ingenieria S.L. 2016. *Final Feasibility Report for ADB TA 8647-TAJ: Water Resources Management in Pyanj River Basin (Appendix 14 - Poverty, Social and Gender Assessment)*. Tajikistan.

⁵⁰ World Bank. 2013. *Tajikistan Country Gender Assessment*.

⁵¹ ADB. 2016. *Tajikistan Country Gender Assessment*. Manila.

⁵² *Ibid.*

⁵³ ADB. 2016. *Tajikistan Country Gender Assessment*. Manila.

⁵⁴ ADB. 2016. *Tajikistan Country Gender Assessment*. Manila.

Women also have limited presence as managers of farm lands. Fewer women than men are formal managers of *dehkan*⁵⁵ farms: in 2012, only 7.8% of all *dehkan* farms were legally headed by women.⁵⁶ In 2014, women headed 13% of *dehkan* farms, but the average size of women-headed farms is smaller than those headed by men. Furthermore, women managed only 6.4% of all planted crop lands on *dehkan* farms. It was also noted that female-managed land is often poorer than that granted to men, and that female managed *dehkan* farms have significantly smaller harvests across all crop categories, and smaller yields for every crop save cotton and corn, which are nearly equal for men and women.⁵⁷

In addition, women do not manage all of those *dehkan* farms that are listed in their names. A World Bank study found that state officials registered them with their wives' names in order to avoid the appearance of conflict of interest or manipulation of state allocation of land. The study further found that notwithstanding the fact that women may have good access to land, they do not play a significant role in decision-making about crop selection on cultivated land.⁵⁸

3.3 Gender and Climate change

As mentioned above, climate change poses a significant threat to the country and may reduce water supplies needed for agriculture, WSS and hydropower. Rural populations are especially vulnerable due to their dependence on farming and natural resources. Women farmers interviewed for ADB's 2016 Country Gender Assessment for Pakistan described unseasonably warm weather followed by heavy rains that ruined crops.⁵⁹

For rural women and female farmers in Tajikistan, aside from household and care responsibilities and employment for income, they also often grow food for family consumption. Kitchen gardens are a crucial for the family's food security, especially for households headed by females. Households headed by females are among the poorest and often have very limited capacity to cope with or recover from weather-related losses. As discussed above, women have limited participation in WUAs, hence, are less likely to participate in decisions about which crops to grow or how to invest income. Women also bear the burden of collecting scarce resources, and women and children are at risk for illness from unclean drinking water and unclean fuel.⁶⁰

Climate change adaptability is also affected by women's lower educational levels, lack of technical knowledge, and limited participation in decision making activities. For instance, during the 2010 Kulyab flooding, many women were adversely affected because they did not know how to react during an emergency, and only a few could swim.

Despite these gender disparities, women have great potential as agents for climate change adaptation. As discussed in an Oxfam report, rural women quickly "grasp the holistic nature of farming and offer examples and solutions that they are already engaging in to adapt to climate change."⁶¹ The report presented several immediate and long-term adaptation measures and

⁵⁵ Mid-sized, privately owned commercial farms that are distinct from household plots; also referred to as "peasant farms." *Dekhkan* farms can be individual, family, or collective farms.

⁵⁶ EPTISA Servicios de Ingenieria S.L. 2016. *Final Feasibility Report for ADB TA 8647-TAJ: Water Resources Management in Pyanj River Basin (Appendix 14 - Poverty, Social and Gender Assessment)*. Tajikistan.

⁵⁷ ADB. 2016. *Tajikistan Country Gender Assessment*. Manila.

⁵⁸ World Bank. 2013. *Tajikistan Country Gender Assessment*.

⁵⁹ ADB. 2016. *Tajikistan Country Gender Assessment*. Manila.

⁶⁰ ADB. 2016. *Tajikistan Country Gender Assessment*. Manila.

⁶¹ Oxfam. 2011. *Climate Change: Beyond Coping. Women smallholder farmers in Tajikistan*. Oxford: Oxfam GB.

mitigation measures which were suggested by women. Several strategic projects that have successfully involved women demonstrate how they can be agents of change, including one which enabled them to start herb and vegetable seedlings in cold weather and extended the growing season; and one where women learned about food preservation.

ADB's portfolio for 2015–2017 included agriculture and natural resources, with projects on ensuring food security and improving WSS. In its project Building Climate Resilience in the Pyanj River Basin⁶² approved in 2013, a gender action plan (GAP) was developed to ensure that women will benefit from flood protection activities and rehabilitated water supply infrastructure.

3.4 Project's Potential Benefits to Women

Projects on agriculture, water resources management or water supply and sanitation, have the potential to significantly benefit women. The 2016 ADB Country Gender Assessment cites that when asked how improved water supply would affect their households, women mentioned "lessening their workloads, having more time for their children and leisure, improving household cleaning and family hygiene, and increasing their home-based agriculture capacity."⁶³ A 2013 gender assessment on rural drinking water program in Tajikistan⁶⁴ discussed multiple examples cited by women when asked about the effects of improved water supply on their families, including improved health situation of children, easier children care, easier maintenance of cleanliness in the house, savings for potable water previously paid to vendors, expansion of their gardens and cattle care, home-based preservation of fruits and vegetables, home-based procession of dairy products.

The original project envisaged that through installation of 12 water points for householder use along the main canal and three in each target interfarm canal, women's water-fetching chores will be lightened. Targets for women's participation in meetings were included to ensure women's meaningful participation in project consultations, and that their needs and preferences are considered. The project is also expected to narrow gender gaps in women's limited representation in WUAs, river basin organizations, and councils; and ensure that women farmers are not left out in the development of demonstration farms, production of high-quality seeds, and other training programs.

This project aims to further ensure women's meaningful participation in water resource management and climate change adaptation processes. A Gender Action Plan is developed (see Attachment 6) to ensure that the specific roles and needs of women relevant to climate change and disaster response are addressed. To address the key issues on women's leadership and access to resources, the following actions are included: (i) An average of 25% of staff positions at Chief and Deputy Chief of Department, Chief of Groups, Heads of Units, Laboratory, and Stations are held by women; (ii) Female staff have adequate gender-appropriate facilities in the new Hydromet campus buildings (e.g. sanitary, changing rooms, breast-feeding rooms, refreshment areas) and a female spokesperson for building facilities and maintenance; (iii) At least 25 qualified female staff from Hydromet are trained in administration and management including leadership, financial management, and commercial management; and (iv) Clear career path opportunities and career track profiles are provided to every staff member.

⁶² ADB. 2013. G0352 TAJ: Building Climate Resilience in the Pyanj River Basin. Manila.

⁶³ ADB. 2016. *Tajikistan Country Gender Assessment*. Manila.

⁶⁴ Krylova, Lena and Safarova, Nigora. 2013. *Gender Assessment: SDC Rural Drinking Water Program in Tajikistan*. Dushanbe: Swiss Agency for Development and Cooperation (SDC).

Another key action is the conduct of disaster risk management (DRM) courses with gender specific themes. To ensure equitable representation and consideration of women in DRM, the GAP targets to maintain a roster of male and female staff experts as focal points in Hydromet, with 30% women.

The project will improve women's participation in decision-making processes by increasing their membership in WUAs. The Gender Action Plan includes targets on: women's participation in stakeholder consultations to assess their needs and preferences, membership in WUASs; and participation in demonstration plot activities. The project will also provide an opportunity for the local people to earn income during the civil works (i.e. in the modernization of Hydromet's campus and associated facilities; modernization and rehabilitation of irrigation and drainage infrastructure and its climate proofing); construction of sediment excluding basin). The women consulted during the PSGA for the ongoing project affirmed that they could exceed more than 30% women who will participate in the project. As many of those consulted do not have any job, working in the construction will be beneficial, especially for the female-headed households whose husbands are migrant workers and seldom send budget for household need. Public Consultations conducted revealed that women are eager and ready to participate in the Project, both in the decision-making processes as well as part of the civil works. Women suggested they are currently actively involved in cleaning their on-farm canals even without the Project. Women said participating in the Project works will increase their income generation opportunity while improving overall agricultural land quality.