

Improving Women's Access to Land and Financial Resources in Tajikistan

**Helen Shahriari,
Alexander M. Danzer,
Renee Giovarelli and Asyl Undeland
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Acronyms

| | |
|---------|---|
| ADB | Asian Development Bank |
| AIB | Agro-Investment Bank |
| CBO | Community Based Organization |
| DFID | Department for Foreign International Development |
| DLC | District Land Committee |
| ESW | Economic and Sector Work |
| GBAO | Gorno-Badakhshan Autonomous Oblast |
| GDP | Gross Domestic Product |
| Ha | Hectare |
| HH | Household Head |
| HP | Household Plot |
| IOM | |
| JDC | <i>Jamoat</i> Development Committee |
| KI | Kredit Invest |
| LRCSSAP | Land Registration and Cadastre System for Sustainable Agriculture Project |
| LSMS | Living Standards Measurement Study |
| MFO | Microfinance Organization |
| MoA | Ministry of Agriculture |
| MoF | Ministry of Finance |
| NBT | The National Bank of Tajikistan |
| NGO | Nongovernmental organization |
| PL | Presidential Land |
| PPP | Purchasing Power Parity |
| PRA | Participatory Rapid Assessment |
| PRSP | Poverty Reduction Strategy Paper |
| RRS | <i>Rayons</i> of Republican Subordination |
| SCLRM | State Committee for Land Resources and Management |
| SCSSP | Sustainable Cotton Sub-Sector Project (Asian Development Bank) |
| TLSS | Tajikistan Living Standards Survey |
| UNDP | United Nations Development Program |
| WUA | Water User Association |

Executive Summary

Background

Since independence in 1991, the Government of Tajikistan has embarked on a land reform program, which includes extensive farm restructuring. Given the demography of rural households in Tajikistan where the phenomenon of female-headed households is quite significant, women's access to land and credit assumes special importance. To date, however, no thorough gender analysis of access to land and finance in Tajikistan has been conducted. As a result, there is insufficient gender disaggregated data to inform policy. It is not clear how effective the reforms are in addressing factors inhibiting women's access to land and their ability to benefit from any changes. In addition, due to the lack of data, no comprehensive microeconomic study on access to finance has been done. Many Tajik women are sole heads of households and caretakers of their families as a direct consequence of war and migration. Migration in particular has a great impact on gender relations, gender division of labor, and gender roles with the possible empowerment or disempowerment of women left behind. Households headed by women in Tajikistan are 28.6 percent more likely to be poorer than those headed by men. Improving and securing access to land and ensuring the gender sensitivity of land reforms, therefore, has potential for improving the conditions of these vulnerable households.

Objective

The objective of this ESW is to improve analytical knowledge of women's constraints to land and financial resources at the household level in Tajikistan. There are two parts: (i) the qualitative analysis, *Understanding Household-Level Barriers Constraining Women's Access to Land and Financial Resources in Tajikistan*, and (ii) the quantitative analysis, *A Gender Perspective on Land and Finance in Tajikistan Evidence from the LSMS 2007 Survey*. The study will contribute to the knowledge base for the ongoing process of land reform in Tajikistan, ensuring that land reform policies account for the particular local-level challenges of land access for women and develop strategies for equitable results. The analysis demonstrates the challenges of addressing gender issues of access to land and credit in Tajikistan. This report will be useful for a wide audience, including the Tajikistan government, civil society, and the donor community.

Outcomes

The report's quantitative analysis is based on the results of a unique multi-purpose national LSMS-type survey conducted in early fall of 2007. This data collection makes information on individual- and household-level finance available. The report reviews data collected on agriculture, migration, and access to finance and credit. Through a sample size of about 4,860 households and 20,753 individuals aged 15 and older of which 50.76 percent are women and the use of gender-specific modules, the study assesses household dynamics; explores the extent of access to land; possible inequalities in access; division of labor; impact of migration; and other gender-related differences and inequalities derived from the existing data. It identifies major constraints in these areas on a nationwide level. The data indicates that in general women have disadvantages in land use and/or input markets and face serious constraints in agricultural production support services. The information shows that females head 19.4 percent of households in Tajikistan and that the majority are widows under the age of 60. In addition, the data shows that land ownership differs between *oblasts*, and that gender differences are subject to regional and ethnic variations.

This analysis demonstrates the heavy costs of migration, which has created a significant surge in female-headed households of 17 percent. The women and children who are left behind carry the burden of survival while bearing the brunt of numerous disadvantages. As a result, improvement in women's involvement in key decisions of access to livelihood assets becomes crucial.

The qualitative analysis focuses on access to land and credit at the household and individual levels. It outlines differences in women's legal and de facto access to land and reviews the dynamics of constraints on women's access to land and credit, as experienced in rural Tajikistan. The study is

based on a desk review of legislation and reports on land and credit and on two stages of field research interviewing over 100 rural women of differing social backgrounds¹ and experience, as well as national and local government officials, representatives of banks and microfinance institutions, NGO leaders, and donor project staff. Tajikistan has a formal legal system that provides for women to exercise property rights, however, customary norms undermine many of these formal legal protections. In addition, due to lack formal legal guarantees of rights to family assets (land or other), customary Tajik traditions do not allow many women to have any role in the management or disposition of property in the household. The report finds that women are rarely the legal holders of title to any land; nevertheless, women have access to land resources via the household unit in which males hold formal rights (if such rights exist and are registered).

The renewal of traditional norms and practices in Tajikistan directly affects women's access to land and financial resources and has a gender-specific impact that further restricts women and limits their ability to benefit from economic development interventions. The increasing prevalence of traditions that restrict the role of women should be mainly within the realm of family is, however, at odds with the reality that war, migration, and male unemployment or abandonment make many women household heads and sole earners. The report reveals that on the one hand, increasing numbers of rural women are in charge of managing land and accessing the market for inputs and outputs with this trend likely to increase with heightened economic pressures. Additionally women are more active as farm laborers on collective farms. Yet, on the other hand, the vast majority of interviewees thought that these trends were not normal or positive and that during better times women should revert back to their passive role.

The reports proposes several areas of action. While fostering women's access to agricultural production can be considered a policy for improving basic welfare, access to finance is an important ingredient for increased productivity and farm growth (i.e., professionalization and potentially commercialization). Financial access opens up opportunities to diversify income generation beyond farming activities. Complementary initiatives for women's empowerment support their access to productive assets and entrepreneurial standing in society, and may simultaneously lift women's self-constraints in demand for finance.

¹ Middle-income married women; low-income married women; women in large households; single women whose husbands are in Russia, divorced or widowed women; and young women (married and not married).

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Part I: A Gender Perspective on Land and Finance in Tajikistan: Evidence from LSMS 2007 Survey

Definitions

In the following definitions, we explain the important notional concepts used throughout this report to guide the reader's understanding.

Gender

The term gender comprises a range of differences between the biological sexes, male and female, and refers to the social construction of associated roles, rights, norms, preferences, self-perceptions, and cultures. Unlike biological sex, gender is dynamically constructed in specific time- and space-variant social and cultural contexts.

Female-headed household

The term female-headed household characterizes households wherein a woman is considered the prime decision maker. In a development context, traditional definitions posit that female-headed households are those where no adult male is present (due to non-marriage, divorce, separation, widowhood, or migration) or where an adult male is present but not contributing to the household income. Most empirical studies, however, consider female-headed households to be those that report women as head of household (self-reported). This accounts for a certain degree of specificity in intrahousehold power allocation but is limited as it does not clearly define the power and duties involved in being head of household (which could, for instance, be related to the role as breadwinner or as decision maker on expenditures). In our empirical analysis, we also use the self-reported category of "female-headedness." This seems a reliable approach for identifying female-headed households, since the self-reported category largely overlaps with conventional definitions in the 2007 LSMS-Tajikistan survey. In 60 percent of self-reported female-headed households there is no male adult present, while in 69 percent of self-reported female-headed households there is no working male adult present. As a consequence of the civil war, a surprisingly large number of female-headed households consist of a widow with an extended family, including an adult son. When controlling for widowhood, only 6.8 percent of non-widow female-headed households contain a working male adult. These numbers indicate a sufficient reliability of the self-reported category in our empirical work and show the traditional power distribution in households in Tajikistan. To test the robustness of our results we perform the main household-level analysis with a narrower measure—female-headedness defined as the absence of a working male adult—and find that the results show an even larger gap to male-headed households. This outcome is not surprising as the presence of a working adult male is associated with higher welfare, however, the exercise highlights the robustness of the presented results.

Background

After gaining independence in 1991, Tajikistan suffered socio-economic deterioration due to the economic collapse that spanned the entire former Soviet Union. In addition between 1992 and 1997, a brutal civil war resulted in at least 60,000 men dead and at least 700,000 displaced, which to a large extent destroyed the physical infrastructure of the country (Falkingham 2000). As a consequence in 1999, Tajikistan, already the poorest of all Soviet Republics, became one of the poorest non-African countries in the world with poverty rates below the minimum consumption level of as high as 95.7 percent of the population (World Bank 2000: 16).

After the war, economic growth resumed, but 2006 GDP was only 50 percent of 1989 GDP with an ongoing drop in the employment ratio from 72.5 percent in 1989 to 52.7 percent in 2006 (Transmonee 2008). The drop implies that only every second individual aged 15-59 years is actually employed with women's participation still lower. This is partly explained by the double burden women carry since most of the social and fringe benefits provided by state-owned enterprises in the Soviet Union (e.g., child care) were abolished.

In general the socio-economic position of women has deteriorated as a consequence of war and the transition process (UNDP 2005: 74). During the transition period, we observed a feminization of predominantly low-paid segments of sectors, such as agriculture, and a consequent exposure of women to high poverty levels (World Bank 2004). In addition, as a result of the war and growing levels of male emigration, there was a feminization of the demographic composition of the rural population and an increase in the number of female-headed households. Furthermore, a resurgence of traditional family perceptions has counteracted the empowerment of women, resulting in status losses in comparison to the relatively gender-equal positions during the Soviet era (World Bank 2002; Falkingham 2000). Despite large-scale emigration of working age men, women may not gain decision-making power inside the household since multi-generation households are common in Tajikistan.

Tajikistan is in general and female-headed households are specifically highly dependent on remittances and thus vulnerable to economic crises. Globally Tajikistan ranks eighth in proportion of GDP earned by official remittances (with more than 20 percent of GDP in 2005; World Bank 2008: 130). Global estimates for 2007 place Tajikistan first on par with Moldova (with 36.2 percent of GDP earned through remittances; Ratha et al. 2007: 3).

While a route for fulfilling the Millennium Development Goals in Tajikistan was outlined in the "Millennium Development Goals Needs Assessment," the economic empowerment of women received only marginal attention (UNDP 2005). The third goal acknowledges achieving gender equality; the assessment covers many important fields to promote gender equality in education, health, and social representation of women. The economic empowerment of women, however, is mentioned only through the *target* of increasing income generation opportunities for women. Little is said about reaching this target, and in the final list of 22 recommendations for achieving gender equality, only one is dedicated to immediate economic empowerment of women: to increase access of women to financial resources. Given women's predominant employment in agriculture and the changing roles and tasks of women in Tajikistan in general, this report takes a different approach.

This study aims to describe and analyze women's economic opportunities by focusing on potential production factors and constraints in access to land and finance. Practitioners

have pointed out that land reform in Tajikistan discriminated against women despite the fact that the majority of agricultural workers are female. The financial sector has also been described as discriminatory against women (Falkingham 2000). On the supply side, women are more often considered “credit unworthy,” since they not only bear the double burden of family chores plus work but also are exposed to discrimination of employers who believe women are relatively unreliable employees due to their family obligations (Nowicka 1999). On the demand side, women seem to be self-restricting, neither knowing their entitlements nor the potential of finance for welfare improvements (UNFEM 2005).

Data source of the Tajikistan LSMS Survey 2007

This report aims to provide a comprehensive overview of gender-specific access to land and finance in Tajikistan. It uses quantitative analysis of household-level data to reveal gender differences. This choice is based on the idea that women as decision makers might be structurally different and/or discriminated against when compared to men. The data source for our analysis is the Tajikistan Living Standard Measurement Survey (LSMS) 2007, a rich nationally representative cross-section data set that comprises information on household composition and consumption, land use, use of financial services, migration and remittance receipt, subjective welfare- and gender-specific power distribution within the household, as well as a wide range of individual-level variables covering demographic characteristics, education, and labor market status. A specific gender module was added, investigating women’s birth history, health status, and time use for chores. In the LSMS 2007 survey, a household is defined as people who were living and having meals therein during the last 12 months. To address questions regarding labor market status or use of financial products, the analysis is on the individual level. For the financial section, this choice prevents small sample problems.

The sample sizes for the calculations in this report are 4,860 households and 20,753 individuals aged 15 and over, of which 50.8 percent women—if not noted differently. For calculations on the household level, household probability weights were used, and on individual level, individual probability weights were used.

Several data limitations exist. First, while the Tajikistan LSMS 2007 is a unique multi-purpose survey, it does not contain information on some details of interest for the study of access to land and finance. For example, the data lacks information on land plot quality, which might be crucial in the process of land reform and land use. Also, it lacks information on joint ownership of land, a highly relevant issue. Furthermore, there is no information on loan size.

Second, empowerment of women is a dynamic concept, which is impossible to fully capture by using cross-sectional data. The evidence presented, therefore, is a snapshot of the situation of women in Tajikistan in the year 2007. Furthermore, the use of cross-sectional data cannot correct adequately for the potential problem of reverse causation. Hence, the results of this report should be interpreted as correlations rather than causal effects.

Status of Women in Tajikistan in the Year 2007

The following factors shape the socio-economic situation of women in Tajikistan: household composition, specific household tasks, and traditional family models, i.e., women's participation and earnings opportunities in the labor market.

Female-headed households in Tajikistan are a consequence of the following factors:

- Mass emigration of young men
- Civil war
- Male disadvantage in life expectancy

Household Composition

Household structures in Tajikistan are strongly determined by social roles and traditions.² Single person households are virtually non-existent in Tajikistan. No women and only 0.02 percent of men aged 15 to 25 live in a single person household. Between ages 25 and 50 years, only 0.05 percent of both sexes live on their own. As seen in Table 1, women who are divorced or separated tend to live with their parents. The phenomenon of moving back to the parent's household is often motivated by income pooling opportunities.

Table 1: Living arrangements in the household (women aged 15+)

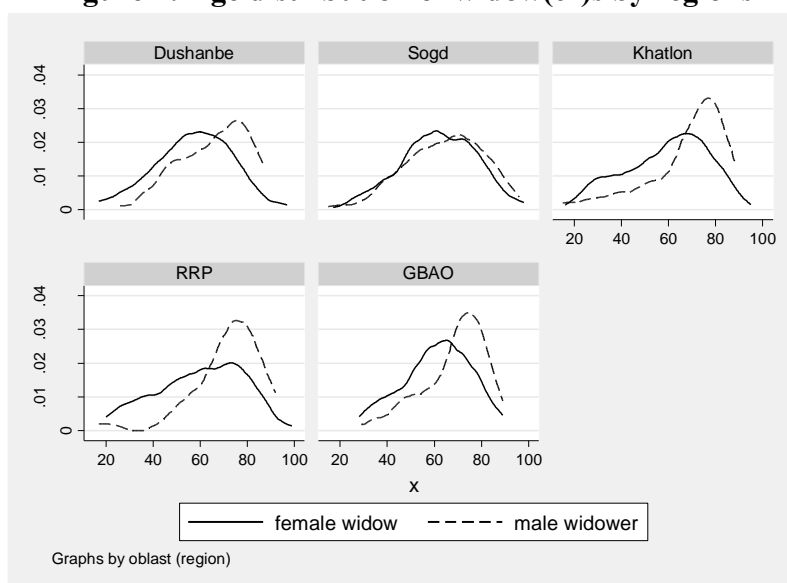
| | Spouse in household | Mother in household | Distribution |
|-----------------|---------------------|---------------------|--------------|
| Married | 92.9% | 3.3% | 60.9% |
| Living together | 52.9% | 21.8% | 0.2% |
| Divorced | -- | 54.9% | 1.0% |
| Separated | 3.1% | 65.5% | 1.2% |
| Single | -- | 94.7% | 29.1% |
| Widow | -- | 13.0% | 7.6% |
| | | | 100% |

Source: LSMS-Tajikistan 2007; author's calculations

As a legacy of war, a high share of young widows (below 60 years) characterize Tajikistan's demography (Figure 1). The age distribution of widows is much flatter and nearly normally distributed as compared to men. This leftward shift in the age distribution of widows is especially strong in the regions (*oblasts*) highly affected by war (Khatlon and RRP).

² Polygamy is a banned but resurging practice in Tajikistan. However, due to non-response in the survey, we can only identify polygamous relationships of male household heads (as the household roster only provides interpersonal relationships for the household head). For Tajikistan as a whole, 1,793 out of 850,000 married male household heads can be identified as having two wives, a share of about 0.2 percent. Due to this low number and the expected serious reporting bias, we refrain from analyzing these households in more detail.

Figure 1: Age distribution of widow(er)s by regions

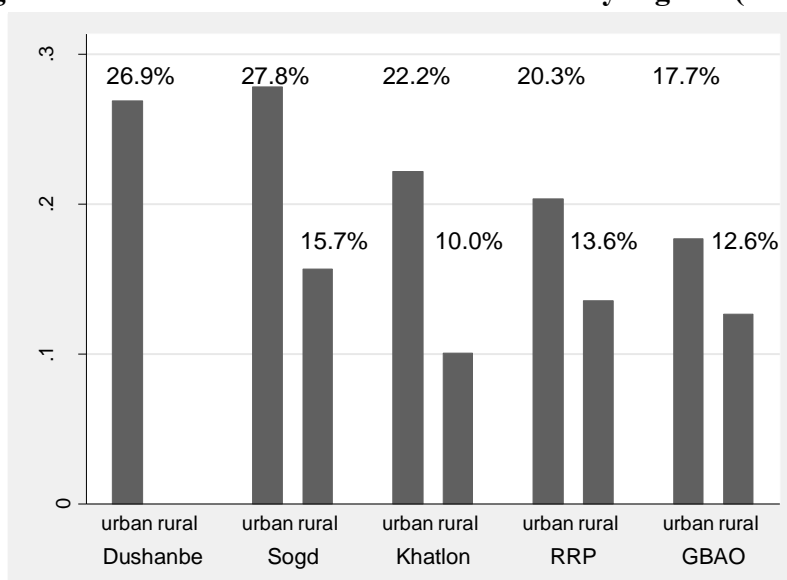


Source: LSMS-Tajikistan 2007; author's calculations

Female-headed Households in Tajikistan

The share of female-headed households is rather high in Tajikistan at 19.4 percent. As evident in Figure 2, regional patterns of female-headed households exist. Generally prevalence is much higher in urban areas, but even in rural areas they comprise more than ten percent of total households.³

Figure 2: Share of female-headed households by regions (*oblasts*)



Source: LSMS-Tajikistan 2007; author's calculations

³ The high level of female-headed households in urban areas stems from the population composition. The majority of households with heads being divorced, separated, or single (4 percent of heads) live in cities; 80 percent are female-headed. Additionally, a large share of female pensioners in cities lives on their own. In rural areas, female-headedness is driven mainly by a high migration incidence, while the war legacy (widowhood) and less traditional life styles are drivers in urban areas.

Female households prevail strongly in the pension-age generation but are especially underrepresented in dual-generation households, the most common household type in Tajikistan. Table 2 shows the gender of the household head by household composition. While the high share of female-headed households among the pension aged is not very surprising, their huge fraction (22%) among large multi-generation households is unexpected.

Table 2: Gender of household head by household composition (in percent)

| | Male-headed household | Female-headed household | Distribution |
|-------------------------------------|-----------------------|-------------------------|---------------|
| Adult single-generation household | 75.18 | 24.82 | 2.5% |
| Pension single-generation household | 49.09 | 50.91 | 2.6% |
| Dual-generation household | 83.95 | 16.05 | 58.3% |
| Multi-generation household | 77.80 | 22.20 | 36.6% |
| Total | 80.59 | 19.41 | 100.0% |

Source: LSMS-Tajikistan 2007; author's calculations

On average, migrant households are twice as likely to be female-headed than non-migrant households (Table 3). However, large differences prevail even among migrant households with female heads being underrepresented in more traditional multi-generation households. This stands in contrast to the high share of female-headed households initially found in non-migrant multi-generation households and might point to the fact that these households were war affected and rejoined. In general, most migrant households either send the son of the household head abroad or replace the former household head by another male household member.

The high level of male emigration in Tajikistan is certainly one reason for the high share of female-headed households with 34.7 percent of all migrant households being female-headed. When disregarding households with heads older than 50 years—who are close to or already in pension age—even more than 51 percent of households with at least one migrant are female-headed according to the survey results.

Table 3: Share of female-headed households by migration status (in percent)

| | Nonmigrant household | Migrant household |
|-------------------------------------|----------------------|-------------------|
| Adult single-generation household | 25.3% | 20.6% |
| Pension single-generation household | 52.4% | 39.7% |
| Dual-generation household | 12.3% | 42.5% |
| Multi-generation household | 21.4% | 26.2% |
| Total | 16.9% | 34.7% |

Source: LSMS-Tajikistan 2007; author's calculations

Migration and civil war have left female-headed households on average smaller than male-headed households (Table 4). **Migrant households are on average larger than nonmigrant ones.**⁴ The fact that households with a migrant are roughly larger by one person points to the fact that large households are able to diversify their income generation portfolio across borders while small households cannot. Since male-headed households are larger irrespective of migration status (by around 1.5 persons), it seems unlikely that migration is the sole “creator” of female-headed households. The war is another explanation for the “missing

⁴ Household size is reported excluding the migrants.

adults.” Table 4 also reports that the difference in household size between migrant and nonmigrant households can be attributed entirely to variation in the number of working age males in both male-headed (plus 1.2 working age male) and female-headed (plus 0.8 working age male) migration households. The fact that more working age men live in female-headed migrant households than in nonmigrant households confirms the fact that migration is not the only explanation for female-headed households.

Table 4: Average household size by migrant status of household

| | | Nonmigrant household | Migrant household |
|-------------|-----------------|----------------------|-------------------|
| Male-head | N | 797,974 | 102,944 |
| | Household size | 6.52 | 7.66 |
| | Working-age men | 2.19 | 3.41 |
| Female-head | N | 162,222 | 54,809 |
| | Household size | 5.17 | 6.00 |
| | Working-age men | 1.25 | 2.05 |
| Total | N | 960,196 | 157,753 |
| | Household size | 6.29 | 7.37 |

Source: LSMS-Tajikistan 2007; author’s calculations

Female-headed households are over represented among the age groups older than 50 years, which points to women’s advantage in life expectancy and the likely widowhood of elderly women (Table 5). However, closer inspection shows that pension-age one-person households are extremely rare. Around 0.03 percent of the pension aged live alone with women being slightly strongly represented in this group. These low numbers, nevertheless, cannot be responsible for the high share of female-headed households.

Table 5: Age structure among household heads (in percent)

| | Age category | | | | N |
|-------------|--------------|-------|-------|-------|---------|
| | 16-25 | 26-50 | 51-65 | 66+ | |
| Male-head | 86.0% | 84.0% | 79.2% | 70.7% | 900,955 |
| Female-head | 14.0% | 16.0% | 20.8% | 29.3% | 216,994 |
| Total | 4.3% | 51.9% | 27.6% | 16.2% | 100% |

Source: LSMS-Tajikistan 2007; author’s calculations

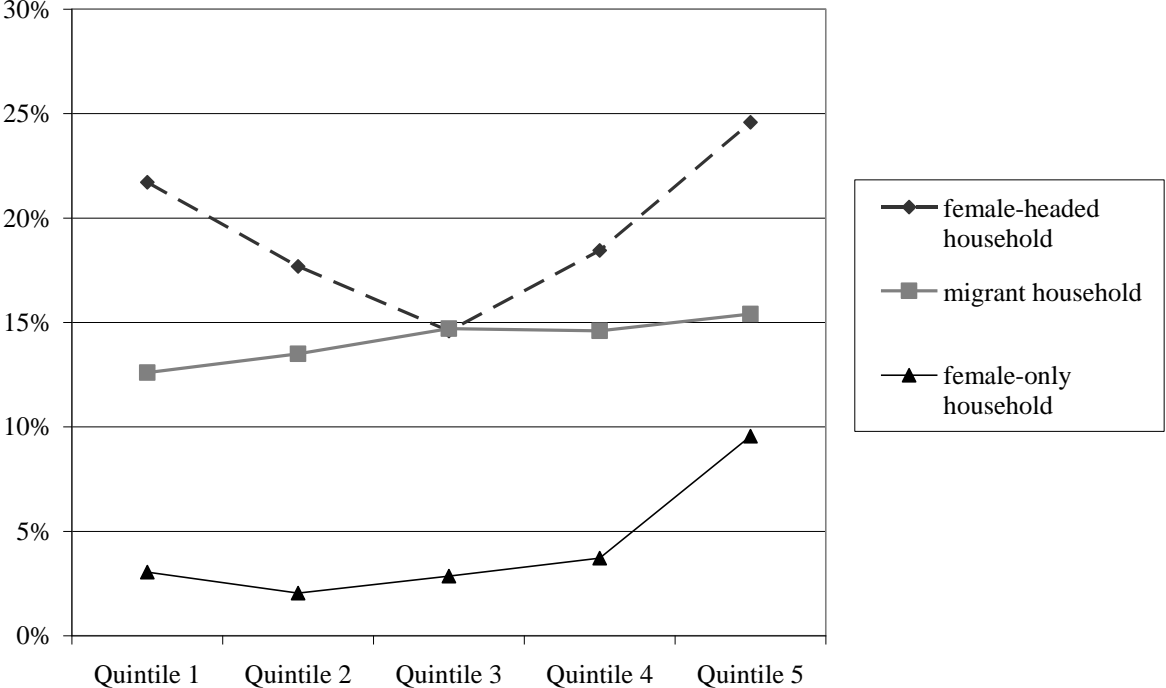
When calculating the share of female-headed households for each of five per capita consumption quintiles, we observe a U-shaped pattern (Figure 3).⁵ This means that female-headed households are over-represented in the lower and upper part of the welfare distribution; the latter is surprising at first glance. The initial assumption is that the high share of female-headed households among the better-off part of the population stems from migrant households where the male household head works abroad and remits money home. Although the relationship between migrant households and income quintiles is positive, it cannot fully explain the high share of well-off female-headed households. Rather, the explanation lies in the sharp rise in female-only households towards the top of the consumption distribution. Forty-one percent of female-only households in the top quintile is pension-age households. Thus, like in other transition countries, some pensioners are relatively better off.⁶ Some of the

⁵ Using per-capita real consumption cannot circumvent the problem that the consumption might be very unequally distributed within the household.

⁶ However, it has to be noted, that pension-age female-headed households are over represented in the top and bottom quintile of the consumption distribution.

nonpension-age female-headed households apparently manage to improve their consumption situation despite poor labor market prospects, which prevail even in the highest consumption quintiles.

Figure 3: Share of female-headed households by consumption quintiles



Source: LSMS-Tajikistan 2007; author calculations

Labor Market Status and Education of Women

The Tajik labor market does not promote women’s empowerment but rather increases their dependency on the household. The figures in Table 6 reveal that female labor market participation rates are much lower than men’s. However, dependent employment and job searches are strongly related to marital status. The share of employed married women aged 15 years and older is low—approximately only every seventh woman is employed.⁷ Separated or divorced women have the highest employment shares.

Table 6: Labor market status of women (aged 15+)

| | Employed | On job search |
|-----------------|-----------------|----------------------|
| Married | 15.6% | 0.3% |
| Living together | 22.4% | 0.0% |
| Divorced | 26.3% | 0.4% |
| Separated | 41.6% | 1.3% |
| Widow | 12.2% | 0.3% |
| Single | 16.7% | 0.7% |
| Women | 16.1% | 0.4% |
| Men | 31.7% | 2.2% |

Note: The table reports domestic employment only.

Source: LSMS-Tajikistan 2007; author’s calculations

Educational attainments of women are lower than those of men, but the differences are not huge. Table 7 documents Tajikistan’s rather good educational endowment, a fact familiar to transition countries as compared to most developing countries. The extremely low labor market participation rate of currently married women cannot be explained by differences in educational attainment: the fraction of women with higher or secondary education among married women is large compared to divorced or separated women.⁸ Also, attributing the low employment of married women to their household chores is unfeasible as they cook or clean no more often than women living with their partners. Instead, differences in women’s decision-making power (e.g., how to spend household income) reflect the employment pattern.⁹

⁷ As working pensioners are a common phenomenon in many post-Soviet countries due to low pension payments, pension-aged individuals are included in the calculation. When considering only adults aged up to 65 years, the share of employed widows raises to 23.5 percent, while other results remain unchanged.

⁸ The raw sample size for divorced women is 137 and for separated women is 146 which should be sufficient for this comparison—given that weights were used to yield representative results.

⁹ Only eight percent of married women have a say in the disposition of household income, while 19 percent of women living with their partner have input.

Table 7: Education of women (aged 15+)

| | University | Secondary | Lower education | No schooling | Years of schooling |
|-----------------|------------|-----------|-----------------|--------------|--------------------|
| Married | 16.6% | 54.7% | 25.7% | 3.0% | 9.51 |
| Living together | 22.0% | 62.2% | 15.8% | 0.0% | 10.01 |
| Divorced | 15.2% | 50.6% | 32.7% | 1.4% | 9.99 |
| Separated | 14.6% | 52.3% | 30.0% | 3.0% | 9.62 |
| Widow | 6.9% | 36.7% | 37.6% | 18.8% | 6.03 |
| Single | 15.4% | 63.0% | 21.6% | 3.7% | 8.21 |
| Women | 15.9% | 57.4% | 26.6% | 4.3% | 8.84 |
| Men | 16.9% | 57.6% | 25.5% | 1.7% | 9.18 |

Source: LSMS-Tajikistan 2007; author's calculations

A substantial share of women works without pay, especially in agricultural and cotton growing areas. In general, Table 8 shows that the phenomenon of unpaid work is widespread among women throughout the country. In Region of Republican Subordination (RRP) and Gorno-Badakhshan Autonomous Providence (GBO) *oblasts* almost 50 percent of working women declare to be unpaid workers. Employment in agriculture is very high in RRP and Khatlon, at above 70 percent among women. At the same time, more than one third of all women employed in agriculture are unpaid (38.1 percent). Khatlon and Dushanbe have high rates of dependent employment while self-employment is highest in Dushanbe and Sogd.

Table 8: Employment type by oblast (of all women aged 15 to 65)

| | Dependent employed | Farmer | Self-employed (nonagricultural) | Of those unpaid |
|----------|--------------------|--------|---------------------------------|-----------------|
| Dushanbe | 19.0% | 0.1% | 7.1% | 3.9% |
| Sogd | 13.8% | 14.1% | 5.3% | 31.8% |
| Khatlon | 27.3% | 15.0% | 2.6% | 18.9% |
| RRP | 7.2% | 16.1% | 2.8% | 48.6% |
| GBO | 13.7% | 12.7% | 1.8% | 45.1% |
| Women | 17.5% | 13.5% | 3.8% | 27.4% |
| Men | 33.8% | 14.9% | 14.5% | 17.1% |

Note: The table reports domestic employment only.

Source: LSMS-Tajikistan 2007; author's calculations

Employment levels are low at all educational levels, but there is evidence of a severe waste of talent among women. As Table 9 indicates, the share of women working is substantially lower than for men. Only about 40 percent of women with a university degree are actually working and only every fourth woman is dependent employed. The share of farming women is larger than the share of farming men and especially concentrated in the lower educational segment. Generally the propensity to work without pay is negatively associated with educational level and is higher among women than among men. Every fifth female university graduate is working without receiving any wage. Also, the wage premium for university graduates as compared to less educated workers is almost negligible for both sexes. The educational system thus cannot channel talented individuals into the labor market. Furthermore, the high levels of nonpayment and the low average wages for the well educated may pose severe disincentive effects on the young generation.

Table 9: Labor market success indicators by education (aged 25 to 65)

| | | Working | Of those working are | | | Unpaid (of working) | Wage |
|-------|-----------------|---------|-----------------------|---------|-------------------|------------------------|-------|
| | | | Dependent employed | Farmers | Self- employed | | |
| Women | University | 41.6% | 65.2% | 26.9% | 11.6% | 21.4% | 154.4 |
| | Secondary | 37.5% | 53.6% | 39.0% | 14.9% | 24.8% | 167.0 |
| | Lower education | 37.1% | 48.3% | 49.3% | 9.6% | 34.1% | 142.4 |
| Men | University | 77.5% | 72.9% | 14.2% | 18.2% | 9.5% | 336.6 |
| | Secondary | 70.6% | 55.0% | 23.1% | 27.7% | 15.7% | 356.7 |
| | Lower education | 64.5% | 53.1% | 30.4% | 23.1% | 20.9% | 319.9 |

Note: The table reports domestic employment only. Columns 2-4 do not add to 100% due to multiple responses. The age bracket 25 to 65 years was chosen in order to analyze the working population who completed education. The share of working population is naturally smaller when using the 15 to 65 years bracket, while composition hardly changes. Source: LSMS-Tajikistan 2007; author's calculations

Access to Land and Finance as Precondition for Economic Development

Analyzing access to land and finance by gender informs development issues and programs concerning efficiency, welfare, and empowerment. Why should gender matter in access to land and finance? First, the empirical literature observes a disadvantage for women in access to both land and finance in many countries, which may be based on constraints to demand, supply, or both. Demand-side explanations are based mainly on self-constraint, limited awareness of women's own rights or of specific gender role models. Especially in transition countries, women often shoulder the parallel burdens of household chores and subsistence production and have no time to deal with issues of access to productive assets. These constraints are especially hard to remove as they are culturally rooted. Supply-side explanations, in turn, are mostly based on discrimination. Generally discrimination is inefficient since resources are not optimally used—no matter whether in the labor market or in access to land or finance. Furthermore, status improvements in ownership and land tenure not only improve production efficiency but also might function as a starting point for business participation (e.g., through the use as collateral).

Second, a large body of literature shows that women's production objectives differ from those of men. In other words, women's income—generated from their assets—is better targeted socially (the welfare effect; cp. Hoddinott and Haddad 1995). For example, research literature establishes that children's nutritional status is more closely correlated to women's income rather than men's. Access to productive resources is thus not only a matter of women's prospects, but also of household well being. Third, appropriate relative access to land and finance contributes potentially to women's empowerment, reducing exposure to marital abuse and domestic violence since women are no longer tied to their husbands for economic reasons. Last but not least, women's access to land and finance can directly contribute to achieving the third Millennium Development Goal of gender equality (World Bank 2008: 124).

Gender-equal access to resources fosters a positive development environment:

- Efficiency in economic productivity
- Social welfare
- Women's empowerment

Agriculture: Not Yet a Stepping Stone for Economic Development

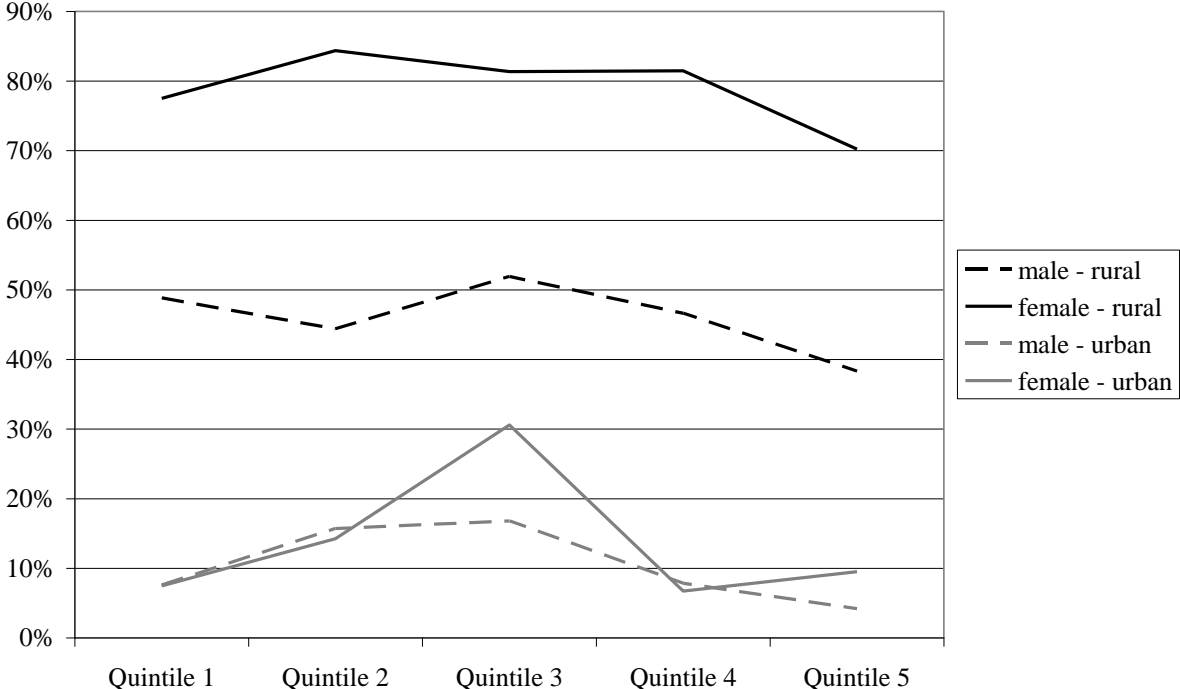
Tajikistan's economy and labor force are highly dependent on agriculture, particularly cotton; women receive particularly low pay in this sector. Cotton, Tajikistan's main cash crop, accounting for 90 percent of agricultural exports, appears to be a mandatory crop for smallholders and *dekhan* farmers with many pushed involuntarily into cotton production. Given the lack of off-farm economic opportunities in rural areas and constraints in production freedom (imposed by monopsonistic producers and some regional authorities; see below), the labor-intensive production structure of cotton creates a substantial low (or even no) pay labor segment dominated by women. In 2006, the agricultural sector comprised 22.7 percent of GDP (26.6 percent in 1996) and slightly more than 60 percent of the work force (50 percent in 1996; 67.6 percent in 2003), with women representing a larger proportional share, especially in cotton production (CIA World Fact Book 2008; Csaki and Nash 1997; International Crisis Group 2005: 16; Lerman 2008).

Cotton is Tajikistan’s main cash crop accounting for 11 percent of GDP in 2004 (UNDP 2005: 38) and serves as a labor sink for small farms or household plots, as reflected in the increase in agricultural employment share by 17.6 percentage points between 1996 and 2003. As in other transition countries, land plots function as important consumption buffers (To Seeth et al. 1998). Productivity in the agricultural sector in general and in cotton specifically decreased in recent years due to ageing of machinery and infrastructure.

The cotton sector hosts the largest share of the country’s poor. The poorest region of Tajikistan, Khatlon, is the main producer of cotton with 60 percent of total production (UNDP 2005: 38). As Ivaschenko and Mete (2008) point out, living in cotton-producing areas significantly increases the probability of falling into poverty. Women harvest almost all cotton; therefore, female participation increases exposure to poverty. Surveys provide evidence that many women do not receive any pay for their work in cotton fields, or they receive monthly wages of below US\$ 2 (UNDP 2005: 39).

Turning to the LSMS data, workers in the agricultural sector are not disproportionately drawn from the bottom of the welfare distribution if consumption quintiles are calculated separately for urban and rural areas (Figure 4). In rural areas, around 80 percent of women’s main or secondary employment is in the agricultural sector. Seventy percent of the richest rural population quintile works in agriculture. The men’s share of agricultural employment ranges between 40-50 percent in rural areas. In urban areas, agricultural employment for both sexes remains below 20 percent (women in the middle quintile at 30 percent). Again there is no decreasing relationship between agricultural employment share and welfare quintiles.

Figure 4: Share of employment in agricultural sector by consumption quintiles



Note: Consumption quintiles are calculated for rural and urban population separately. The figure reports domestic employment only. Source: LSMS-Tajikistan 2007; author’s calculations

On average in Tajikistan, women earn only 46 percent of what men earn and are strongly over represented in low-paying sectors like agriculture and health. The sectors

presented in Table 10 account for 81 percent of the female work force (work in the main job in the last two weeks). Besides agriculture, employment of women is growing in the private segment of the service sector (e.g., sales and trading). As employment in this subsegment differs markedly from the public segment of the service sector (mainly health and education), we present disaggregated data on the service sector. It should be noted, however, that already one in four women is employed in health, education, or sales. In agriculture, women earn less than 63 percent of men's pay in contrast to the health sector where pay to men and women is equally poor. The significant gender difference in earnings suggests that the overall pay gap is not only driven by gender-specific sector composition, but by real differences in pay across almost all sectors. Two percent of men and women working in agriculture reported not having received any pay during the last month. Taking into account the (very modest) differences in working hours, the results of gender hourly wage gaps are very similar, although, for agriculture the pay gap increases from 37 to 42 percent.¹⁰

Table 10: Sector shares and real wages of main job (selected sectors)

| | | Men | Women |
|--------------|------------------|-------|-------|
| Agriculture | employment share | 25.6% | 56.3% |
| | real wage | 213.5 | 134.0 |
| Health | employment share | 1.7% | 6.1% |
| | real wage | 130.1 | 134.1 |
| Education | employment share | 5.9% | 11.4% |
| | real wage | 195.1 | 154.0 |
| Construction | employment share | 18.8% | 0.7% |
| | real wage | 524.1 | 355.5 |
| Sales | employment share | 8.5% | 6.5% |
| | real wage | 443.5 | 331.8 |
| Total | real wage | 341.9 | 157.9 |

Note: CPI correction according to IFS statistics, base month September 2007;

Employment shares of selected sectors do not add to 100%. The table reports domestic employment only. Source: LSMS-Tajikistan 2007; author's calculations

Women are strongly over represented in the low-paying segments of all economic sectors, but especially in agriculture and the health sector measured at below 50% of the median wage per month (Table 11). Across all sectors, women work more than twice as often in low-paying positions (36.8 percent) when compared to men (14.6 percent).

¹⁰ We do not report hourly wages in comparison, as labor supply is reported in actual hours worked and thus highly dependent on the planting and harvest cycle in agriculture.

Table 11: Low pay jobs and job security

| | | Men | Women |
|--------------|------------------------------|------------|--------------|
| Agriculture | Monthly pay <50% of median | 29.4% | 41.2% |
| | Worker with written contract | 31.7% | 29.8% |
| | —among employees | 59.2% | 52.2% |
| Health | Monthly pay <50% of median | 42.8% | 62.2% |
| | Worker with written contract | 73.6% | 72.7% |
| Education | Monthly pay <50% of median | 6.7% | 19.1% |
| | Worker with written contract | 72.8% | 73.2% |
| Construction | Monthly pay <50% of median | 3.0% | 20.4% |
| | Worker with written contract | 27.8% | 28.2% |
| Sales | Monthly pay <50% of median | 2.7% | 4.0% |
| | Worker with written contract | 15.9% | 9.1% |
| Total | Monthly pay <50% of median | 14.6% | 36.8% |
| | Worker with written contract | 37.6% | 37.2% |
| | —among employees | 54.2% | 58.4% |

Note: Real wages calculated for employees and self-employed using official exchange rate.
The table reports domestic employment only.

Source: LSMS-Tajikistan 2007; author's calculations

Averaged over the main sectors of employment, female employees have higher rates of job insecurity, as measured by the absence of a written contract. Sector disaggregated data show that this result is driven by agriculture where women's employment relations are less secure. In all other sectors, women and men are relatively comparable with respect to the share of written contracts (Table 11). Traditional (public) service sectors like health or education have a higher percentage of jobs with contracts (around 73 percent in both sectors and irrespective of gender) while in the agricultural sector only around 30 percent of workers have a written contract—irrespective of gender. Self-employment among agricultural workers is a partial explanation. When focusing on employees only, however, women in agriculture fare quite poorly relative to men and relative to other sectors.

Box 1: Land reforms in Tajikistan are incomplete

The demanding task to transform state-owned land into private-owned land started in Tajikistan soon after independence and was strongly enforced in 1995 and after the end of the civil war in 1998. For individuals and households, land withdrawn from the collective farms offered an opportunity to become a professional *dekhan* farmer (Presidential Decree No. 522, 1996). Additionally, household plots were and still are a widespread phenomenon throughout the former Soviet Union and became important consumption buffers when poverty rates increased sharply during the transition (Tho Seeth et al. 1998). According to the Tajik Land Code (Art. 71), every family has the right to receive a household plot with maximum size increasing with altitude. Formally, women and men are treated equally; however, women's awareness of their rights is extremely low (UNDP 2005: 76f.).

Land remains the “exclusive property of the state” (Presidential Decree No. 349, 2004) and consequently land sale markets have not developed. Nonetheless, various tenure types exist and long-term use rights can be allocated and inherited (Caccavale 2005: 6). The titling procedure is long and some farmers still await official tenure entitlement. There is evidence from many countries of female discrimination in state allocation of land. Different explanations exist for this phenomenon. First, land allocation is often network- and power-based. Since women are typically less well connected to power positions, clientelism tends to favor men. Second, traditional role models and perceptions prevail, according to which women are seen as incapable of handling property (Falkingham 2000). Inheritance rules in more traditional societies also tend to favor sons instead of wives and daughters. Especially in patrilocal societies, parents are more inclined to pass down land to the son, as the daughter leaves the family after marriage to live with her husband's family.¹¹

If land rights are neither optimally formulated nor effectively enforceable—as is the case of Tajikistan—there are potentially adverse effects on the welfare of the land “owner.” First, tenure insecurity results in production inefficiencies since labor input will be dedicated to inefficient activities (like the construction of fences) rather than production. Second, incomplete ownership depresses land values and thus directly household wealth. Third, land plays a less significant role as collateral and cannot improve creditworthiness. The latter two aspects are indicators and causes of underdeveloped or non-existent land markets (Giovarelli 2004). Fourth, individual land property rights have the potential to empower women by strengthening their position in intrahousehold decision making and by reducing their economic dependence on male family members and the exploitation of their labor. In the literature these positive attributes are typically assigned to off-farm employment, however, they also apply to individual and female land ownership. Furthermore, while better off-farm employment opportunities may complement land-related opportunities, they can hardly substitute for land if poor rural households intend to diversify their portfolio of coping activities.

Access to land is the basis for diversifying livelihoods; however, crop choice and input constraints are additional challenges. The question of whether women are disadvantaged in land use and/or input markets has not yet attracted much attention. The few comprehensive studies on the agricultural sector in Tajikistan have almost entirely ignored gender issues (cp. Lerman 2008). In Tajikistan, crop choice is not a private decision for farmers, despite a Presidential Decree in 2000 guaranteeing independent production. Local governments (*khukumat*) often require farmers to allocate a predetermined share of land to cotton production. When farmers decide to produce noncotton crops, they can face the threat of land

¹¹ For the claim that Tajikistan is a patrilocal society and its empirical underpinning see Grogan (2007).

seizure (UNDP 2005: 39). Monopsonistic input suppliers offering inputs on a credit basis are another source of free market distortions. Often farmers must sell their products below market prices; for example, all 27 cotton-ginning factories in Tajikistan are regional monopolies (UNDP 2005: 40). On the other hand, many farmers do not have access to ordinary financial markets, and inputs are not regularly available on a free market basis (for a detailed review see World Bank 2004b).

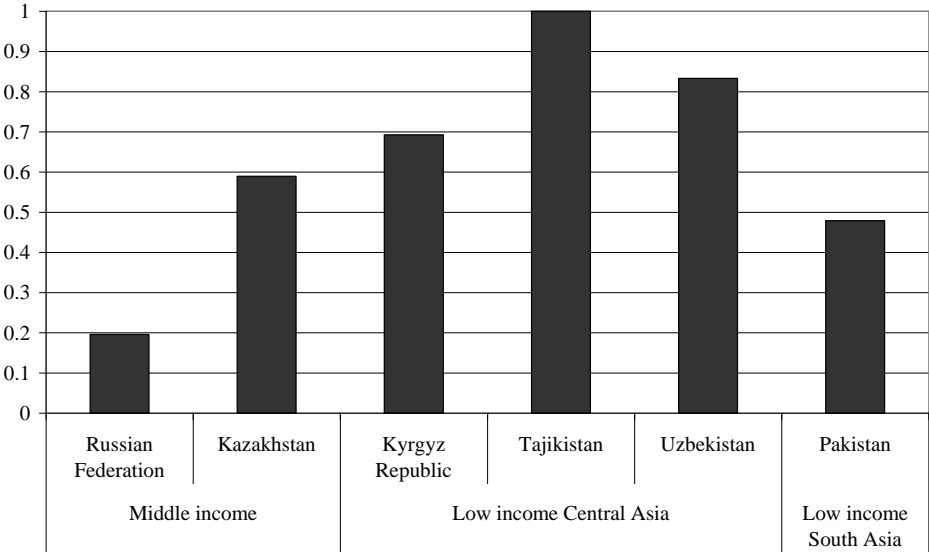
In Tajikistan, there is evidence that women face serious constraints in agricultural production support services (Falkingham 2000). In 2007, the Government of Tajikistan and the World Bank jointly set up a Cotton Sector Recovery Project to address several of these market obstacles and to promote independent and efficient farming in seven cotton-dependent project districts. This policy intervention focuses on cotton farm debt resolution, as well as supply chain development (Government of Tajikistan 2007). As part of producer support strategies, regional public awareness programs aim to improve the population’s knowledge of legal rights. The program does not specify, however, how the government plans to deal with low awareness among women.

- | |
|---|
| <p>In Tajikistan existing land reforms efforts</p> <ul style="list-style-type: none">• are still incomplete• do not secure land rights completely• only partially contribute to farmer’s economic freedom• do not address gender issues specifically |
|---|

Financial Sector as Basis for Economic Development

Tajikistan’s financial market is in early stages of development. Finance itself is not an economic opportunity; but it helps to exploit economic opportunities. Early focus on the financial sector in developing countries was mainly on credits and loans. Recently studies include savings, transfer, and insurance services, as these financial services can be especially important for the poor (Johnston, Morduch 2007). The demand for financial products and services like loans, bank accounts, microinsurance, and remittance transfer schemes is often interdependent. Especially relevant for all finance-related questions in the developing world is the problem of financial literacy. Tajikistan’s financial sector is entirely underdeveloped and is the shallowest in the post-Soviet region (World Bank 2005: 8).

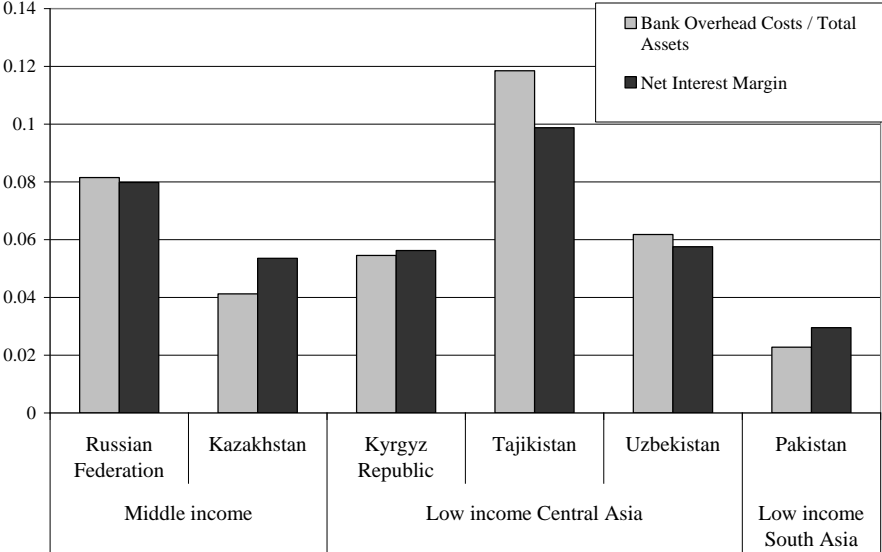
Figure 5: Bank concentration in international comparison (three largest banks) (2004)



Note: Bank concentration of unity means there are at most three commercial banks and no competition market structures. The lower the asset concentration of the three largest players, the more competition can be expected. Source: Revised version (2007) of Beck, Demirgüç-Kunt and Levine data set (2000)

The Tajik banking sector performs weakly in terms of market structure and efficiency of commercial banks. Generally the central role of financial intermediaries is the efficient channeling of funds from savers to investors. As seen in Figure 5, market concentration among the three largest Tajik commercial banks (as measured by their total banking sector assets) was unity in 2004, indicating little if any efficiency enhancing competition. By international standards, Tajikistan has a highly concentrated banking sector, which likely hampers allocation of financial resources at affordable prices.¹² Indeed, Figure 6 shows the comparatively low efficiency of the Tajik banking sector as measured by extremely high bank overhead costs (as share of bank assets) and high net interest margins.

Figure 6: Bank costs and net interest margin in international comparison (2004)



Source: Revised version (2007) of Beck, Demirgüç-Kunt and Levine data set (2000)

¹² Unfortunately, latest data for Tajikistan and some other Central Asian countries exist only for the year 2004.

More competition and market entrants with adequate technologies to stimulate deposit collection would deepen the banking sector and reduce costs for banking services.

The microfinance market grows and widens in product variety and loan size, and it acts as a partial substitute for lack of bank facilities in rural areas. At the end of 2007, the ten largest microfinance institutions issued loans to 44,000 Tajik women. Women's market share of total loans was below 40 percent; however, some smaller institutions specifically target the rural population or female borrowers (e.g., Microloan Fund Madina and Microloan Fund ZAR). Some banks have expanded their business activities into the microfinance segment, and specialized microlending banks have evolved in recent years offering a wide range of individual, group, and livestock loans. At the end of 2007, the ten largest institutions provided loans to almost 110,000 borrowers (Table 12). On average, banks issue larger loans than nonbank financial institutions: bank loans often exceed the needs and economic potential of many small entrepreneurs. The average loan from a nonbank financial institution is worth US\$ 690. Women's independence in the microfinance market is limited by loan requirements, including husband's consent on loan application and/or use of collateral (De Klerk and Rasulov 2005: 8).

Table 12: Market indicators for the ten largest microfinance institutions

| | Gross Loan Microfinance Portfolio (US\$ mil.) | Active borrowers | Institution | Women borrowers | Average loan size (US\$) |
|------------------------------|--|-----------------------------|--------------------|----------------------------|---|
| Agroinvestbank | 26.7 | 17,850 | Bank | 42.6% | 1,496 |
| IMON ^b | 24.8 | 26,030 | NBFI ^a | 42.5% | 952 |
| Tojsodirotbank | 20.2 | 2,860 ^c | Bank | - | 7,063 |
| FMFB - Tajikistan | 20.0 | 17,780 | Bank | 36.8% | 1,127 |
| Bank Eskhata | 12.6 | 5,170 | Bank | 26.0% | 2,437 |
| MLF MicroInvest ^c | 8.0 | 14,250 | NBFI | 44.8% | 563 |
| FINCA | 4.7 | 11,050 | NBFI | 38.1% | 425 |
| OXUS | 4.0 | 6,800 | NBFI | 46.3% | 581 |
| MLF HUMO | 2.5 | 4,300 | NBFI | 46.1% | 578 |
| Imkoniyat ^d | 1.3 | 2,820 | NBFI | 60.4% | 449 |

Source: MixMarket (2009), EBRD, FMFB, IMON, OXUS

Note: Gross loan portfolio covers only microfinance relevant segment of total portfolio; Data from 31 Dec 2007

a. NBFI = Non-bank financial institution; b. Data from 31 July 2008; c. Data from 30 June 2008; d. Data from 30 Sept 2008; e. Data from 31 Dec 2006

Agricultural lending facilities mainly benefit large farms and enterprises. In 2005 in Tajikistan only 10 percent of agricultural lending served noncotton crops (Höllinger 2006), reflecting the dominance of cotton production and the strong bias of agricultural support services like finance and contributing to business impediments in farmers' crop choice.

Box 2: Financial markets have to be gender-neutral—the recent literature at a glance

A functioning financial market can benefit the poor directly or indirectly through labor market opportunities. The question is how financial access can actually help the poor or help women. Natural experiment settings show, for example, that the positive welfare effect from access to finance is in productivity gains (rather than selection bias), and that participating women benefit more than men (Pitt and Khandaker 1998). Concerns are articulated that access to finance will always be selective at the onset (e.g., the more able risk takers use services first) and thus can contribute to inequality in the short run (Giné and Townsend 2004). The recent literature on access to finance in developing countries emphasizes that financial products should not focus exclusively on the poor. The middle class might be more demanding of service quality and could potentially contribute to consolidation of the financial sector. In the long run, financial access for the middle class implies spillovers to the poor through employment and wage effects (World Bank 2008). However, since women tend to have lower labor market participation rates in developing countries, they can reap only partial benefits from these spillovers.

Especially in the developing world, credit markets must not restrict loan provision to formal institutions. Despite lower security and efficiency, informal lending has the advantage of higher outreach and lower entry costs, thus being especially attractive among the poor and remote. Informal lending has potential to function as a stepping stone for formal financial institutions and to increase general financial literacy among the poor (World Bank 2008).

Obstacles to credit provision include information asymmetries between credit provider and loan receiver, which result in higher transaction costs and reduce supply of credit.¹³ The biggest problem lies in hazardous behavior of the borrower through nonrepayment (*moral hazard*). Although empirical literature on finance suggests that women perform better on repayment, they face higher entry barriers and are more often considered “credit unworthy” on the basis of prevailing gender roles and perceptions (World Bank 2008: 124). Joint liabilities provide solutions to the adverse selection problem with social capital as the underlying control mechanism. This form of group credit is not suitable, however, when members borrowing needs differ in loan size or risk. Women might be vulnerable to exploitation if they command smaller loans than men (World Bank 2008: 129). An additional critical variable of importance in Tajikistan is geographic transaction and monitoring costs in the determination of credit supply. Modern, mobile technologies (deposit collectors, cell phone technology) perform well around the globe, and create models to reduce transaction costs in remote areas.

The demand for loans depends on both fixed costs and interest. The recent literature discusses whether interest rates are an important determinant (or barrier) of loan demand. On the one hand, women seem to be much less credit elastic regarding interest rates due to their lower opportunity costs in the absence of labor market opportunities (Emran, Morshed, and Stiglitz 2006). On the other hand, the repayment burden of loans seems to be of little importance in access to credit (Karlan and Zinman 2006). Important determinants of loan demand are expected returns of investment projects. If women face investment constraints, their demand for financial services might be involuntarily low. Further problems and characteristics of undeveloped financial markets can be found in low levels of trust in financial institutions and in low financial literacy.

Financial markets in Tajikistan

- are in an early stage of development
- need to support economic development
- exploit economic opportunities but do not generate them

¹³ Here we focus exclusively on borrower-specific risks.

Gender Sensitive Evidence on Access to Land and Finance in Tajikistan

To date there is no thorough gender analysis of access to land and finance in Tajikistan. Lerman (2008) recently provided a profound overview of Tajikistan's agricultural system but without any gender-sensitive evidence. Due to lack of data, no comprehensive microeconomic study on access to finance was done.¹⁴ The collection of the LSMS 2007 data with individual and household-level financial information enabled new types of analysis.

Women Lag Behind in Land Access, Livestock Holdings, and Production Technology

Land ownership of Tajik women

- lags significantly behind men but less so for irrigated land
- is not more insecure than men's
- plays little role as collateral for women or men

Land use of Tajik women

- differs with respect to crop choice and livestock holdings
- is less constrained by access to inputs as compared to men
- seems less technically intensive

Land ownership differs significantly between male- and female-headed households.

Based on the LSMS 2007 data, 66.7 percent of male heads own land versus only 46.6 percent of female heads. To date, 65 percent of agricultural land has been withdrawn from corporate farms and transferred to private use (Lerman 2008: 8). Thus, the remaining non-privatized 35 percent of land is available to be distributed in a gender-sensitive way.

Inequality in Land Holdings

When focusing on landowners, the size of women's land holdings is significantly lower than men's. As seen in Table 13, men's land holdings are 1.4 times larger, rented land is 3 times larger, and rented-out land is 4.6 times larger than women's holdings. Owned land is a measure of (potential) welfare and reflects better economic opportunities for male-headed households. Lower use of rental land may reflect female discrimination in access to this market, or the relatively small size of rented land may reflect the lower financial potential of the transaction for women-headed households. Finally, the low figure can reflect real lower demand through a preference shift away from agricultural production. Such a shift is expected if alternative income sources are different for male and female-headed households.

¹⁴ A recent analysis of the rural financial sector is provided by Meyer and Sheets (2006).

Table 13: Household land size (in *sotkas*) by gender of household head (HH) (only landowners)

| | Land owned by HH | Land rented by HH | Land rented out by HH |
|-------------|------------------|-------------------|-----------------------|
| Male-head | 23.30 | 9.52 | 0.21 |
| Female-head | 16.90 | 3.15 | 0.05 |

Source: LSMS-Tajikistan 2007; author's calculations

Migrants relax the production burden in male-headed households, while they seem to relax the liquidity constraint of female-headed households and increase their activity. To explore this possibility, Table 14 reports the size of rented land separately for migrant and nonmigrant households. Since migration from Tajikistan is almost entirely male, we could expect that female-headed households with migrant status engage less in agriculture if the income from remittances lowers their subsidiary farming requirement. Surprisingly the opposite is true for Tajikistan. While male-headed households with migrants lower their agricultural activity through renting in smaller land plots (in total they use only 25.6 instead of 30.6 *sotkas* of land on average) female-headed households with migrant status can afford to expand their rental land size strongly. Migration contributes to narrowing the gender land use gap and thus promotes female economic activity.

Table 14: Land rented by migration status of household (in *sotkas*)

| | Male-head | Female-head |
|----------------------|-----------|-------------|
| Nonmigrant household | 10.38 | 2.77 |
| Migrant household | 5.58 | 4.79 |

Source: LSMS-Tajikistan 2007; author's calculations

Land holdings generally display a high degree of inequality (Gini coefficients of well above 0.5) but are more equally distributed among women than among men. Table 15 reports inequality of land holdings within gender groups. The largest ten percent of land holdings are 15 times larger than the smallest ten percent of holdings: this effect is similar across sexes (P90/P10 ratio). The bottom dispersion of land holdings is much larger for women (P10/P50), and the top dispersion is larger for men (P90/P50). While the largest land holdings of women are about three times larger than the median, the largest holdings of men are more than four times larger. Female smallholders own only one fifth of the median, while male smallholders own 27 percent.

Table 15: Inequality in land holdings

| | Gini | P90/P10 | P90/P50 | P10/P50 |
|--------------------------------------|-------|---------|---------|---------|
| Female, aged 15+, with land holdings | 0.581 | 15.5 | 3.5 | 0.20 |
| Male, aged 15+, with land holdings | 0.614 | 15.3 | 4.2 | 0.27 |
| Female heads with land holdings | 0.536 | 15.0 | 3.0 | 0.20 |
| Male heads with land holdings | 0.613 | 15.0 | 4.1 | 0.27 |

Note: The Gini coefficient is a widely used measure of inequality that ranges between 0 (equal distribution) and 1 (all land owned by one person/household). P90/P10 measures the landholdings of the 90th percentile (the 10 percent land-richest persons/households) in relation to the land holdings of the 10th percentile (the 10 percent land-poorest persons/households). Similarly, P90/P50 measures the top dispersion beyond the median person/household while P10/P50 measures the bottom dispersion.

Source: LSMS-Tajikistan 2007; author's calculations

The analysis of intragroup inequality is important as it reflects the degree of dissimilarity in production needs. This is relevant for access as a group in credit arrangements functions best among producers with similar production structures and credit needs.

When controlling for various household heads, household, and regional characteristics, the gender gap in the size of land holdings is 12.5 percent but almost doubles when accounting for general access to land (Table 16). The controlled land-size gender gap is highly significant when accounting for the household decision whether to use land at all (Heckman selection model). Beside household composition, ethnicity, and regional controls, the educational variables provide interesting insights: household heads with a university education command—all else equal—more than nine percent larger land plots than heads with secondary education, while the latter are even outperformed by lower-educated household heads (9.3 percent larger land). When applying the selection model for the subsample of female- and male-headed households separately, one can see some interesting differences in the patterns of land size correlates. While age has a much stronger positive association with land size for women, the association between land size and educational attainments exists only for male-headed households. This result suggests that seniority is more relevant than human capital endowment in size of women's land holdings.

Table 16: Determinants of land size (Dependent variable: log of used land)

| | (1) OLS model (I) | (2) Heckman selection Probit | (3) Heckman model (II) | (4) Female- headed households | (5) Male- headed households |
|------------------------------|-------------------------|---------------------------------------|------------------------------|--|--------------------------------------|
| Female-headed household | -0.125** (0.054) | -0.302*** (0.067) | -0.231*** (0.061) | | |
| Age of head | 0.002 (0.002) | 0.007*** (0.002) | 0.004** (0.002) | 0.010** (0.005) | 0.004* (0.002) |
| Lower education | 0.092* (0.049) | 0.024 (0.072) | 0.093* (0.049) | 0.008 (0.117) | 0.111** (0.055) |
| University | 0.121** (0.055) | -0.107* (0.064) | 0.091* (0.055) | 0.350 (0.368) | 0.080 (0.056) |
| Kyrgyz | -0.406** (0.178) | -2.637*** (0.277) | -2.073*** (0.523) | -1.789* (1.085) | -2.017*** (0.599) |
| Uzbek | 0.178*** (0.047) | 0.164** (0.069) | 0.226*** (0.049) | 0.247** (0.113) | 0.220*** (0.054) |
| Russian | -0.493** (0.203) | -1.133*** (0.421) | -1.108*** (0.356) | -0.941* (0.535) | - - |
| Children in household | 0.075 (0.055) | 0.049 (0.071) | 0.085 (0.055) | 0.160 (0.139) | 0.073 (0.059) |
| Multi generation household | 0.176*** (0.048) | 0.282*** (0.066) | 0.271*** (0.053) | 0.024 (0.154) | 0.303*** (0.057) |
| Pension single generation HH | -0.185 (0.174) | -0.777*** (0.175) | -0.543*** (0.206) | -0.857 (0.526) | -0.452** (0.220) |
| Adult single generation HH | 0.005 (0.156) | -0.482*** (0.173) | -0.202 (0.174) | 0.325 (0.336) | -0.351* (0.192) |
| Altitude in '000 meters | 0.565*** (0.043) | 0.544*** (0.067) | 0.749*** (0.067) | 0.664*** (0.166) | 0.750*** (0.073) |
| Dushanbe | 0.653*** (0.192) | -1.532*** (0.111) | -0.305 (0.352) | -0.253 (0.741) | -0.248 (0.398) |
| Khatlon | 0.718*** (0.051) | 0.272*** (0.070) | 0.832*** (0.057) | 0.893*** (0.133) | 0.815*** (0.063) |
| RRP | 0.298*** (0.059) | -0.375*** (0.076) | 0.172** (0.073) | 0.145 (0.190) | 0.176** (0.079) |
| GBAO | -0.164* (0.088) | -0.724*** (0.131) | -0.419*** (0.118) | -0.315 (0.267) | -0.422*** (0.131) |
| Rural | 0.913*** (0.071) | 1.371*** (0.057) | 1.741*** (0.247) | 1.612*** (0.542) | 1.737*** (0.269) |
| Constant | 0.402*** (0.138) | -0.965*** (0.155) | -2.146*** (0.747) | -2.025 (1.690) | -2.124*** (0.817) |
| Central heating | | -0.980*** (0.170) | | | |
| Log of rooms per capita | | 0.097* (0.054) | | | |
| Inverse Mill Ratio | | | 4.187*** (1.241) | 3.154 (2.745) | 4.242*** (1.358) |
| Observations | 3066 | 4857 | 3064 | 452 | 2612 |
| R-squared | 0.205 | | 0.209 | 0.252 | 0.203 |

Note: Omitted categories: Secondary education, dual-generation household, Sogd and urban.

Identifying restriction in selection equation: "central heating and log of rooms per capita" significant at 1%;

Further details on the selection model is found in Annex 2. The number of non-censored observations is 3,066;

Robust t statistics in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%

Source: LSMS-Tajikistan 2007; author's calculations

Women Disadvantaged in Land Allocation not Land Entitlement

Box 3: Land allocation in Tajikistan

In Tajikistan, land can be acquired through state allocation (privatization), inheritance, or market transactions. Markets for land property rights, however, are absent as all land is owned by the state. Only farmers can hold long-term land use rights. In 1996 the restructuring of state farms into smaller private units was initiated. Due to increasing poverty, especially in rural areas, the government allocated land plots to households to help people cope with their deteriorating economic situations (called *Presidential Land* after Presidential decrees on their issue in 1995 and 1997). This implies that after the restructuring of state farms and the respective land allocation, inheritance of long-term use rights is the only effective “ownership” transaction mechanism of land holdings.

Of state- and presidential-allocated land, women received only a small fraction of titles (15.2 percent and 12.2 percent respectively). Yet, among individuals with actual land holdings, there are no great gender differences in the manner of land allocation as Table 17 illustrates. The major difference is that women, as compared to men, acquired land significantly more often through the first wave of state allocation but were somewhat less likely to receive land through presidential allocation or inheritance.

Inherited land goes to women in less than one out of seven cases.¹⁵ With inheritance as the only mode of transaction, the gendered land distribution is likely to remain unchanged in the near future. If appropriate markets for land use rights are installed, marginal value of land will lead to efficient distribution of land plots.

Table 17: Land allocation by gender of household head

| | State allocation | Presidential allocation | Inheritance | Other | Total |
|--|------------------|-------------------------|-------------|-------|-------|
| Male-head | 59.0% | 16.3% | 21.6% | 3.2% | 100% |
| Female-head | 63.7% | 13.7% | 19.3% | 3.2% | 100% |
| Share of total allocated to female-headed households | 15.2% | 12.2% | 14.9% | 14.1% | |

Source: LSMS-Tajikistan 2007; author’s calculations

Women command titles (e.g., certificate, sealed act, receipt or other title) more often than men, implying a lower vulnerability of women with respect to land tenure. A necessary precondition for a functioning and efficient land market is the availability of land titles for use as proof of ownership in transactions. Furthermore, land titles ease use of land as collateral (see section 7.2.1). As Table 18 illustrates, most land plots are allocated with title.

Table 18: Land title of plot by gender of household head

| | Certificate | Sealed act | Receipt | No document | Other |
|-------------|-------------|------------|---------|-------------|-------|
| Male-head | 55.7% | 35.2% | 2.2% | 6.4% | 0.5% |
| Female-head | 54.5% | 39.2% | 0.9% | 4.0% | 1.3% |

Source: LSMS-Tajikistan 2007; author’s calculations

Except for Dushanbe, women are better endowed with land titles in all regions of the country. Large shares of nontitled agricultural land exist in Dushanbe, the capital city, and Khatlon, the main cotton-growing region (Table 19). As only a small share of households in

¹⁵ We acknowledge that ownership of land may not be necessary for usage of land. However, legal ownership is important for collateral and for decision-making power.

Dushanbe is actually engaged in agriculture, the absence of titles may reflect ownership of dachas. There are no straightforward explanations why women are more likely to hold land titles, however, it could be related to differences in risk attitudes between men and women and in the value that women place on their land titles, as only a small fraction of women are actually allocated land.

Table 19: Share of landowners without title (out of all land owners)

| | Men | Women |
|----------|------------|--------------|
| Dushanbe | 20.4% | 29.7% |
| Sogd | 3.9% | 2.8% |
| Khatlon | 9.0% | 6.4% |
| RRP | 6.3% | 2.2% |
| GBAO | 4.0% | 4.1% |

Source: LSMS-Tajikistan 2007; author's calculations

Modest Differences in Access to Irrigated Land

Gender differences in access to irrigated land are only modest and do not exhibit serious patterns of disadvantage between sexes. After substantial extension of irrigation coverage during the Soviet era, in 1990 the share of irrigated land in total arable land was 70 percent. Today, virtually all arable land (more than 700 thousand ha.) can be considered irrigated, because since independence, the area of arable land has declined by almost 200 thousand ha., while irrigated area remained stagnant (Lerman 2008: 4). As seen in Table 20, the share of irrigated land in total privately used land reflects these realities. While regional differences in the share of irrigated land exist, gender differences are low. Men's ratio of total irrigated land is relatively lower in the city of Dushanbe (where less than five percent of households are engaged in agricultural production) and in the RRP. Interestingly Khatlon, the *oblast* with extremely high irrigation demand for cotton production, lacks private irrigation. Most likely, cotton irrigation crowds out irrigation for other crops. In parts of Khatlon, local governments (*khukumats*) force farmers to produce cotton on at least 80 percent of their land. As cotton production requires irrigation, virtually all irrigated land must be dedicated to cotton production. Farmers who do not comply with that rule have found their fields destroyed by bulldozers (ICG 2005: 7)

Table 20: Share of irrigated in total household land by region

| | Male-head | Female-head |
|----------|------------------|--------------------|
| Dushanbe | 77.6% | 93.8% |
| Sogd | 86.1% | 84.2% |
| Khatlon | 62.8% | 63.2% |
| RRP | 76.1% | 86.3% |
| GBAO | 95.9% | 94.7% |

Source: LSMS-Tajikistan 2007; author's calculations

The irrigation shares of poor female-headed households are slightly higher than those for non-poor households. Table 21 investigates differences in irrigation shares by different welfare levels. Again, female-headed households do seem to have a slight advantage in access to irrigated land if they are not extremely poor, i.e., if they do not fall short of meeting their nutritional requirements. One explanation for this result may be that women received land of better quality. More likely however, female household heads care for and invest more into irrigation systems, as they face higher constraints to land holding.

Table 21: Share of irrigated in total household land by poverty status

| | Male-head | Female-head |
|----------------|------------------|--------------------|
| Extremely poor | 78.4% | 77.5% |
| Poor | 76.2% | 79.5% |
| Not poor | 73.1% | 76.9% |

Note: Poverty categories are defined as follows: “Extremely poor” refers to households with monthly per capita consumption below the basic nutritional requirement level of 88.8 somoni (food poverty line); “Poor” refers to households with monthly per capita consumption between 88.8 and 138.7 somoni (poverty line); “Not poor” households consume above 138.7 somoni per person and month. Both absolute poverty lines were generated according to the basic needs approach. Source: LSMS-Tajikistan 2007; author’s calculations

Inferior Land Use and Land Use Technology

Land use and farming in Tajikistan still follow Soviet structures and often Soviet-style command structures. Like in Soviet times, almost all households use at least some land to supplement their consumption (poverty buffer).

Female-headed households have significantly lower livestock holdings for all kinds of animals, but their relative gap is especially large for productive livestock (horses, donkey, mules) (Table 22). Women use more manual labor and their holdings are less technically intensive. Table 22 shows cattle raising is a widespread, traditional practice in Khatlon. In addition holdings of cows, sheep, and goats are common in Khatlon and in GBAO where mountainous landscape has less value for crops and more use as pasture.

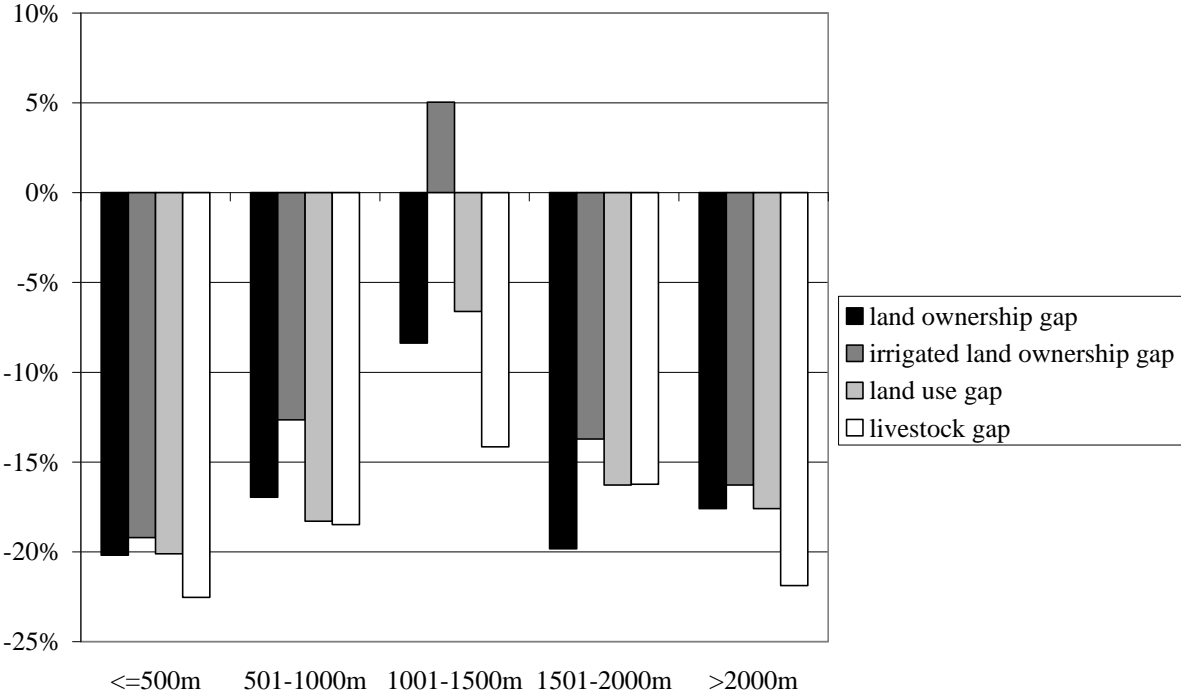
Table 22: Livestock holdings by region

| | Dushanbe | Sogd | Khatlon | RRP | GBAO | |
|-------------|-----------------------|-------------|----------------|------------|-------------|-------|
| Male-head | Any livestock | 1.9% | 55.7% | 73.6% | 64.3% | 79.8% |
| | Cattle | 1.7% | 44.6% | 65.5% | 58.7% | 72.4% |
| | Pig, sheep, goats | 0.3% | 22.9% | 27.5% | 18.5% | 71.5% |
| | Poultry | 0.6% | 20.7% | 44.1% | 33.1% | 35.4% |
| | Horses, donkey, mules | 0.2% | 17.8% | 26.4% | 11.5% | 14.9% |
| Female-head | Any livestock | 1.1% | 37.6% | 60.8% | 48.4% | 59.9% |
| | Cattle | 0.8% | 27.5% | 56.3% | 40.4% | 57.7% |
| | Pig, sheep, goats | 0.0% | 16.3% | 14.6% | 10.9% | 50.5% |
| | Poultry | 0.3% | 16.8% | 34.7% | 25.7% | 15.0% |
| | Horses, donkey, mules | 0.0% | 9.2% | 13.3% | 4.9% | 3.0% |

Source: LSMS-Tajikistan 2007; author’s calculations

Across altitudes, land gaps display a consistent inverted u-shaped form, pointing to disadvantages for women-headed households especially in low and very high settlement areas. Tajikistan’s geography is extremely diverse with great variation in altitude of settlements. This is important as land use not only differs by preferences and resources but also depends strongly on natural conditions. Figure 7 displays various land gaps between female and male-headed households across different altitude brackets. About one-third of the Tajik population lives at altitudes above 1000 meters.

Figure 7: Gender land gaps at different levels of altitude (in percentage points)



Note: The gap is measured as difference between the fractions of household land holdings among male- and female-headed households. Source: LSMS-Tajikistan 2007; author’s calculations

Table 23 reports disadvantages for female-headed households whose assets are worth roughly one third of their male counterparts. The low agricultural asset holdings of households are reflected on the aggregate level. As calculated in Lerman (2008: 6), the number of tractors in Tajikistan decreased from 37,000 in 1991 to 19,000 in 2006. Generally, the decrease of gross agricultural output in Tajikistan since independence is due to shrinkage of asset stocks, as well as use of old and outdated machinery.

While male-headed households own 94 percent of their assets, female-headed households share their equipment more than twice as often. This places potential limits on free production decisions but also indicates that women have high potential for collective collaboration. Another explanation could be that women may not be able to drive tractors and, therefore, share with someone who can drive. Overall ownership of tractors, however, is low among both male- (1.7 percent) and female-headed households (0.7 percent).

Table 23: Assets in agriculture by gender of household head

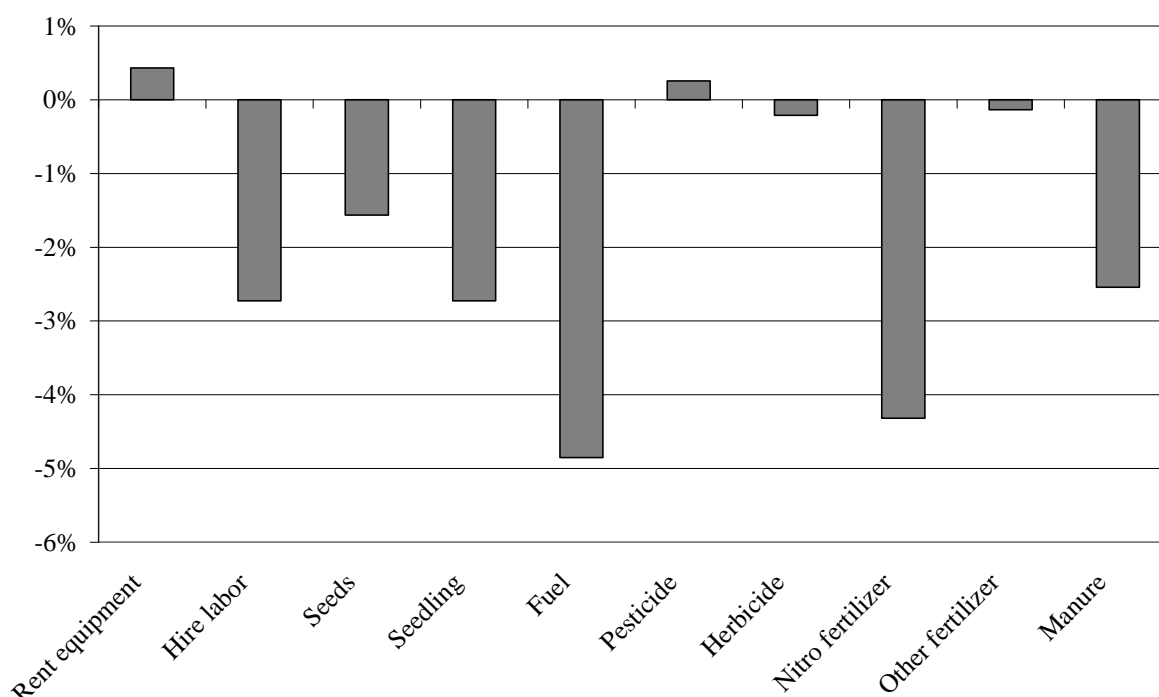
| | Shared assets | Value of own assets |
|-------------|---------------|---------------------|
| Male-head | 6.0% | 5435.4 |
| Female-head | 13.8% | 1978.3 |

Note: Values reported in Tajik somoni.

Source: LSMS-Tajikistan 2007; author's calculations

The lower ownership rates of assets among female-headed households might explain why women tend to rent equipment slightly more often (Figure 8). However, input use gaps are generally quite low—in a range of a few percentage points. Serious disadvantages for women-headed households prevail especially for fuel and nitro fertilizer both of which reflect more mechanical and chemical agricultural processing.

Figure 8: Input gap between female- and male-headed households (percentage points)



Source: LSMS-Tajikistan 2007; author's calculations

Land Use Gaps Smaller for the Poor

Table 24 shows female-headed households face lower constraints in almost all kinds of agricultural inputs. These results hold across the different poverty levels. Women appear much less constrained in access to fertilizer and somewhat less constrained in access to fuel. These results qualify the preceding results of lower input use among female-headed households (and thus larger input gaps).

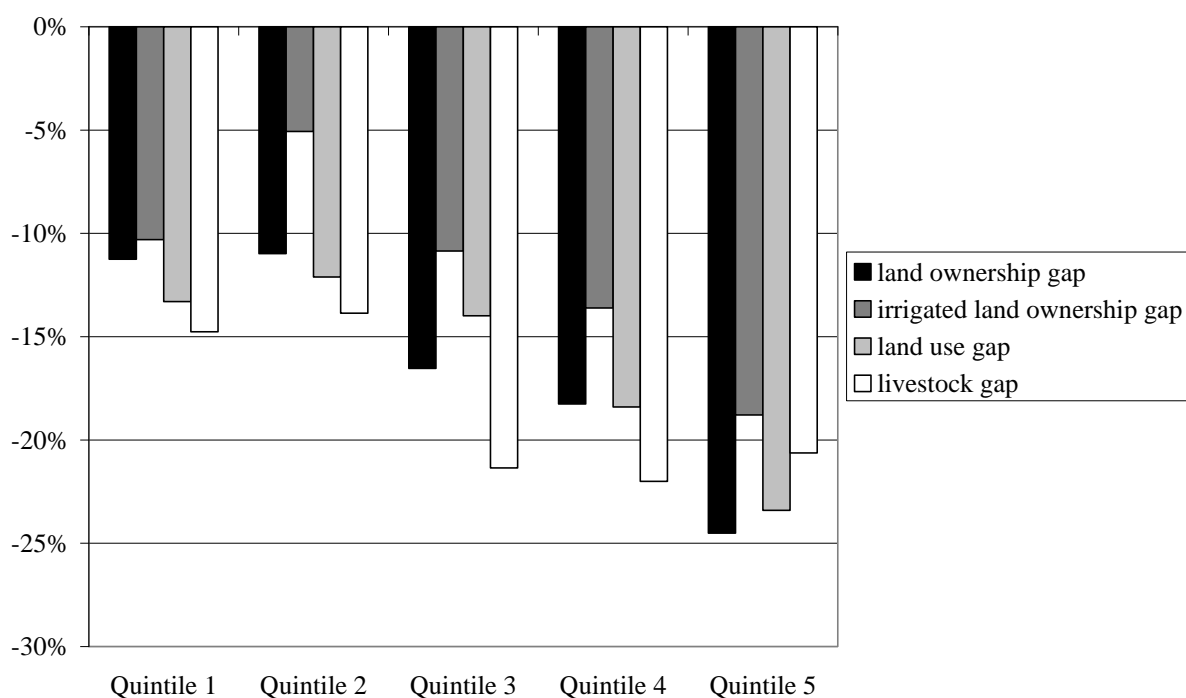
Table 24: Agricultural input constraints by gender of household head

| Constraint in | Male-head | | | Female-head | | |
|---------------------|----------------|-------|----------|----------------|-------|----------|
| | Extremely poor | Poor | Not poor | Extremely poor | Poor | Not poor |
| Any type of input | 37.7% | 33.6% | 36.8% | 27.1% | 33.5% | 31.8% |
| Equipment | 15.2% | 7.3% | 7.0% | 6.0% | 10.5% | 6.9% |
| Seeds | 18.7% | 21.3% | 21.4% | 19.7% | 16.7% | 19.6% |
| Fertilizer | 24.9% | 19.4% | 25.5% | 14.3% | 15.8% | 22.8% |
| Herbicide/Pesticide | 1.0% | 0.3% | 1.0% | 0.0% | 1.2% | 1.0% |
| Fuel | 10.7% | 9.4% | 11.3% | 9.1% | 7.4% | 4.6% |

Source: LSMS-Tajikistan 2007; author's calculations

Women use land more extensively and less technically. Figure 8 and Table 24 in combination tell a story of less input use by female-headed households due to lower input demand. One interesting finding should be noted: while extremely poor male-headed households are especially constrained in access to equipment and fertilizer, their female counterparts report substantially lower constraints (by nine percentage points). It is unclear, however, whether this female advantage is due to aid targeting or less technical production.

Figure 9: Land gaps by consumption quintiles (in percentage points)



Source: LSMS-Tajikistan 2007; author's calculations

As Figure 9 illustrates, gender land gaps exist across the whole welfare distribution of households, however, poverty has an “equalizing” effect. The size of the gap increases from about ten percentage points on land ownership towards the top of the consumption distribution (25 percentage points). One potential explanation for this positive relationship between land gap and welfare comes from an inspection of household size between male- and female-headed households across the welfare distribution. Women-headed households are generally smaller, but less so in lower quintiles. In the fifth quintile, however, the average male-headed household consists of five persons, while the female-headed counterpart has

only three members. Female-headed households of higher consumption quintiles lack on average one working age male (as compared to 0.7 working age males in lower quintiles), which reflects lower agricultural labor supply of those households.

The gap in livestock holdings is less welfare sensitive and ranges between 14 and 22 percentage points. Livestock holdings seem to have no relationship to poverty status with a rather stable livestock gap between female- and male-headed households across different poverty states (results not shown).

Limited Finance Access Overall with Slight Gender Disadvantage

- Women’s access to financial services in Tajikistan
- is extremely low in absolute terms for women and men
 - is lower for women in relative terms
 - is cheaper for short-term loans but prohibitively expensive for long-term loans most needed in agriculture (adverse selection)
 - serves investment activities more often than men’s
 - is restricted as remittances are transferred through informal channels and immediately used for basic consumption

Tajikistan’s financial system is generally “underdeveloped and unstable” (Meyer and Sheets 2006: 178). Many people store money in foreign currency at home as savings—a method which does not pay any interest. This section describes access to financial services in Tajikistan and distinguishes between borrowing, saving, transmitting, and insuring financial instruments, since the different products play distinctive roles in the welfare generating process.

As a relic from the Soviet Union, the banking system predominantly addresses farmers—and specifically cotton farmers. Many cotton farms were heavily in debt before privatization, and often debt allocation remained unclear when farmers withdrew a share of collective land (Meyer and Sheets 2006: 186). The challenge is to broaden the basis of the financial system and to develop products addressing more sectors than the highly indebted cotton sector.

Table 25: Financial products by gender of head of household

| | Observations | Loan | Interest | Bank account | Insurance | Remittances |
|-------------|--------------|-------|----------|--------------|-----------|-------------|
| Male-head | 900,917 | 3.04% | 0.40% | 0.21% | 21.07% | 9.68% |
| Female-head | 217,031 | 2.29% | 0.00% | 0.19% | 14.10% | 23.18% |

Note: *Loan* means at least one household member currently has a loan; *insurance* means the household paid insurance contributions during the last twelve months for life or short-term insurances; *interest* means the household received income from interest during the last twelve months; *bank account* means at least one household member has currently a bank account; *remittances* means at least one household member was away and has sent money to the household during the last year.

Source: LSMS-Tajikistan 2007; author’s calculations

Table 25 reveals that the absolute coverage of financial products is not in a mature condition. Three percent of male-headed households and 2.3 percent of female-headed households use loans. These numbers show World Bank estimates of access to banking in Tajikistan at 16 percent of the adult population are rather optimistic (World Bank 2008). The

prevalence of savings accounts remains far below one percent of households. Levels of insurance (measured as insurance payment during the last twelve months) are reasonably high. These, however, include diverse products like car and life insurances. Unfortunately, the survey does not distinguish between long- and short-term insurance.

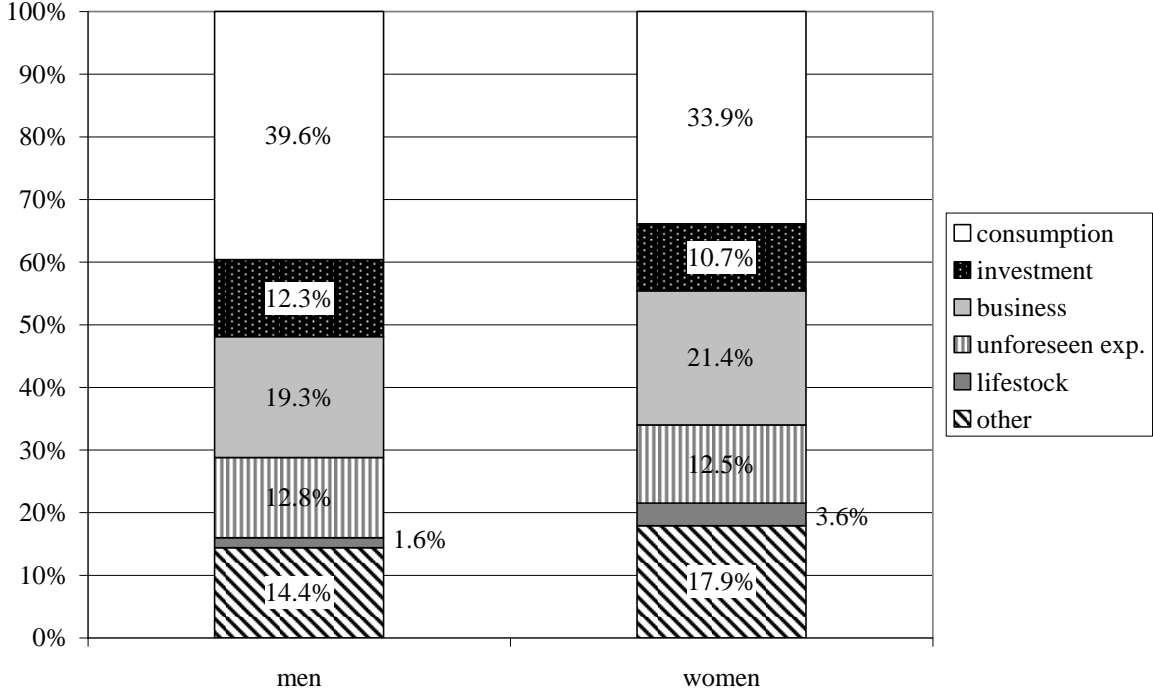
For all products except bank savings accounts, female-headed households have substantially lower coverage. Coverage of loans among female-headed households is thus 25 percent lower than among male households. No female-headed household in the survey responded positively to having received interest income during the last year.

Potential demand for safe, efficient, and cheap bank services are high. Unfortunately, the demand for financial products is not recorded in the survey. To illustrate potential, Table 25 also reports the share of households receiving monetary remittances. There is no information on whether a household received the money through a bank connection or through an informal channel. Still, the high numbers of households receiving remittances illustrate how the banking sector could expand by channeling the transferred money into the official system.

Women Prefer Investment and Asset Loans but Pay More

Women use loans less often for consumption and investment purposes, but they have a two-percentage point higher share of loans for business activities and livestock holdings. Figure 10 shows that 34 percent of women’s and 40 percent of men’s loans are for consumption. Due to the high female employment share in agriculture, it seems reasonable to believe that the largest share of women’s business loans goes into agriculture. When focusing on household heads exclusively, all female heads have their credit arrangements with the *Agro-Invest Bank*, supporting the idea that women predominantly take credit for business intentions. However, the total number of loan contracts in the sample is only 251, indicating only slightly more than one percent of the population aged 15 and above has a loan.

Figure 10: Purpose of loan by gender (individuals aged 15+)



Source: LSMS-Tajikistan 2007; author’s calculations

Box 4: Cost structure of loans

The cost structure of loans is an important factor in demand among different groups of the population. In general, a loan has fixed and variable cost parts. The variable cost reflects the interest rate, while fixed costs consist of collateral, minimum securities, and transaction costs. In theory, interest is charged to cover the cost of the lessee and to insure the risk of non-repayment. Especially for small and short-term loans, fixed costs may be prohibitively high. Evidence shows that women have smaller and shorter loans than men and are thus disadvantaged if fixed costs are an important part of the total cost (World Bank 2008). Unfortunately, the LSMS 2007 does not have any information on the repayment behavior of lenders. However, according to international evidence, women tend to have better repayment records. If this holds in the Tajik setting, we might expect average interest to be lower for women compared to men. At the same time, women are often seen as credit unworthy: adverse selection problems may increase costs for women. Which effect finally dominates in the determination of loan costs remains an empirical question.

Formal institutions such as banks issue almost 60 percent of all loans (58.5 percent); women prefer formal settings in more than two-thirds of the cases (67.9 percent). Loans can be provided on the formal credit market, as well as through informal structures. Often the latter charge higher prices but lower dependence on formal credit facilities. Besides prevalent punitive capital sources like private moneylenders and producer credit, initiatives by development agencies have begun to provide informal lending facilities for business promotion. In GBAO, the Aga Khan Foundation set up Village Development Funds through which rural households not only receive access to relatively cheap informal loans but also to business service facilities. So far, 3,000 customers were served through the Enterprise Development Unit program with approximately 30 percent being women (Aga Khan Foundation 2009). Due to the small overall sample size, informal family arrangements are also included in the analysis. These loans are often extremely cheap or even interest free.

While men prefer formal loans for long-term credit and informal loans for short-term arrangements, women use both schemes predominantly for short-term loans (Table 26). Both observations might be supply-side driven: informal lenders who have lower risk pooling potential, as compared to banks, may prefer short-term arrangements as exchange rate and failure risks are easier to control. On the other hand, formal institutions seem to constrain women in loan duration for similar reasons; women are viewed as risky borrowers.

Table 26: Duration of formal and informal loans

| | Formal loan | | Informal loan | |
|---------------------|-------------|-------|---------------|-------|
| | Men | Women | Men | Women |
| Up to one month | 10.9% | 43.3% | 65.7% | 60.9% |
| Three months | 30.6% | 0.0% | 23.2% | 15.6% |
| More than six month | 33.6% | 10.4% | 7.1% | 13.9% |
| Other | 25.0% | 46.3% | 4.0% | 9.7% |
| | 100% | 100% | 100% | 100% |

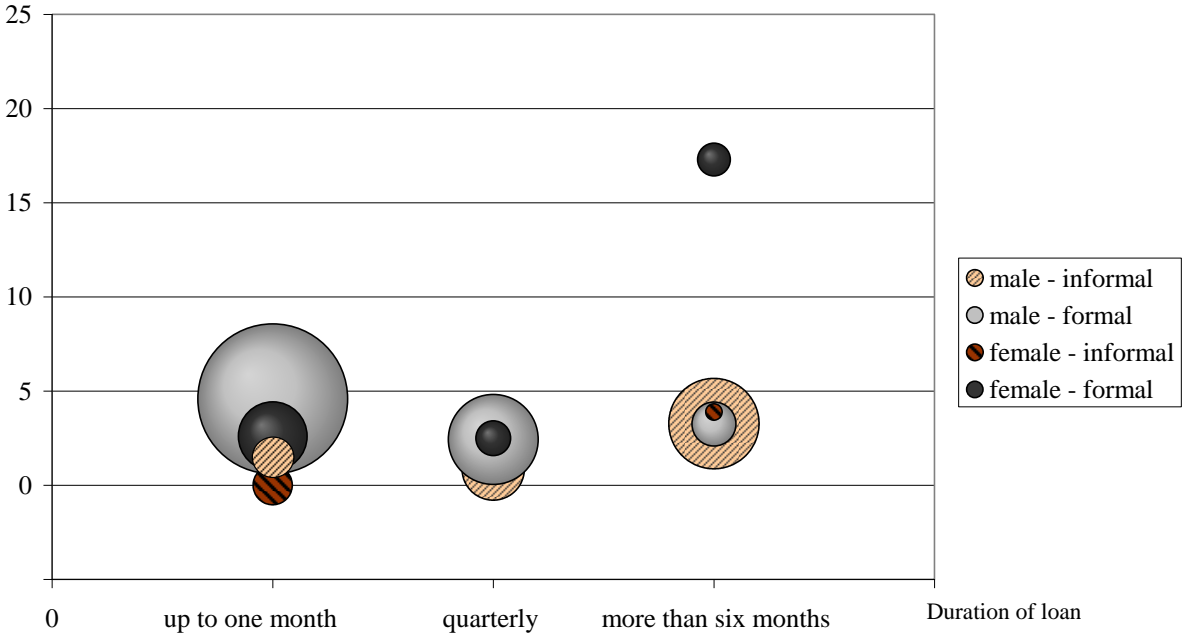
Source: LSMS-Tajikistan 2007; author's calculations

Comparing interest rates of formal lending products between men and women confirms the hypothesis that women face higher interest rates in the long run, while prices for short-term credit do not exhibit specific gender patterns. The average interest rate for men is 7.7 percent. Women pay a substantially lower 2.7 percent if the loan is issued in the Tajik currency (somon), but pay a much higher interest (18.2 percent in comparison to 5.2 percent for men) if the loan is in foreign currency (US dollar, Russian ruble and euro). However,

when distinguishing between different loan durations, the pattern changes with interest rates for women not significantly higher than for men except for longer lasting loans, such as more than six months (Figure 11). For very short loans of up to one month, women have a slight variable cost advantage, which might be due to their better repayment performance. As can also be seen from the figure, informal loans are much cheaper than formal credit. This is due to the fact that a majority of non-formal loans are arranged within families or in communities at very low prices. The formal credit market may charge high prices to women for long-term loans, as these loans are risky, especially if abilities are hard to observe.

Clear lending patterns exist for men: long-term credit is mostly taken from the formal market while short-term credit seems better achievable in the informal market (the size of the circles reflects the quantity of specific lending arrangements). Women in general are less likely to have loans—and if so, they prefer short-term arrangements. Generally the informal sector favors men. Loans might be used for stabilizing the cash flow (short-term) rather than for large investments (long-term). Women might experience supply constraint for long-term investments, as the adverse selection problem is serious with increased lending volume. Additionally as the relationship between loan period and interest rate is positive in the formal market for women, they might have low demand for long-term credit. The consequence of an underdeveloped financial sector is that large-scale investments are hard to realize.

Figure 11: Interest rates(in percent) for formal and informal loans (individuals aged 15+)

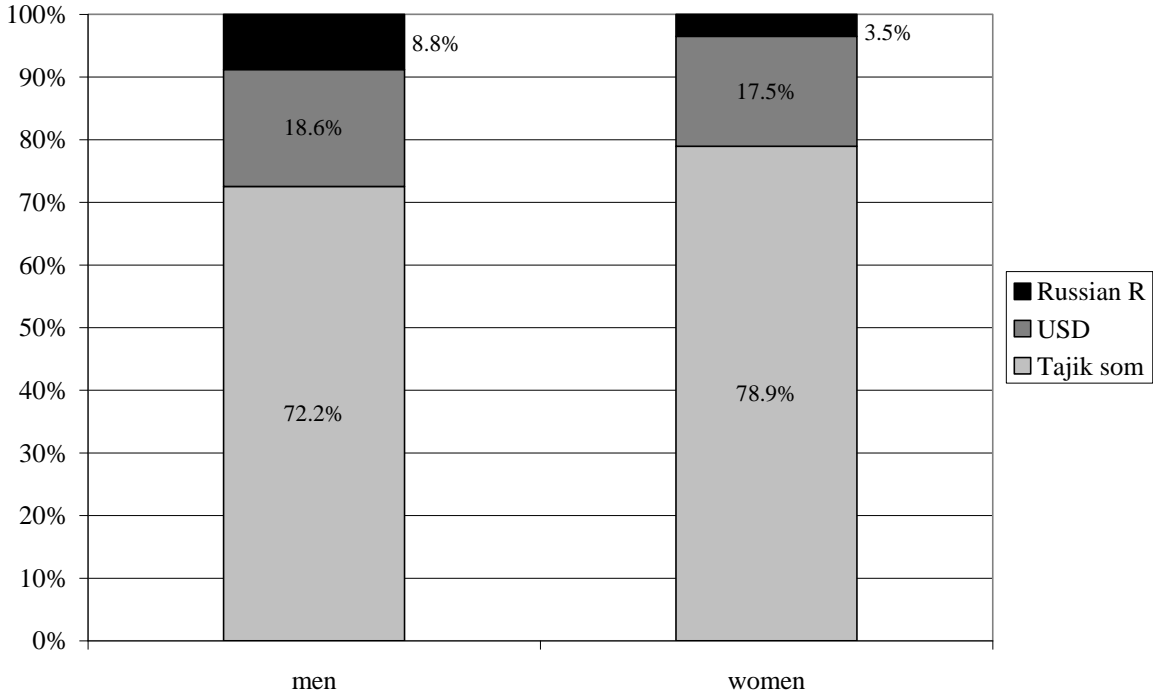


Note: The size of the circles reflects numbers of total loans in the category, not interest range. Average interest rates are given in the centre point of circles.

Source: LSMS-Tajikistan 2007; author’s calculations

Women use loans issued in Tajik somoni slightly more often, which partly stems from lower international business exposure. Figure 12 shows the choice of currency for loans; however, given the sample size the gender differences may almost be neglected. Loans in foreign currency might be issued as a demand or supply strategy. Banks might be capitalized in foreign currencies, and both banks and informal lenders might prefer to issue hard currency loans in the face of exchange rate fluctuations of the Tajik somoni against stable currencies. On the demand side, borrowers might wish to use hard currency to buy larger imported goods or for trade. Although foreign currency loans are used slightly more often for business credit and potentially for trade payments (28 percent compared to 26 percent for loans in Tajik somoni), the difference is small and cannot entirely explain why loans are taken in hard currency. Focusing on men and women employed in agriculture, as well as in the construction and service sector, we find that men are more likely to take credit in agriculture (3.2 percent compared to 1.0 percent of women) and in construction (4.8 percent compared to zero percent of women) while women dominate in services which mainly comprise sales and trading (6.5 percent compared to 3.1 percent of men). This finding confirms qualitative evidence that women use credit mainly for small businesses in trading and services (Giovarelli and Undeland 2009). As sector affiliations also reflect differences in real wages, demand differences are partly covered by the fact that credit might purely be more affordable in specific sectors.

Figure 12: Currency of loan (individuals aged 15+)



Source: LSMS-Tajikistan 2007; author’s calculations

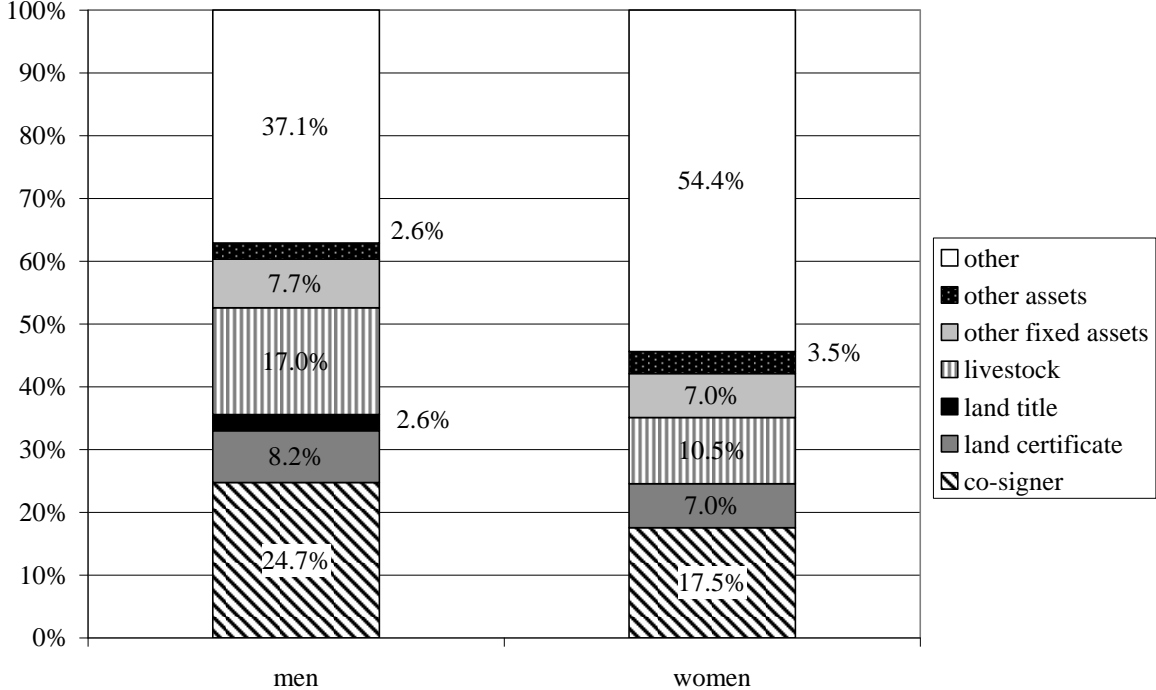
Box 5: Collateral as signal

Due to asymmetric information, banks or informal lending institutions normally require proof of “trustworthiness.” It has been established that the credit trustworthiness of women in Tajikistan is deemed low (Falkingham 2000) despite international evidence of women paying back their loans more reliably (World Bank 2008). In theory, the optimal sign for trustworthiness would be a steady cash flow. However, small farmers and entrepreneurs may need their loan prior receiving cash, especially when planting and harvesting seasons fall several months apart. Another established way to build trust is through the use of collateral.

Land-related collateral (including livestock) plays a much more important role for males (27.8 percent) than for females (17.5 percent). This might reflect women’s lack of land ownership (Figure 13). Given the widespread ownership of land, the numbers are modest even for men. This could be caused by the market problem with land. Land can only be transferred through inheritance in Tajikistan, thus making it less than optimal collateral for credit (Caccavale 2005).

Less than 45 percent of women lenders use standard collateral like land, assets, or a co-signer. The fact that women use non-standard forms of collateral should be further investigated to better understand women’s restrictions and opportunities in access to credit. Unfortunately, the survey does not provide deeper insights. Qualitative research finds that women in Tajikistan often use jewelry or group lending schemes as collateral (Giovarelli and Undeland 2009).

Figure 13: Collateral by gender (individuals aged 15+)



Source: LSMS-Tajikistan 2007; author’s calculations

Box 6: Farmers’ insufficient economic freedom in production decisions

In agriculture, especially in the cotton sector, specific production chains have developed. Farmers receive inputs from big agricultural enterprises to which they are obliged to supply their crop. This type of informal lending channel can create dependence and exploitation of a monopsony in which farmers have no control over product prices (Caccavale 2000). On the other hand, these informal production credits may perform better than highly indebted government agricultural banks in rural areas. In the past, some governments and development agencies have provided cheap credit in rural areas for agricultural production, which “pollutes” the market and lowers repayment. This threat is less pronounced in Central Asian countries (Vogel 2006).

For men, loans are a means to expand business or further improve economic status while women use loans for business start-up activities. Table 27 shows how land and credit are closely intertwined. Although the direction of causality is unclear, a general pattern can be observed: as male-headed households with loans command much larger land (both used and rented out) and frequently more livestock, their wealth seems to be a precondition for the loan. Loans enable male households to rent land of better quality in exchange for their own land, renting in and out substantial amounts of land at the same time. Quite differently, female-headed households with loans own smaller amounts of land than their counterparts without loans. The former seem to use the loan to rent in additional land. Households with loans generally face higher input constraints irrespective of gender. Loans might be used to tackle these production limitations.

Table 27: Credit and land use

| | | Male-head | Female-head |
|---------|------------------------|------------------|--------------------|
| No loan | Own land size | 14.63 | 8.90 |
| | Rented land size | 7.56 | 2.45 |
| | Out-rented land size | 0.02 | 0.02 |
| | Hold livestock? | 57.9% | 38.6% |
| | Any input constraints? | 35.5% | 31.1% |
| Loan | Own land size | 32.32 | 3.46 |
| | Rented land size | 25.79 | 3.96 |
| | Out-rented land size | 4.00 | 0.00 |
| | Hold livestock? | 74.9% | 43.2% |
| | Any input constraints? | 43.8% | 44.8% |

Source: LSMS-Tajikistan 2007; author's calculations

Savings Bank Accounts Virtually Non-existent in Tajikistan

Savings bank accounts are exceptional in Tajikistan: only 0.21 percent of male household heads and 0.19 percent of female household heads respond positively to having a bank account. In the general population, the shares are still much lower. This is particularly important since remittances play an important role in the country's income. These remittances do not enter the banking system. As in other Central Asian countries, large cash holdings at home are very common, mostly in hard currency (US dollars or euros) since the population has experienced devaluation of their savings twice: when the Tajik currency converted from Russian rubles to Tajik rubles and when the Tajik rubles became the Tajik somoni (Lamberte and Vogel 2006: 63). Thus, those with cash holdings do not earn income on their savings. With these low numbers of savings bank accounts, gender-specific analysis is of little value. Rather, the numbers indicate that the Tajik population overall is seriously under-banked, and lack of access to savings services is more of a problem than stated in previous work (e.g., World Bank 2008). Even among the countries with highly repressed access to savings, Tajikistan is found in the lower tier (World Savings Bank Institute 2006).

Potential Demand for Banking through Remittances, Particularly among Women

Tajikistan is a major source of predominantly male emigrants, seeking employment opportunities in Russia and—increasingly—Kazakhstan. The LSMS-2007 records a current stock of 250,000 migrants abroad (3.6 percent of the total and 13.7 percent of the working population) but can neither account for single-household migrants nor for larger households leaving the country together. In a report for the IOM, Olimova and Bosc estimate that between January 2000 and February 2003, 632,000 adults (aged 15 and older) or 18 percent of the adult population left the country to work abroad (2003: 20). The majority of the migrants in our sample remit money or goods in-kind back home to their families. Although the LSMS-2007 lacks information on remittance channels, it sheds some light on those migrants who remit money as potential customers for financial services. As more than 23 percent of female-headed households receive monetary remittances (compared to below ten percent of male-headed households) channeling remittances into the formal banking system could be a useful tool especially for women. Indeed, the true number of migrant households willing to use financial intermediaries might even be higher, as some migrants might remit cash instead of goods in-kind if safe, efficient, and cheap transfer services were available.

Financial Access Depends on Household Welfare

At first glance there exists no clear pattern in use of financial services with respect to poverty status: savings bank accounts are, however, mostly reserved for the non-poor (Table 28). Initially, this might sound convincing. However, poor households that are not structurally poor could use savings to smooth out consumption in times of income shocks.

Table 28: Bank services of female-headed households by poverty status

| | Remittances | Bank account | Loan |
|----------------|--------------------|---------------------|-------------|
| Extremely poor | 24.55% | 0.00% | 2.34% |
| Poor | 21.61% | 0.09% | 1.19% |
| Not poor | 23.17% | 0.31% | 2.89% |

Note: Poverty categories are defined as follows: “Extremely poor” refers to households with monthly per capita consumption below the basic nutritional requirement level of 88.8 somoni (food poverty line); “Poor” refers to households with monthly per capita consumption between 88.8 and 138.7 somoni (poverty line); Not poor household consume above 138.7 somoni per person and month. Both absolute poverty lines were generated according to the basic needs approach. Source: LSMS-Tajikistan 2007; author’s calculations.

Since households receive remittances across all welfare states, the migration cycle of Tajikistan seems rather mature. Given that the first migrants to leave the country (pioneers) are normally disproportionately drawn from the upper part of the welfare distribution—those who can afford migration—the trickle down effect of migration to lower parts of the welfare distribution has apparently already taken place in Tajikistan.

Dividing loans into formal and informal arrangements shows that loan formality depends on the welfare level of the borrower (lessee). While almost all formal loans are in the hands of non-poor individuals, informal arrangements are concentrated among the poor and especially the extremely poor (Table 29). Informal lending thus serves a different clientele than banks and offers rather complementary products.

Table 29: Formality of loan by poverty status

| | Formal | Informal |
|----------------|---------------|-----------------|
| Extremely poor | 0.00% | 2.34% |
| Poor | 0.08% | 1.10% |
| Not poor | 2.03% | 0.87% |

Note: see Table 28. Source: LSMS-Tajikistan 2007; author's calculations

Women's Pessimism about their Socio-economic Situation

In evaluating financial access, it is difficult to observe of the barriers. Beyond traditional explanations of gendered financial supply barriers (e.g., discrimination of women, credit unworthiness due to lack of collateral), recent research has observed demand barriers. Many women, it is argued, self-restrict credit demand and do not choose to become active in the financial markets. Reasons may be that women are (overly) discouraged by existing market discrimination or are just less interested in financial activities. In theory and from empirical evidence in other countries, there is no good reason to believe that Tajik women should be less interested in financial products than other women. The design of financial products, however, might not be well suited for them (World Bank 2008).

Evaluation of the current economic and financial situation, as well as the past and expected future dynamics, is discouraging for female-headed households (Table 30). Over one third of female heads of household expressed worries over not having enough to eat (reported for the past four weeks), and more than 60 percent expressed dissatisfaction with the current financial situation. While male heads are not satisfied with their current economic and financial situation either, almost 58 percent of them reported an improvement of the financial situation compared to three years ago. This substantially more positive trend for men directly translates into better future expectations. Overall, the perception of past performance and future expectation of a household's financial development are highly correlated.¹⁶

Table 30: Self-reported financial situation of the household by gender of household head

| | Household has food worries | Unsatisfied with current financial situation | Financial situation | | | |
|-------------|-----------------------------------|---|----------------------------|---------------------|--------------------------|------------------------------|
| | | | Past three years | | Next 12 months | |
| | | | improved | deteriorated | likely to improve | likely to deteriorate |
| Male-head | 26.7% | 55.7% | 57.8% | 10.3% | 61.3% | 5.9% |
| Female-head | 34.9% | 61.9% | 47.2% | 16.5% | 51.4% | 8.9% |

Source: LSMS-Tajikistan 2007; author's calculations

Women perceive their economic situation and prospects with less optimism than men, which partially corresponds to their poorer welfare status. In Figure 3, however, female-

¹⁶ The uncontrolled correlation coefficient is 0.65, significant at the 0.1% level.

headed households are over represented in both low- and high-welfare quintiles. When disaggregating those households with good past financial performance¹⁷ by gender, it turns out that 85 percent of those male-headed households look optimistically into the future versus only 81 percent of female-headed households.

Short Summary of Policy Recommendations

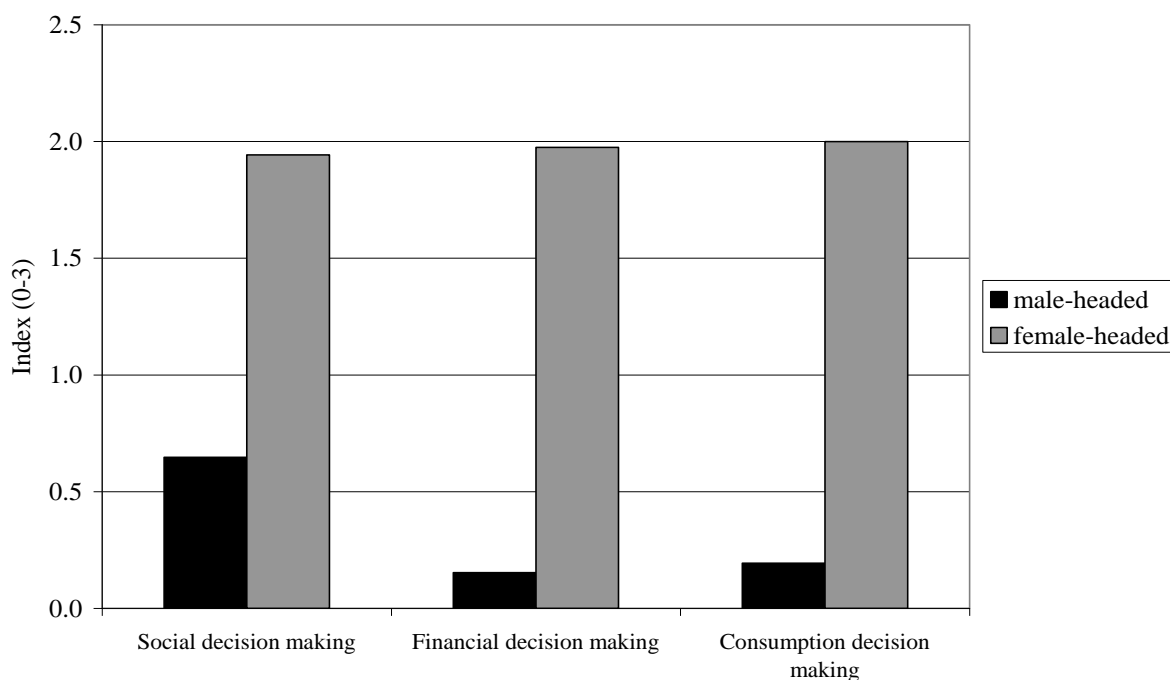
| | |
|-------------------|--|
| Access to land | <ul style="list-style-type: none"> • Introduce effective land-use rights to improve household welfare and women’s access to land • Secure free crop choice and reduce vested interest in the cotton sector • Create incentives to improve productivity through functioning product markets. Incentives for investment will increase the demand for financial services • Promote joint ownership structures for women and provide them with joint finance • Challenge the underlying social norms and customs that prevent women from access to land |
| Access to finance | <ul style="list-style-type: none"> • Use the potential of remittances to substantially improve access to banking • Further strengthen group scheme loans • Do not subsidize cheap credit which spoils market and credit culture • Create competition and attract market entrants to invent new technologies and speed up banking development • Target financial market subsidies at overcoming barriers not at prices of financial services |

¹⁷ Their financial situation improved during the last three years.

Lack of Decision-making Power for Women

Figure 14 shows that women in male-headed households have little role in social, financial, or consumption decision making with social decisions still women's strongest sphere. Naturally, women can decide more in female-headed households. We measure empowerment of women by their rights in intrahousehold decision making and distinguish between social decisions (marriage of son and daughter, children's school attendance), financial decisions (how much to save, whether to sell production, borrow money) and consumption decisions (buy major things, decide what to grow, decide how spend income).

Figure 14: Decision making of women in the household by gender of household head

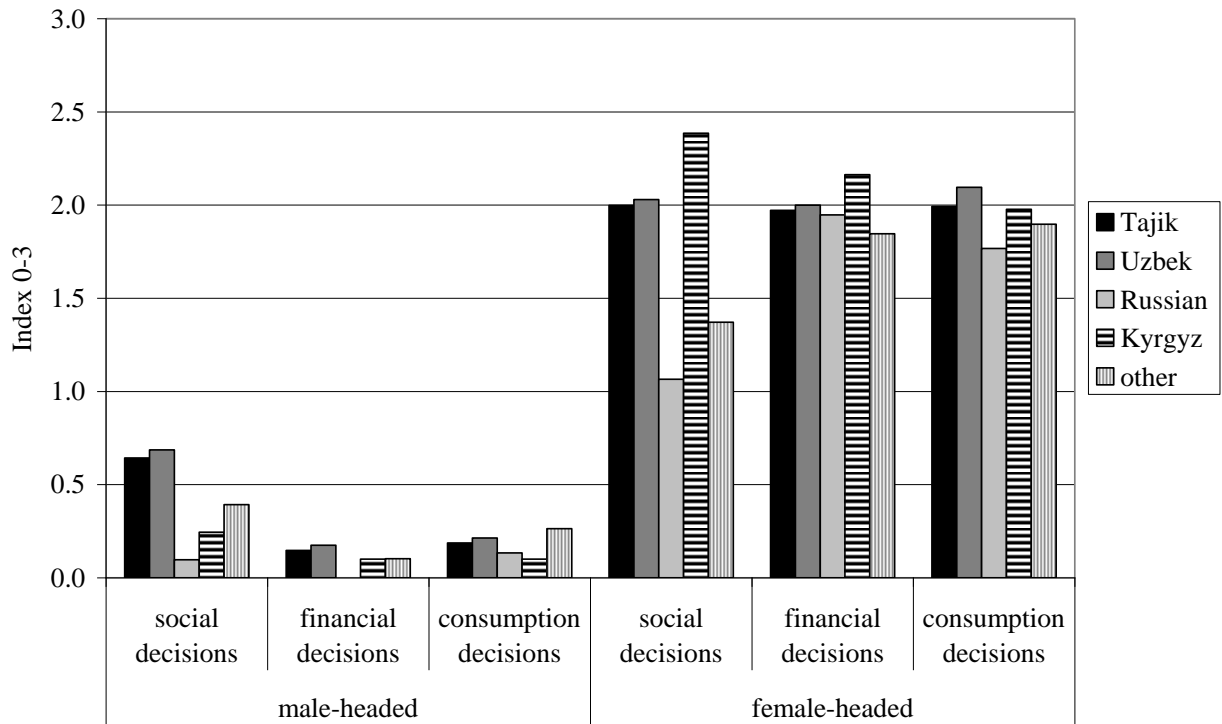


Note: Indices are constructed as average scores. One point in the index means that a women is a major decision maker in any of the following spheres: marriage of son and daughter, children's school attendance for social decision making; how much to save, whether to sell production or borrow money for financial decision making; whether to buy major things, decide what to grow, decide how to spend income for consumption decision making. Source: LSMS-Tajikistan 2007; author's calculations

There are modest differences in female decision-making power across ethnicities (Figure 15). Consistently across all ethnicities, women have little say in male-headed households. In Tajik and Uzbek households, women have some power in the social sphere (index > 0.5). In our sample, women have lower decision-making power in Russian households.¹⁸

¹⁸ As this result might be affected by small sample bias, we refrain from interpretation.

Figure 15: Decision-making power of women in the household by ethnicity



Note: Indices range from zero to three; see Annex. Source: LSMS-Tajikistan 2007; author's calculations

Whether male migration empowers women depends on the composition of the remaining household. To analyze whether migration actually empowers women requires an indicator of overall female decision-making power, which is calculated by merging all nine above-mentioned dimensions of decision making to one index. Table 31 shows that migration of a household member does empower women modestly if the household head remains male (i) or if the household was previously female-headed (ii). Strong improvements in decision making can be expected for women in households where—*ceteris paribus*—the male head emigrates and no other man is assigned as the new household head (iii). As a result, male migration is not enough for the empowerment of women; it matters whether the household head migrates or not and whether another male replaces him as head. In case the son of the household emigrates, a shift along (i) increases the decision making power of women by mere 0.2 percentage points while the premium is 10.9 percentage points if the partner emigrates. The highest decision-making power can be found among women of female-headed households in which a women emigrates (85.5 percent) albeit this is a very rare phenomenon (around 6 percent of migrant households).

Table 31: Decision making power of women in the household (percent of full index)

| | | Male-headed household | Female-headed household |
|-----------------------|-----------------------|-----------------------|-------------------------|
| Non-migrant household | Decision making power | 11.0% | 62.5% |
| | N | (i) 797,974 | (ii) 162,222 |
| Migrant household | Decision making power | 25.3% | 73.2% |
| | N | 102,944 | 54,809 |

Note: The decision-making index ranging from zero (no power for women) to nine (full power for women) is transformed in a percentage scale ranging between 0% and 100%. Alternatively, we performed Principal Component Analysis on the relevant decision making variables and transformed the first principal component in order to scale it to the highest value of Table 31 (73.2%); the remaining values are then (clockwise): 13.9%, 13.3% and 62.8%. The close fit of the Principal Component and the equally weighted Index, can already be derived from the large Eigenvalue of the Principal Component; see Annex.

Source: LSMS-Tajikistan 2007; author's calculations

Women administer land assets only in every second migrant household. Women manage fifty-one percent of land owned by absent migrants. The surprisingly low figure is due to the fact that sons of the current household heads manage 13.6 percent of land. More importantly in most households the son rather than the husband goes abroad; 74.5 percent of migrants are sons of male heads of households while only 10.2 percent are the spouses of female heads of households.

Women's intrahousehold responsibilities cover basic domestic chores but largely exclude power-based tasks. Table 32 illustrates domestic chores like cooking or cleaning that are almost exclusively performed by adult females. Women in less than two-thirds of all households fetch water, a task that involves leaving the house. Generally women have low responsibility in tasks that involve decision making, like how to use money or public negotiation in communal issues. Further, large differences exist between male- and female-headed households in the power-based tasks. Women in male-headed households are virtually excluded from the most important household decisions and from debates in the public sphere thus mirroring the revival of traditional gender roles in Tajik society. As a consequence, women are caught in a vicious circle of low capacities and economic dependence. Since women have to perform virtually all of the time-consuming household chores, their labor supply and thus their potential financial autonomy are seriously limited. In the labor market, for instance, women report discrimination by employers due to their lack of experience and perceived unreliability (Falkingham 2000). The absence of women from public decision making severely hinders self-organization and cooperation. To break this vicious circle, policy interventions are necessary (see Section 10).

Table 32: Women's responsibility in the household

| | Fetch water | Cooking | Cleaning | Money | Negotiate communal issues |
|-------------|-------------|---------|----------|-------|---------------------------|
| Male-head | 64.1% | 90.0% | 85.0% | 21.5% | 11.4% |
| Female-head | 62.3% | 86.8% | 83.6% | 64.5% | 53.9% |

Source: LSMS-Tajikistan 2007; author's calculations

Substantial Heterogeneity across Tajikistan

Tajikistan is a highly heterogeneous country in terms of geography and political administration. The country does have a multi-ethnic legacy, stemming from nomadic practices, Soviet-boundary drawing and war history.

Ethnic Differences Partly Explain Use of Land and Finance

The states of Central Asia are—due in large measure to the artificial boundary drawing of the early Soviet Union—multi-ethnic in nature. Since many minorities left the country after independence, three major ethnic minority groups remained beside the titular ethnicity in Tajikistan: Uzbeks, Kyrgyz and Russians. As seen in Table 33, ethnic minorities concentrate in specific *oblasts* of the country with Uzbeks being the most numerous.

Table 33: Ethnic composition of regions (*oblasts*)

| | Tajik | Uzbek | Kyrgyz | Russian | Other |
|----------|--------------|--------------|---------------|----------------|--------------|
| Dushanbe | 86.4% | 6.8% | 0.1% | 2.3% | 4.5% |
| Sogd | 64.7% | 30.6% | 0.0% | 0.2% | 4.5% |
| Khatlon | 74.6% | 22.7% | 0.1% | 0.1% | 2.4% |
| RRP | 78.2% | 16.4% | 0.4% | 0.1% | 4.9% |
| GBAO | 86.7% | 0.0% | 5.3% | 0.0% | 8.0% |

Source: LSMS-Tajikistan 2007; author's calculations

Ethnic groups have different intensities of land and loan use, and gender relations vary substantially within the different ethnicities. Concerning land ownership, 79.1 percent of Uzbek households own land, while only 4.3 percent of Russian households own at least one plot. The huge difference can partly be explained by settlement patterns: while the Uzbek population predominantly resides in the arable rural areas of Sogd and Khatlon (along the south-western border of Tajikistan), the largest part of the Russian population lives in urban Sogd and Dushanbe.

Ethnic differences create land use variation among sexes (Table 34). The gender gap of land ownership is 18.3 percent for Tajiks, 15.5 percent for Uzbeks, –5.6 percent for Russians and –16.7 percent for Kyrgyz. Taking into account only rural households, the gap disappears for Uzbeks, narrows to one third for Tajiks, but strongly increases for Kyrgyz and Russian households. Overall, differences in land use intensities of female-headed households across ethnicities are much smaller as compared to their male-headed counterparts.

Table 34: Land use by ethnicity of household head

| | Tajik | Uzbek | Kyrgyz | Russian |
|---------------------|--------------|--------------|---------------|----------------|
| Male-head | 67.8% | 82.0% | 25.6% | 0.0% |
| Female-head | 52.2% | 69.9% | 42.3% | 5.6% |
| Male-head – rural | 87.5% | 89.9% | 26.1% | 0.0% |
| Female-head – rural | 81.1% | 89.5% | 53.1% | 40.1% |

Source: LSMS-Tajikistan 2007; author's calculations

Different cultures of financial service usage exist among ethnic groups, which might be partially explained by regional settlement and infrastructure patterns. Table 35 sheds some light on ethnic differences in the use of financial services of male- and female-headed households. Savings bank accounts are used relatively often by Russian male-headed households, but not in all other groups. Loans are more common among Kyrgyz, while Russians do not use them at all. Tajik male-headed households use loans more often than female-headed households while the opposite holds for Uzbek households. Potential explanations these patterns include the following: 1) ethnicities could have different average welfare levels, 2) dissimilar access to service providers according to settlement structures, and 3) cultural differences might prevail.

Table 35: Use of financial services by ethnicity of household head

| | | Tajik | Uzbek | Russian | Kyrgyz |
|-------------|--------------|--------------|--------------|----------------|---------------|
| Male-head | Remittances | 10.09% | 8.66% | 0.00% | 4.27% |
| | Bank account | 0.21% | 0.09% | 7.78% | 0.00% |
| | Loan | 3.42% | 1.61% | 0.00% | 17.34% |
| Female-head | Remittances | 23.94% | 28.13% | 3.05% | 0.00% |
| | Bank account | 0.04% | 0.85% | 0.00% | 0.00% |
| | Loan | 2.45% | 2.26% | 0.00% | 12.42% |

Source: LSMS-Tajikistan 2007; author's calculations

Urban versus rural regional settlement structures determine the type and supply of financial services, such as microfinance institutions, banks, and informal loan schemes. Banks and microfinance institutions serve urban areas relatively well, while specialized microfinance institutions and informal loan schemes predominate in rural areas (e.g., Village Development Funds in GBAO, revolving fund schemes of *jamoat* Development Committees in RRP, and development projects like Counterpart). To discriminate among regional effects, we run multivariate probit regressions.¹⁹ Even after controlling for several household characteristics, settlement region, and poverty status, Russian and Kyrgyz households are roughly ten percent less likely to receive remittances, as compared to Tajik and Uzbek households. The propensity to have a savings bank account is significantly reduced by being poor, while only being a Russian male-headed household has a positive impact. Loans are most prevalent in the GBAO region with all other regions significantly lagging behind. Being poor or being of Uzbek ethnicity significantly reduces the use of loans compared to Tajik households, while Kyrgyz households are five percent more likely to have a loan.

¹⁹ We do not report the results here as the low incidence of financial services makes the estimation rather imprecise. The reported results should be considered only indicative.

Strong Geographic Differences in Access to Land and Finance

In several poverty assessments in Tajikistan, the World Bank (2000, 2004) found widely differing poverty rates across regions (*oblasts*). On the national level between 1999 and 2003 there was a general decline in extreme poverty (PPP US\$ 1.08 per day) from 36 percent to 18 percent. However, in the two poorest regions of the country, extreme poverty fell from 69 percent to 36 percent in GBAO and from 50 percent to 27 percent in Khatlon—still much higher than the national average.

In 2007 poverty—measured by the basic needs approach—was high throughout the country with particularly high poverty rates in Sogd and RRP.²⁰ Table 36 shows that poverty is a rural phenomenon in Sogd and GBAO but more prevalent in urban areas in Khatlon and RRP. While in the past GBAO performed as extremely poor under the US\$ 2.15 framework, it is now the *oblast* with the lowest level of poverty. In general, varying incidences of poverty translate into regional differences in migration propensities. While migration is most prevalent in GBAO, with 22 percent of rural households and 24 percent of urban households having a migrant, emigration rates are much lower elsewhere: rural Sogd, 8.6 percent; Khatlon, 4.4 percent; and RRP, 13.7 percent. Apparently, the high incidence of migration in urban GBAO and the generally small population (only 0.4 percent of all Tajikistan) have contributed to GBAO's low poverty rate.

Table 36: Poverty headcount index

| | 2007 | |
|-----------------------|-------|-------|
| | Urban | Rural |
| Dushanbe | 43% | |
| Sogd | 54% | 74% |
| <i>Oblast</i> Khatlon | 52% | 46% |
| RRP | 57% | 46% |
| GBAO | 19% | 46% |

Source: LSMS-Tajikistan 2007; author's calculations

Strong regional differences prevail in the use of financial services among female-headed households (Table 37). While loans are especially popular in GBAO (where several microcredit institutions are operative), they are rarely used in Sogd and Khatlon. While almost every third female-headed household in GBAO receives remittances, only every eighth does so in Dushanbe.

²⁰ In 2007, poverty was measured in the basic needs framework rather than at US\$ 2.15 per day. This approach accounts more precisely for specific needs of the people but prevents from comparing current poverty rates with the past.

Table 37: Financial products among female-headed households by *oblast*

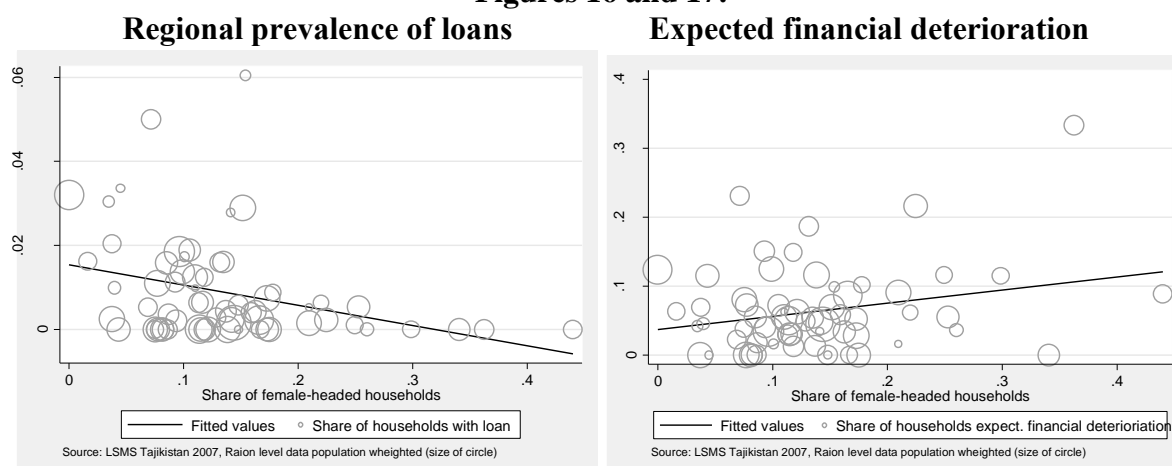
| | Loan | Bank account | Remittances |
|----------|-------------|---------------------|--------------------|
| Dushanbe | 2.85% | 0.00% | 12.55% |
| Sogd | 1.30% | 0.44% | 28.92% |
| Khatlon | 1.85% | 0.00% | 21.41% |
| RRP | 3.85% | 0.00% | 23.14% |
| GBAO | 5.56% | 0.82% | 31.60% |

Source: LSMS-Tajikistan 2007; author's calculations

As several poverty assessments in Tajikistan have revealed, conducting analysis at the lowest administrative level in Tajikistan (*rayon*) can bring new insights on poverty pockets (e.g., Ivaschenko and Mete 2008).

High shares of female-headed households correlate negatively with the share of households with loans and correlate positively with the general expectation of financial deterioration (Figures 16 and 17). These results support the comparatively weak financial situation of women at the household level. The lower share of loans in regions with high shares of female-headed households may also reflect specific banking infrastructure shortages.

Figures 16 and 17:



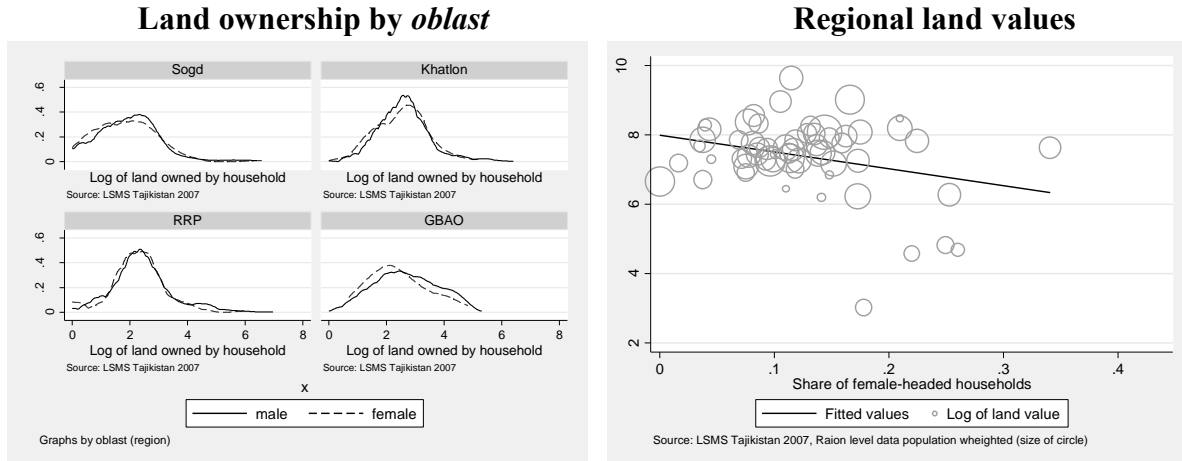
Note: The vertical axis in Figure 16 reports share of households with loans; in Figure 17 it reports share of households expecting financial deterioration in the next two years. The horizontal axes report regional share of female-headed households. Regions weighted by population size.

Source: LSMS-Tajikistan 2007; author's calculations

Land ownership generally differs among *oblasts*, and gender differences are subject to regional variation (Figure 18). In Khatlon and GBAO, female-headed households are worse off, but they are relatively equally endowed in Sogd and RRP.

Rayon-level land values are depressed when the share of female-headed households rises (Figure 19). This can be the result of women's weaker market position (i.e., lower power to demand higher prices) or might reflect the fact that women become heads of households more often in regions where land is less valuable. One possible explanation is that men tend to migrate when land yields are lower (land value is expected to be positively correlated with yields).

Figures 18 and 19:

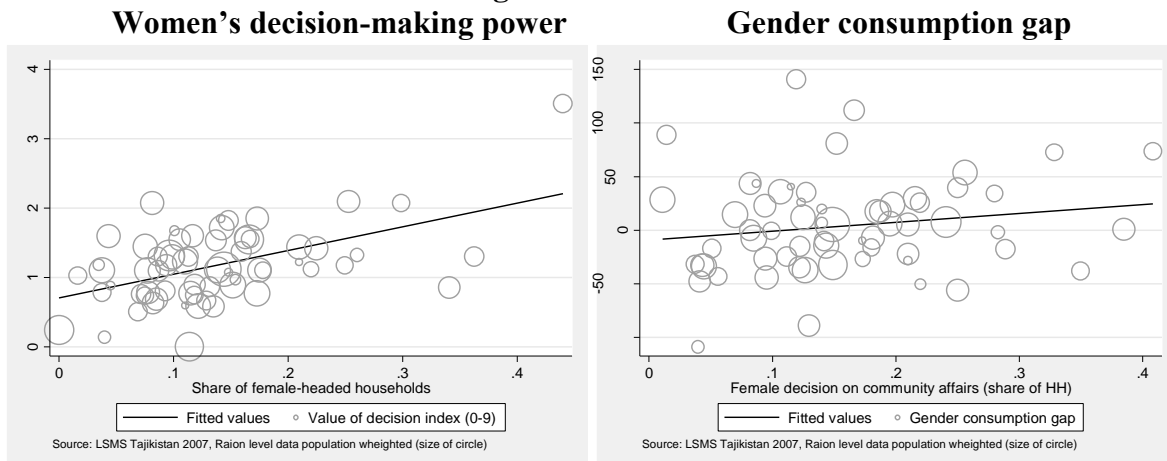


Note: Figure 18 shows land distribution between men (straight line) and women (dotted line) by *oblasts*; the vertical axis in Figure 19 reports average regional log of land value. The horizontal axes report regional share of female-headed households. Regions weighted by population size. Source: LSMS-Tajikistan 2007; author’s calculations

General decision-making power of women in a region increases with the share of female-headed households (Figure 20).

There is a slight positive relationship between the gender consumption gap and the share of households in which women have decision power in public community affairs (Figure 21). This interesting result points to the fact that empowered women better serve the general relative welfare position of female-headed households. While a negative consumption gap exists (i.e., male-headed households have higher per capita consumption than female-headed households) in regions where less than 15 percent of households have women as decision makers in communal (public) affairs, female-headed households are better off the more women participate.

Figures 20 and 21:

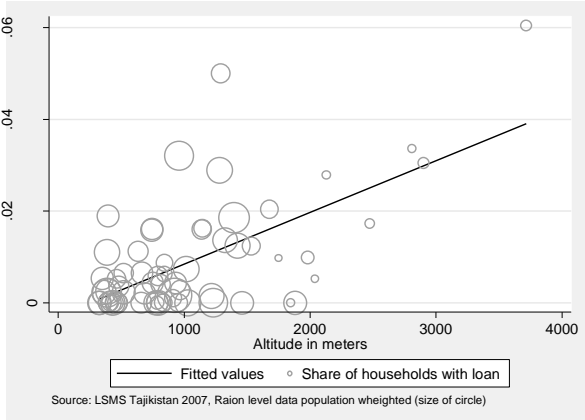


Note: The vertical axis in Figure 20 reports average regional value of decision index, the horizontal axis reports regional share of female-headed households; in Figure 21 the vertical axis reports the gender consumption gap (avg. consumption in male households minus avg. consumption in female-headed households), the horizontal axis reports the share of households where women have decision making power on communal issues. Regions weighted by population size. Source: LSMS-Tajikistan 2007; author’s calculations

Tajikistan’s geography causes very specific natural risks for economic activities. The relief of Tajikistan is extremely mountainous with only seven percent of total land being

easily accessible and usable for lowland agriculture. More than 20 percent of the population lives on altitudes of 2,000 meters and above; five percent settle above 3,000 meters. The altitude of settlement has two important implications. First, higher areas are more remote, more difficult to reach, and less well equipped with basic infrastructure. They are highly exposed to local natural disasters, like landslides, that threaten life, assets, and accessibility. Those factors contribute to higher production costs as irrigation becomes costly and anti-erosion measures necessary. Second, the agricultural season becomes substantially shorter; the risk of crop losses increases due to regular frost damage. At the same time, the local economy is virtually undiversified with almost all households engaging in agricultural production. Given these adverse conditions for economic activity, it is interesting to analyze access to land and credit by altitude.

Figure 22: Altitude and loans



Note: The vertical axis in Figure 22 reports the regional share of households with loans; the horizontal axis reports average altitude of region. Regions weighted by population size. Source: LSMS-Tajikistan 2007; author’s calculations

There is a positive relationship between the altitude of the settlement and the share of households with loans (Figure 22).²¹ At first glance, this seems surprising as transaction costs are expected to increase with altitude. It is not clear whether this reflects government or aid agency programs to improve livelihoods in remote areas. Investigating the settlement patterns of different ethnicities yields a surprising correlation: while most ethnicities live on average well below 1000m altitude, Kyrgyz households settle on average 2900m above sea level thus forming the majority of settlements at high altitude. Table 26 showed the Kyrgyz propensity for loans, thus offering an explanation for this surprising result.

²¹ However, it should be noted that the dispersion around the prediction line increases with altitude.

Deficient Infrastructure as Obstacle to Empowerment of Women

Despite Tajikistan’s wealth in natural resources, deficient infrastructure often deprives the population of basic necessities, like water. Only 43.8 percent of households receive their water from urban or rural plumbing. This infrastructure, however, may be more unreliable than wells and natural sources: 48.2 percent of households with plumbing claim that their water supply was interrupted for at least one full day during the last two weeks, while only 27.1 percent of households with other sources of water faced this problem.

Of those households with no water plumbing, an adult woman bears the burden of fetching water in 72.7 percent of cases (Table 38). In an additional 8.2 percent of households, a female child below 15 years has the burden of water fetching. These numbers confirm that women are seen as “naturally” responsible for chores and duties in the house. Roles are already ingrained at a young age: in only 3.5 percent of households, a boy is responsible for water supply in times of leaking infrastructure.

Males are more likely to fetch water when travel to the source is time consuming. Fetching water can be demanding due to mountainous terrain. Some households report a 90-minute round-trip walk to the water source. There are gender differences revealed in time use for fetching water: the average time needed for fetching water by women and girls is between 13 and 14 minutes and for men and boys 20 and 23 minutes respectively.

Table 38: Who spends most time fetching water?

| | |
|------------------------|-------|
| Woman | 72.7% |
| Man | 10.0% |
| Female child (<15 yrs) | 8.2% |
| Male child (<15 yrs) | 3.5% |
| Shared burden | 3.9% |
| Pay somebody | 1.1% |
| Other | 0.5% |

Source: LSMS-Tajikistan 2007; author’s calculations

Welfare Implications of Access to Land and Finance

While household welfare levels are strongly determined by the household head and by household and regional characteristics, female-headedness per se does not have any significant negative impact: apparently women heads manage to perform despite their disadvantaged endowment position (Table 39). Education is one major determinant of wellbeing: a household head holding a university degree gains about 19 percent in welfare compared to a head holding secondary education and gains 27 percent compared to lower education. To test whether welfare correlates may differ between the two sexes, the study ran welfare regressions for female- and male-headed households separately. Results are similar and do not indicate any robust structural difference (results therefore not shown).

Financial services, except loans, correlate with a higher welfare position of the household. Financial products associate positively with household welfare by varying degrees: savings bank account plus 38 percent, insurance plus 12 percent, remittance receipt

plus 8 percent. The problem with financial service variables lies in the potential reverse causality. Do financial services improve welfare or are better-off households just more likely to have access to those services? The high stability of all coefficients as compared to the baseline specification suggests that access to and use of financial services has the potential to improve household welfare.

Making use of technical inputs in agricultural production also improves household welfare, while cotton production reduces welfare by more than ten percent. Use of fertilizer and technical assets improve welfare, but women face constrained in using both. Ivaschenko and Mete (2008) described the latter result.

Educational expenditures per capita are significantly higher (by more than ten percent) among female-headed households compared to male-headed households (Table 40). This finding confirms existing international evidence that women's expenditures are pro-poor since the returns to education are substantial in Tajikistan (see Table 39). Educational investments promise future returns and help to reduce poverty in the long run. It is also of interest to note that educational expenditures are not particularly high in households with children but are higher in adult single-generation households. Thus, adult education appears to play an important role. From a policy perspective, adult education should be fostered without gender discrimination.

The availability of financial products associates positively with educational expenditures: educational loans, however, seem to play no distinctive role.²² In general, remittances do not promote educational expenditures, but remittances have a strong positive impact of a 29 percent increase in spending if they are sent to a female-headed household. Female-headed households without migrants still have 9.3 percent higher educational expenditures on average than male-headed households.

Agricultural assets, like land, also increase educational expenditures while the use of inputs (e.g., fuel) has a negative impact. The negative correlation between educational investments and spending on fuel can either mirror a substitution effect or indicate child labor in the agricultural sector.

²² Business loans could eventually cover educational expenditures.

Table 39: Determinants of welfare (log of consumption)

| | (1) OLS model (baseline) | (2) OLS model (extended I) | (3) OLS model (extended II) |
|-------------------------------------|--------------------------------------|----------------------------------|-----------------------------------|
| Female-headed household | 0.015 (0.74) | 0.017 (0.81) | 0.008 (0.32) |
| Lower education | -0.073 (3.62)*** | -0.068 (3.37)*** | -0.087 (4.22)*** |
| University | 0.192 (10.02)*** | 0.185 (9.69)*** | 0.131 (5.64)*** |
| Uzbek | -0.039 (2.19)** | -0.035 (1.96)* | -0.025 (1.27) |
| Share of working age women | 0.080 (1.42) | 0.088 (1.55) | 0.006 (0.10) |
| Kids | -0.194 (8.36)*** | -0.192 (8.32)*** | -0.155 (5.97)*** |
| Multi-generation household | -0.104 (5.40)*** | -0.106 (5.53)*** | -0.088 (4.31)*** |
| Pension single-generation household | 0.210 (3.55)*** | 0.222 (3.76)*** | 0.285 (3.31)*** |
| Adult single-generation household | 0.556 (9.57)*** | 0.559 (9.66)*** | 0.519 (6.13)*** |
| Migrant household | 0.067 (3.40)*** | | 0.053 (2.45)** |
| Altitude in '000 meters | -0.028 (1.46) | -0.023 (1.22) | -0.033 (1.66)* |
| Dushanbe | 0.097 (3.02)*** | 0.114 (3.50)*** | 0.188 (1.85)* |
| Khatlon | 0.206 (9.68)*** | 0.205 (9.66)*** | 0.249 (10.99)*** |
| RRP | 0.207 (8.35)*** | 0.211 (8.55)*** | 0.293 (10.91)*** |
| GBAO | 0.216 (5.54)*** | 0.232 (5.91)*** | 0.253 (5.93)*** |
| Rural | -0.096 (4.26)*** | -0.100 (4.47)*** | -0.007 (0.25) |
| Finance | Loan | 0.017 (0.44) | |
| | Bank account | | 0.383 (2.10)** |
| | Insurance | | 0.118 (6.46)*** |
| | Remittances received | | 0.081 (3.89)*** |
| Land use | Use of nitro fertilizer | | 0.038 (1.99)** |
| | # of agricultural assets owned by HH | | 0.050 (2.51)** |
| | Cotton | | -0.105 (1.94)* |
| Constant | 5.090 (96.13)*** | 5.057 (95.12)*** | 4.868 (79.18)*** |
| Observations | 4860 | 4860 | 3186 |
| R-squared | 0.17 | 0.18 | 0.14 |

Note: Omitted categories: Secondary education, dual-generation household, Sogd and urban. All regressions controlled for ethnic groups (Kyrgyz and Russian insignificant) and age (insignificant). In model (II) we also controlled for land size, livestock, input constraints, use of seeds and fuel demand (all insignificant). Robust t statistics in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%; Source: LSMS-Tajikistan 2007; author's calculations

Table 40: Determinants of per capita education expenditures (log)

| | (1) OLS model (baseline) | (2) OLS model (extended) | (3) OLS model (extended) | (4) OLS model (extended) |
|-------------------------------------|--------------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Female-headed household | 0.135 (2.70)*** | 0.137 (2.73)*** | 0.123 (1.86)* | 0.093 (1.72)* |
| Age of head | 0.003 (1.59) | 0.003 (1.61) | 0.005 (2.54)** | 0.003 (1.86)* |
| Lower education | -0.299 (5.83)*** | -0.290 (5.65)*** | -0.331 (5.74)*** | -0.300 (5.85)*** |
| University | 0.373 (7.50)*** | 0.359 (7.22)*** | 0.328 (4.88)*** | 0.372 (7.47)*** |
| Russian | 0.804 (3.77)*** | 0.778 (3.59)*** | 1.610 (9.87)*** | 0.812 (3.83)*** |
| Share of working age women | 0.068 (0.43) | 0.079 (0.51) | -0.199 (1.09) | 0.084 (0.53) |
| Kids | -0.263 (4.16)*** | -0.263 (4.15)*** | -0.165 (2.14)** | -0.267 (4.21)*** |
| Multi-generation household | -0.293 (5.97)*** | -0.293 (5.99)*** | -0.346 (6.27)*** | -0.284 (5.75)*** |
| Pension single-generation household | 0.380 (0.68) | 0.426 (0.77) | -0.188 (1.39) | 0.377 (0.66) |
| Adult single-generation household | 1.291 (2.95)*** | 1.282 (2.94)*** | 0.503 (0.97) | 1.288 (2.92)*** |
| Migrant household | -0.012 (0.24) | -0.093 (0.66) | -0.043 (0.75) | -0.059 (1.12) |
| Altitude in '000 meters | -0.046 (0.97) | -0.045 (0.94) | -0.119 (2.22)** | -0.052 (1.10) |
| Khatlon | -0.208 (3.74)*** | -0.212 (3.81)*** | -0.164 (2.62)*** | -0.203 (3.66)*** |
| RRP | 0.084 (1.32) | 0.083 (1.31) | 0.143 (1.97)** | 0.092 (1.46) |
| Rural | -0.405 (7.66)*** | -0.409 (7.76)*** | -0.317 (3.86)*** | -0.407 (7.69)*** |
| Finance | Loan | | 0.154 (1.59) | |
| | Bank account | | 0.703 (2.23)** | |
| | Insurance | | 0.164 (3.30)*** | |
| | Remittances received | | 0.103 (0.70) | |
| Land use | Land size | | 0.001 (3.22)*** | |
| | Fuel | | -0.155 (2.52)** | |
| | # of agricultural assets owned by HH | | 0.166 (3.08)*** | |
| | Female-headed household*migrant | | | 0.289 (2.11)** |
| Constant | 2.011 (15.60)*** | 1.964 (15.19)*** | 1.877 (11.57)*** | 1.981 (15.32)*** |
| Observations | 3636 | 3636 | 2466 | 3636 |
| R-squared | 0.15 | 0.16 | 0.10 | 0.15 |

Note: Omitted categories: Secondary education, dual-generation household, Sogd and urban. All regressions controlled for ethnic groups and regions (Kyrgyz, Uzbek, Dushanbe and GBAO insignificant). In model (II) we also controlled for livestock, input constraints, cotton, use of seeds and nitro fertilizer (all insignificant); Robust t statistics in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%;

Source: LSMS-Tajikistan 2007; author's calculations

Box 7: Consequence of the financial crisis: Poverty impact of reduced remittance receipts

The global financial crisis beginning in late 2008 was detrimental to Russia and Kazakhstan, the most important destination countries for labor migrants from Tajikistan. The ensuing large-scale decrease in financial assets shook many economic sectors, and second-order economic effects lowered firms' demand for labor. Therefore, many laborers faced layoffs, reduced working hours, or falling wages all more easily imposed on migrant workers. Reduced earnings abroad translate directly into lower remittances upon which many households are highly dependent. To analyze the gender-specific impact of reduced remittance receipt on household poverty, we simulated two scenarios, in which all remittance receiving households suffer from reduced money transfers. We assume, therefore, that the volume of total remittances is "taxed" by a fixed 20 percent or 50 percent rate, respectively. All other income sources, as well as the household composition, remain unchanged, i.e., migrant workers do not immediately return to Tajikistan where they would increase the consumption requirements of the household but stay abroad.

As evident from Table 41, rural households are generally poorer than urban households and female-headed households in rural areas suffer from even higher poverty rates than their male-headed counterparts. In the first simulation (remittances minus 20 percent) female-headed households suffer more strongly from the shortfall of remittances in both urban and rural areas, although the differences in increased poverty are still comparatively modest. The second simulation (remittances minus 50 percent) shows clearly the strong dependence of female-headed households on remittances: while the poverty headcount ratio for male-headed households increases between 3.3 and 6.7 percentage points, it rises by 8.8 to 9.1 percentage points for female-headed households. Similarly, the depth of poverty as measured by the average distance to the poverty line (poverty gap) increases substantially stronger for female-headed households than for their male-headed counterparts.

Table 41: Simulated poverty impact from the international financial crisis

| | Urban | | Rural | | Total |
|--------------------------------|-----------|-------------|-----------|-------------|-----------|
| | Male-head | Female-head | Male-head | Female-head | |
| Poverty headcount ratio | | | | | |
| Number of persons | 1,445,077 | 412,623 | 4,481,164 | 724,936 | 7,063,800 |
| Actual ratio | 49.3% | 49.0% | 53.1% | 63.0% | 53.1% |
| Simulation Remittances -20% | 51.1% | 52.7% | 57.1% | 68.0% | 56.7% |
| Simulation Remittances -50% | 52.6% | 57.8% | 59.8% | 72.1% | 59.5% |
| Poverty gap | | | | | |
| Number of persons | 1,445,077 | 412,623 | 4,481,164 | 724,936 | 7,063,800 |
| Actual gap | 14.8% | 17.6% | 14.3% | 18.6% | 15.0% |
| Simulation Remittances -20% | 16.6% | 20.4% | 17.0% | 25.5% | 18.0% |
| Simulation Remittances -50% | 19.2% | 25.4% | 21.2% | 34.7% | 22.4% |

Note: The poverty measures were calculated on the household level but weighted to represent values for the entire population. Source: LSMS-Tajikistan 2007; author's calculations

Results indicate that female-headed households are currently more dependent on external income generation and thus especially vulnerable to poverty. Given their relatively poor labor market prospects, the crisis impacts female-headed households more negatively than male.

Policy Recommendations

Three areas of action emerge from the results of this study. While fostering women's access to agricultural production is considered a policy for improving basic welfare levels, access to finance is an important ingredient for productivity and farm growth (i.e., professionalization and potentially commercialization). Financial access also opens up opportunities to diversify income generation beyond farming activities. Complementary initiatives for women's empowerment support their access to productive assets and entrepreneurial standing in society, simultaneously lifting women's self-constraints in demand for finance.

Area of Action: Gender Equality in Agriculture

- The aim is to promote food security through women's better access to land, their secure land use rights, productivity improvements, and freedom of agricultural production. The government of Tajikistan has taken steps to update the current land use legislation and its Land Use Strategy, both of which are outdated and insufficiently formulated to promote gender equality. Consultations benefit from the input of FAO and various international organizations and development agencies. These efforts will help to close the gap between the formulated gender policy and its actual implementation. Legal amendments alone, however, are unlikely to improve women's access to agricultural resources sustainably. Therefore, the strategic adjustments mentioned in the Draft of the Land Use Strategy (Draft Land Strategy 2008) are highly endorsed, which attempt to promote gender capacity building, to improve the statistical basis for analysis, or to better coordinate gender topics across administrative units.
- The challenge is to improve women's land ownership, to free particularly dependent women from vested interests in the cotton sector, and to raise productivity.

Area of Action: Promoting Access to Finance

- The aim is to widen access to financial products and to develop a financial sector, which provides financial solutions for the business interests and potential of women. The classic banking sector is dedicated to medium- and large-scale enterprises in urban areas and lacks the outreach to provide financial services for the rural population. Nonbank financial institutions (e.g. microfinance institutions) and informal lending schemes have developed in rural areas and provide small loans for rural businesses and farms. Generally, the coverage of these services should be extended, as many of them have limited regional coverage or are in the pilot phases of programs by development agencies. Beside supply-side improvements, policy interventions are desirable that improve the knowledge base of the rural population in general and of women in particular.
- The challenge is to support the development of a product range that serves women—with a special focus on joint liability schemes and microcredit. On the demand side, it is crucial to reduce women's self-constraints.

Area of Action: Empowerment of Women

- The aim is to foster women's empowerment in the public and private sphere. This includes improving women's welfare and economic independence, as well as granting access to productive resources like education, land, and credit. In the political sphere empowerment includes the acknowledgment of discriminatory structures, women's

political participation, and fair share in control. On the political level, gender discrimination and equal opportunity are addressed in the “National Plan on Improving Women’s Position in the Society” (1998) and a state program on “Basic Directions of the State Policy on Providing Equal Rights and Opportunities for Women and Men in the Republic of Tajikistan from 2001-2011” (2001). Direct policy interventions have in recent years improved the situation of women in some respects, e.g., through the introduction of a gender quota system for local governments by presidential decree in 2003 (UNDP 2005). However, it is evident that laws and decrees alone will not sufficiently change women’s situations as long as soft barriers, like stereotypes and prejudices, prevent women’s economic activities and empowerment. Although the articulation of women’s rights has improved substantially through 152 women’s NGOs (2003), many of which are involved in public awareness campaigns (UNDP 2005: 78), many women do not know their rights and do not exercise a demand for power.

- The challenge is to encourage trust in women’s abilities and to show women’s exercise of social responsibility in decision making. The main obstacles limiting women’s rights and independence are customary habits predominant in the private sphere. Changing attitudes takes time but is crucial for the sustainability of public policy interventions.

Proposed Strategies for Different Actors

Government of Tajikistan

The Government of Tajikistan acknowledges the comparatively difficult economic situation of women, stemming from disadvantages in access to productive resources, low cultural demand for economic independence of women, and lack of awareness of women’s legal rights. Although in Tajikistan the legal framework of access to land and finance is formulated in a non-discriminatory way, the application of customary law and habits especially in rural areas counteracts its implementation. As suggested in the quantitative analysis, control over land is highly unequal in Tajikistan despite the legal formulation of gender equality. Still, the Government of Tajikistan has several spheres for intervention to promote a more gender-equal environment throughout the country.

Undertake legal adaptations.

Although legal norms do not promote or allow discrimination by gender in Tajikistan, the legal instruments to prevent discrimination effectively may not be elaborated sufficiently. As a commitment towards a strict gender-equality campaign, the government could further reform legal acts, effectively preventing customary habits that counteract state policy. In the past, the government has done so to prevent the spread of Islamic marriage rites that affect wealth distribution among spouses after separation.

Some aspects of land use rights are not sufficiently regulated in the Land Code and the government is attempting to address these legal gaps. One critical aspect relates to the legal provision and enforceability of production freedom. A key to enforceability is a sophisticated dispute settlement design. Supplementary to the legal court system, the geographic outreach

of the system of Third Party Arbitration Courts should be extended. The entire population has to be informed about legal rights and procedures with respect to land access and use.

Implement farm restructuring processes.

The government regulates the process for farm restructuring, but reform progress is slow. Clear processes and procedures for farm restructuring should be defined, including the question of how to promote women in the process. Mechanisms that ensure gender equality in the process should be considered.

Follow best practice in policy conduct:

The government can promote gender equality through best practice. As employer and executive authority, the state is uniquely qualified for this role. Effective gender-neutral hiring practices across the entire administration hierarchy will lead to better average earning opportunities for women who currently dominate lower pay sectors. Gender-neutral staffing policy will reduce the severe waste of education and talent among women and increase returns to women's education. Better opportunities might lead to higher female school attendance rates and a balance of value placed on the education of sons and daughters. As such, staffing policy can be used as an incentive for educational attainments. Gender-neutrality alone will not lead to equality, as women disadvantages extend to education and labor market experience. Consequently the state can use affirmative staffing policies to advance the female workforce.

Future state land distribution should be gender-neutral. It should support the improvement of women's awareness of their rights and the importance of land titles as a source of security and collateral. The issue of land privatization has been debated ever since the transition from the former Soviet Union. While promoters of privatization point to potential positive incentives for productivity enhancing investments in agriculture, opponents fear that land may be reallocated into the hands of few, leading to higher levels of inequality and more working poor (examples in Latin American societies cited). Leasing contracts from the state, however, can substitute for private ownership, as they are reliable collateral and may induce incentives for productivity enhancements similarly.

Gender budgeting within administrative units is another area for empowerment. These strategies use the budget planning process (hearings with gender groups and NGOs), a sector allocation of spending (introducing budgets for gender-promoting projects, for instance, in education and health), and a gendered impact analysis of specific resources. Gender budgeting has been implemented successfully in many countries of the world, particularly in India (Budlender and Hewitt 2003).

A national tax system not only generates revenues but also provides incentives for action: lower tax rates can support desired policy outcomes. Lower tax rates for land owned jointly by husband and spouse, as well as tax benefits for joint loans can potentially improve the legal access of women to productive resources. Tax-reduced joint home loans in India, for instance, are successful in promoting house co-ownership. Ownership requiring

both partners to have separate sources of income creates barriers, particularly in rural Tajikistan where women are expected to care for the family rather than work outside home. Substantial tax incentives applied over time may contribute to growing opportunities and a higher share of women being allowed to enter the labor market.

Produce and monitor gender-related indicators.

Gender equality may not evolve naturally, even when legal norms against discrimination exist. To analyze whether affirmative strategies can be pursued and enforced successfully requires a range of reliable gender-related indicators to the regional level. On the basis of this report, the importance of indicators covering gender-disaggregated access to land, inheritance practices, and land usage, as well as access to different forms of finance (which is generally low among rural households) is stressed. Furthermore, gender-sensitive indicators for analysis of employment and spending in the public sector should be collected and monitored centrally. Gendered policy targets should be formulated for the state sector and monitored regularly.

Create a cross-cutting government gender unit.

Concentrate demand analysis, formulation, and monitoring of gendered policies in a central government agency. Currently gender policies are formulated and performed by separated units, weakening the overall perception and efficacy of national gender policies. A central agency should take the lead on the National Strategy for the Activation of Women in Tajikistan.

Expedite gender education and training.

People internalize social roles and norms at relatively young age. If the government wants to reduce prejudices about women's abilities, gender education is a method for children at schooling age. Any successful strategy requires well-trained staff and well-informed parents. Complementary information programs may help to generate openness to change in society. Gender-equality training for teachers and for public administration staff in land and water management, courts, and financial institutions might slowly contribute to a societal change in the perception of women's roles.

Non-governmental organizations

Promote the financial sector and broaden the range of financial products.

Non-governmental organizations and development agencies can promote the development of the nonbanking financial sector, as well as informal community schemes in Tajikistan. Broadening the service coverage of these projects seems desirable, as interventions so far remain regionally limited and financial products usage is still extremely low. Most of these financial products try to overcome the accessibility problems of rural farmers. Although these practices should be further developed, an extension of financial products into off-farm

businesses and education projects is desirable to assist in diversifying rural opportunities. For example, joint partner loans could be combined with joint education savings schemes for children.

Advance empowerment through voice, information, and training.

In Tajikistan, women's demand for access to land, finance, independent livelihood, and some civil rights is restricted by customs. Policy interventions can only work if discriminatory cultural habits are removed step by step. The civil society itself plays a crucial role in the transformation of the society. Therefore, nongovernmental organizations are important agents in claiming women's rights, distributing information about legal norms and economic opportunities, and training women for new roles.

International Organizations

Promote agriculture for women.

As this analysis shows, women are vulnerable to exploitation in the labor market, especially as unpaid workers in agriculture. Therefore projects to improve women's independent farming activities are useful to support. As many women lack skills to farm independently, women's farm co-operatives could be promoted to teach agricultural skills, to offer instruction on appropriate technology, input access and use, efficiency improvements for land, and prevention of soil degradation. In addition to farming techniques, legal and marketing services could be provided.

Strengthen off-farm employment projects.

The rural population in general and women specifically depend strongly on agriculture. Employment projects can help to diversify income generation; the service sector can offer a range of low-input opportunities, some of which are already used by women in Tajikistan. Projects to identify these opportunities, set up business plans, help finance and monitor ventures may help to reduce rural dependence on agriculture.

Empower dependent women.

In 2006, UNDP Tajikistan launched a first project on empowerment of rural wives whose husbands migrated abroad. Besides capacity building in women's self-organization and health programs, the project also supported income-generating activities of women to reduce their external dependence and increase their decision-making power in the household. After evaluation, projects of this kind should be extended to a wider range of rural areas.

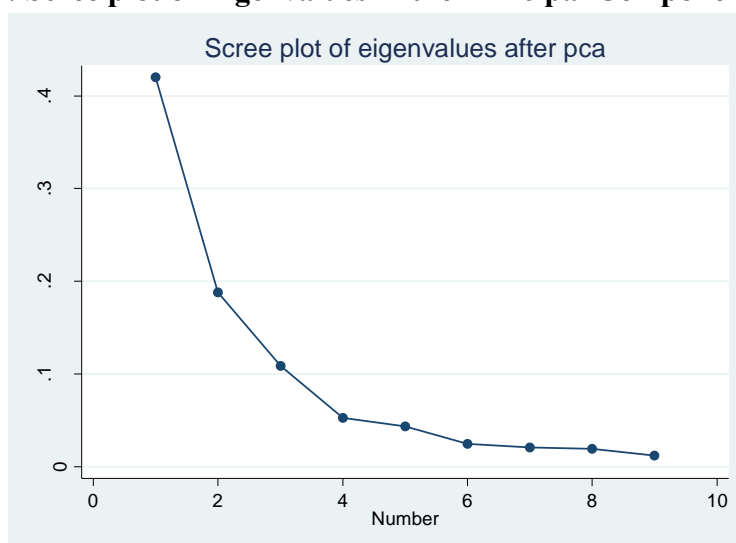
Methodological Annex

The **Heckman selection model** in Table 16 is computed in a two-stage procedure. The prediction from the selection equation (first stage: whether a household uses land) is transformed in order to yield the Inverse Mill Ratio, which is included in the second stage of the estimation. The model was alternatively estimated with a joint maximum likelihood estimator. The Chi2 statistic was computed to test whether both equations are independent (i.e. the error correlation between both equations $\rho=0$). In our case, the Wald test easily rejects the independence hypothesis. Consequently, the Heckman model is preferred to OLS. Two exclusion restrictions were used to identify the selection equation. The first one indicates whether a household lives in a home with central heating. Central heating is generally associated with urban settlement or Soviet building blocks. The respective residents are expected to be less likely to use land, but no statement can be made concerning the size of land. Given the mountainous relief of Tajikistan, remoteness determines general access to land but not the size of available land. The second restriction is the natural logarithm of the number of rooms per capita in the household. More spacious housing is associated with living in rural areas, but does not determine the size of land used, as it can be associated with higher welfare levels. On the one hand higher welfare implies less reliance on agricultural production, on the other hand welfare eases affordability of land.

Empowerment Index

For the analysis of the gender-specific power distribution within households, we compute the so-called Empowerment Index, a transformed index of nine equally weighted dummy variables in three dimensions of household decision making (social, financial, and consumption). The Empowerment Index thus consists of three dimensions (three sub-indices in the social [marriage of son and daughter, children's school attendance], financial [how much to save, whether to sell production or borrow money] and consumption sphere [whether to buy major things, decide what to grow, decide how to spend income]). Each of the nine variables adds to the Empowerment Index, if women participate in the household decision making for the respective decision (self-reported). At first sight, this approach might seem simplistic, as it gives equal weights to different aspects like decision making on schooling for children and decision making on purchase of consumption goods. Therefore, we performed Principal Component Analysis (PCA) of the covariance matrix of the nine variables. PCA is a powerful non-parametric tool used for complexity reduction of multidimensional data matrices and reports data components in descending order of information content, i.e., the share of variance explained by each synthetic data vector. PCA relies on two assumptions: (1) all variables are multivariate normally distributed and (2) the variance-covariance matrix of the observations has strictly positive Eigenvalues.

Figure 23: Scree plot of Eigenvalues in the Principal Component Analysis



Source: LSMS-Tajikistan 2007; author's calculations

The scree plot shows the Eigenvalues of all estimated components in descending order of importance (Figure 23). The first Principal Component, which we use as a proxy for the Empowerment Index, explains 42.7 percent of the entire data variance. The fact that all Eigenvectors of the first Principal Component range between 0.2 and 0.5 indicates already that the weight of different variables in the Index is quite similar. And indeed, when recalculating the first Principal Component in order to match the largest value of the equal index used before, the results are very similar. This suggests that the equally weighted Empowerment Index is a good approximation for the data structure in decision-making power.

| Variables | |
|-------------------------|--|
| Land ownership gap | Share of male heads of households owning land minus share of women heads of household owning land (percentage point difference) |
| Land size gap | Average land size of male heads of households owning land minus average land size of women heads of household owning land (in <i>sotkas</i>) |
| Gender consumption gap | Average per capita consumption level of male-headed households minus average per capita consumption level of female-headed households |
| Decision-making power | Transformed nine-digit index with nine decision items (marriage of son; marriage of daughter; children's school attendance; how much to save; whether to sell agricultural products; borrow money; whether to buy major things; decide what to grow; decide how to spend income). Ranging from 0%-100% |
| Female-headed household | Decisions are normally made by a female household head |
| Age of household head | Age of head of household in years |
| Lower education | Education below secondary degree |
| University | University degree |
| Tajik | Self-reported ethnic category – Tajik |
| Kyrgyz | Self-reported ethnic category – Kyrgyz |

| | |
|--------------------------------------|---|
| Uzbek | Self-reported ethnic category – Uzbek |
| Russian | Self-reported ethnic category – Russian |
| Share of working age females | Ratio of women who are aged 15-55 to total household size |
| Kids | At least one child in the household |
| Dual-generation household | Two generations live in the household |
| Multi-generation household | At least three generations live in the household |
| Pension single-generation household | Only one generation of pension age lives in the household |
| Adult single-generation household | Only one generation of working age lives in the household |
| Migrant household | Household has currently at least one migrant abroad |
| Altitude in '000 meters | Altitude of settlement above sea level |
| Dushanbe | <i>Oblast</i> Dushanbe – capital city |
| Khatlon | <i>Oblast</i> Khatlon |
| RRP | <i>Oblast</i> RRP |
| GBAO | <i>Oblast</i> GBAO |
| Urban | Household located in urban area |
| Rural | Household located in rural area |
| Loan | At least one person in household currently has loan |
| Bank account | Household has a savings bank account |
| Insurance | Household paid insurance contribution during the last twelve months |
| Remittance received | Household received remittances |
| Use of nitro fertilizer | Household uses nitro fertilizer in agricultural activity |
| Land size | Size of land used for subsidiary farming (in <i>sotkas</i>) |
| Fuel | Household uses fuel for agricultural production (technical input) |
| # of agricultural assets owned by HH | Number of productive agricultural assets (e.g. plough) owned by the household |
| Cotton | Household produces cotton privately |
| Central heating | House has central heating |
| Log of rooms per capita | Natural logarithm of number of rooms divided by household size |

Part II: Understanding the Framework of Laws and Customs Concerning Women's Access to Land and Financial Resources in Tajikistan

Land categories and women's access

In Tajikistan, rural people have access to four categories of land:

- Household plots
- Presidential Land (PL)
- Land Reserve Fund plots
- *Dehkan* farmland (former collective and state farmlands).

Household plots

Household plots improve women's ability to feed their families and to earn income. These plots, also referred to as kitchen garden or *subsidiary farmland*, are used primarily to grow food for household consumption. Since the early 1990s, houses and gardens have been privatized for the occupants without charge or for a nominal fee. Now families hold a "Land Passport" for their house and household plot and can use them in transactions. Usually household plots are located near the house, but some are farther away.

Women's access to land is greatest with household plots. Access to these plots is the most secure for rural women for three reasons. First, the land is linked to the house and women provision the household from it regardless of whether a husband is present. Second, women can inherit the rights to the household plot. Third, no formal or informal limitations are imposed on how households use their plot.

Women use household plots to raise additional household revenue. Female heads of households report that crops from the household plots are usually sold for additional income with a much smaller share used for home consumption (ranging from 10 to 20 percent of the total). Another study identified household plots as the second most important source of income in rural areas after labor income (not including informal economic activities and remittances).²³ Therefore, given the relative security of tenure and economic necessity, women demonstrate an ability to use land assets efficiently to develop revenue streams.

Under the Land Code every family has the right to request a household plot.²⁴ This parcel includes the footprint of any buildings on the parcel. Field interviews revealed that these plots range between 0.02-0.8 ha on average, and are allocated by *jamoats* of villages, settlements, and cities by a decision of the head and the Government of Tajikistan (LC, Article 71). Household plots/houses are registered with the *jamoat*. Most parcels were provided in the early 1990s and reflected living patterns at that point.

Since household plots are attached to the home, family members must reside for access to the land; this requirement may penalize women who divorce or relocate (Law on

²³ Kuvatova et al I. ILO, CARE Int. Pickup, F., A. Kuvatova, 2003. Household Survival Strategies in Tajikistan

²⁴ Up to 0.12 hectares of irrigated land, up to 0.25 hectares of non-irrigated land, in mountain areas up to 0.15 hectares of irrigated and up to 0.40 hectares of non-irrigated land, and in previously untilled (non-irrigated) land up to 0.40 hectares.

Subsidiary Farms, Art. 47). Women who do all of the work on household plots have no rights to this subsidiary farmland or its value if they separate from the household because dividing the household plot is not automatically permitted (LC, Art. 71-1). The household plot is defined as the subsidiary farm used by individuals or household members to produce agricultural products for family use. Foreigners and urban citizens also have a right to a plot for a subsidiary farm.

Women want certificates for household plots but express concern that certificates are issued in their husbands' names only. The Land Code was recently amended to allow for additional land to be allocated for a subsidiary farm (LC, Article 71-2), which will presumably come from the Land Reserve Fund (see following). However, since most certificates for household plots are issued in the name of the male head of household, women could lose access to this valuable land. In addition, due to weak civil registration services in Tajikistan after independence, many rural women lack passports or other formal documents, without which they cannot enter a civil marriage. These women, therefore, cannot secure their legal rights, including property rights, under civil law.

The law is unclear on eligibility criteria for household plots. The provision states, “Land plots shall be allocated to citizens for the organization of an additional individual supplemental farm with the agreement of the primary land users in accordance with the normative and legal acts of the Republic of Tajikistan by the decisions of the heads of cities and districts” (LC, Art. 71-2).

Recommendations

The dynamics of household plots suggest that regulation of future provisions should aim to remove barriers that erode women’s productive capacity. The state will continue to provide land on a one-time basis to households, and there is additional discussion of releasing land from the Land Reserve Fund as supplements to the household plot/subsidiary farm.

- Encourage Government to mandate that both spouses be registered as co-owners of a household plot (see also Section VI. Legal and Customary Practices).
- Identify female-headed households (due to divorce, abandonment, out-migration, or other reasons) and provide land registered solely in their names.

Presidential Lands

No women interviewees were found to have formal rights to Presidential Land (PL); their name was not on the land certificate. However, 90 percent of interviewed families who have PL also have a special certificate of use rights for PL. Some families did not receive certificates because they owe taxes or lack documents needed to formalize their land rights. Women reported that PL was the third most important source of income and subsistence in their households after household plots and labor earnings but excluding remittances and informal activities.

Allocations of presidential land are intended to supplement household plots. Presidential decrees in 1995²⁵ and 1997²⁶ distributed land first to families who had less land per capita in

²⁵ Presidential Decree 342, “On Assignment of 50,000 hectare of Lands for Personal Husbandry of the Citizens” October 9, 1995

their household plots. For five years, allocations were based on family size and their existing household plot (Article 6). Members of private farms, owners, or employees of cooperatives or small enterprises were ineligible (Article 7). PL plots are not transferable (Article 9), and rural people can use the land as they wish. PL assignments varied by *rayon* (from 0.15 ha to 0.25 ha.) and were assigned by the district land committee, *khukumats*, and the village *jamoat* offices. Since 2005, *jamoats* provide land certificates for PL.

Interviewees allege that some PL was distributed to ineligible citizens. According to the above Articles, distribution of PL by some *jamoats* appears to be irregular with land allocated to collective farm bosses and others who already had land. Several village focus groups reported that no women received PL, and in fact, women were not even informed that land was available until after allocations had taken place. In a few regions, however, including Garm, some women interviewed reported use of PL.

Women have difficulty utilizing PL plots. Despite the importance of PL in livelihood strategies, using PL plots is difficult for women for two reasons. First, many PL plots are far from homes, and women lack access to transport. Although *khukumats* and *jamoats* try to allocate PL close by, it is not always possible. Second, most PL is used to raise cereals, vegetables, fruit and nut trees, or livestock fodder. The land is dry and requires substantial irrigation for which men have better access than women. Families unable or unwilling to cultivate their PL can seek informal rental arrangements that include social and tax payments and a share of the harvest.

PL land tenure is under threat from compulsory acquisition of unused land. In October 2007, President Rahmon announced in a televised speech that uncultivated PL should be taken back and reallocated for cultivation by those in need. Because *khukumats* interpreted the speech as an order, they have been carrying out inspections of PL, and creating special PL-use commissions that include representatives from the Ministry of Agriculture, Land Agency, and Tax Inspectorate. A Kulyab *rayon khukumat* representative reported that about 187 ha of PL was repossessed by the state for nonuse. Interviewees expressed insecurity regarding their PL rights even as holders of a formal certificate who had used their land in the past but without intention to use it in the current year.

Recommendations

- Consider special measures to include women in future PL distributions. Clarify procedures and target women expressly: first, inform everyone of planned PL allocations, and second, explain the allocation process itself. Clearly some women are comfortable acting as economic agents (see end of Section IV below) and would seek PL in future distributions. Nonetheless, existing allocation procedures are vague, allowing local officials broad discretion in distributing land with the assumption that they are accountable only to the central government.
- Specify procedures for equitable PL allocations that exclude local discretion. Establish flexible use regimes with increased tenure security.

Land Reserve Fund Plots

²⁶ Presidential Decree 874, "On Allocation of 25,000 ha. of Land for Personal Subsidiary Farm of the Citizens," December 1, 1997

A Land Reserve Fund plot is state-owned land held by the local *khukumat* and allocated to former collective or state farm members and other rural residents. The law on land reform, passed soon after independence, created a Land Reserve Fund that exists to serve state priorities. The *khukumats* interpret how state priorities apply locally, for example, withdrawing land to create a private *dehkan* farm (Article 8). The first priority of land reserve plots is citizens of established *dehkan* farms, part-time farms, collective, or market gardening. The second priority is local citizens with agricultural knowledge and practical agricultural experience. Land is also provided to enterprises on a competitive basis (Article 12). The amount of land in the reserve varies greatly among regions. Reserve fund land is irrelevant to rural residents until it is allocated through lifetime-inheritable ownership or short-term leases. Villagers allege that this land is usually distributed to the affluent and well connected. While no legal barriers prevent allocation as household plots rather than *dehkan* farmland, this has not occurred and does not appear to be the policy goal for this land.

Recommendation

- The Government of Tajikistan could use the Land Reserve Fund plots to balance some inequities that may have occurred during earlier distributions. Specifically, some state land could be provided to women entrepreneurs who seek additional land but are unable to access Presidential Land and to landless women who are the sole providers due to divorce or abandonment. India provides an example of distribution of state land to women and vulnerable households for house and garden plots to increase nutritional status and family income.²⁷

Dehkan farm plots

In theory, former collective and state farms distributed *dehkan* farm plots. The intention was to divide the farmland among individual farms members who would receive long-term use rights to establish their own farms. In practice, however, most farms and their management structures are unchanged. Individual farmers have not withdrawn parcels or understood they could, so privatization impacts are not evident to most people. Farmers who want to farm independently on their share of land must go through the privatization process again as individuals, even on farms already privatized as collective farms. This requires district *khukumat* approval despite that fact that every member of an enterprise has the right under law to receive a land share. This occurs in practice because land use certificates are often issued directly to an enterprise without listing individual members or to the head of a family with family members listed. Because land is still state owned, individuals must receive state approval to withdraw a land plot for their use.²⁸ District land committees attached to

²⁷ For more information see Tim Hanstad and S.B. Lokesh "Reaping the Rewards of Homestead Gardens: Nutritional and Income Benefits from Homestead Plots in Karnataka." (February 2004).

²⁸ Individuals can hold this state-owned land under long-term use rights, including perpetual use, life-long inheritable use, fixed-term use, or lease (LC, Art. 11-14). Land use rights can be leased to other individuals or legal entities, sold, purchased, mortgaged, or inherited (LC, Art. 19). Land can be distributed in lifetime-inheritable use to *dehkan* farms or individuals. As early as 1992, the land of the former state and collective farms could be distributed to the workers to establish a *dehkan* farm, though implementing regulations were absent. In 1996, the Land Code established that workers within a collective or state farm have a right to a share of land to personally use within the collective or the right to withdraw their share for the purpose of establishing a *dehkan* farm. But enterprises or individuals who want land from the enterprise must petition the *khukumat*, which is obliged to make a decision within one month. Presidential Decree #522, "On Reorganization of Agricultural

khukumats allocate land and resolves disputes. Applicants can also appeal decisions in court, though interviewees among legal professionals in Tajikistan noted that this was extremely rare.

Women have a legal right to a share of *dehkan* farmland, but they are either unaware, unwilling, or unable to withdraw their land to work independently. Although large *dehkan* farms are nominally collectives, women workers are in effect employees of *dehkan* farm management, rather than shareholders in their own right. Interviewees noted that young and elderly women often work on collective farms to enable the family to preserve access to social services, land shares, and low-cost products such as wheat flour or scarce commodities, such as *guzopaiya* (cotton sticks) for cooking fuel. Recent dramatic increases in the number of women working on farms are thought to be due to male out-migration: men would rather leave than accept the low wages paid for agricultural work. Despite contributing a larger share of agricultural work, females are not becoming landowners in higher numbers. The economic downturn could change these work patterns as male migrants return from Russia due to unemployment.

Women rarely participated in restructuring collective farms. Soviet-era collective and state farms had gender-differentiated roles. Rural females were rarely appointed to head farms; instead, most women worked in the social sector: crafts, services, and agricultural processing. As a result, men who were former managers administered most farm restructuring. In 2004, the Tajikistan Statistics Committee reported that women headed only seven percent of registered *dehkan* farms. Women have secure land rights to these farms, primarily when they are household heads, which is rare. Consequently most women's land rights hinge on their relationships with the male household members: fathers, husbands, or sons. However, there are three situations in which *dehkan* farms are headed by women: first, women from households with a discrete land plot who are married to men either too ill to work as farm managers or have migrated to Russia; second, educated females with experience or connections, such as women employed in government offices, to establish small farms (not more than 20 ha); and third, women who used to be farm managers or brigade leaders and gained experience running a collective farm, which is rare. Also, some *dehkan* farms are registered to women simply because state officials register their wives as farm owners to avoid the appearance of conflicts of interest or to manipulate the process of state allocation of land, but these women do not actually manage the farms.

Recommendations

Enterprises and Organizations,” of 1996 provided guidelines for the withdrawal of land on former collective and state farm enterprises: land should be distributed among “regular workers” in share sizes determined by the district land committee. If workers leave the enterprise, they have a right to a land plot at the rate of their share. Property (non-land assets) (Article 12) can also be redeemed by employees of the farm enterprise, irrespective of their position or type of work, who are the employees of the enterprise at the time of reorganization; pensioners, who retired directly from the enterprise; persons chosen to elective positions of higher levels; invalids of groups I and II, who became disabled in the enterprise; persons who were called up to active military service from the enterprise; persons who were sent from the enterprise for training or improvement of their skills; any other persons, according to working commission decision. In 2006, a new Presidential Decree on farm reorganization was passed. The new decree established a State and *Oblast* Commission on reorganization and reforming agricultural enterprises. The local executives together with the State Land Committee were tasked with implementing reorganization and reforming of agricultural enterprises (Decree of the President of Republic of Tajikistan, “About additional measures on reorganization and reforming of agricultural organizations, No. 1775, June 30, 2006). The commissions are responsible for informing the public and providing information about reorganization and to assist in the process.

- Provide access to information on exercising legal rights to former collective and state farm land and offer remedies for lack of enforcement.
- Conduct mass media information campaigns on women's access to land, as well as relevant provisions of laws on land, taxation, etc. For example, install billboards in all *jamoats* providing simple graphic messages on rights.
- Provide training to local dispute resolution bodies and paralegals; offer legal aid for women and men with a special effort to reach women. At present judicial enforcement is unlikely for most women, because it requires overcoming taboos against functioning outside the family.
- Offer training in negotiation skills, particularly for women leaders who can represent women in dealings with the *khukumat*.
- Provide extension and business training for potential *dehkan* farm owners, especially women with experience and background in farming.
- Establish clear procedures for all former collective and state farm members to exercise their rights to withdraw a land plot from a collective *dehkan* farm.

Inheritance and the Division of Property

Formal Law

By law, surviving spouses have a right to half of common property. Spousal property held in joint ownership converts to common ownership; the deceased spouse's half of the property is divided by will or by law and the other half remains with the surviving spouse. If property cannot be divided, the surviving spouse must pay the heirs for half of the property either in cash or in kind (Civil Code, Part III, Art. 1140).

If there is no will, the property must be divided in equal shares among children, spouse, and parents of the deceased (Civil Code, Art. 1166). If any of these heirs are deceased, their portion of the inheritance will go their heirs. Female and male heirs inherit equal shares, but surviving spouses may receive only a small portion of the estate property if the family is large. Special categories of people have a right to an inheritance even if they are not included in the will (Civil Code Art. 1171). For example, underage children, disabled children, spouses, or parents, including stepfathers and stepmothers, must inherit two-thirds of their intestate share.²⁹ However, surviving spouses can be barred from receiving a mandated inheritance if other heirs can prove that marriage with the testator had ended prior to death or if the spouses maintained separate household for at least three years prior to death (Civil Code, Art. 1172).

Guardians of underage children (under 16 years) do not have the right to benefit from property belonging to their wards and cannot receive compensation (Family Code, Art. 37).³⁰

²⁹ Any heir who lived with the testator for a year before he/she died has a pre-emptive right to receive from the inheritance the composition of the dwelling house, apartment or other dwelling premises, utensils, household articles, and property they held in common ownership. If as a result of implementation of these rights, the property making up the inheritance is insufficient to provide to other heirs what belongs to them, the heir implementing pre-emptive right must provide cash or property compensation (Civil Code, Art. 1185).

³⁰ Without prior consent from the agency of guardianship and curatorship to conclude, to give consent to transactions for the alienation, including exchange or gift, of property of the ward, its rental (or lease), uncompensated use or pledge, nor to transactions involving a renunciation of rights belonging to the ward, the division of his property or the separation of shares from it, nor to any other transactions involving the reduction of the property of the ward (Family Code, Art 38).

The immovable property registration system is non transparent. In the event of divorce, the relevant provision fails to provide information or a mechanism to split real property.³¹ This creates two problems. First, since the registry is closed the nonregistered spouse cannot get information about property registered in the name of the other spouse unless taking over the property by succession (LR, Article 29). Second, information must be requested for a *specific property*, therefore a nonregistered spouse must already know which properties the other spouse owns to access the information. This contrasts with title registration systems in other countries where access to the immovable property registry is open to anyone who is involved in immovable property transactions and wants to find out the name of the legal owner. The current provision is detrimental to everyone engaged in property transactions, but especially to women, since they are rarely the registered owner of immovable property.

Laws governing division of immovable property do not include land plots. Perhaps most difficult for couples dividing common property is that property division or boundary change on a land plot is by a decision of the local executive and the Government of Tajikistan.³² (LC, Art 53). These laws favor men because they are more involved in local governance and have more connections outside of the household.

Informal practices

Typically, adult Tajik women do not inherit land from their parents under customary law. Sons always inherit family land. Women rarely receive compensation from their brothers for family land shares when their father dies or for joint marital land holdings from their in-laws when their husband dies.

When a man dies, his parents, brothers, or adult sons inherit his land. Local customs dictate that land is male property and thus, the first choice of an heir is always male. Even though Islam stipulates division of assets to the wife and children of the deceased, local customs ensure all real estate and land transfer to male household members.

Recommendations:

- Amend the Law on Registration to enable spouses to request and receive information about properties registered to their spouses
- Amend the Law on Registration to include property rights to land among family property to be divided in divorce. This division should explicitly include a compensation mechanism for a share in real property rather than forcing

³¹ Article 29 of the Law on Registration (LR) (2008) states: 1. National and territorial organizations for state registration shall provide any person with the necessary information only about the rights and restrictions (encumbrances) existing at the moment of providing the information (hereinafter referred to as relevant rights and restrictions (encumbrances)) for a specific object of immovable property. Such information shall be given out as an extract from the registration book. 2. Generalized information about rights to immovable property belonging to a certain entity shall be submitted only to the following persons: right holder; persons who take over the immovable property rights in the course of universal succession or inheritance; state bodies and other organizations, notary offices and other persons in cases envisaged by the legislation of the Republic of Tajikistan.

³² The division of immovable property shall be carried out (except for a land plot) on the basis of a contract, among the co-owners, on the division of immovable property, which shall be the common property of two or more objects of immovable property or on the basis of a decision on the division of immovable property into two or more objects of immovable property, which shall be made by the owner or by court. The document proving the establishment or termination of immovable property existence as a result of division shall be the contract on division among the co-owners or a decision on division by the owner or by court (LR, Article 50).

fragmentation of plots. Since women are under represented in local governance structures, using local mullahs or *jamoat* or *mahalla* committee members to arbitrate land division is unlikely to reflect women's rights under formal law.

Women's Access to Credit

The credit market

Tajikistan lacks legislation to allow credit unions or credit cooperatives, but microfinance organizations are allowed. There are laws on production cooperatives (Republic of Tajikistan, Law on Production Cooperatives, No. 68, December 12, 2002) and consumer cooperatives (Republic of Tajikistan, Law on Consumer Cooperatives, No. 583, March 13, 1992) but not on credit cooperatives or credit unions, which are two forms of financing that have worked well in other countries and could be beneficial in Tajikistan, especially for women.

As of April 1, 2008, Tajikistan had 12 banks, 7 credit institutions, 1 nonbanking financial institution,³³ 10 microcredit deposit organizations, 26 microfinance organizations, and 39 microcredit funds. The amount of credit available is growing, and according to official data, these microcredit organizations provided about 383,400,000 somoni (about US\$11 million) during the first three months of 2008.

The National Bank of Tajikistan must license individuals or legal entities that accept deposits or execute other banking transactions (Art. 5); several exceptions exist, including for noninterest loans and microlending funds. The Law on Microfinance Organizations allows microcredit deposit organizations (MDOs) and microlending organizations (MLOs), which are commercial organizations licensed by the National Bank³⁴ and microlending funds (MLFs), which are noncommercial organizations certified by the National Bank.³⁵ The Law on Banks and Banking Activities does not apply to microfinance organizations except in cases provided for by the Law on Microfinance Organizations (LMO, Art. 3).

Law on Mortgages

Provisions in the April 2008 Law on Mortgage protect women. Article 8 states that a mortgage can be established for property that is in common joint ownership (without determination of the share of each owner's property rights) only with the written consent of all owners. This provision would apply to those who are legally married. Co-owners have the

³³ National Bank of Tajikistan, 2008.

³⁴ Regulation 136 On Micro-lending Organizations (commercial). The regulations for micro-lending organizations require that the minimum size of the authorized capital stock must be equivalent to 10,000 US dollars (2.6). The authorized capital stock must be formed by the founders, stockholders, and participants in accordance with legislation (2.7). Moreover, micro-lending organizations do not have the right to accept deposits (4.8).

³⁵ Regulations on Micro-lending Funds (137) (non-commercial). Microlending funds are set up as social funds. A capital stock minimum of 10,000 US dollars has not been set. However, if the capital stock is over 10,000 US dollars, the Fund must provide confirmation of the legality of the sources in order to get a certificate. The requirements for a certificate are less than those for a license. Self-help groups could fit into the category of micro-lending funds.

right to mortgage their share without consent of other owners, a provision that would apply to single owners who share land. If an owner's share goes into foreclosure and sale, other owners have a preemptive right of purchase according to articles 298 and 303 of the Civil Code. Article 47 provides that user rights to a *dekhan* land plot can be mortgaged but only with the consent of all its members (Art. 47), which could be very difficult if the farm is large.

Agricultural land can be mortgaged but restrictions may lead to uncertainty for the lender. Mortgage Law restrictions are established to protect the borrower, but lenders may not accept the high collateral risk associated with agricultural land. Although these restrictions are common practice in many countries, their effect in Tajikistan is as yet unknown. Restrictions on the mortgage of agricultural land include the following:

- Foreclosure of a land use right may be denied if the debtor's default on the principal obligation is insignificant and the mortgagee's claims are explicitly incommensurate with the normative value of the mortgaged land use right (Art. 48).
- If valid and recognizable causes of default exist related to agricultural land use, such as bad harvest due to extreme weather conditions, the mortgagor can request the court to postpone the sale of the land plot for up to one year. (Art. 48)
- Borrowers in default have preemptive rights to lease back their land if the land goes into foreclosure and is purchased by the lender. Borrowers have one year to make their claim.
- Borrowers in default have a preemptive right to purchase the land plot within one year from its alienation if the lender purchases the land at auction.
- Finally, the mortgagor cannot give up his preemptive rights to lease or purchase. That is, the mortgagor cannot contract out of this preemptive right; this law aims to protect borrowers from lenders that may require them to relinquish this right.

Credit practices

Recently Tajikistan's credit market has grown considerably. Until the late 1990s, state banks dominated the credit market, and only powerful people (usually men) had access to these funds. Credit for agriculture skewed to large-scale cotton farming.

Microfinance organizations have flourished in Tajikistan. Donors—Aga Khan Foundation, USAID, ADB, EBRD—engage in microcredit. Based mainly on NGOs existing after the civil war, microfinance organizations (MFOs) first focused on selected beneficiaries and activities. Over time, however, these organizations became commercial institutions, and by 2006, their portfolio was around US\$30 million.³⁶ As they gained experience, the institutions often provided technical assistance and training to their credit clients. Most MFOs belong to the Association of Microfinance Organizations in Tajikistan (AMFOT), created in 2004 after the Law on Microfinance Organizations was adopted. Before 2004, AMFOT was an informal coalition of donor projects and local NGOs involved in microlending. The AMFOT has 40 members with a portfolio of US\$ 30 million, 200,000 clients, and an average loan of US\$ 450-\$500.

More than 62 percent of MFOs clients are women.³⁷ In Tajikistan, urban women prefer individual loans; women in remote rural areas prefer group loans with social collateral. Agricultural land is never used as collateral for MFOs, but houses and household plots are

³⁶ Tajikistan Policy Note. Enhancing the Development Impact of Remittances. PREM, World Bank, June 2006.

³⁷ According to AMFOT data.

used. Most women get credit for trade, and the share of credit for obtaining livestock and offering services is growing. Women, especially poor women, exhibit preference to work in groups. In addition, groups of women from rural traditional areas can designate a representative to interface with the credit organization, which allows them access to credit without the social stigma of leaving their homes. Men tend to prefer individual loans, and IMON, a large microcredit organization, gives twice as many individual loans to men. The number of group loans is almost equal for men and women.

Recommendations

- Allow local credit unions or cooperatives to reinvest in their operations.
- Review and simplify reporting requirements for small MFOs.
- Increase women's access to microcredits and financial resources through *jamoat* support centers and financial institutions.

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