



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Integrating Gender and Nutrition within Agricultural Extension Services

Tajikistan Landscape Study

August 2018



USAID
FROM THE AMERICAN PEOPLE



INGENAES

Integrating Gender and Nutrition
within Agricultural Extension Services



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TAJKISTAN

Landscape Analysis

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Abbreviations

ADB	Asian Development Bank
AES	Agricultural Extension Services
CRF	Common Results Framework
EAS	Extension and Advisory Services
FAO	Food and Agriculture Organization of the United Nations
FSCT	Food Security Council of the Republic of Tajikistan
GDP	Gross domestic product
GOT	Government of Tajikistan
HDI	Human Development Index
INGENAES	Integration Gender and Nutrition within Agricultural Extension Services
MOA	Ministry of Agriculture
MOH	Ministry of Health and Social Protection of the Population of Tajikistan
MSCC	Multi-Sectoral Coordination Council
NDS	National Development Strategy
NFSS	Nutrition and Food Safety Strategy
NGOs	Non-governmental organizations
NCAHS	National Child and Adolescent Health Strategy
NHS	National Health Strategy
RDC	Regional Development Cooperation
RBMPs	River basin management plans
SUN	Scaling Up Nutrition
TAU	Tajikistan Agrarian University
UN	United Nations
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government
WB	World Bank
WHO	World Health Organization
WRM	Water resources management
ZOI	Zone of Influence

Introduction

The Integrating Gender and Nutrition within Agricultural Extension Services (INGENAES) project is funded through the Bureau for Food Security of the United States Agency for International Development (USAID) to support the Presidential Feed the Future Initiative, which strives to increase agricultural productivity and the incomes of both men and women in rural areas who rely on agriculture for their livelihoods.¹

This landscape study provides an overview of key issues related to the INGENAES mission in Tajikistan. It contributes to the knowledge base of the Feed the Future countries for both the INGENAES team and country extension and development practitioners. It also serves as a public reference tool for any other parties interested in the topics.

The study starts with an overview of Tajikistan's socio-geo-economic and political profile. It then provides a brief snapshot of the Tajik agricultural sector including the national agricultural strategy, the status of agricultural extension services, women's involvement in agriculture, food security and nutrition issues in the country, and the national nutrition strategy. In addition, the study details the key aspects of the Feed the Future approach in Tajikistan and how USAID's development strategy supports Feed the Future activities in the country. The final section of the study provides a summary of the ongoing projects by the United States Government (USG) and other donors in the country related to agriculture, extension, and gender and nutrition issues.

Background

Tajikistan is a landlocked and mountainous country in Central Asia with an estimated population of 9.01 million people (World Bank [WB], 2015; FAOSTAT, 2017). Mountains cover nearly ninety-three percent of the country whereas the lower elevation river valleys and steppes in the north (the Fergana Valley) and southwest (the Vaksh and Panj River Valleys) provide limited arable land for agricultural production (about 6 percent; AQUASTAT, 2012). Tajikistan became independent in 1991 following the breakup of the Soviet Union and almost immediately plunged into civil war, which lasted until 1997. The Khatlon Oblast² (which was the epicenter of the conflict) is one of the primary agricultural zones and has been the Zone of Influence (ZOI) of the Feed the Future activities in the country until 2018 (Feed the Future, 2011).

Tajikistan shares about a 1400 km border with Afghanistan in the south, making the country a strategic partner to the USG and allied countries to contain and decrease the threat of Islamic militants in Central Asia and drug-trafficking into Russia and the West (Nichol, 2012). Tajikistan also borders with China and Kyrgyzstan (east and north) providing the country with potential economic growth opportunities, whereas the border with Uzbekistan is often closed or embroiled in conflict over water and energy (United Nations Development Programme [UNDP], 2010). Although recent presidential change in Uzbekistan has resulted in thawing 'tense' relations with Tajikistan and re-building economic, political and cultural ties

¹ The USAID cooperative agreement (Award No. AID-OAA-LA-14-0008) has been awarded to the prime implementer, the University of Illinois at Urbana-Champaign, the lead organization of the consortium. The consortium also includes the University of California-Davis, the University of Florida, and Cultural Practice, LLC. The project is currently working in select Feed the Future countries.

² An administrative unit equivalent to province or region. It is a Russian word for province.

Tajikistan has one of the lowest per capita gross domestic products (GDP) among the fifteen former Soviet Republics (US \$2,763 per capita in 2016) and its economy continues to face major issues associated with heavy reliance on remittances from Tajiks working in Russia (representing nearly 42.7 percent of GDP),³ persistent corruption, limited economic development, and the major role of drug-trafficking in the country's informal economy (estimated at 30-50 percent of GDP; WB, 2015; FAOSTAT 2017; The World Factbook, 2018). According to WB (2014), exposure to external market shocks, susceptibility to natural disasters (earthquakes, landslides, and floods are frequent), underdeveloped economic potential, limited arable land, and its landlocked position make Tajikistan one of the poorest countries in the Europe and Central Asia region, with a gross national income per capita of US \$1,307 in 2013 (United Nations [UN] Data, 2016). The loss of the Soviet financial support and the civil war devastated Tajikistan's economy and human capital, as many Russian-speaking ethnic groups left the country creating a "brain drain." Nevertheless, the economy performed strongly in the decade following the end of the civil war, averaging nearly 8 percent growth annually between 2000-2008; this was propelled by favorable world prices for Tajikistan's main exports of cotton and aluminum. However, a recent economic downturn, sanctions in Russia, and the slowdown of Chinese economy have hit the economy again by decreasing the GDP growth to 3 percent (World Bank [WB], 2014; The World Factbook, 2018). Table 1 shows the major sectors that comprise Tajikistan's annual GDP and compares select economic indicators to neighboring countries in Central Asia.

Table 1: Economic indicators by country in five Central Asian countries

	Tajikistan	Kazakhstan	Kyrgyzstan	Turkmenistan	Uzbekistan
Population (millions; 2017)	9.01	18.56	5.79	5.35	29.75
Rural population (%; 2018)	72.9	42.6	63.6	48.4	49.5
GDP per capita (US\$)	2,763 (2016)	26,300 (2017)	3,700 (2017)	18,100 (2017)	6,900 (2017)
Agriculture (% of GDP)	28.6	4.8	14.3	7.5	18.5
Industry (% of GDP)	25.5	34.4	32.5	44.9	34.4
Services (% of GDP)	45.9	60.8	53.2	47.7	47
Labor force (millions)	2.209 (2017)	8.97 (2017)	2.84 (2017)	2.305 (2013)	18.12 (2017)
Labor force by occupation – agriculture (%)	43	18.1	48	48.2	25.9
Labor force by occupation – industry (%)	10.6	20.4	12.5	14	13.2
Labor force by occupation – services (%)	46.4	61.6	39.5	37.8	60.9
Population below poverty line (% population)	31.5 (2016)	2.6	32.1 (2015)	0.2 (2012)	14 (2016)

Source: Compiled from CIA World Factbook data; FAOSTAT, 2017.

As shown in Table 1, agriculture is important to Tajikistan's economy compared to other Central Asian countries. An estimated 72.9 percent of Tajiks reside in rural areas supporting rural livelihoods and providing employment, especially to women (Feed the Future FEEDBACK, 2014; UN Data, 2016; The World Factbook, 2018). The main agricultural products are cotton, grain, dried and fresh fruits, vegetables, cattle, sheep and goats. The industry sector is small and is comprised mostly of aluminum, cement, and hydropower production. Services account for 45.7 percent of the country's GDP and include wholesale

³ About one million Tajiks (mostly men) are estimated to be working abroad, primarily in Russia and Kazakhstan (Feed the Future, 2012). According to WB (2015), Tajikistan is the most remittance-dependent county, although it dropped from its highest peak (49.6% of GDP in 2013) due to economic recession in Russia.

and retail trade, hotels and restaurants, transport, government, financial, professional, and personal services such as education, health care, and real estate services (The World Factbook, 2018).

Tajikistan is the poorest among Central Asian republics. An estimated 31.5 percent of the population lives below the national poverty line, which fell from 96 percent in 1999 and 47 percent in 2009 (WB, 2015; The World Factbook, 2018). The multidimensional poverty data available for Tajikistan is from 2012 that showed that 7.9 percent of Tajiks were multidimensionally poor⁴ (see Table 2), while 23.4 percent of the population lived near multidimensional poverty. However, poverty rates in Tajikistan vary from one quarter to another and are driven primarily by seasonality of agriculture (poverty rate increases during January-April, the lean season) and changes in remittances flow, which also falls to winter months. Poverty is particularly prevalent in rural areas. The Khatlon Province has the largest number of people living below the poverty line and the highest rates of undernutrition among children (Feed the Future, 2012; UNDP 2016).

In terms of Human Development Index (HDI), in 2015, Tajikistan was ranked 129 out of 188 countries. The inequality-adjusted HDI (0.532) shows a loss of 15.2 percent, which is largely attributed to inequality in life expectancy and income. Tajikistan's HDI (0.627) is below the average of 0.631 for countries in the medium human development group and below the average of 0.756 for countries in Europe and Central Asia (see Table 2; UNDP, 2016). The gender Inequality Index (GII), which looks at inequalities between men and women in reproductive health, empowerment, and economic activity, is 0.322, ranking Tajikistan 65 out of 159 countries. About 14.7 percent of women hold parliamentary seats and 98.1 percent of adult women have secondary education compared to 88.2 percent of adult men. For every 100,000 live births, 32 women die from pregnancy related causes, and the adolescent birth rate is 38.1 births per 1000 live women ages 15-19. Overall female participation in the labor market is 59.4 percent compared to 77.5 for men (ibid.). However, since 1999 more women got involved in agriculture due to men's economic outmigration (from 54 percent in 1999 to more than 75 percent of total current population) leading to the feminization of agriculture in Tajikistan (Mukhamedova and Wegerich, 2018, p. 129). Literacy is above 99 percent for both males and females and well above other countries in Africa and Asia, which have similar levels of per capita income (UNDP, 2015).

Table 2: Human development indicators in select countries and region, 2015

Countries	HDI	GII	Population with at least some secondary education (%)		Labor Force Participation rate (%)		Maternal mortality ratio	Adolescent birth rate	Female seats in parliament (%)	Multidimensional poverty index
			Female	Male	Female	Male				
Kyrgyzstan	0.627	0.394	100	99.9	49.4	77.1	76	39.6	19.2	0.008 (2014)
Tajikistan	0.664	0.322	98.1	88.2	59.4	77.5	32	38.1	14.7	0.031 (2012)
Uzbekistan	0.701	0.287	99.9	99.9	48.3	76.2	36	17.7	16.4	0.013 (2006)
Europe and Central Asia	0.756	0.279	78.1	85.7	45.4	79.4	24	26.6	19	
Medium HDI	0.631	0.491	40.4	57.6	37.2	79.4	164	40.8	19.9	

Source: Compiled from UNDP's 2016 Human Development Report

⁴ Multidimensional poverty is defined as a condition in which a person experiences the deprivation of good health, education and adequate living standards (UNDP 2016).

Khatlon Oblast

According to Feed the Future report (2012), Khatlon Oblast is located 100 km (62.5 miles) south of Dushanbe, the capital. It is the most populous oblast, with about 19 percent of the country's total population and 23 percent of the total rural population. It is also the poorest region and has some of the country's worst performance indicators for nutrition and maternal and child health. The oblast has the highest under-five mortality rate in the country (61 per 1000 live births), twice as high as in Dushanbe. Roughly 27 percent of children are stunted (ibid.; Feed the Future FEEDBACK, 2014).

The Feed the Future ZOI covers 12 of the 24 districts in Khatlon, which are located in the southwestern region of the country bordering Afghanistan. The ZOI includes the districts of Qubodiyon, Qumsangir, Vakhsh, Nosiri Khusrav, Jilikil, Bokhtar, Khuroson, Jomi, Yovon, J. Rumi, Sharituz, and Sarband (Feed the Future, 2012).

Khatlon Oblast with its low lands is the cornerstone of Tajik agriculture (AQUASTAT, 2012). It accounts for one-third of agriculture land area, 45 percent of gross agricultural output, 49 percent of cropland, 40 percent of cattle and 39 percent of sheep and goats (Feed the Future FEEDBACK, 2014). The favorable climate for the production of high-value horticulture crops prompted the transition of farmland from cotton monocropping into the production of stone-fruits, vegetables, and meat and dairy products.

Agriculture Overview

As in many low-income countries around the world, Tajikistan's agricultural sector is an important economic driver; it accounts for nearly half of the country's labor force⁵ and constitutes over a quarter of the GDP (USAID, 2014a). Consequently, low agricultural productivity is associated with high levels of rural poverty and stagnant economic growth.

The majority of agricultural activity in Tajikistan consists of irrigated farming, though rain-fed production is still common (WB, 2009). Wheat and cotton are the most widely planted crops.⁶ Cotton is the more economically important of these two crops, accounting for over 20 percent of total export revenues and 11 percent of the GDP (WB, 2009). Wheat, in contrast, is not an important export crop; in fact, Tajikistan imports 25 percent of its wheat needs annually (Feed the Future, 2012). However, wheat self-sufficiency is not likely in the near future because of the high cost of implementing the

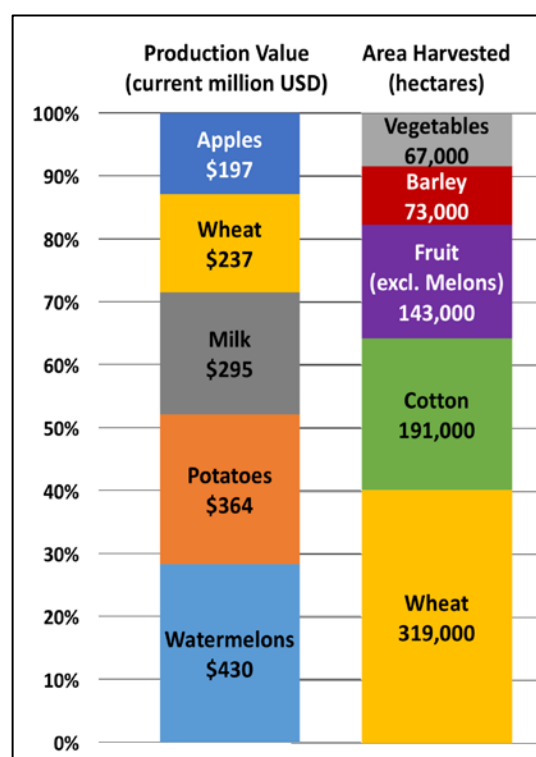


Figure 1: Summary of important agricultural products in terms of production value and area harvested; see Appendix 3 for more details. Data from FAOSTAT online database, graph by authors.

⁵ According to Mukhamedova and Wegerich (2018), agriculture employs many women in the formal and informal arrangements of who many are rural women.

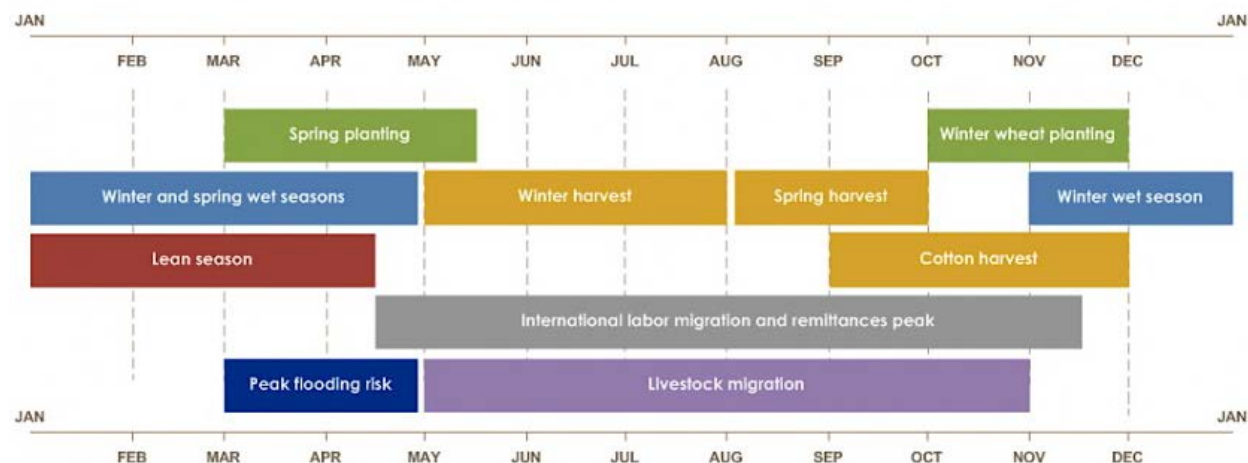
⁶ Note that cotton is not included in the left-hand graph in Figure 1 because data on the production value of cotton was not available in the FAOSTAT database.

irrigation infrastructure rehabilitation or development that would be needed to produce additional wheat crops (Feed the Future, 2012). Moreover, because of the lack of arable land, Tajikistan will continue to depend on food imports.

As seen in Figure 2, Tajikistan has two main planting seasons that bookend three harvest seasons, which occur during the country’s summer (May – Oct). The lean season falls between January to mid-April, just prior to the first harvest, increasing people’s vulnerability to shortages of food or increased expenditures on food products.

In Tajikistan, land belongs to the government, which gives “use rights” to farmers. After 1997, the government transformed 562 collective farms into tens of thousands of smallholder farms (Food and Agriculture Organization [FAO], 2014). During this process, many households received land in varying sizes. Land was given to dekhkan farms and households. The dekhkan farm is defined as a commercial farm where land belongs to the state and leased to an individual farmer for long-term use. The average size of dekhkan farms is about 1-5 ha (Mukhamedova and Wegerich, 2018). Along with land reform that took place in Tajikistan the collective farmland was distributed to rural households as Presidential land of about 0.115 ha to allow families grow additional food (ibid.). Rural households also cultivate kitchen gardens to grow food for family consumption such as potatoes, carrots, onions, cabbage and fruit trees, such as apples, peaches, sour cherries, and apricots. The average size of the farmland that belongs to female-headed household is slightly smaller compared to male-headed households averaging 0.12ha vs. 0.14ha, respectively (FAO; 2014, Mukhamedova and Wegerich, 2018).

Figure 2: Agricultural calendar (Source: www.fews.net)



About 93 percent of agricultural produce is grown in household plots and dekhkan farms, although kitchen gardens are by far the most productive enterprises accounting for more than 50 percent of the value of agricultural production (as cited in Yakubov 2013 in Mukhamedova and Wegerich, 2018, p. 131). Farmers are primarily risk-averse and therefore grow relatively small areas of several different crops chosen from a narrow crop range (WB, 2015). As indicated in Table 3, about 10.3 percent of women own land vs. 89.7 percent of men. This implies that with the feminization of agriculture in Tajikistan the inequality in owning or controlling land by women remains large with men controlling not only land but also other agricultural inputs and equipment (Mukamedomova and Wegerich, 2015).

Table 3. Individual holders of agricultural land by sex in Tajikistan

Number of female land holders	Female	Number of male land holders	Male	Total land holders
5,996	10.3%	52,317	89.7%	58,313

Source: Adopted from FAO, 2014

Reforms in Agriculture

According to Asian Development Bank (ADB; 2016), agricultural productivity in Central Asia is low by international standards, whereas Tajikistan's yields are among the lowest in the region.⁷ For a country of its size, Tajikistan should produce approximately 3 times more wheat than its current yield to provide sufficient quantities for its citizens (ibid.). Agricultural reforms in the country focus on the Government of Tajikistan's (GOT) primary focus resulting from continued challenges with poor production yields: food insecurity, meaning increasing wheat and other food stock yields to improve country's food security and availability. The GOT has identified water resources management (WRM), land availability, and climate change resilience as the major barriers to improved agricultural yields and food security (ibid.).

Tajikistan has the second-lowest level of renewable water resources per capita and access to water has been declining over the past decade due poor WRM. Within the Living Standards Improvement Strategy of Tajikistan, 2013-2015, the GOT identified WRM as one of 16 goals for improving food security. The Living Standards sought to improve irrigation and drainage through a targeted improvement of 320,000 ha of agricultural land. During this process, irrigated land increased by 1,500 ha, resulting in a 7 percent value added to agricultural products. The program also included an investment of \$262 million towards WRM and \$24 million for the agriculture sector, accounting for 7.4 percent of Tajikistan's national funds across all sectors (ADB, 2016). In 2013, the Ministry of Land Reclamation and Water Resources was abolished and the Ministry of Energy and Water Resources and the Agency of Land Reclamation and Irrigation were charged with making reforming institutional capacity relating to WRM. Additional areas of WRM reform include classification of WRM institutional responsibility from territorial administration (based on districts and community boundaries) to hydrological areas; the creation of river basin management plans (RBMPs) which monitor use and allocation of water; and the establishment of water governance institutes which are the management entity for the development of RBMPs and provide oversight of different water users (ADB, 2016).

The availability of arable land has declined significantly since Tajikistan gained its independence from the Soviet Union. Tajiks own approximately 0.1 ha of arable land per capita, the least per capita land ownership in Central Asia. Furthermore, only about one-fifth of Tajikistan's land is arable. The decline is attributed in part to corrections of Soviet statistics of arable land that revealed higher soil salinity, land lost by erosion, and areas with hazardous or radioactive environmental contamination than previously estimated (ADB, 2016). Progress in agricultural reform took off in 2007 with the introduction of the "Road Map," a collaborative reform program designed and funded by the GOT and donors, such as ADB and World Bank (WB). The "Road Map" focused on improving the freedom to farm, rural finance, addressing cotton-related debt, and diversification of agricultural products (WB, 2015). In 2012, the GOT made further strides towards securing improved land tenure for citizens through amendments to the Land Code. These amendments ensured that landowners held lifelong rights to inherit, market, and exchange land (WB,

⁷ Tajikistan produces about 2.2 tons/ha for wheat, 1.7 tons/ha for cotton, and 21.9 ton/ha for potatoes as compared to Uzbekistan's yields of 4.5 tons/ha, 2.3 tons/ha, and 24.5 tons/ha, respectively.

2015; ADB, 2016). The Mortgage Law and the Law on Dekhkan Farms were also amended to improve loan protection⁸ for land users (WB, 2015). Finally, there has been a general effort by NGOs and the GOT to restructure the farming system from collective farming to individual, family farms. High costs, administrative barriers, and debt have been the key barriers in preventing farmers from leaving the collective system, pursuing independent production, and investing to land improvement (ADB, 2016).

Tajikistan is highly vulnerable to climate change and natural disasters triggered by global warming (AQUASTAT 2012). The Amu Darya river basin, a major water source for rural Tajikistan, is dependent on water from surrounding glaciers. It is estimated that the glacial flows may reduce by 35 percent by 2085 (ADB, 2016). In 2008, Tajikistan was selected for the Pilot Program for Climate Resilience (PPCR), a nationally-led program supported by several multilateral development banks⁹ that is operational under the Strategic Climate Fund (SCF) (PPCR, 2009; WB, 2015). The PPCR aims to identify and demonstrate methods for climate change reform and means of integrating climate change adaptability within the country's core development initiatives (PPCR, 2009). In 2013-2015, Tajikistan received \$60 million from the ADB through the Investment Climate Reforms Program, a policy-based program in alignment with the National Development Strategy (NDS), 2007-2015 (ADB, 2016). The program prioritizes investment and capacity building of the private sector, emphasizing the mitigation of risks associated with climate change for entrepreneurs and small enterprises. Under the Environmental Land Management and Rural Livelihoods Project, the PPCR promotes sustainable land and water resource management (WB, 2015).

Agricultural Challenges

USAID (2014) notes a number of challenges that inhibit agricultural production in Tajikistan:

- Only seven percent of the country's landmass is arable (this arable land is largely concentrated in the Khatlon region, where Feed the Future interventions are concentrated)
- Most of the country's terrain is mountainous (though not in Khatlon; see map in [Annex I](#))
- Winters are harsh
- Droughts are frequent

Additionally, the WB (2009) states that decades-long underinvestment in Tajikistan's irrigation and drainage networks is connected with frequent water shortages, water-logged soils, reduced soil fertility, and decreased crop yields. The total irrigated land area has decreased significantly, affecting around two million people (WB, 2009). Those who do have access to water are often faced with high costs of water delivery, especially in mountainous areas (ibid.). Lastly, the WB (2009) points to inadequate state cropping plans and a lack of auxiliary services or credit as additional barriers to improvement of agricultural productivity production.

Fortunately, literacy rates are *not* a barrier to agricultural activities or interventions in Tajikistan, as nearly 100 percent of men and women over age 15 can read and write (WB, 2013).

Women in Agriculture

As stated earlier, in Tajikistan, women play a significant role in agriculture and make up a substantial part of the agricultural labor force (about 75 percent). Women are heavily involved in most labor-intensive agricultural work, including weeding, thinning, breaking up crust soil with hoes after irrigation, tipping, and

⁸ In the form of institutional safeguards for land users that prevent them from losing their holdings in the event they default on a loan for which their land is used as collateral.

⁹ PPCR affiliated banks include the WB, the ADB, and the European Bank for Reconstruction and Development.

picking cotton and cotton stalk after harvest. In fact, there are more women working in the cotton sector than men (Mukhamedova and Wegerich, 2018). Heavy and machinery-intensive work is done by men such as plowing, ripping, and fertilizing. However, the economic outmigration of men from rural areas imposed new roles for women in agriculture where they are learning to drive and use machinery-intensive work, which is part of feminization of agriculture process (ibid.)

Despite women's overrepresentation in agriculture, women earn only half of what men earn in this sector (ADB, 2006). This is partially due to gender stereotypes that exclude women from household and community decision-making and that don't allow women to be considered "suitable" farm managers, which limits women's access to private agricultural land (ibid.). Only 10 percent of women have rights to land via farmland use certificates, and inherited land goes to women in less than one out of seven cases (Feed the Future, 2012). Additionally, women risk losing access to land if their husbands die (ibid.). In some, especially conservative regions, women need their husband's approval to leave the house, even if he has migrated to another region or country; this further underscores the lack of decision-making power held by women (ibid.; ADB, 2006). Additionally, as is the case in many countries, women's unpaid labor time within the household limits their ability to be as economically active as men. Many consider this to be a backslide from the Soviet era, when many reproductive duties (such as childcare) were provided by the state, and women were generally given more equality in family and economic life (Feed the Future, 2012).

In general, women tend to provide unskilled labor during planting and harvesting (such as weeding and picking cotton), especially in areas where the number of war widows is high or where there is high outmigration by men (ADB, 2006). They rarely perform tasks that require the operation of machinery, as this is seen as a "man's domain," how the recent outmigration of men to Russia led to reducing the occupational segregation in agriculture where women are filling in the absent male jobs (ADB, 2006; Mukhamedova and Wegerich, 2018). Women rarely receive formal training in the agricultural sector (ADB, 2006). Many women are active as traders in local marketplaces, though much of this activity is connected with the "shuttle trade,"¹⁰ and it is unclear to what extent women are involved in the sale of agricultural products (ibid.).

In the Khatlon region, 26 percent of households in urban areas are female-headed, as are 13 percent in rural areas of that region (ADB, 2006). However, as previously mentioned, even women in female-headed households (for example those who have husbands who have migrated to other regions) still often suffer from gendered discrimination and a lack of mobility and rights. In order to improve women's agricultural productivity, ADB points to the need to increase women's access to privatized land, the enforcement of gender equity legislation by government officials, and the need to change discriminatory cultural stereotypes regarding women's capabilities to be productive farmers.

According to FAO (2014), the outmigration of men has caused many women to carry a double burden of heading a household in which men either abandoned a household or do not provide economic support, and care for the children (over 70 percent of these de facto female-headed households have children). Despite the coverage of this problem in Tajik media, the data on these households is sparse but the general trend shows that women in these households receive no or insufficient remittances from migrant husbands. As a result, they search for alternate sources of income where informal labor market becomes important (ibid.).

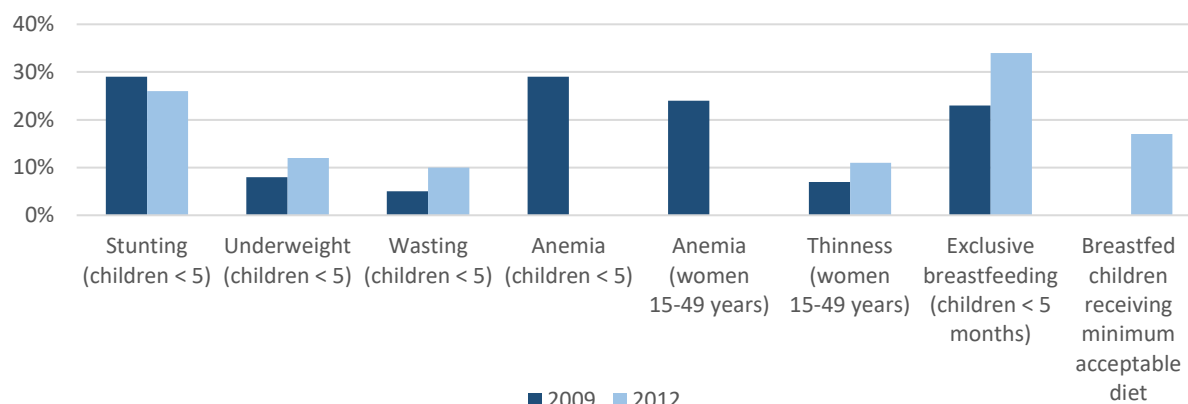
¹⁰ Shuttle trade is defined as an activity in which individuals buy goods abroad or in larger cities for resale in street markets or small shops.

Food Security and Nutrition

An estimated one-third of Tajikistan's population is affected by food insecurity and ten percent of the population is severely food insecure (USAID, 2014a). Household food insecurity is primarily driven by increases in food prices, because the majority of the population spends between 60-80 percent of their income on food (USAID, 2014a; WB, 2015). For a map depicting of sub-regional variation in food insecurity, see [Annex 2](#).

Malnutrition is a significant public health problem. One in three children under five are stunted, which is a consequence of chronic malnutrition. Iron deficiency anemia affects one third of children (USAID, 2014a). Food insecurity is closely linked to undernutrition in Tajikistan; other causes of undernutrition are inadequate childhood feeding practices, a lack of parental knowledge about managing common childhood illnesses, and not seeking timely medical attention (USAID, 2014a). In addition, 42 percent of households lack access to clean water, which increases diarrheal disease incidence and further increases the risk of undernutrition. The WB (2009) states that better water management would improve the yields of family gardens, which would positively impact both household nutrition and women's agricultural productivity. Lastly, a lack of dietary diversity may contribute to nutrition issues, as wheat accounts for almost 60 percent of the calories in the average Tajik's diet (Feed the Future, 2012). See additional tables and charts in [Annex 4](#).

Figure 3: Key nutrition indicators. (Source: USAID, 2014a.)



As seen in Figure 3, several indicators of undernutrition have increased in recent years, including underweight and wasting of children and thinness among women. Even though the stunting rate has decreased slightly, USAID (2014) calls Tajikistan's stunting rates "alarmingly" high, especially given that poverty rates are lower than in other Feed the Future countries. Breastfeeding practices have increased slightly, but are still considered low (ibid.). In the same report, undernutrition is considered an underlying cause of 35 percent of child deaths.

Though official statistics indicate that less than one percent of Tajikistan's population is living with HIV (WB, 2013), the ADB report (2006) states that this data may not reflect the real situation; they estimate that HIV infection rates are 10-20 times higher in some regions in Tajikistan than the official level. United Nations Children's Fund (UNICEF; 2015) explains the link between HIV/AIDS and childhood malnutrition: "Children living with HIV/AIDS are at great risk of malnutrition. HIV/AIDS stunts child growth and can reduce appetite, food intake, and nutrient absorption." Additionally, "Antiretroviral drugs are most

effective when children are well-nourished and have safe and sufficient access to food,” though “diarrhoea and nausea can be side effects of antiretroviral drugs, making eating a challenge.”

Tajikistan’s National Nutrition Strategy

The National Development Strategy for 2016-2030 highlights food security and nutrition as priority issues. In addition, Tajikistan’s Nutrition and Food Safety Strategy (NFSS) outlines national plans concerning nutrition, including the introduction of nutrition-sensitive policies. Other national strategies involved in designing national nutrition-related objectives include: The National Child and Adolescent Health Strategy (NCAHS) 2010-2015, the Food Security Programme 2009-2015, the National Health Strategy (NHS) 2010-2020, and the Nutrition and Physical Activity Strategy 2015-2024.

The NCAHS lays out plans and institutional appointments set to address a wide range of nutritional challenges in the country. For example, the Food Security Council of the Republic of Tajikistan (FSCT) was established through the NCAHS and works to create and implement food safety standards. The demand for councils like the FSCT arose following the independence of Tajikistan when the prevalence of micronutrient deficiencies and diseases related to this type of malnutrition began to increase. The increase in poor nutrition is hypothesized to be the result of declining access to nutritious foods and iodized salt. Diets are more limited micronutrients in rural, agrarian regions of the country. The increase in malnutrition may also be connected to the high animal fat diet, high rates of enteric infection (especially during summer months), lack of adequate quantities of food, and poor feeding child and infant feeding practices (Khodjamurodov et al., 2016).

The NFSS 2013-2020 focuses on malnutrition, the prevention of food-borne diseases, and nutrition-related non-communicable diseases (USAID, 2014a).¹¹ Due to the multifactorial nature of Tajikistan’s nutrition challenges, the Nutrition and Food Safety Strategy uses an integrated methodology and simultaneous implementation to address multiple drivers of malnutrition. Tajikistan has aligned this strategy with World Health Organization (WHO) and UN policies, guidelines, and frameworks concerning nutrition and food safety. Figure 4, below, illustrates the guiding principles the NFSS for 2013-2020.

The priorities of the Nutrition and Food Safety Strategy are outlined below:

- Strengthen the capacity of the National Health System and nutrition education systems;
- Improve infant and child feeding practices;
- Improve water, sanitation and hygiene (WASH) practices on farms and in homes;
- Strengthen collaboration and coordination between nutrition-related sectors (agriculture, health, economy);
- Establish a national school nutrition program;
- Develop a set of initiatives to address nutrition-related non-communicable diseases;
- Improve knowledge of consumers on food safety and dietary guidelines, and the risks associated with poor nutrition;
- Establish a national Codex Alimentarius Intersectoral Working Group;
- Develop and strengthen lines of communication and methods of disseminating information to consumers;
- Evaluate the gender inclusivity of nutrition-sensitive trainings and information; and
- Establish an inter-sectoral government committee to overlook the implementation of the Nutrition and Food Safety Strategy (Boymatova, 2013).

¹¹ The Nutrition and Food Safety Strategy (2013-2020) has been finalized but has not been approved by the government (USAID, 2016).



Figure 4: Guiding principles for the Nutrition and Food Safety Strategy. (Source: Boymatova, 2013).

Institutional Framework for Extension and Advisory Services

The EAS system in Tajikistan is diverse and pluralistic, comprised of NGOs, donor organizations, academic institutions, research institutions, the Ministry of Agriculture (MOA), and the Ministry of Melioration and Water Resources (Kazbekov and Qureshi, 2011; Shtaltovna, 2016). Since the fall of the Soviet Union, however, both knowledge-sharing between those establishments and accessibility of knowledge to farmers have deteriorated. In the past, research findings and new agricultural technologies were transferred from the before-mentioned institutions through the MOA to reach *kolkhoz* (collective farm) and *sovhoz* (state farm) experts.¹² These experts played the role of agriculture extension agents within the Soviet system and delivered information to collective farms. In the current EAS system in Tajikistan, *kolkhoz/sovhoz* experts no longer exist as government employees and have instead sought employment through NGOs. Today, the majority of farmers depend on former *kolkhoz/sovhoz* experts or old farmers for agricultural information. This has led to a knowledge gap at the farm level, with farmers receiving out-of-date information, resulting in a less skilled, poorly informed farming community (Shtaltovna, 2016).

Currently, NGOs are the active EAS providers in Tajikistan (Shtaltovna, 2016). As the public system dissolved, NGOs filled in the gaps to deliver services to farmers. The complication with this, however, has been inconsistent advancements in the EAS system; evidence from past programs and interventions

¹² Collective and state farms were agricultural enterprises during the Soviet period. Collective farms managed collective-owned farms, while state farms operated state-owned farms.

indicates that EAS in Tajikistan is highly dependent on donor funds and lacks the national-level institutional support to maintain the projects once funding runs out. For example, in 2004, FAO and the MOA established the Agricultural Information Center (AIC), an organization intended to serve as the governing agency for the national extension system, but this initiative ended with the program's funding (Kazbekov and Qureshi, 2011). The *Support to the setting up of a structure to provide information, training, and advice to farmers and other rural businesses in the Khatlon Region of Tajikistan* (SITAF) project established a communication network for ESPs, but this too was halted after funding was used. Finally, the International Center for Agricultural Research in the Dry Areas (ICARDA) established the Information Center with the Academy of Agricultural Sciences, and this too was terminated with the loss of funding (Kazbekov and Qureshi, 2011). There are approximately 29 extension service providers (ESPs) active in Tajikistan. However, only 11 of them have the capacity to train farmers and about half of those have training capacity in farm management. The majority of these ESPs are dependent on donor funds (Kazbekov and Qureshi, 2011).

The existing public EAS exists within Agroprom (Agricultural Production Unit), under the Ministry of Agriculture. Extension officers are typically subject matter specialists who have limited access to resources (transportation, internet, or program support). Interestingly, the extension officers focus more on a top-down approach to delivering extension services through building social networks, cooperatives, and increased market access. This may be tied to the former Soviet system of shared farming, where social networking was an essential asset for farm success. Because farming within the Soviet system called for a group of collective farmers, each with his or her own specialization (agronomy, animal science, economics, irrigation, etc.), farmers were equipped with a very specific subset of technical knowledge. As these collective farms have disappeared, knowledge demand has shifted away from specialization and towards diversified, technical skill. One barrier to providing these skills to farmers is the lack of technical training for front-line extension workers through the Tajikistan Agrarian University (TAU) or the National Agricultural Training Center, neither of which offers courses in extension methods (Modernizing Extension and Advisory Services [MEAS], 2011).

Despite challenges in agriculture extension, Tajikistan has made several advancements. In 2009, a four-way collaboration between the Sogd Branch of the Tajikgiprovodkhoz Institute (research institution), local NGOs (information processing), Irrigation-Agro Consulting (water-related extension), and ZarZamin (agricultural extension) showed promise in involving multiple stakeholders to address the extension needs of farmers. The program addressed technology promotion and adoption in rural villages of the Fergana Valley. The program revealed the limited involvement of the GOT in extension activities and has led to increased interest in government investment in mainstreaming policies on technical, financial, and agronomic support for farmers (Kazbekov and Qureshi, 2011). As a result Neksigol Mushovir was formed which is active in the Agricultural Extension Services (AES) sector serving primarily the dekhkan farmers in Northern Tajikistan, although Neksigol is expanding its reach to Khatlon Oblast to target women and dekhkan farmers (Personnel communication with Neksigol Mushovir, 2016).

Agricultural Institutions

The MOA is the primary agricultural ministry of Tajikistan and functions primarily as a top-down, administrative entity that designs and disseminates new policies and agricultural reforms to other agriculture-related institutions. The MOA does not have control or input regarding its budget, which is determined by the GOT. The MOA is comprised of a research entity and Agroprom. The Academy of Agricultural Sciences and the TAU are included under the research entity and both have experimental stations or branches throughout the country. Agroprom represents the extension side of the MOA, although in a passive role. This branch of MOA consists of provincial and district officers, many of which

are former *kolkhoz* experts. These officers typically play a supervisory role, collecting data on regional yield and production, rather than delivering farm-level extension services (Kazbekov and Qureshi, 2011).

National Agricultural Development Plan

Tajikistan lays out its agricultural plan for agriculture, rural development, and agro-industry within the larger country policy framework, the National Development Strategy (NDS). The NDS is responsible for streamlining efforts of donor- and NGO- led interventions in accordance with the GOT priority activities. Below are the major NGO, donor-supported, and government priorities identified within the NDS:

- Establish a natural resource and water management framework,
- Develop sustainable practices in agriculture and land use,
- Improve energy systems' effectiveness and efficiency,
- Reduce the impact of natural disasters and erosion,
- Improve water/sanitation and irrigation systems,
- Promote climate change resilience actions, and
- Support income and employment generating activities in villages, local cooperatives, small farms, and small businesses (EU, 2014).

In addition to the NDS, a series of sector-specific strategies target discrete areas of agriculture-related reform. These strategies include: i) the Poverty Reduction Strategy, ii) the Program of Economic Development, iii) the Concept of Agricultural Policy (which includes the Action Plan for Comprehensive Agrarian Reform), iv) the Development Program for the Cotton Industry, v) the Development Program for the Seed Industry, and vi) the Strategy for Reforming the State Governance (FAO, 2011). The majority of these programs foster the general goal of improving rural welfare and livelihoods. In addition, the National Agrarian Reform Program and the Water Sector Reform Strategy are based on private sector agricultural growth in addition to bridging the communication gaps between public and private stakeholders (EU, 2014).

Although many policies have been developed to promote and protect smallholder farmers, implementation has lagged. These policies included in the Action Plan for Comprehensive Agrarian Reform, the Poverty Reduction Strategy, and the Program of Economic Development all focus on food availability and price stabilization (EU, 2014). The primary implementation methods have included price controls and state sales. This, however, has ignored accessibility and quality of food. Interestingly, despite the recognized need for improved knowledge-sharing and EAS among farmers and between agricultural institutions, none of the national strategies, including the NDS, detail improvements in EAS as a priority action (Shtaltovna, 2016).

Health Institutions

Like the agriculture sector, the health sector in Tajikistan has recently undergone extensive reforms. In 2005, the GOT passed the Healthcare Financing Strategy 2007-2015, followed by the Law on Mandatory Health Insurance in 2008, and the NHS 2010-2020. The NHS supports the GOT's previous stance on healthcare with the promise of additional reforms in health finance. However, despite these improvements, the rate of illness in Tajikistan remains the worst in post-Soviet Central Asia. Furthermore, the reemergence of polio represents a considerable challenge for the country and indicates that the public health system requires further strengthening (EU, 2010).

Tajikistan's healthcare system functions under a state-run, universal model. Although government investments have been historically low in Tajikistan, the country is making progress. For example, funds allocated to healthcare spending have increased from 1.6 percent in 2010 to 6.9 percent in 2014 (EU,

2010; Yuldoshev, 2014). Mandatory health insurance has been pushed by the GOT since 2008, upon the introduction of the Law on Mandatory Health Insurance. However, implementation of this law has been postponed twice; first to begin implementation in 2015, and later to 2017 (EU, 2010). The Ministry of Finance, the Ministry of Labor, and the Tax Committee have recommended the postponement due to financial shortage. According to estimations based on observations of neighboring countries, government spending on health care should exceed 10 percent of the GDP before the law can be sustainably imposed (Yuldoshev, 2014).

The Ministry of Health and Social Protection of the Population of Tajikistan (MOH) is the primary health institution for the country and is responsible for designing, implementing, and delegating responsibilities related to the NHS. The MOH manages most national health facilities and health services while local authorities manage social services. However, the MOH does not have control over the national health budget (Khodjamurodov et al., 2016). The MOH laid out the following objectives in the most recent NHS (2010-2020):

- Strengthen and modernize governance within the health system to improve sustainability, transparency, and equity;
- Improve the accessibility, quality, and efficiency of individual and population-based health services; and
- Develop health system resources (EU, 2010).

Aside from the MOH, there are 163 health facilities (hospitals and clinics) run by other ministries or state agencies. These ministries include the Ministry of Defense, Ministry of Internal Affairs, Ministry of Justice, Ministry of Transport and Communication, and the Ministry of Light Industry. The MOH coordinates the activities of such parallel health services to assure that they align with the NHS, including new health reforms and policies. Finally, starting in 2002, the GOT began promoting private sources of healthcare with the adoption of the Law on Private Medical Practice. Development of the private sector has been slow, however, because the general population has limited resources to spend on medical treatment, or those with resources tend to seek better services in Russia, Turkey or India. Furthermore, physicians themselves often lack the funds and experiences to pursue a private practice venture (Khodjamurodov et al., 2016).

Scaling Up Nutrition Movement

Tajikistan joined the Scaling Up Nutrition (SUN) Movement in 2013, a global movement that seeks to eliminate malnutrition by 2030. SUN unites national governments, bilateral organizations, donors, businesses, and civil society leaders in a collaborate effort to improve nutrition. Following the introduction of the SUN movement in Tajikistan (funded primarily by USAID and UNICEF), a thorough review of national nutrition policies was completed to determine under which strategies nutrition objectives are planned, and under which strategies are they being implemented (See the above section, *Tajikistan's National Nutritional Strategy*, for all national strategies that mention 'nutrition' in their plan). The review culminated in 2015 with the development of the Common Results Framework (CRF), which identified sectoral priorities and contributions among key stakeholders across a variety of sectors (government, private sector, academia, civil society, and NGOs/development partners). The CRF eventually led to the inclusion of Food Security and Nutrition as a distinct goal of the new National Development Strategy 2016-2030 (UNICEF, 2017).

After the introduction of SUN, the MOH convened a Multi-Sectoral Coordination Council (MSCC) to promote the inclusion of nutrition-related goals and indicators within their sector-specific strategies.

Finally, the MSCC established the FSCT to address and coordinate decisions concerning food security among associated branches of the government, NGOs, and donors (SUN, 2015).

Since joining the SUN Movement, Tajikistan has met several milestones, one of which was the design and implementation of a more effective information system to understand and monitor the quality of people's diets, both with respect to quality of nutrients and diet diversity. The GOT, through MOH and Tajikistan's Agency of Statistics, implemented a dietary assessment in accordance with WHO dietary recommendations (FAO, 2017).¹³

Gender Integration into EAS and Nutrition

Although limited access to EAS is a problem experienced by all smallholder farmers in Tajikistan (less than 10 percent of farms are reached under the current system), women's ability to take part in EAS is further constrained by reduced mobility, small social networks, and lack of training opportunities as compared to male farmers (MEAS, 2011; FAO, 2016). Somewhat limited mobility restricts women from equal participation in markets and extension activities (e.g., trainings, field days), which can significantly affect the production success of farms, and women farmers in particular. Women also experience limited opportunities to sell their produce at village or roadside markets and access higher levels of the value chain. Furthermore, a lack of transport facilities in remote rural areas limits women's ability to seek financing assistance, apply for loans, pay taxes, or seek legal assistance related to agriculture (FAO, 2016). With limited EAS, many farmers in Tajikistan depend on advice or assistance from farmer networks, especially those among dekhkan farmer networks. Women, however, do not appear to benefit from these knowledge-sharing networks because of their lack of access to these networks or lack of recognition of their roles in agriculture. Lack of access to the networks and AES are identified as a major barrier preventing women from adopting sustainable farming practices (FAO, 2016). The gender gap in agricultural education (i.e., fewer women seek formal agricultural education) marks an additional barrier to women in accessing agricultural information. Furthermore, despite women's overrepresentation in agriculture, their effort is typically concentrated within the lowest paying jobs. A very small number of women enter into professional or high education institutions for agricultural study or employment (FAO, 2016). The current public EAS system does not take into consideration the gaps experienced by women farmers in the delivery of their services. This is primarily because state-run EAS is extremely limited for both men and women, and when targeted it focuses on male-farmers (ibid.).

There have been donor projects that integrate gender within their programs. For example, the USAID-funded Farmer Advisory Services in Tajikistan (FAST) project, ran by the University of Illinois at Urbana Champaign, included a women-targeted program for disseminating good farming practices among both homestead farmers and commercial farmers in Khatlon Oblast. Nonetheless, women farmers have difficulty employing the practices they learn in such trainings due to challenges with decision-making within the home (FAO, 2016).

Feed the Future Multi-Year Strategy

As previously mentioned, Feed the Future focused its interventions in the Khatlon region, where rates of undernutrition and poverty were among the highest in the country. This was also a suitable region for promoting water and land reforms, because of Khatlon's irrigated watersheds and cotton-dominated agricultural production. Feed the Future (2012) estimated that 201,000 vulnerable smallholder farmers and their families, especially women and children, would receive assistance to escape poverty and hunger

¹³ Technical support was given by FAO and funding from the EU.

over the next five years, and that significant numbers of additional rural populations would also attain improved income and nutritional status as a result of Feed the Future interventions.

The Feed the Future strategy was built on three pillars:

Pillar 1: Assistance to household and small commercial farms to increase income and the production of food for home consumption, as well as support to improve nutritional and health outcomes.

- Developing fruit and vegetable value chains,
- Improving livestock management and increasing meat and milk yields,
- Increasing access to protein,
- Reducing harm on the environment,
- Increasing income of and educating women to improve nutrition, dietary practices and health outcomes of children and women.

Pillar 2: Building the capacity of local institutions and community-based organizations

- Strengthen agricultural extension,
- Improve resource conservation,
- Create producer groups to improve access to markets and inputs.

Pillar 3: Completion of effective agrarian reform in selected districts

- Promote land and water reforms,
- Strengthen institutional foundation for reforms to be effective (Feed the Future, 2012).

Gender and nutrition were most heavily addressed through Pillar 1, which focused on the development of fruit and vegetable value chains, improvement of household livestock management and fodder production, and implementation of public health interventions that address nutritional and micronutrient deficiencies. Specifically, these health interventions promoted exclusive breastfeeding; increased intake of vitamins, minerals, and micronutrients; appropriate complementary feeding; and improved hygiene-related practices such as hand-washing (Feed the Future, 2012).

The Intermediate Results (IRs) of the Feed the Future program are as follows:

IR 1: Markets expanded and value chains strengthened.

IR 2: Small farm productivity increased.

IR 3: Successful agrarian reform demonstrated in Khatlon.

IR 4: National policy related to agriculture and nutrition reformed.

IR 5: Nutrition improved.

Over the course of Feed the Future activities in Tajikistan, Feed the Future conducted a population-based survey interviewing 2000 households in the ZOI during December 2012 - January 2013 time period. This data combined with secondary data for the ZOI collected information related to women in agriculture, food security, consumption, nutrition, and wellbeing of households in the ZOI. The main goal of this activity was to establish a baseline value to measure changes in the Feed the Future indicators for ZOI (Feed the Future FEEDBACK, 2014). The subsequent assessments were followed in 2015 for interim assessment, and the final survey was projected for 2017 (ibid.).

USAID/Regional Development Cooperation Strategy

The 2015-2019 Regional Development Cooperation Strategy (RDC, for Central Asia) is considered more modest, but more attainable than other strategy from USAID in the past 20 years (RDC, 2015). The new RDC is comprised of three development objectives (DOs):

DO 1: Expanded diverse and competitive trade markets.

DO 2: Enhanced regional cooperation on trans-national energy and water resources.

DO 3: More effective, inclusive governance institutions (USAID, 2014b).

According to the RDC (2014b), by diversifying commodities for economic growth beyond the primary staple crops, Tajikistan is believed to become less vulnerable to fluctuations in food prices, recessions, and other economic shocks. USAID proposes diversifying crops and increasing investments for value-added industries as a means of breaking the reliance on primary commodities. This would require an improved business environment. In order for this to occur, there must be supportive investments in infrastructure, human capital, and management practices. Additionally, the trade market must support the diversification and strengthening of production channels. In recent years, international trade with Tajikistan has slowed due to a lack of regional trade agreements and limited participation in globally-recognized rules-based trading systems (the World Trade Organization, for example). USAID intends to support efforts to harmonize cross-border trade through increased transparency. A final goal within this DO is agricultural competitiveness and food security.

DO 2 addresses the limitations of energy and water resources in Central Asia, a source of disagreement and tension in the region. These tensions have led to a distrustful trade environment and negative economic outcomes. USAID intends to support this DO through increased attention on national energy security, improved energy policies and procedures, and improved energy infrastructure. Improved management of shared resources should maximize the benefit of those resources and allocate them more effectively among Central Asian countries.

The final development objective, DO 3, addresses the ongoing governmental transition from the Soviet governance structure and post-civil war recovery. These transitions have led to large, overstaffed government agencies that lack the resources to sustain themselves. Furthermore, citizens in Tajikistan are unaccustomed to voicing their expectations, criticisms, or suggestions to state policy. This DO seeks to facilitate improvement local and state governmental bodies (through transparent policy making and engagement between civil society and government) to increase the effectiveness and accessibility of public services (health, education, EAS).

The Illustrative Performance Indicators (IPIs) for the USAID's Development Cooperation Strategy includes gender-specific indicators for the number of women and women's groups participating in cross-border trade, measurements of the Women's Empowerment in Agriculture Index (WEAI), percent change in women's incomes (farming and non-farming households). USAID also intends to integrate gender within the regional strategy by increasing women's decision-making power with regards to water resources management and policy (USAID, 2014b).

Active Projects funded by the USG, USAID in particular

See [Annex 5](#) for more detailed information on select (Feed the Future) projects

Project	Implementing partner(s)	Link	Goals/objectives	Contacts
Feed the Future Tajikistan Land Market Development Activity 2016 – 2020 \$9.7 mln.	Chemonics International, Inc.	https://www.chemonics.com/projects/establishing-land-market-tajikistan/	Improve Tajikistan's land policy and legal and regulatory framework for governing market transactions; introduce market-based principles for agricultural land-use rights; simplify land registration procedures; and increase knowledge and protection of agricultural land markets	Chynara Arapova, Chief of Party, carapova@landtj.com
Tajikistan Agribusiness Competitiveness Activity 2018-2023 \$18.68 mln	Winrock International		Main goal is to improve the competitiveness of Tajikistan's agribusiness enterprises, leading to increased economic development, employment, and livelihoods.	
Feed the Future Tajikistan Health and Nutrition Program 2015-2020 \$13 million	IntraHealth International Inc. (lead) Abt Associates and Mercy Corps Target area: Khatlon Oblast	www.intrahealth.org/page/feed-the-future-tajikistan-health-and-nutrition-program	Integrate high-quality maternal, newborn, and child health care at the family, community, clinical and national levels, with an emphasis on nutrition, sanitation and hygiene	Karen Doll, Senior Program Manager kdoll@intrahealth.org
Feed the Future Tajikistan Agriculture and Water Activity 2015-2020 \$11 million	Chemonics International, Inc. Target area: Khatlon Oblast	www.chemonics.com/OurWork/OurProjects/Pages/Tajikistan-Agriculture-and-Water-Activity.aspx	Assist smallholder farmers to increase, diversify, and add value to agricultural production to address dietary deficiencies and market surplus production Promote nutrition sensitive agriculture	Kirk Ramer, Chief of Party kirk.ramer@gmail.com
Feed the Future Tajikistan Farmer to Farmer Program 5 years \$2.1 million	ACDI-VOCA Focus: Khatlon Oblast	http://acdivoca.org/our-programs/project-profiles/europe-caucasus-and-central-asia-farmer-farmer-program-f2f	Providing specialized volunteers technical assistance to increase agricultural sector productivity and profitability and strengthen the competitiveness of agricultural sector institutions	Nodir Ibrohimzoda Chief of Party nodir.i@gmail.com Meredith Jones, ACDI-VOCA Program Manager mjones@acdivoca.org
Feed the Future Women Entrepreneurship for Empowerment Project 2015-2018	National Association of Business Women of Tajikistan Target area: Khatlon Oblast	https://www.facebook.com/NABWT/info/?tab=page_info	Reduce poverty by advancing women's capacity to create successful businesses within the agriculture sector Support the Feed the Future priorities on food security and nutrition	Farrukh Shoimardonov Project Manager farrukh_shoh@mail.ru
Tajikistan Read with Me 2016 – 2021 \$19.45 mln	Chemonics International, Inc.	https://globalreadingnetwork.net/reading-programs-worldwide/tajikistan-read-me	Main goal is to improve reading outcomes for students in grades one through four in targeted schools in Tajikistan.	

Other Donor Funded Projects and Activities

Below listed projects are funded by donors (WB, ADB, and others) working in the field of agriculture, health/nutrition, and gender.

Project	Donor/Implementing partners	Target areas	Goals/objectives	Contacts
Tajikistan Health Services Improvement Project 2013 – 2019 \$23 million grant	WB (donor) Ministry of Health and Social Protection	Khatlon Sughd	Improve maternal and child health outcomes by providing incentive payments for better performance in coverage and quality of basic primary health care services in rural health facilities	Lola Bobokhajaieva, First Deputy Minister of Health and Social Protection Dr.lola@mail.ru
Scaling-up of the Pilot of Nutrition Investments in Severely Food Insecure Districts in Khatlon – Japan Social Development Fund Grant 2013 – 2018 \$2.80 million	WB (donor) Ministry of Health and Social Protection Partners: Embassy of Japan Mercy Corps UNICEF USAID	Khatlon	Improve health and nutrition status among children under five years and pregnant and lactating mothers in 14 districts of Khatlon affected by food price shocks	Salimzoda Nusratullo, Director info@hsip.tj
Environmental Land Management and Rural Livelihoods Project 2013 – 2018 \$16.88 million	WB (donor) Committee for Environmental Protection GIZ and DIFD	Districts of Khatlon Kulob, Farkhor, Khovaling, Baljuvan, Tavildara and Jirgatol	Promote the adoption of innovative rural production and land management practices on village, jamoat-level pasture user groups, and water user associations-level	Ibodzoda Khairulo, Committee Chairman Elmrl_cep@outlook.com
Agriculture Commercialization Project 2015 – 2021 \$25.92 million	WB (donor) Ministry of Agriculture	Khatlon	Increase commercialization of farm and agribusiness' products of select value chains Support the new Agrarian Reform Program	Sandra Broka, Task Team Leader Tel.: (992-37) 221-1596
Second Public Employment for Sustainable Agriculture and Water Resources Management Project 2012-2018 \$45.90 million	WB (donor) Ministry of Energy and Water Resources Agency for Land Reclamation and Irrigation	Khatlon Districts of Republican Subordination (Dushanbe)	Create jobs to food-insecure people through irrigation and drainage system rehabilitation Increase crop production Support water resource management institutions	Safar Karimov, Project Manager fwrmp@mail.ru
National Water Resources Management 07/2014 – 06/2018 \$7,356,882	Swiss Agency for Development and Cooperation (SDC) Helvetas, GIZ, ACTED Target area: Sughd Oblast		Improve water resource and irrigation management at national, basin, canal, and on-farm level to increase water and food security and reduce water related disaster risks, improve livelihoods and raise socio-economic indicators in rural areas	Rano Mansurova, Country Director rano.mansurova@acted.org

Source: Information on WB projects comes from The World Bank Group – Tajikistan Partnership Program Snapshot, 2015.

Conclusions

INGENAES aims to reduce gender gaps in agricultural extension and advisory services in Feed the Future countries. Tajikistan faces several internal obstacles that must be addressed in order for INGENAES objectives to be successful:

- Poor secondary education coverage among both women and men
- High poverty rates, especially in rural areas
- Irrigation, water resource management, and marketing infrastructure are all extremely limited
- Transitioning economy, government and agricultural system from the former Soviet model
- Low climate change resilience, high vulnerability
- Lack of transparency, civic engagement, and access to information, resulting in non-responsive governance and poor public service delivery

As INGENAES maintains a strong focus on gendered issues, it is important to consider those barriers facing women in Tajikistan as well:

- Cultural beliefs more highly value men over women
- Women and girls have higher rates of primary and secondary education and achieve lower levels of education
- Women have less access to extension services
- Women own smaller plots of land
- Women experience limited access to transportation
- Women have limited access to business networks
- Women have a limited voice in community and national politics

Tajikistan's most important crop is cotton, which accounts for 20 percent of the country's total export revenues and 11 percent of the GDP. Backyard gardening is a common practice in rural Tajikistan, allowing families subsistence farm plots of varying sizes. Wheat, potatoes, carrots, onions, cabbage, and some fruit trees are commonly produced in home gardens for family consumption.

Although Tajikistan's agricultural sector is highly dependent on irrigation, both management and infrastructure relating to water resources management are limited. Half of the water pumping and more than half of drainage systems are estimated to be dysfunctional. Furthermore, overexploitation of water resources has led to soil depletion and salinization, a major contributor to the decreasing availability of arable land in Tajikistan. The Ministry of Energy and Water Resources and the Agency of Land Reclamation and Irrigation are charged with introducing major reforms to irrigation for agricultural purposes.

An estimated one-third of Tajikistan's population is food insecure, and ten percent is severely food insecure. Food insecurity is more severe in rural areas, where in two out of four provinces; at least 11 percent of the rural population is severely food insecure. Food insecurity and malnutrition are closely linked in Tajikistan. Major drivers of food insecurity include: vulnerability food price volatility, lack of dietary diversity, poor infant and young child feeding practices, lack of access to clean water, and high rates of enteric disease (diarrhea). With respect to poor diet diversity, wheat accounts for almost 60 percent of the daily allotment of calories in the typical Tajik diet. Although stunting has decreased slightly, underweight and wasting among children and thinness among women have increased in recent years. To support rural nutrition, the GoT outlines a nutrition plan through the Nutrition and Food Safety Strategy

that strongly promotes improved capacity of public services relating to health and nutrition and improved nutrition education among both children and adults (focusing on women and children).

Tajikistan's extension and advisory services function within a multi-actor, pluralistic system consisting of services provided by the public sector, private sector, NGOs, and donors. In general, however, farmers do not depend on the state for agricultural information or training. NGO and donor-led programs have filled in the gaps in the EAS system through interventions. This has led to questions of sustainability, as many of these programs are unable to be continued once the organization withdraws financial support due to limited policy and institutional support from the government of Tajikistan. The Ministry of Agriculture is the primary state-run EAS institution and houses Agroprom, the functional EAS body that employs agricultural extension officers. These officers, however, mainly fill an administrative role and do not deliver EAS to the front line (farms). Farmers instead depend on information and advice from older, more experienced farmers. Women are severely disadvantaged by this system because i) the limited services available do not reach them due to limitations on women's transportation and agency to participate and ii) women cannot benefit from the knowledge-sharing that men utilize for farm advice because they do not have equal access to social networking. One of the reasons women do not have access to agricultural networks is because men perceive farming as "men's work." This is particularly true in more conservative regions of the country.

Feed the Future focuses its interventions in the Khatlon region, where food insecurity and poverty are among the highest in the country. FTF's activities center around improving food security and improving income through a three-pillared strategy:

1. Provide assistance to household and small commercial farms to increase income, production and consumption of food produced, and deliver nutritional and health-related support
2. Build the capacity of local institutions and community-based organizations
3. Complete an effective agrarian reform in selected districts through water resource management and institutional reform

INGENAES initiatives overlap with several other projects supporting nutrition, agriculture, food security, and gender mainstreaming in Tajikistan. These external projects include U.S. government-funded programs, NGOs and other donors, and small-scale grassroots operations. Detailed information about on-going Feed the Future and non-USAID funded projects can be found at the end of this brief.

References

- AQUASTAT. (2012). Tajikistan. Water Report 39. Retrieved from www.fao.org/nr/water/aquastat/countries_regions/TJK/TJK-CP_eng.pdf.
- Asian Development Bank [ADB]. (2006). *Country Gender Assessment: Republic of Tajikistan*.
- Asian Development Bank [ADB]. (2016). *Country Partnership Strategy: Tajikistan, 2016-2020 (Sector Assessment (Summary))*. Retrieved from <https://www.adb.org/sites/default/files/linked-documents/cps-taj-2016-2020-ssa-03.pdf>.
- Bedoshvili, D. (2006). *Global Partnership Initiative for Plant Breeding Capacity Building: Plant Breeding in Tajikistan*. FAO. Retrieved from www.fao.org/in-action/plant-breeding/our-partners/asia/tajikistan/en/.
- Boymatova, Kh. (2013). Nutrition and Food Safety Strategy for Tajikistan 2013-2020. NPO Nutrition and Food Safety, World Health Organization Country Office in Tajikistan.
- Densiova, I., Malokostov, A.M., and Turdyeva, N.A. (2013). *Tajikistan joining the customs union of Russia, Belarus and Kazakhstan: Pros and cons*. FREE Policy Brief Series, December. Moscow: CEFIR.
- European Union [EU]. (2010). *Action Fiche No 1 for Tajikistan*. Retrieved from https://ec.europa.eu/europeaid/sites/devco/files/aap-financing-tajikistan-af-2010_en.pdf.
- European Union [EU]. (2014). *Multi-annual Indicative Programme 2014-2020: Tajikistan*. Retrieved from <https://ec.europa.eu/europeaid/sites/devco/files/mip-2014-2020-tajikistan-20140812-en.pdf>.
- FAOSTAT. (2015). *FAOSTAT Database*. Food and Agriculture Organization of the United Nations. Retrieved from www.faostat3.fao.org.
- Feed the Future Initiative. (2011). *Tajikistan Fact Sheet*. Feed the Future Initiative. Washington, D.C.: US.
- Feed the Future. (2012). *Tajikistan FY 2011-2015 Multi-Year Strategy*. Washington, DC.
- Feed the Future FEEDBACK. (2014). *Feed the Future Tajikistan Zone of Influence Baseline Report*. Rockville, MD: Westat.
- Food and Agriculture Organization of the United Nations [FAO]. (2011). *Trends of Agro-Industry*. Retrieved from www.fao.org/fileadmin/user_upload/Europe/documents/Publications/AI_briefs/Tajikistan_ai_en.pdf.
- Food and Agriculture Organization of the United Nations [FAO]. (2017). *Tajikistan: Country Indicators*. Retrieved from www.fao.org/faostat/en/#country/208.
- Food and Agriculture Organization of the United Nations [FAO]. (2014). *Rural Women in Eastern Europe and Central Asia*. Retrieved from www.fao.org/3/a-i3840e.pdf.
- Food and Agriculture Organization of the United Nations [FAO]. (2016). *National Gender Profile of Agricultural and Rural Livelihoods: Tajikistan*. Ankara. Retrieved from www.fao.org/3/a-i5766e.pdf.
- Food and Agriculture Organization of the United Nations [FAO]. (2017). *Tajikistan Embraces A New Way To Fight Child Malnutrition*. Retrieved from www.fao.org/in-action/tajikistan-embraces-a-new-way-to-fight-child-malnutrition/en/.
- Government of Tajikistan. (2015). *National Food Safety Strategy*. Retrieved from <https://itctj.files.wordpress.com/2013/03/nfss-final-eng.pdf>.

- Kazbekov, J., and Qureshi, A. S. (2011). *Agricultural extension in Central Asia: existing strategies and future needs*. International Water Management Institute (IWMI). Retrieved from www.iwmi.cgiar.org/publications/iwmi-working-papers/iwmi-working-paper-145.
- Khodjamurodov, G., Sodiqova, D., Akkazieva, B., and Rechel, B. (2016). Tajikistan: Health system review. *Health Systems in Transition* 18(1):1-114.
- Mukhamedova, N., and Wegerich, K. (2018). The Feminization of Agriculture in Post-Soviet Tajikistan. *Journal of Rural Studies* 57:128-139.
- Nichol, J. (2012). *Tajikistan: Recent Developments and U.S. Interests*. Washington, D.C.: Congressional Research Service.
- Pilot Program for Climate Resilience [PPCR]. (2009). Pilot Program for Climate Resilience – Tajikistan. Joint Mission Report by the World Bank, the Asian Development Bank, and the European Bank for Reconstruction and Development. Retrieved from https://www.climateinvestmentfunds.org/sites/cif_enc/files/tajikistan_english_joint_mission_report_052510.pdf.
- Scaling Up Nutrition [SUN]. (2015). Tajikistan. Scaling Up Nutrition Movement. Retrieved from <http://scalingupnutrition.org/sun-countries/tajikistan>.
- Shtaltovna, A. (2016). Knowledge Gaps and Rural Development in Tajikistan: Agricultural Advisory Services as a Panacea? *The Journal of Agricultural Education and Extension* 22(1):25–41.
- Swanson, B.E., Meyer, E., and van Weperen, W. (2011). *Strengthening the Pluralistic Extension and Advisory System in Tajikistan* (Report on the MEAS Rapid Scoping Mission). Modernizing Extension and Advisory Services [MEAS]. Retrieved from <https://docs.google.com/viewer?a=v&pid=sites&srcid=bWVhcy1leHRlbnNpb24ub3JnfHB1YmxpY3xneDo3N2YxNGI5YTYwNWE0YTJl>.
- The World Factbook. (2018). Tajikistan. Central Intelligence Agency.
- United Nations Children’s Fund [UNICEF]. (2016). *International consultancy to provide technical assistance in developing a Common Results Framework including multi-sectoral plan of action for Nutrition in Tajikistan*. Dushanbe, Tajikistan.
- United Nations [UN] Data. (2016). Tajikistan. United Nations Statistics Division.
- United Nations Development Program [UNDP]. (2010). *Employment in the context of human development*. National Human Development Report 2008-2009. Dushanbe: UNDP Tajikistan.
- United Nations Development Program [UNDP]. (2016). Human Development Report 2016: Tajikistan. Retrieved from http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/TJK.pdf.
- United States Agency for International Development [USAID]. (2014a). *Tajikistan: Nutrition Profile*. Washington, DC: United States Agency for International Development.
- United States Agency for International Development [USAID]. (2014b). *Regional Development Cooperation Strategy 2015-2019*. Retrieved from <https://www.usaid.gov/sites/default/files/documents/1861/RDCSCentralAsia.pdf>.
- United States Agency for International Development [USAID]. (2016). *Tajikistan: Nutrition Profile*. Retrieved from <https://www.usaid.gov/what-we-do/global-health/nutrition/countries/tajikistan-nutrition-profile>.
- World Bank [WB]. (2009). *Agricultural Activities, Water, and Gender in Tajikistan’s Rural Sector: A Social Assessment of Konibodom, Bobojon Ghafurov, and Yovon*. Social Development Department Europe and Central Asia Series.

- World Bank [WB]. (2013). *World Development Indicators*. Retrieved from <http://databank.worldbank.org/>.
- World Bank [WB]. (2014). *Tajikistan partnership program snapshot*. The World Bank Group Tajikistan. Dushanbe: World Bank.
- World Bank [WB]. (2015). *The World Bank Group – Tajikistan Partnership Program Snapshot*. Retrieved from www.worldbank.org/content/dam/Worldbank/document/Tajikistan-Snapshot.pdf.
- Yuldoshev, A. (2014). Implementation of health insurance law postponed until 2017. *Asia-Plus*. Dushanbe, Tajikistan. Retrieved from www.asiplus.tj/en/news/tajikistan/power/20140108/implementation-health-insurance-law-postponed-until-2017.

Annex I: Map of Tajikistan and Feed the Future ZOI



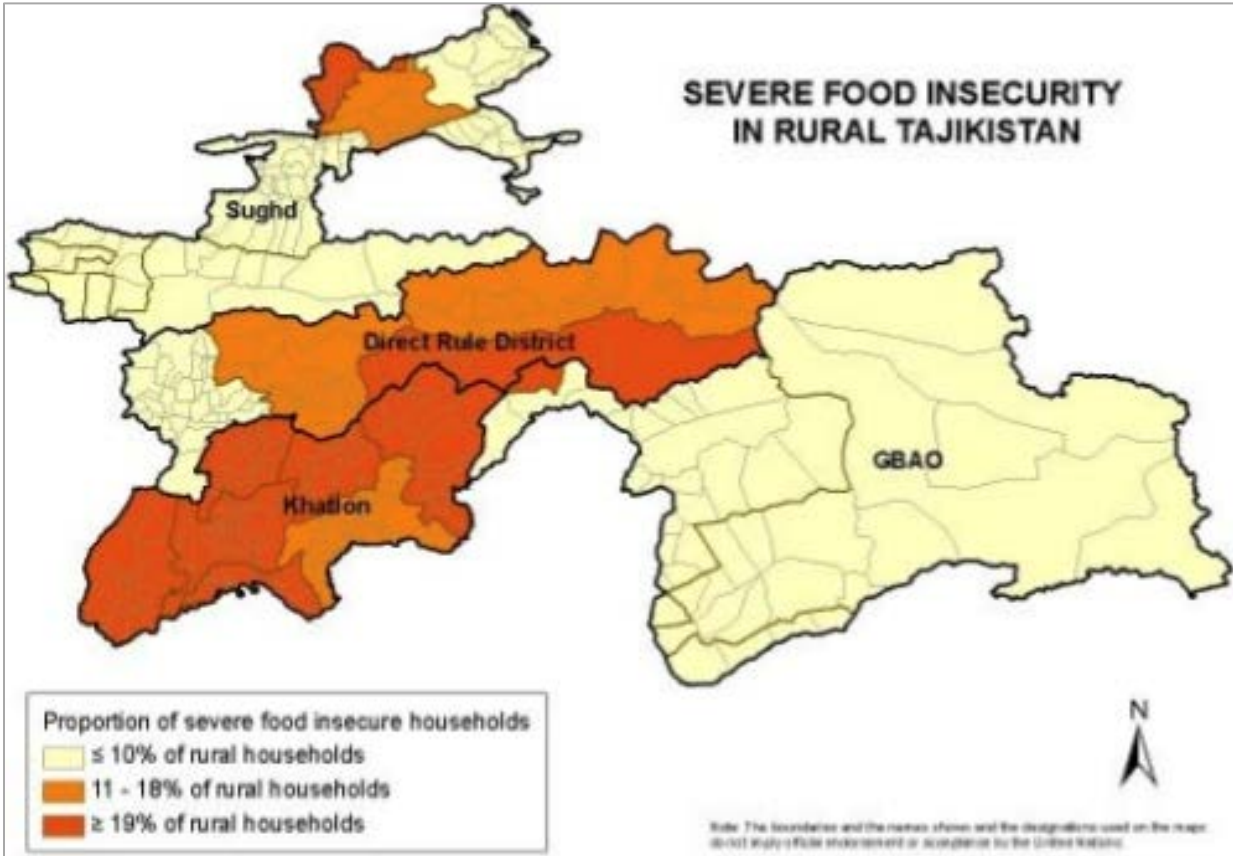
Map No. 3765 Rev. 11 UNITED NATIONS
October 2009

Department of Field Support
Cartographic Section



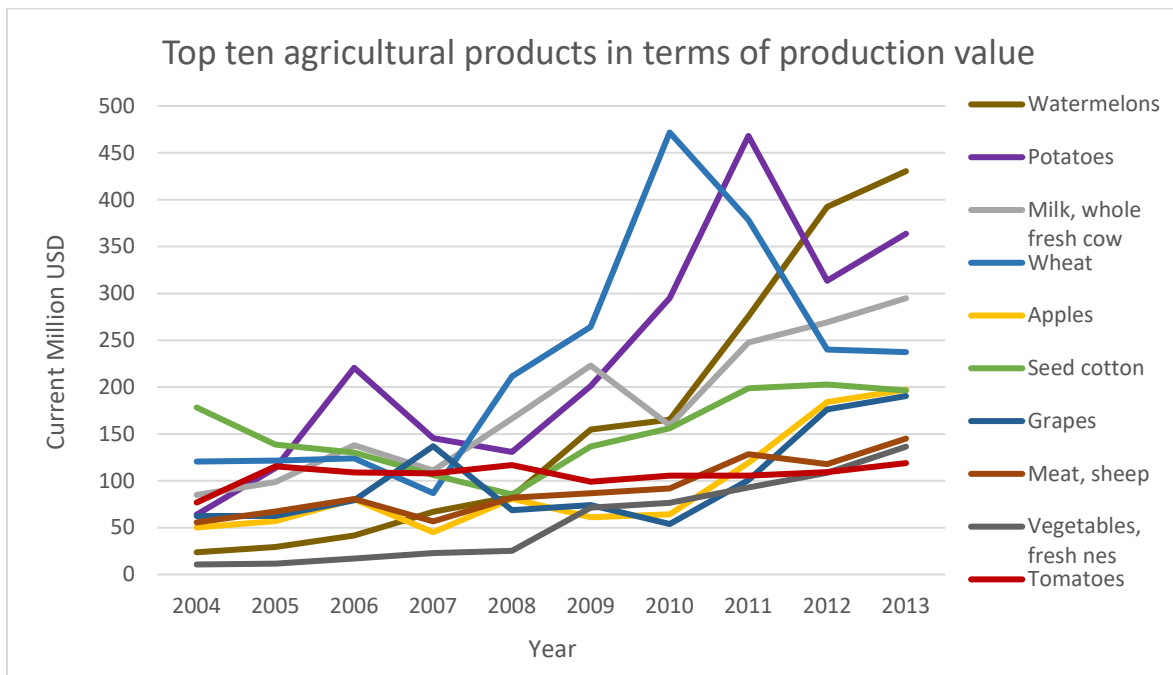
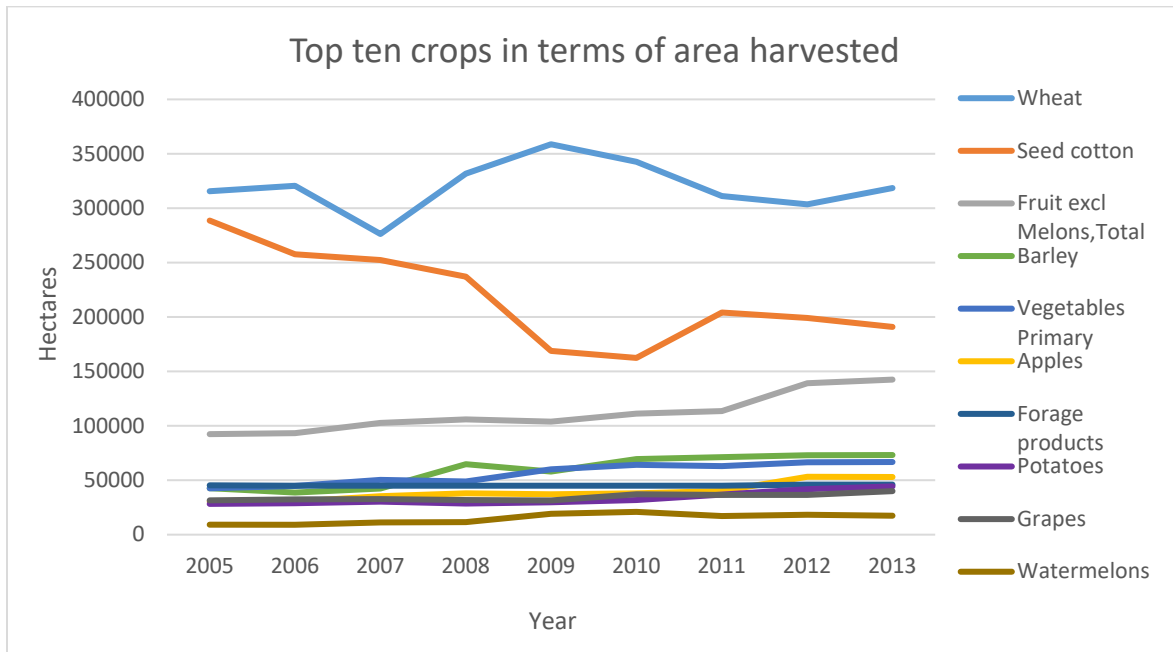
Sources: United Nations Geospatial Information Section; Feed the Future

Annex 2: Severe food insecurity in rural Tajikistan



Source: <http://image.slidesharecdn.com>

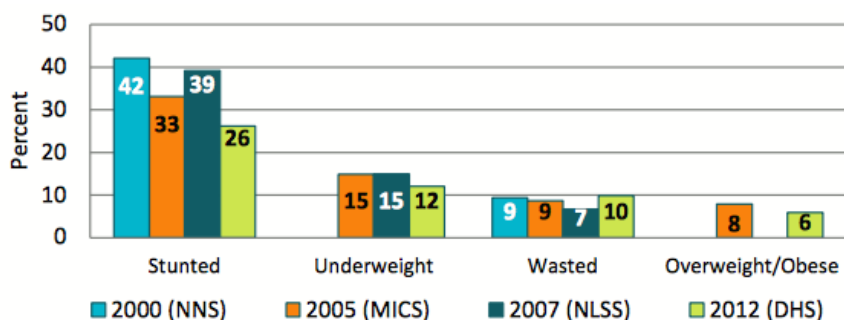
Annex 3: Agricultural production



Source: FAOSTAT, 2015.

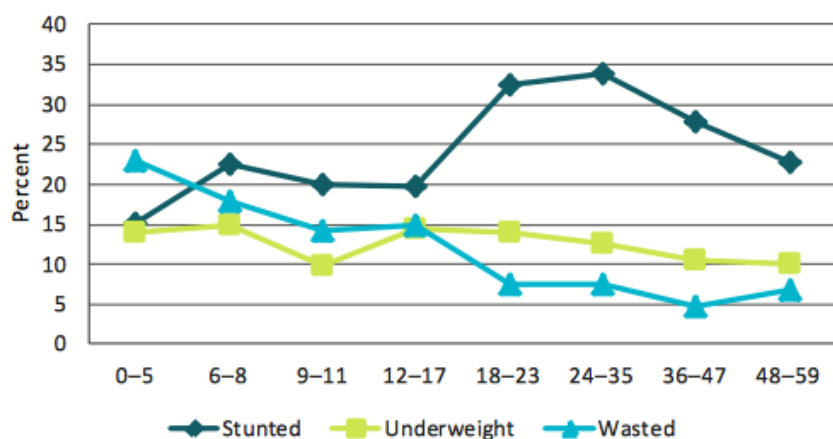
Annex 4: Trends in child nutrition and health status

Trends in Nutritional Status of Children Under 5, 2000–2012

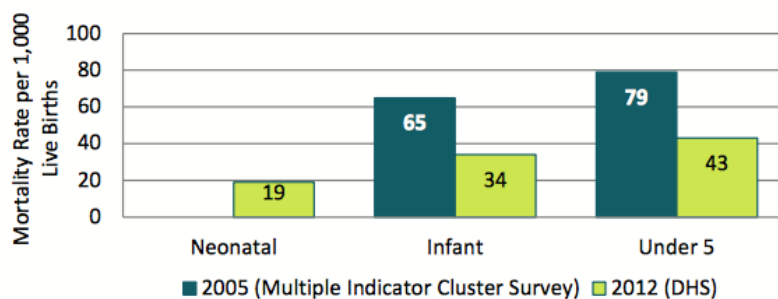


Note: Data represent four different national survey sources and thus comparability across surveys may be limited.

Nutritional Status of Children by Age (2012 DHS)



Child Mortality, 2005-2012*



* Data are for the time period within the previous 5 years of the survey.

Source: Tajikistan Demographic and Health Survey (DHS) 2012, via FANTA (2014)

Annex 5: Feed the Future projects in Tajikistan

FEED THE FUTURE TAJIKISTAN HEALTH AND NUTRITION PROGRAM

This is a five year \$13,158,832 million project. It was launched in 2015 to improve health and nutrition among women and children in ZOI Khatlon Oblast. The project is led by an independent nonprofit organization IntraHealth International Inc (with offices based in Chapel Hill, North Carolina and Washington, DC).

The goal of the project is to integrate high-quality maternal, newborn, and child health care at the family, community, clinical and national levels, with an emphasis on nutrition, sanitation and hygiene.

According to project website, activities will include:

- Promote the use of evidence-based maternal, neonatal, and child health practices in the first 1000 days between a woman's pregnancy and her child's second birthday within the home, community, and health facility.
- Improve healthy behaviors and practices among adolescent girls, women, and children in their homes and communities related to consumption of nutrients-rich food, improved sanitation and hygiene, and increased use of appropriate health care services.
- Strengthen links among health facilities, communities, and the US Government's Feed the Future initiatives to address global hunger.
- Incorporate gender-equitable and culturally sensitive approaches that empower women to improve their health and the health of their children.
- Leverage stakeholder partnerships across the health, education, and agriculture sectors; with donors; and through public-private partnerships.
- Support key policy changes to institutionalize reforms related to health and national food security.

Cross-cutting issues: Nutrition, Hygiene, Sanitation and Water

The project is co-led by Abt Associates (responsible for developing and implementing maternal and child health clinical standards and conducting health workforce training to improve the quality of service delivery) and Mercy Corps (responsible for implementing facility and community level activities on child health and the promotion of positive health and nutrition behaviors). The project seeks to synergize and strengthen the outcomes of the Scaling Up Nutrition movement, sustainable agriculture and household food security.

The project is implementing its activities in Yovon, Jami, Khuroson, Vakhsh, Bokhtar, Sarband, Jaloloddin Rumi, Qunsangir, Jilikul, Qubodiyon, Shahrtus, Noriri Khisrav Districts (12).

www.intrahealth.org/page/feed-the-future-tajikistan-health-and-nutrition-program

FEED THE FUTURE TAJIKISTAN AGRICULTURE AND WATER PROJECT

This is a three year \$11,235,625 million project. It was launched in 2015. Chemonics International Inc is implementing the project. The goal of the project is to improve nutrition of women of reproductive age and children under the age of two through nutrition-sensitive agriculture.

According to Chemonics website, the project will:

- Expand access to agricultural extension, increase production, improve access to irrigation, and boost the consumption of nutritious goods. For agricultural extension activities the project will train public and private agricultural extension agents on how to reach appropriate audiences to disperse agriculture technologies, develop international partnerships to access improved inputs, and support innovative and sustainable private sector involvement.
 - Improve vegetable and dairy production by identifying best practices, strengthening greenhouse usage, and improving supply chains.
 - Implement and improve irrigation water management.
 - Promote multiple outreach campaign on nutritious agriculture, water management and WASH.
- www.chemonics.com/OurWork/OurProjects/Pages/Tajikistan-Agriculture-and-Water-Activity.aspx

FEED THE FUTURE TAJIKISTAN FARMER-TO-FARMER PROGRAM (F2F)

F2F program is working in the Feed the Future 12 districts of Khatlon Oblast.

According to ACDI-VOCA website, the project aims to:

- Improve the quality and viability of agricultural support and financial institutions to strengthen support to the agricultural sector
- Expand agricultural sector access to financial services
- Raise farmers' incomes, increase the efficiency of farmers' organizations, and the productivity and profitability of associated agribusinesses
- Improve the capacity of producers in the homestead production horticulture, orchards, and livestock value chains to explore domestic and regional market opportunities

<http://acdivoca.org/our-programs/project-profiles/ecca-tajikistan-farmer-farmer-program-f2f>

FEED THE FUTURE WOMEN ENTREPRENEURSHIP FOR EMPOWERMENT PROJECT

This project has been awarded to a local NGO – The National Association of Business Women in Tajikistan (NABWT). The project started in 2015. The project aims to tackle poverty by advancing women's capacity to create successful businesses within the agriculture sector. According to NABWT General Director Gulbahor Makhkamova: "The program will work with household farms and small businesses, focusing particularly on women-headed households, within fruit and vegetable markets. The program will focus in these areas because of their importance in providing nutrition and food security for the family." Overall, the project will focus on improving gender equality and female empowerment by inspiring and supporting women who want to start small businesses.

INGENAES supports the development of improved extension and advisory systems (EAS) to reduce gender gaps in agricultural extension services, increase empowerment of women farmers, and improve gender and nutrition integration within extension services by directly or indirectly assisting multiple types of stakeholders within a country, such as farmers, producer groups, cooperatives, policy makers, technical specialists, development non-governmental organization (NGO) practitioners, and donors.

INGENAES efforts will strengthen the capacity of key stakeholders and provide the fora and networks for them to coordinate and reach agreement on policies and strategies to implement improved EAS that better meet the needs of men and women farmers. While INGENAES project will not directly monitor beneficiary impact, it will focus on changes in institutions that directly impact men and women who access agricultural information, training, technologies and nutrition information. Improved services empower women and engage men.

INGENAES will strengthen institutions by identifying their needs and strengthening their capacity to effectively integrate gender and nutrition sensitive information and activities into agricultural extension systems with the aim to promote gender equality, improved household nutrition, and increased women incomes and, subsequently, household food security. Based on the identification of four main gaps in extension services in terms of gender and nutrition integration, INGENAES activities can be divided into the following action areas:

- Build more robust, gender-responsive, and nutrition-sensitive institutions, projects, and programs capable of assessing and responding to the needs of both men and women farmers through EAS;
- Identify and scale proven mechanisms for delivering improved EAS to women farmers;
- Disseminate technologies that improve women's agricultural productivity and increase household nutrition; and,
- Apply effective, nutrition sensitive, extension approaches and tools for engaging both men and women.

Indicative activities of the INGENAES project include: learning exchanges, assessments, curricula development, training into action, mentoring relationships, internship experiences, and networks that focus on identifying gender-responsive and nutrition-sensitive innovations that can be promoted by EAS organizations, and adopted by men and women farmers. Developing these outputs collaboratively with agricultural extension experts and other partners will transform extension-relevant institutions working directly with men and women farmers.

In each country INGENAES needs to examine the relationships, identify the key change actors, build their capacity, and provide them the incentives to make changes (e.g., set new policies, employ new management practices, modify organizational structures, make changes in practice, adopt innovations). The key actors will vary from country to country, although policy makers, the Ministries of Agriculture and Health, non-governmental organizations (NGOs) and the private sector, and of course, women farmers, are likely to be involved in most countries. Key actors will be identified as part of the needs and scoping assessments. Thus, and in preparation of country level activities, the consortium gathers information and key contacts to develop a landscape study of the agricultural sector in that country, a simple description of the pluralistic extension system, nutrition related initiatives, and gender issues. As such, the landscape study is intended as a preparatory tool and handy reference document for work in country. Each landscape study will be updated periodically as INGENAES continues to engage in that country and identifies new key contacts, organizations, and initiatives.