



The World Bank

Tajikistan: Strengthening Resilience of the Agriculture Sector Project (P175952)

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Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 31-Mar-2021 | Report No: PIDA31476

**BASIC INFORMATION****A. Basic Project Data**

Country Tajikistan	Project ID P175952	Project Name Strengthening Resilience of the Agriculture Sector Project	Parent Project ID (if any)
Region EUROPE AND CENTRAL ASIA	Estimated Appraisal Date 15-Apr-2021	Estimated Board Date 30-Jun-2021	Practice Area (Lead) Agriculture and Food
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance	Implementing Agency Ministry of Agriculture	

Proposed Development Objective(s)

The development objective of the proposed project is to strengthen the foundations for a more resilient agricultural sector in Tajikistan.

Components

Strengthen seed, seedling and planting material systems
Support investments in agri-logistical centers for horticulture value chains
Strengthen public capacity for crises prevention and management
Project management and coordination

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Project Cost	50.00
Total Financing	50.00
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS**World Bank Group Financing**

International Development Association (IDA)	50.00
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IDA Grant	50.00
Environmental and Social Risk Classification	
Substantial	
Decision	
The review did authorize the team to appraise and negotiate	

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Other Decision (as needed)

B. Introduction and Context

Country Context

Despite notable achievements in economic development and poverty reduction over the last decade, Tajikistan remains a low-income International Development Association (IDA) country with a large proportion of the population vulnerable to poverty and shocks. Tajikistan is a landlocked country, bordering with Afghanistan, China, the Kyrgyz Republic, and Uzbekistan, with a population of 9.3 million, of which 73 percent live in rural areas. Over the past decade, Tajikistan has made a steady progress in reducing poverty and growing its economy. Between 2000 and 2018, the poverty rate fell from 83 percent to 27 percent, while the economy grew at an average rate of 7 percent per year. Yet, the country continues to face many challenges. It is the most vulnerable country in Central Asia and exposed to adverse recurrent impacts from external shocks, seasonal food insecurity, and climate change. From 1992 to 2016, natural disasters alone estimated to have caused economic losses exceeding US\$1.8 billion or US\$72 million annually, affecting almost 7 million people. Limited economic and social opportunities and poverty have contributed to substantial labor migration overseas.

Even before the COVID-19 pandemic, Tajikistan faced a challenging economic outlook due to large fiscal and external imbalances. The country is heavily dependent on remittances (primarily from Russia), the Somoni-denominated value of which has fluctuated between one-quarter and one-half of GDP in recent years. Fiscal revenues, heavily reliant on import-related value added taxes, have fluctuated considerably as well. For instance, following the economic crisis in Russia in 2014, Tajikistan went through a cumulative 45 percent decline of both remittances and imports. Private investments are low, at 4 percent of GDP. The financial sector is still recovering from the 2014 crisis and excessive directed and subsidized lending by banks, which triggered the 2016 bailout estimated at 6 percent of GDP. The losses of state-owned enterprises (SOEs) are additional sources of fiscal pressures. Tajikistan remains at high risk of debt distress, with total public and publicly guaranteed debt estimated at 53 percent of GDP in 2020.¹

The COVID-19 pandemic has led to a sharp slowdown of the economy in 2020 and has been particularly hard on the poor. It has largely wiped out the income and poverty reduction gains achieved in the past couple of years. The economy

¹ World Bank and International Monetary Fund assessment.



experienced its slowest growth since 1997, as a result of the partial lockdown due to the pandemic and associated disruptions in migrant remittances and trade activities. Migrant remittances fell by 15 percent on a year-to-year basis by mid-2020, according to Tajik authorities.² The plunge in foreign earnings slashed household consumption and fiscal revenues. Among the sectors, the hospitality and tourism industry are the most hit by the pandemic. Wage arrears in the private sector and SOEs have been growing. The authorities estimate the damage to the economy at US\$2 billion,³ including from the reduction in GDP growth from the projected 7.0 percent at the beginning of the year to the actual 4.5 percent in 2020. Food price inflation exceeded the non-food inflation by 6 percentage points, which hit the poor the hardest. According to the World Bank's Listening to Tajikistan Survey (L2TS), at the peak of the pandemic, two out of five households reported to have reduced their consumption of food, far beyond the reported levels in 2019. This negative food consumption trend continued into 2021. The average retail wheat flour prices in Somoni were 38 percent higher in 2020 than in 2016-2019, while the average retail potatoes prices were 47 percent higher during the same period. Food prices spiked in April-May 2020, dropping after that, and increasing again in November and December 2020.⁴

Tajikistan exhibits multiple forms of food insecurity and malnutrition and the COVID-19 crisis has worsened it. Nationally, stunting among children under five years of age declined 2 percentage points per year over a period of six years, from 26 percent in 2011 to 17 percent in 2017 (the latest data available). With the annual population growth rate of 2.5 percent, however, the current rate of decline is insufficient to meet the global World Health Assembly 2025 target of a 40 percent reduction in the number of children under five who are stunted. Seasonal and year-on-year increases of food prices, which affect food security and nutritional outcomes negatively, have been traced to irregular remittances and irregular food production due to lack of affordable, good-quality seeds, pest/locust invasions, and climate-related shocks.⁵ The latest State of Food Security and Nutrition in the World report reveals that 29 to 42 percent of households in Tajikistan cannot afford a nutrient adequate diet.⁶

Climate change is a key threat to Tajikistan's development, especially agriculture. Farming is significantly affected by climate change due to the high vulnerability of its natural environment and its low adaptive capacity. In addition to rising average temperature and loss of glaciers, Tajikistan suffers from more frequent droughts and strong winds, which have a large impact on water availability, crop yields, and pasture productivity.⁷ Climate change is expected to reduce the average yields of grains by 15 percent and vegetables and fruits by 9-11 percent during 2015-2050,⁸ and to cause changes in pest profiles, including the arrival of new pests.⁹ The projected rise in average global temperatures of up to two degrees centigrade by 2050 will catalyze glacial and early snow melts, changing the seasonality of runoffs and affecting the stability of water supplies. Exposure to drought, for which Tajikistan is ranked 8th in the world, followed by high risk for earthquakes, wildfire,¹⁰ and flood exposures (and associated hazards such as landslides), and relative low levels of coping capacity render

² Russian estimates show a decline of 40 percent for the same period.

³ The speech of the President of Tajikistan at the 75th Session of the UN General Assembly held in September 2020.

⁴ World Bank staff estimate using the FAO GIEWS data.

⁵ FAO, IFAD, UNICEF, WFP and WHO. 2020. The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. Rome, FAO.

⁶ A nutrient adequate diet provides adequate calories (per the energy sufficient diet above), and relevant nutrient intake values of 23 macro- and micronutrient through a balanced mix of carbohydrates, protein, fat, essential vitamins and minerals within the upper and lower bounds needed to prevent deficiencies and avoid toxicity. FAO, IFAD, UNICEF, WFP and WHO. 2020. The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. Rome, FAO.

⁷ Khakimov, P., J. Aliev, T. Thomas, J. Ilyasov, and S. Dunston. 2020. *Climate Change Effects on Agriculture and Food Security in Tajikistan*. Silk Road: A Journal of Eurasia Development 2(1): 89-112.

⁸ Khakimov P., J. Aliev, T. Thomas, J. Ilyasov, and S. Dunston. 2020. Climate Change Effects on Agriculture and Food Security in Tajikistan. *Silk Road: A Journal of Eurasian Development* 2(1). p.89–112. doi: <https://doi.org/10.16997/srjed.33>

⁹ Asian Development Bank (ADB) and World Bank. 2021. Climate Risk Country Profile Tajikistan. (draft).

¹⁰ <https://thinkhazard.org/en/report/239-tajikistan>



the country exposed to relatively high disaster risk, ranked 64th out of 191 countries in the INFORM 2019 Index for Risk Management.¹¹ Moreover, Tajikistan, together with its neighboring Central Asian countries, is highly affected by annual transboundary locust plagues, causing Tajikistan an annual loss of crop and pastureland output estimated at US\$10-15 million. Increased drought frequency, catastrophic flooding because of glacier lake outbursts, destabilization of mountain slopes, and more frequent landslides will produce economic losses, and will affect key variables such as viability of ecosystems, health impacts, productivity of labor, and the yield of crops. This will pose risks to the population, and hamper the ability of communities to fight poverty, especially since the poorest and most marginalized groups are expected to be disproportionately affected by the projected impacts of climate change. Adverse effects of climate change will be compounded by the projected 6.7 percent population growth during the 21st century.¹²

Fiscal space has decreased during 2020, making it more difficult for the authorities to respond to the continued COVID-19 crisis. The budget revenues contracted by 15 percent, to which the Government of Tajikistan (GoT) responded with a corresponding contraction in expenditures. This left the fiscal deficit at 2.3 percent of GDP. With support from the International Monetary Fund's (IMF) Rapid Credit Facility (plus debt relief) and the Asian Development Bank's (ADB) budget support, Tajikistan amended its 2020 state budget in mid-summer, providing additional fiscal space for increased healthcare expenditures. The GoT rolled out a nationwide targeted social assistance program, providing eligible families with a modest one-off financial assistance, while providing tax reliefs to the private sector, increasing public-sector wages and pensions, postponing tariff increases for electricity and municipal water, and allocating emergency funds for buying and distributing seeds to farmers. Altogether, the GoT allocated close to 3 percent of GDP (or US\$220 million) for COVID-19-related expenditures.

To help mitigate the impact of the COVID-19 crisis on the economy and people, the World Bank Group (WBG) has supported the GoT through technical and financial assistance. The support included the Emergency COVID-19 (Coronavirus) Emergency response project , provision of emergency cash transfers using the targeted social assistance program, regular monitoring of the situation based on high-frequency L2T survey covering the issues of household wellbeing, and information system via SMS-dissemination to population with key health messages under the Mobile Engagement project. This support was underpinned by the WBG Approach Paper “Saving Lives, Scaling-up Impact and Getting Back on Track” (the “WBG Approach Paper” hereafter). The proposed project is also part of the WBG’s response to COVID-19 in Tajikistan.

Sectoral and Institutional Context

Agriculture is the mainstay of Tajikistan’s economy. In 2020, it constituted 23 percent of the country’s GDP, 19 percent of export, and 61 percent of total employment. Agriculture grew annually by an average of 6.4 percent between 2010 and 2019, exceeding the average agricultural growth in Kazakhstan (2.7 percent), the Kyrgyz Republic (1.9 percent), and Uzbekistan (4.7 percent) during the same period.¹³ Yet, it has largely remained subsistent and underdeveloped characterized by low labor productivity and use of traditional low-yielding technologies. Most farmers are small in scale and not well integrated in the agrifood value chains. Food processing and input supply sectors are also small and fragmented, contributing to large food and farm input imports. Tajikistan imports about 75 percent of food consumed and over 50 percent of the value of agricultural inputs such as seeds, seedlings, animal breeds, fertilizers, and farm machinery, with most of these inputs not adapted to various agroecological zones of Tajikistan. More than 70 percent of agricultural value addition is generated by crops and the rest by livestock. Crop production is confined primarily to river valleys, where

¹¹ ADB and World Bank. 2021. Climate Risk Country Profile Tajikistan. (draft).

¹² ADB. 2014. *Country Partnership Strategy: Tajikistan, 2016-2020*. Manila.

¹³ The World Bank staff estimate using the World Development Indicators database.



68 percent of the crop land is dependent on irrigation. Arable land is in short supply, accounting for 20 percent of agricultural land (equivalent to 980,000 ha), which puts a premium on sustainable intensification (i.e. higher yields) needed to produce larger volumes of more nutritious foods. Approximately, 86 percent of the arable land area is accounted for by ten crops, including wheat (31 percent), cotton (22 percent), barley (9 percent), potato (6 percent), apples (5 percent), grapes (4 percent), onions (3 percent), and watermelon, maize and tomatoes (each 2 percent).¹⁴

Agriculture is one of the largest employers, including of women Although exact figures vary with some sources saying that the share of female employment in agriculture was 59.6 percent in 2020,¹⁵ and others estimating that anywhere between 31 percent and 85.5 percent of women are active in the sector, women are such an integral part of Tajikistan's agricultural labor force, that the term "feminization or womenization of agriculture" is used to describe the sector that men exit either for migration or for non-farm opportunities.¹⁶ Even under these circumstances, however, women still tend to conduct work in the field, such as weeding, sowing, transplanting, and harvesting, while men tend to retain tasks that require decision-making such as over the selection of seeds, fertilizers, and plant protection materials.

Crop production, the major generator of agricultural value addition, has become more diversified over time, but its potential for enhancing food security and nutrition remains underutilized. Tajikistan's main crops remain wheat and cotton, as in old times, but their relative importance has declined over time. The cotton growing area dropped from 32 percent of the total in 2005 to 22 percent in 2018, while the wheat growing area declined from 35 percent in 2005 to 31 percent in 2018. The horticulture growing area, on the other hand, which consists of potatoes, vegetables, fruits, melons, and grapes, increased from 18 percent in 2005 to 30 percent in 2018, which represents a significant increase. Land area under permanent crops (fruits and nuts) also expanded, from 115,000 ha in 1995 to 151,000 ha in 2018. The shift towards more balanced land use and production of higher value crops has been occurring in Tajikistan much earlier than in the neighboring Uzbekistan, which started to shift land away from cotton to horticulture only in 2017. Agricultural diversification in Tajikistan has been also supported by the growing attention to value chain development, extending beyond only agricultural production, and recently to the export orientation. Several donor-supported projects include activities along the entire agrifood value chains, reflecting the government's intention to promote inclusion of small farmers into modern value chains and export. Creation of productive partnerships between lead agribusiness/processing firms and farm groups (or agricultural clusters) has also begun, albeit slowly, paving the way for building competitive and sustainable value chains so much needed to serve domestic market and penetrate to international ones.¹⁷ Yet, the quantity and quality of Tajik horticulture produce remain low, and infrastructure for cold storage,¹⁸ sorting, grading, and processing (i.e. agri-logistical services) is still rudimentary. Thus, even when production of fruits and vegetables grows, there are no facilities for storing and post-harvest handling of these perishable products, so their supply is short and highly seasonal. Horticultural export is small, about 5 percent of total agrifood export in 2020, reflecting weak horizontal and vertical coordination among small farmers and exporters, as well as insufficient public investments in agri-logistic infrastructure, adaptation of seedlings to various agroecological zones and access to finance for horticulture investments.

¹⁴ FAOSTAT.

¹⁵ World Bank. World Development Indicators (WDI). Accessed on 29 November 2020.

¹⁶ USAID. 2014. *AgTCA Tajikistan: Agricultural Technology Commercialization Assessment*. USAID Enabling Agricultural Trade project.

¹⁷ World Bank. 2020. Central Asia's Horticulture Sector — Capitalizing on New Export Opportunities in Chinese and Russian Markets. Washington, D.C.

¹⁸ In 2015, the International Finance Corporation (IFC) estimated that a refrigerated warehouse capacity could service only 6 percent of produced fruits and vegetables. Although increased in recent years (during 2015-2019, 188 new storage facilities were constructed with a total capacity of 224,000 tons), the refrigerated warehouse capacity in Tajikistan in 2018 was only 0.1 million m³ or 0.041 m³ per urban resident, according to the Global Cold Chain Alliance's 2018 Global Cold Chain Capacity Report. In Uzbekistan, for comparison, it was 0.385 m³ per urban resident in 2018, increasing from 0.102 m³ per urban resident in 2014.



Notwithstanding its small share in export, the agricultural diversification has been good for farmers and for the economy. In addition to increasing farm incomes, higher horticulture production and its processing tend to create many jobs and contributes to nutrition security. In neighboring Uzbekistan, for example, a one-million-US dollar investment in horticulture value chains (e.g. in intensive orchards, greenhouses, processing, and storage) is estimated to have created 40-50 jobs, with more than half of them occupied by women.¹⁹ Private investment amounting to US\$58,000 in drying, processing and packaging of fruits in Tajikistan's Sughd free economic zone is projected to create 40 permanent jobs.²⁰ Horticulture value chains, especially export-oriented ones, have shown to have a great power to create many better-paid jobs, which are difficult to automatize, offering a long-term job solution for a country such as Tajikistan, where good jobs so far have been in a large deficit. Accelerating crop diversification, therefore, offers an opportunity to stimulate creation of sustainable jobs and inclusion.

Looking forward, the Tajik export promotion and agricultural diversification strategy should build on a strong comparative advantage of the country's horticulture and the growing investments along horticulture value chains. The medium-run export potential of horticulture products is estimated at US\$32.6 million,²¹ which is 3.3 times more than the actual export in 2018. The early season for Tajik fruits is one of the characteristics that can foster competitiveness. Relative low labor and electricity costs is another such characteristic. In addition, favorable climatic conditions with long growing period and numerous sunny days result in special flavor and high sugar content. Right public investments to harnessing this potential for value chain development (e.g., farm productivity, productive partnerships) and trade facilitation (e.g., agri-logistics, green corridors for perishable products, single window for export-import operations) and crowding in private sector investments are critical to turn comparative advantages into economic competitiveness. Many of these investments are already occurring and growing. The GoT has been investing in green corridors at the border posts for the export of perishable fruits and vegetables and in the single window services for export-import operations, crowding in private sector investments in greenhouses and fruit orchards. Investments in agri-logistical services, which are critical for making perishable fruits and vegetables longer available for domestic market, export competitiveness, and for reducing waste and losses as found in the recent World Bank analysis,²² are, however, still lacking, calling for more proactive support from the government to accelerate such investments. Moreover, focusing on horticulture has the potential to generate significant climate co-benefits through *inter alia* the adoption of climate-resilient (drought tolerant) crop varieties by farmers, crop diversification for increased production of higher value and nutrient-rich horticulture products, and climate-smart practices that improve soil health, reduce water needs, and reduce land degradation. Growing fruit trees also mitigates greenhouse gas (GHG) emissions through carbon sequestration. Shifting towards more diversified production increases the resilience to climate shocks; reduces the occurrence, hence impact, of diseases and insect pests; and has the potential to significantly increase farm income thereby increasing farm investments in more drought-resistant seeds, precision agriculture, and other climate-smart farm practices; and requires fewer fertilizers.

Lack of availability of seeds, seedlings, and planting materials, in sufficient quantity and quality, is one of the critical issues affecting the agricultural sector in Tajikistan, compromising agricultural productivity, which was amplified by the COVID-19 crisis. Primary inputs' supply is from farmers' own resources. Deficit in supply is highest for horticulture and fodder crops but is also severe for cotton, potatoes, and wheat, imposing unsuitable replacement rates. Seeds and seedlings supply systems have made discrete progress with donor support but are still incomplete.²³ Most donor projects

¹⁹ World Bank. 2020. Uzbekistan's Agrifood Job Diagnostic. Washington, D.C.

²⁰ Donai Almos investment. The article on East Fruits platform accessed on November 1, 2020.

²¹ World Bank. 2020. Central Asia's Horticulture Sector — Capitalizing on New Export Opportunities in Chinese and Russian Markets. Washington, D.C.

²² World Bank. 2020. Central Asia's Horticulture Sector — Capitalizing on New Export Opportunities in Chinese and Russian Markets. Washington, D.C.

²³ Previous attempts to address the shortage of seeds, seedlings and planting materials, including those undertaken by the Food and Agriculture Organization (FAO) of the United Nations (UN), Swedish International Development Cooperation Agency (SIDA),



provide direct extension support to farmers on multiplying and adopting seeds and seedlings, but they do little to make more seeds for food staples available on the market and assure their quality. As a result, farmers in many parts of the country do not have access to high-quality seeds, seedlings, and planting materials. The local capacity to generate new varieties and planting materials remains low. Some agricultural research institutes and universities engage in seed production, but this includes mainly maintaining “super elite, pre-basic or original” and “elite or basic” seeds.²⁴ Even though there is a mandate to monitor seed quality and relevant public procedures have been established, lack of budgetary resources and weak human capacity to do so have resulted in only 60 percent of the seed production facilities producing seeds of acceptable quality. The capacity to test new varieties of crops for their adaptation to soils and climate in the country is also lacking, and in general the regular testing of new varieties, whether domestically developed or imported, is not conducted. Private seed farms and nurseries focus on importation of hybrid varieties of vegetable seeds and planting materials for fruit orchards, and not investing in research and development (R&D) of local varieties or adaptation of imported seeds to the agroecological richness of Tajikistan. The availability of high-quality commercial seeds for wheat and potatoes, two main food staple crops, is low, necessitating the importation of foundation seeds into Tajikistan for further multiplication.²⁵

COVID-19 has also exposed the weakness of the public sector on early warning and response. Real time sector monitoring and agricultural production outlook are not effectively produced, catching the authorities off-guard in their response to emergencies. Farmers receive neither much of agricultural market or agrometeorological information nor timely early warning about pests and locust outbreaks. During outbreaks, locust attacks destroyed pasturelands and a wide range of cultivated crops. It is estimated that total annual damage for the country caused by locusts can vary from US\$10 million to US\$15 million.²⁶ However, the overall impact is more devastating as annual locust and other pest attacks curtail severely the livelihoods of the poorest segments of the Tajik society. Other agricultural services such as soil testing have also remained in short supply and are often delivered by donor projects without or with little government participation, and with limited coordination between DPs and the GoT. Human and infrastructural capacity of most agricultural public institutions remains weak, a result of their chronic past underfinancing. Public spending on agricultural research and development (R&D) in Tajikistan, for example, was 0.05 percent of agricultural gross output in 2019, which was ten times lower than other developing countries with successful agricultural performance spent on this purpose.²⁷ Higher income countries spend on average 1.5-2.0 percent of the agricultural gross output on agricultural R&D programs.²⁸

COVID-19 has exposed other weaknesses of Tajik agriculture and has had a large adverse impact on food security and nutrition. The impact on agricultural production in 2020 was moderated by the fact that farm inputs for the main planting in spring were procured by farmers before the COVID-19 outbreak. Second planting in the summer was supported by the

and Austrian-supported programs targeted only certain segments of the seed, seedling and planting materials value chain and hence fell short of developing a vibrant seed, seedling, and planting material sector.

²⁴ “Super Elite” (also referred to as “Pre-basic” or “Original” in some government documents) are seeds, seedlings and planting material that represent the main characteristics of the variety and are free from pathogens and infectious diseases. These are used by the breeder in developing new varieties or maintaining existing ones. They are generally only maintained by the breeder or breeding organization. Upon registration of the variety it is officially listed in the “Register of Commercial Varieties”. “Elite” are seeds (also referred to as “Basic” in some government documents), seedlings and planting material propagated directly from “Super Elite” material and would include that propagated using any method including in vitro techniques, buds and cuttings. This material would be developed by the variety owner or a contractor and used by operators to produce “Certified” material. These definitions are taken from an English translation of the “Seed Law of Tajikistan.”

²⁵ In 2020, for example, the FAO procured 100 tons of imported foundation potato seeds for their multiplication through the state seed farms and farm cooperatives.

²⁶ FAO TCP-TAJ-3806, 2020.

²⁷ World Bank. forthcoming. Tajikistan: Agricultural Sector and Public Expenditure Review. Washington, D.C.

²⁸ World Bank Group. 2019. Harvesting Prosperity: Technology and Productivity Growth in Agriculture. Washington, D.C.



emergency distribution of seeds and other inputs from GoT and donors. As a result of this and favorable weather conditions, the agriculture sector grew by 8.8 percent in 2020. However, the adverse impact on the 2021 agricultural production is anticipated to be much larger. High-quality seeds are in short supply and their prices are rising, fueled by the higher regional demand: the access to seeds remains the highest concern of farmers and the authorities for the 2021 planting season and beyond. Already in the summer of 2020, Tajik farmers had to pay 10 percent more for ammonium nitrate and 57 percent more for superphosphate fertilizers than in the summer of 2019, and the global recovery may lead to even higher fertilizer prices on global markets. The small fiscal space of the GoT has become even smaller in the aftermath of COVID-19 crisis, reducing the likelihood of another emergency input distribution and improved generation and delivery of agricultural services without external assistance. During the COVID-19 pandemic, the GoT did not have real-time information on food stocks or the structure of actual cropping areas of subsequent planting campaigns to take timely and effective crisis response measures, exacerbating the adverse impact of declined purchasing power of the population as a result of lost jobs and remittances on food and nutrition security. The weak capacity of the public institutions for helping farmers maximize returns from using costlier seeds and fertilizers through, for example, soil testing or provision of agrometeorological information prevented a scale-up of public services to farmers affected by the crisis. And, when horticulture produce generated by Tajik farmers could not be exported, due to travel restrictions and lower purchasing power of consumers in importing countries, a lack of sufficient and adequate infrastructure for storage and post-harvest handing exposed the weaknesses of agrifood value chains in the country.

The GoT has recently prepared two strategic documents on development of agriculture and food and nutrition security in Tajikistan,²⁹ which are adjusted to the realities of the post-COVID-19 era to provide a framework to strengthen resiliency, inclusiveness and sustainability of the agriculture sector. The State Program for Medium-Term Development of the Republic of Tajikistan (MTDP) 2021-2025 emphasizes the need for improved capacity of agricultural public institutions to increase resilience and sustainability of the agriculture sector, including for ensuring a better response to climate change and other shocks in the future.

The Ministry of Agriculture (MoA), which needs to implement most reforms and investment programs identified in the MDTP and NAIP, itself requires strengthening and modernization. Its structure and capacity have been designed on directing production of strategic crops such as cotton and wheat and monitoring the achievement of production targets. Generation and delivery of many public services such as research, extension, crop protection and locust control, market information system, real time data collection or seed development and quality control have been constrained by the underinvestment in human capacity and physical infrastructure, exposed by COVID-19, which in turn created momentum for changing this situation. Institutional strengthening of the MoA will need to focus on: (i) strengthening technical departments in line with new strategic priorities and requirements; (ii) building competencies of public staff for better service delivery and early warning and crisis response management; and (iii) enhancing collaboration with donors for better coordination and leadership in implementation of the recipient- and donor-executed projects, and with other public institutions (i.e. Committee of Food Security, State Committee of Land Management and Geodesy, Agency for Meteorology and other relevant ministries and departments) for more integrated approach in designing and implementing agricultural public policies and investments.

C. Proposed Development Objective(s)

²⁹ These documents are expected to be approved during the first part of 2021.



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Development Objective(s) (From PAD)

The development objective of the proposed project is to strengthen the foundations for a more resilient agricultural sector in Tajikistan.

Key Results

The project aims to support the GoT in successfully transitioning to a sustainable, more productive, climate-resilient and inclusive model of agricultural sector growth. The proposed project would help to: (i) increase the availability of improved seeds, seedlings, and planting materials that are climate resilient, affordable, farmer-preferred and well adapted to the different agro-ecological conditions of Tajikistan; (ii) improve the access to improved agri-logistic services of farmers and agribusinesses; and (iii) strengthen the crisis management, i.e. early warning, preparedness and response capacity of selected public institutions. All activities related to human resource development and capacity building will include topics on understanding climate change better and frameworks, tools, and techniques to facilitate designing and implementing climate adaptation and mitigation approaches. All infrastructure, including buildings, offices, laboratories, and storage facilities, constructed and/or rehabilitated by the project, will be encouraged to utilize energy-efficient and climate-resilient materials and designs. The proposed project aims to thereby strengthen the foundations for more resilient agriculture sector, which would in turn help improve food security and nutrition and accelerate agricultural diversification. It would also contribute to the development of a viable sector of private micro, small and medium enterprises in rural areas and generate employment opportunities for women in regions with few legal alternatives. Annex 3 contains a detailed project description.

D. Project Description

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The project has four components (three technical and one project management and coordination).

Component 1: Strengthen seed, seedling and planting materials systems

This component will support the development of viable seed, seedling, and planting material systems to ensure the availability of improved, locally adapted, market oriented, farmer-preferred, and climate resilient varieties of these inputs for priority crops,³⁰ and in sufficient quantity and acceptable quality. Advances in inputs technology are one of the most important channels for improving productivity in agriculture. The GoT recognizes the crucial role of the inputs sector, including seeds, seedlings, and planting materials in achieving not only agriculture production and productivity goals, but also broader development goals, such as food and nutrition security and climate resilience. The availability of improved

³⁰ Priority crops as identified by GoT include wheat, cotton, potatoes, grapes, onions, apples, and cherries.



seeds, seedlings and planting materials, in sufficient quality and acceptable quality, contributes to enhanced and efficient use of other inputs, including water, fertilizers, pesticides, and insecticides. This component has four subcomponents prioritizing support for improving the enabling environment necessary for the development of viable seed, seedling and planting material systems; research and development; multiplication; and quality assurance of the production and distribution of high-quality seeds, seedlings and planting materials. The subcomponents are designed in a way to combine a rapid response to the urgent needs of farmers for better seeds (by importing foundation seeds and multiplying them on seed farms for commercial sale) with a gradual strengthening of long-term capacity of both public and private seed sector institutions to increase the availability of seeds, seedlings, and planting materials that are better adjusted to local agroecological conditions and of higher quality.

Component 2: Support investments in agro-logistical centers for horticulture value chains

1. This component will support investments in Agri-Logistical Centers (ALCs)³¹ to improve competitiveness of horticulture value chains and access to markets (e.g. domestic retail chains and export). The investments in ALCs will help build resilient food systems, promote agricultural diversification, ensure better market linkages, quality, and food safety standards, reduce food loss/waste, and initiate the development of an efficient distribution system network in Tajikistan. ALCs were identified by the World Bank³² and the IFC³³ diagnostics as a missing, yet critical, element to provide incentives for increasing the competitiveness and further development of horticulture value chains in Tajikistan. The in-depth feasibility study and market assessment to identify potential traded volumes of agriculture products, main functions, and business models for the management of ALCs, will encompass consultation, including inclusive group discussions to elicit the demand for ALC functions, with emphasis on group discussions with vulnerable (small, young) producers as well as women farmers and other users.

Component 3: Strengthen public capacity for crises prevention and management

This component will strengthen the capacity of relevant public institutions on agricultural crises prevention and management, focusing on selected programs, which can significantly enhance resiliency of agricultural sector. It will enhance the public capacity, thereby allowing institutions to have an early estimate of agricultural production and crop yields, determine potential food shortages, and identify crises and take early preparedness and response actions. It will also support climate adaptation and mitigation measures, generating substantial climate co-benefits. Priority areas for strengthening include: (i) real-time monitoring of agricultural production and agrometeorology; (ii) soil testing for improved soil fertility management and precision agriculture; and (iii) crop protection and locust control. The component consists of three subcomponents, real-time monitoring of agricultural production, land use, and agrometeorology; soil fertility management and Crop protection and locust control.

Component 4. Project management and coordination

³¹ Construction will be climate proof and energy efficient.

³² World Bank. 2020. Central Asia's Horticulture Sector — Capitalizing on New Export Opportunities in Chinese and Russian Markets. Washington, D.C.

³³ In 2015, the IFC had the project to attract private sector investments in refrigerated warehouses/ALCs in Tajikistan, which were identified by market participants as a critical investment for horticulture sector development. The plan was to expand the refrigerated warehouse capacity by 16,700 tons with the investment of US\$26.8 million. The private sector, however, showed little interest in financing capital investment costs, but expressed interest to engage in operation and management of ALCs if they would be established.



The objective of this component is to support project management, coordination, M&E, and implementation of environmental and social framework (ESF) instruments and fiduciary aspects of the project. These functions will be undertaken by a project implementation unit (PIU) to be established under the auspices of the MoA. The PIU will also manage the project's grievance redress mechanism (GRM) and citizen engagement activities. Enhanced engagement and outreach activities will improve the outcomes of the project. Component 1 will carry out beneficiary satisfaction surveys (using scorecards and other feedback mechanisms) annually. Components 2 and 3 and the project will also conduct ex ante inclusive group discussions to elicit the demand for ALC functions, and for public sector agricultural information and delivery mechanisms, with emphasis on group discussions with vulnerable (small, young) producers as well as women-farmers and other users. These will be organized annually as participatory social monitoring activities with the objective to engage with stakeholders. The PIU will be staffed with the required specialists, including fiduciary and ESF. Activities to be financed under this component include: (i) PIU staffing; (ii) operational costs, including stationary, fuel, per diem, mobile air time etc.; (iii) goods, including office furniture, IT equipment, vehicles, audio visual etc.; (iv) consultancy and non-consultancy services, including training, workshops, conferences etc. and technical assistance (TA) for various activities e.g. conducting TOT, capacity needs assessment, specification of lab equipment etc.; and (v) implementation, including planning, monitoring (supervision) and evaluation (impact evaluation), report writing, project auditing, donor coordination, etc.).

Legal Operational Policies

Triggered?

Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

Operational Policy 7.50 is applicable to this project because the project supports minor rehabilitation and alterations of existing irrigation schemes in selected public research institutions and seed farms, which are already consuming water from the two main transboundary rivers Syr Darya and Amu Darya and their tributaries shared by Tajikistan with Afghanistan, Turkmenistan, Uzbekistan, Kyrgyz Republic, and Kazakhstan. The project activities will not adversely affect the quantity or quality of the water flowing to other riparians, and the Project will not be affected by other riparians' possible water use. The exception to the notification requirement was approved by the ECA Regional Vice President on March 21, 2021.

Note to Task Teams: This summary section is downloaded from the PAD data sheet and is editable. It should match the text provided by E&S specialist. If it is revised after the initial download the task team must manually update the summary in this section. ***Please delete this note when finalizing the document.***



The environmental and social risks are both rated Substantial, making the overall risk rating Substantial. The project recognizes the following standards as relevant: ESS 1, ESS 2, ESS 3, ESS 4, ESS 5, ESS 6, and ESS 10.

The project is expected to result in positive impacts as the interventions will improve livelihoods and local knowledge. Adverse environmental and social impacts, if any, and the risks therefrom, are expected to be limited in duration and mitigable. The project is taking a framework approach because the details about the investments and the locations (could be located anywhere across the country) are not known and most of which will not become known until after implementation begins. The following instruments will need to be prepared: (i) Environmental and Social Management Framework (ESMF); (ii) Resettlement Policy Framework (RPF); (iii) Stakeholder Engagement Plan (SEP); and (iv) Labor Management Procedures (LMP). The ESMF will assess current pest management practices and recommend areas for improvement; provide guidelines for assessing project activities; and, where necessary, preparing and implementing site specific Pest Management Plans (PMPs) and Environmental and Social Impact Assessments/Environmental and Social Management Plans (ESIA/ESMPs). The RPF will likewise indicate when site specific Resettlement Action Plans (RAPs) would be required.

Note: To view the Environmental and Social Risks and Impacts, please refer to the Appraisal Stage ESRS Document.

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E. Implementation

Institutional and Implementation Arrangements

2. **The primary implementing agency for the project will be MoA.** The MoA will be the lead implementing agency (IA) with the overall responsibility for coordinating all aspects of the project, including contributions by the different relevant ministries and agencies participating in the project's implementation. The main responsibilities of the MoA will include project oversight, coordination, planning, technical support, financial management, procurement support, citizen engagement, ESF instruments compliance, and monitoring and evaluation (M&E). The MoA will be accountable for authorizing and verifying all project transactions and will work closely with the World Bank's Task Team during project implementation.

3. The MoA will be supported by a project implementation unit (PIU to be established under its auspices). The PIU will support the MoA in the implementation of the project. In addition to the PIU in Dushanbe, the MoA will also establish two regional project offices (RPOs) - one in Sughd and one in Khatlon. The PIU and RPOs will be staffed, equipped, and strengthened to support project management and coordination. They will be responsible for facilitating day-to-day implementation of the project in close collaboration with other implementing institutions at national, regional, and local levels. They will also be responsible for following up fiduciary and ESF aspects of the project implementation and provision of support to the implementing institutions.

The implementation of the SRASP will also be supported by a Project Steering Committee (PSC) and a Project Technical Committee (PTC) that will play oversight and technical support roles, respectively to project implementation. The SRASP will use the existing PSC established for the ACP, which it will supplement with additional members, as deemed necessary, by drawing from institutions involved in project implementation. The PSC, chaired by the Minister of Agriculture, will provide strategic guidance for project implementation, ensure coordination as well as help identify key issues that need to be brought to the attention of the Government and facilitate their resolution. The PTC, chaired by the Deputy Minister of Agriculture, will be responsible for providing technical advice to the PIU on the quality of implementation reports and special studies, guidelines, documentation of best practices, and M&E reports.



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