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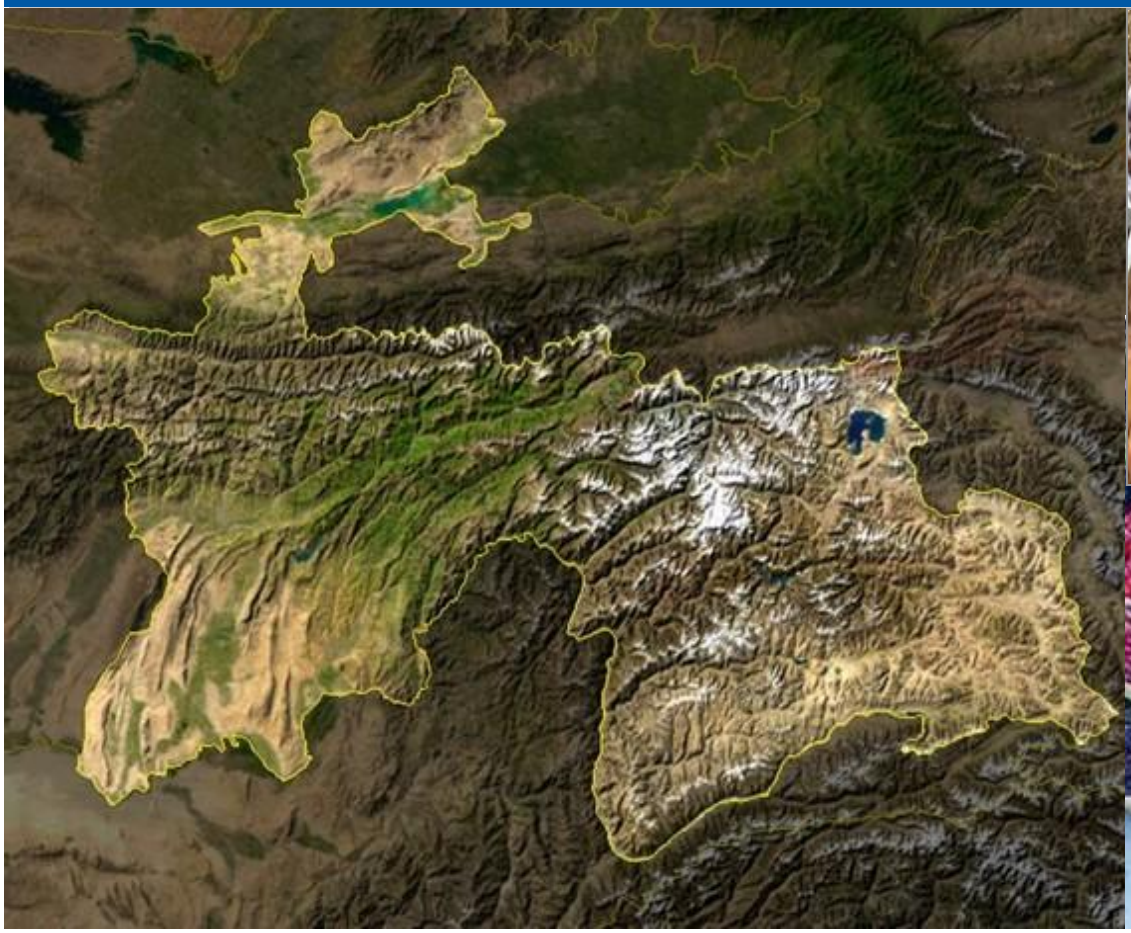

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN – SUGHD REGION

PROJECT STRENGTHENING RESILIENCE OF THE AGRICULTURE SECTOR

Feasibility Study – Business Plan – ESIA / Detailed Design /

Cost Estimate for three ALCs and Supervision of works

Phase 2: Detailed Design

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ESMP	Environmental and Social Management Plan
PSRAS	PROJECT STRENGTHENING RESILIENCE OF THE AGRICULTURE SECTOR
ESIA	Environmental and Social Impact Assessment
ALC	Agro logistic center
ACP	Agriculture Commercialization Project
REDP	Rural Economy Development Project
ESS	Environment and Social Standards
PMU	Project Management Unit
EHS	environment, health and safety ()
MoA	Ministry of Agroculture
CEP	Committee for Environmental Protection
GRM	Grievance Redress Mechanism
MEWP	Ministry of Energy and Water resources
MH	Ministry of Health
PPE	Personal protective equipment
ILO	International Labor Organization
HSO	Health and Safety Officer
ESO	Environmental Safety Officer
AWP&Bs	Annual Work Plans and Budgets
SEP	Stakeholder Engagement Plan
ESMP	Environmental and Social Management Plan
PSRAS	PROJECT STRENGTHENING RESILIENCE OF THE AGRICULTURE SECTOR
ESIA	Environmental and Social Impact Assessment
ALC	Agro logistic center

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1. EXECUTIVE SUMMARY

This Environmental and Social Management Plan (ESMP) was developed for the Project Strengthening Resilience of the Agriculture Sector in Tajikistan, component of the Construction of an Agrological Center for the Sughd Region which is being carried out by the Ministry of Agriculture through the Project Implementation Unit and funded by the World Bank. The ESMP is designed to identify, assess, and effectively manage potential environmental and social impacts throughout the project's lifecycle. Its goal is to minimize negative effects on the environment and local communities while maximizing positive social and environmental outcomes, ensuring compliance with laws and standards, and promoting sustainable development practices. The plan also outlines the roles and responsibilities for managing environmental and social risks within the project, as well as mechanisms for feedback and grievances from citizens and other stakeholders.

Project objective. The main goals of the Agriculture Sector Resilience Enhancement Project are to boost the agriculture sector's resilience during difficult times, enhance food security within the country, improve the groundwork for higher production and competitiveness in horticulture, and strengthen the ability of the Ministry of Agriculture and other relevant public institutions to provide early warnings, be prepared, and respond effectively to crises. Furthermore, the project aims to help develop sustainable small businesses in rural areas and create job opportunities in regions with few other options.. Four components to achieve the development objective are as follows:

Component 1 aims to enhance seed, seedling, and planting materials systems by supporting the availability and utilization of improved seeds. The project will take an integrated approach to address bottlenecks in the seed sector across different systems.

Component 2: Supporting investments in agro-logistics to expand horticulture value chains: This component aims to boost horticulture value chains by investing in agro-logistics centers (ALCs). These centers will enhance the competitiveness of horticulture products by supporting investments in ACP and REDP initiatives and leveraging lessons from other contries. The focus is on establishing ALCs through public-private partnerships to promote agricultural diversification, improve food distribution and safety, reduce waste, and enhance climate resilience and energy efficiency.

Sub-component 2.1 "Support to ALC development and operation" will establish three ALCs in Khatlon, Sughd, and RRS regions to provide essential services for local horticulture, ensuring quality, food safety, and access to high-value markets. These ALCs will facilitate market access, reduce food loss, attract private investment in horticulture, and create job opportunities. They will address gaps in refrigeration, storage, packaging, and logistics, promoting standardized production and quality management for domestic and international markets.

.Component 3: Aims to enhance government capacity for crisis prevention and management in the agri-food sector. The project will improve early warning systems, strengthen plant protection measures, and enhance locust prevention efforts. This will be achieved through digitalization initiatives, capacity building, and infrastructure investments. Training will also be provided to enhance monitoring capabilities and ensure effective crisis response.

.Component 4: Supporting Project Management. This component will support project management, coordination, monitoring and evaluation, and implementation of environmental and social measures under the World Bank Environmental and Social Framework.

Project location. The project will be implemented nationwide. The agro-logistic centers (ALCs) will be located one each in Khatlon, Sughd, and Dushanbe regions selected for their agro-ecological potential, agricultural production patterns, and proximity to major urban market (in the case of Dushanbe). The sub-sectoral focus will be on horticulture. The project builds on and complements to two projects related to agricultural food sector development

The agricultural center for the Sughd region will be established within the Free Economic Zone of Sugd, situated west of Khujand city in the Bobojon Gafurov district.

Project potential environmental and social risks and impacts. Overall, the project will provide a series of positive social and environmental impacts. It would support technical assistance and capacity building activities on improving quality of seeds, food safety standards, phytosanitary and agrologistic services, among others, all of which would reduce environmental and health risks in agricultural production in the country, while at the same time creating new economic opportunities.

Environmental risks and impacts. The proposed project activities have the potential to create various environmental risks and impacts due to the construction and rehabilitation activities involved, such as building agro-logistics centers, fruit storage and handling facilities, and fruit processing plants. These activities could lead to increased environmental pollution through waste, noise, dust, air, and water pollution, as well as impacts on biodiversity, health hazards, and labor safety concerns. Introducing new seed varieties could also pose risks and impacts related to biodiversity and ecosystem services.

While these risks and impacts are common for small and medium-scale construction projects, agriculture production, and fruit processing activities, they are expected to be temporary and site-specific. By implementing best construction practices and relevant mitigation measures, these risks can be effectively managed.

Social risks and impacts associated with the physical footprint of the project can be effectively managed through mitigation strategies. The primary social risks include those related to the community, health and safety, and labor safety within project activities. It is anticipated that there will be minimal risks concerning labor influx, gender-based violence, or community health and safety, as the majority of project workers will be recruited locally.

To address social risks during the construction of the Agro-logistic center, a comprehensive set of measures has been proposed. These include the implementation of the Contractor's Environmental and Social Management Plan (ESMP) and other relevant sub-management plans, such as those for traffic safety, community engagement, and emergency response. It is important to note that no land acquisition or land use restrictions are expected to occur during the construction of the Agro-logistic center in the Sugd region.

Relevance of World Bank Environmental and Social Standards (ESS). The Project will follow the guidelines of the World Bank Environmental and Social Framework (ESF), which includes ten Environmental and Social Standards (ESS). All ESSs, except for ESS 7, 8, and 9, are applicable to the project. Detailed information can be found in Section 3.5. All investments funded by this Project will adhere to national environmental laws, regulations, and the applicable World Bank environmental and social standards.

ESMP supervision and reporting. The status of the compliance with the ESMPs' requirements shall be provided by the contractors to the PIU, and then PIU will send it to the World Bank in form of their semi-annual report. Environmental and social monitoring during project implementation will provide information about key environmental and social aspects of the sub-projects, particularly its environmental impacts, social consequences of impacts and the effectiveness of taken mitigation measures. Such information enables the PIU to evaluate the success of mitigation measures as part of project supervision and allows corrective action(s) to be implemented in a timely manner, when needed.

PIU/Regional will carry out regular monitoring of sub-projects during construction and operation to ensure that ESMP/checklists are properly implemented. IfPIU/Regional notices any problems in implementation, it will inform the relevant contractor and agree with him on corrective action to be taken. The PIU will present its findings to the WB in the project progress report twice a year or more frequently and bring issues to the attention of the WB as necessary. The WB project team will also visit the sub-project sites as part of the project supervision, as appropriate and appropriate.

Integration of the ESMPs into project documents. All sub-project bidding documents shall include a requirement for implementation of the ESMP, and the documents shall be attached to the bidding documents and then to the construction contracts. The ESMPs requirements will be integrated in construction contract, both into specifications and bills of quantities, and the Contractors will be required to include the cost for ESMP implementation in their financial bids. Based on the ESMF there will be highlighted the roles and responsibilities of all involved

parties in the project implementation process. Lastly, based on the ESMF and ESMPs requirements, monitoring and evaluation of mitigation/avoidance measures identified in the site-specific review and in the ESMPs will constitute integral part of the subproject implementation, including into them the contracts binding the and the contractors will need to carry out the environmental and social obligations during civil works. Furthermore, all contractors will be required to use environmentally acceptable technical standards and procedures during carrying out of works. Additionally, the contract clauses shall include requirements towards compliance with all national construction, health protection, safeguard procedures and rules as well as on environmental protection.

Grievance Redress Mechanism (GRM). The Project Grievance Redress Mechanism aims to enable beneficiaries and citizens to register any grievances on all project-related issues of concern. The GRM will operate at a local and national level. At the local level, citizens can submit their grievances first to the local jamoat or to the local PIU representative. If the grievance has not been considered or the citizen has not received a satisfactory response, he/she may file a grievance to the main office of PIU. Environmental and social specialist will keep a record of the grievances received. This will be done by applying multiple absorption channels such as mail, email, phone, project website, personal delivery. Currently, citizens are actively using mobile networks, so the project will open special groups in Telegram and Facebook applications. It is recommended that in jamoats, where sub- projects will be implemented, logs for registration of grievances were placed.

Every grievanceshall be tracked and assessed if any progress is being made to resolve them. It is expected that project will receive many grievances and should ideally have an electronic system for entering, tracking, and monitoring grievances. The project monitoring and evaluation information system should also include indicators to measure grievance monitoring and resolution.

2. PROJECT DESCRIPTION

2.1. Overview

Agriculture is an important sector of Tajikistan's economy. In 2022, it accounted for 23 percent of the country's GDP, 19 percent of exports, and 61 percent of total employment. Agriculture grew at an average annual rate of 6.4 percent between 2010 and 2021. Nevertheless, it has largely remained existing and underdeveloped, characterized by low labor productivity and the use of traditional low-productivity technologies. Most farmers are small in scale and poorly integrated into agri-food value chains. The food processing and input supply sectors are also small and fragmented, contributing to large imports of food and agricultural inputs. Tajikistan imports about 75 percent of the food consumed and more than 50 percent of the value of agricultural inputs such as seeds, seedlings, animal breeds, fertilizers and agricultural machinery, and most of these inputs are not adapted to the different agro-ecological zones of Tajikistan. More than 70 percent of value added in agriculture is generated by crop production and the rest by livestock production. Crop production is mainly concentrated in the river valleys, where 68 percent of the cultivated area depends on irrigation. Arable land is scarce, accounting for 20 percent of agricultural land (equivalent to 980,000 hectares), making sustainable intensification (i.e., higher yields) necessary to produce larger quantities of more nutritious food a priority. Approximately 86 percent of the arable land area is devoted to ten crops, including wheat (31 percent), cotton (22 percent), barley (9 percent), potatoes (6 percent), apples (5 percent), grapes (4 percent), onions (3 percent), and watermelon, corn, and tomatoes (2 percent each).

The Strengthening Resilience of the Agricultural Sector Project is a IDA grant prepared to support Tajikistan to build the foundations for a more sustainable agricultural sector. relate to the availability of public agricultural services.

This project aims to support the Government of the Republic of Tajikistan in a successful transition to a sustainable, more productive, climate resilient and inclusive growth model for the agricultural sector. It will help to: (i) increase the availability of improved seeds, seedlings and planting materials that are climate-resilient, affordable, preferred by farmers and well adapted to the different agro-ecological conditions of Tajikistan; (ii) improve access of farmers and agribusinesses to improved agro-logistical services; and (iii) strengthen crisis management, i.e. the early warning, preparedness, and response capacity of selected public institutions. The project consists of the following components:

Component 1: Strengthening seed, seedling and planting materials systems: The objective of this component is to support the development of an effective seed, seedling and planting materials system that enhances the availability and utilization of new, improved and farmer preferred seeds, seedlings and planting materials. The approach to be followed in supporting the development of a dynamic seed/planting sector under the proposed project is an integrated approach to seed sector development. This approach will address bottlenecks in the seed/plant value chain in different seed systems including formal and informal, private and public, etc.

Component 2: Supporting investments in agro-logistics to expand horticulture value chains: The objective of this component is to support investments in agro-logistics centers (ALCS) to expand value-added horticulture value chains so that horticulture products become more competitive. The component will support horticulture investments initiated under ACP and REDP and learn from similar investments in neighboring Uzbekistan through investments in several agro-logistics centers with public-private partnership options in their management and operation. These investments will bring climate co- benefits by promoting agricultural diversification into horticulture,

improving food distribution and food safety, reducing food losses and waste, and making construction climate resilient and energy efficient.

Sub-component 2.1 "Support to ALC development and operation" will support the establishment of three ALCs, tentatively located one each in Khatlon, Sughd and RRS regions where horticultural production is concentrated.

The main objective of these ALCs is to provide important services to support primary collection, quality and food safety standards for local horticulture and its access to high value markets. This will facilitate market access for local produce (horticulture) and reduce the risks of food loss and waste. The availability of ALC services will also increase private investment in horticulture, including orchards, which in turn will contribute to climate change mitigation and job creation.

ALCs should fill a critical gap in refrigeration, storage, packaging and logistics and initiate the development of an integrated network of market/distribution infrastructure in Tajikistan. They will promote more standardized production and quality management, including grading and packaging, for domestic and international markets.

Component 3: Building government capacity in crisis prevention and management: The objective of this component is to strengthen the crisis prevention and management capacity of selected public institutions. The COVID-19 outbreak caught many by surprise, revealing weaknesses in the current agri-food sector early warning and monitoring systems, as well as the government's response capacity. They have failed to provide reliable estimates of available food stocks/inputs and accurate forecasts of future harvests, leading to food hoarding and increased food price volatility. As climate change intensifies, crises such as the COVID-19 pandemic will occur even more frequently. The proposed project will strengthen selected/key government institutions to enhance capacity, resilience and improve early warning and response, plant protection and quarantine, and locust prevention/ eradication, as well as sector planning, monitoring and evaluation through digitalization and capacity building. Support will include investments in the digital and laboratory infrastructure of the Ministry of Agriculture and other selected government agencies and institutions, as well as capacity building to improve early warning and monitoring of the agri-food sector, and effective response.

Component 4: will support project management, coordination, M&E, and ESF implementation. A PIU will manage the project's GRM and citizen engagement. Enhanced outreach activities will improve project outcomes. Component 1 will conduct beneficiary satisfaction surveys annually. Components 2 and 3 will organize inclusive group discussions to understand demand for ALC functions and public sector agricultural information. The PIU will have specialists for fiduciary and ESF tasks. Activities include staffing, operational costs, goods, consultancy services, and implementation tasks.

2.2. Detailed Design Description

The Component 2 will support investments in Agro- Logistics Centers to expand horticulture value chains and improve their competitiveness and access to high-end markets (e.g. retailers and exports). In Tajikistan, the logistics of fresh produce needs to be significantly improved, especially through the development of functional cold storage facilities that contribute to value chain efficiency and increase the value of fresh produce through shorter links between primary production and markets.

The proposed concept of ALCs, supported by the Government of Tajikistan and the World Bank, envisages the establishment of distribution centers that will process and distribute fruits and vegetables at the warehouse level. The main stakeholders in this process - traders and

producers - expect ALCs to play a key role in creating shorter chains, become cross-docking platforms, and help add value to produce by changing it in space and time:

- Collecting all regional agricultural products in one center and distributing them to different consumption points;

- Increasing the storage life of the products by using cold storage facilities and choosing the most favorable time to sell them on the market.

All links in the value chain, from growers to sellers, look to ALC as a strategic tool to improve their performance in the marketplace. Sellers are looking for a steady supply of quality produce to simplify and unify fresh produce purchases; growers are looking for more and better customers with whom to establish long-term trading relationships. Therefore, stability and reliability in the agricultural value chain business is expected from the ALC, bringing significant benefits to both parties - growers and sellers - in a typical win-win situation.

The project plans to construct three Agrological Centers in Khatlon, Sughd regions and DRS. The purpose of this construction is to strengthen control over the collection of primary produce, compliance with quality and food safety standards for local horticultural products and to ensure their access to high value-added retail outlets. The main buyers of these centers will be retailers, wholesalers and exporters. The construction of these centers will help develop an integrated network of market and distribution infrastructure in Tajikistan, increase production standardization and quality management, and improve refrigeration, storage, packaging and logistics systems. In the medium term, these centers could be integrated into a national food distribution system, which would improve food safety and quality, improve the competitiveness of the horticulture chain, strengthen aggregation and horizontal integration of smallholders, and create a favorable environment for private investment in the processing and service sectors.

The selection of sites for the construction of centers was based on several factors. Firstly, the proximity to the main areas of fruit and vegetable production in Tajikistan was taken into account. This will minimize the time and costs of transporting products to the centers. Secondly, the proximity to the city of Khujand, where a large number of people live and large retail chains are located, was taken into account. This will ensure easy access of products to consumers. Finally, a market demand analysis was conducted to determine the potential customer base for these centers.

The required land for each plot is estimated to be approximately 12,500 sq.m. The general layout of ALC facilities is shown in the figure below.

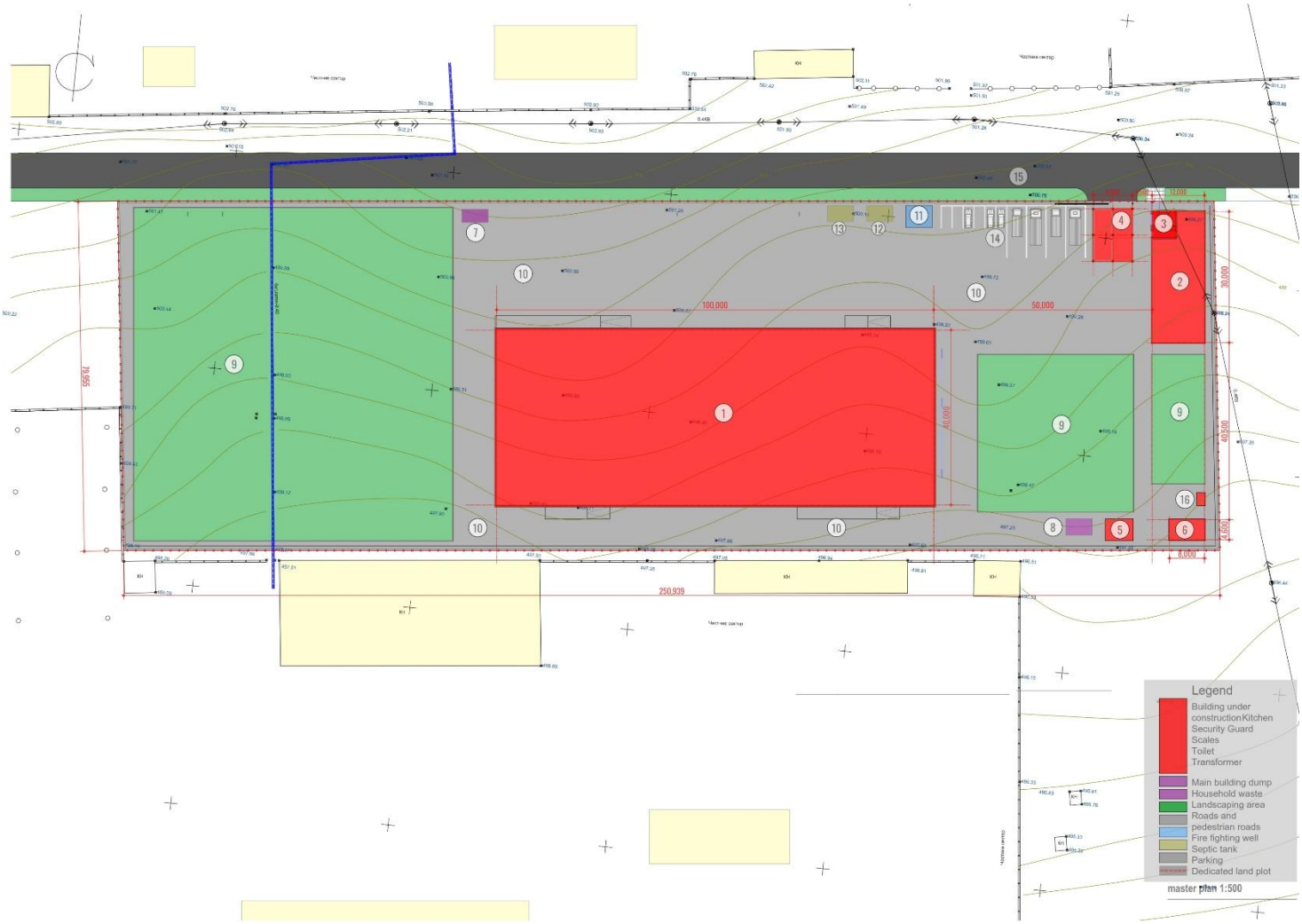

Figure 1: Master plan of the proposed ALC facilities

2.3. Socioeconomic and Environment Overview of Project Area

The Agro-Logistics Center in the Sughd region will be strategically located within the free economic zone "Sughd," offering significant advantages for its operations. With the ability to expand to meet increasing demands, this center is poised to play a crucial role in the region's agricultural sector.

Having already obtained a permit from the Free Economic Zone administration, the establishment of this agro-logistics hub is seen as a pivotal development. Situated in the city of Khujand, the designated site for the Agrological Center is conveniently located less than 2 km from the main road, accessible via a well-maintained route. The proximity to key industrial players such as Ariana Metal Plast CJSC, renowned for metal-plastic structures, and entrepreneur Abdullo-zade R.R., specializing in natural juices and dried produce, further enhances the center's strategic position.

Additionally, Real LLC, a manufacturing company focused on polyethylene pipes and electrical cables, is situated in the southern part of the site, fostering a synergistic environment for collaboration and growth.

2.3.1. Geography and topography

The Sughd region in Tajikistan is located in the north-west and borders Uzbekistan and Kyrgyzstan. It is separated from the rest of Tajikistan by the Gissar Range. The region has diverse geography, including the Zarafshan River valley in the south and the Fergana Valley in the north. It is home to 30% of the country's population and has fertile land for agriculture. The region is divided into the Fergana Valley and Zeravshan Valley, with the former being the most populous region in Central Asia. The Sughd region has mountainous and plain areas, with fertile oases in the valleys.

This part of Tajikistan is called the Fergana Basin in the geological literature. To shed light on this history, we first present sedimentological and stratigraphic observations from well-exposed Cenozoic outcrops to the east, near Tash-Kumyr in Kyrgyzstan. The triangular Fergana Basin is located in the western part of the Kyrgyz Tien Shan, which is part of the Central Asian Orogenic Belt (Central Asian Mobile Belt).

Light gray soils in dry, hot climates have little humus, high lime content, and soluble salts. They can develop secondary salinization. Common in Syrdarya River valleys at 300-600m, they become dark gray at higher altitudes like Zeravshan Valley. Ordinary gray soils have more humus and lime. Mountain brown soils are found in Sughd region's middle mountains. Dark gray soils are the main irrigated lands, becoming highly productive through watering and tillage.

Soil erosion is widespread in Sughd due to poor irrigation management and variable precipitation. Nutrient cycles require careful management to prevent depletion. Wind erosion, especially in Zeravshan Valley, is common in the region (23%).

Landslides are common in the mountainous areas of Sughd where slopes exceed 10% gradient. They often result from land cultivation on steep slopes, erosion of river banks and reservoirs due to poorly constructed hydraulic structures and roads, and ravine erosion. Landslides destroy fertile slopes, turning them into unproductive areas.

Water saturation and logging occur in high-water layers or due to human activities raising groundwater levels, particularly in flat regions of Sughd. This leads to reduced soil fertility and unusable agricultural land.

Salinization is a significant issue in intermountain valleys like the Fergana Valley in Sughd, affecting irrigated agriculture in drylands with poor drainage. Irrigation in foothills raises groundwater levels, carrying mineral salts that lead to salinization of lower-lying lands.
Soil drainage is necessary where fertility has declined due to low humus content from improper tillage, lack of fertilizers, and irregular crop rotation. The region's soil, especially in the mountains, is generally infertile. Reduced fertilizer use results in decreased productivity, erosion, and deflation. A more than threefold reduction in fertilizers significantly lowers soil fertility and agricultural output.

2.3.2. Environmental resources

Climate. The Sughd region has a variable climate with moderately cold winters and hot summers. The summer months are very hot and temperatures can reach over +45°C. The average temperature in July exceeds +30°C. The winter months are relatively cold and the average January temperature is around -6°C, but temperatures can drop as low as -28°C. In the Zeravshan Valley, the climate is characterized as continental, warm temperate and semi-arid.
Precipitation follows an annual pattern with maximums in late autumn and spring with an annual 400-700 mm. The microclimate of the most elevated region of Kukhistoni Maschokh is determined by its high mountain environment, exceeding 5000 m. All climate diagrams in this area are the result of collected data from 3 measuring stations in the Sughd region. Weather stations above 2230 m were not included. All data correspond to monthly averages for the last 20 years.
Water resources. The primary rivers in the Sughd region are the Syrdarya and Zeravshan. The Syrdarya River, which begins in the Tien Shan Mountains in Kyrgyzstan and eastern Uzbekistan, flows 2,212 kilometers west and northwest through Uzbekistan. The northwestern part of Uzbekistan lies within the Syrdarya River basin. In 2018, the recorded total flow volume of the Tajik segment of the Syrdarya River was 15,978 km3/year. The Kairakkum reservoir, a large man-made lake in the B. Gafurov district of Sughd, was renamed "Tajik Sea" in 2016 by the Majlisi Oli of the Republic. Situated in the western part of the Fergana Valley on the Syrdarya River, the reservoir is approximately 15 km west of the regional administrative center, Khujand. With a water surface area of 520 km2, a length of 56 km, and a maximum width of 15 km, the Kairakkum reservoir has a volume of around 3,410 km³.
Air quality. Between 2009 and 2018, the Sughd region experienced a significant increase in total emissions of pollutants into the atmosphere from stationary sources. This includes particulate matter, CO, SO2, NO, and hydrocarbons. The data indicates that these emissions nearly tripled during this period. Alarmingly, the majority of these pollutants (86%) were released into the air without any treatment.
Additionally, the total volume of pollutants emitted by mobile sources in the Sughd region in 2018 amounted to 218.8 thousand tons per year. This highlights the pressing need for effective measures to reduce emissions and improve air quality in the region.

2.3.3. Biodiversity and natural life

Flora: The region boasts a diverse array of plant species, including comb, camel thorn, psoralea, and marshmallow, which play a crucial role in the diet of Gissar and Astrakhan sheep, as well as other local animals. In the mountainous areas, juniper, apple, walnut, pistachio, almond, rose hip, astragalus, barberry, and cotoneaster can be found in the wild.
Fauna: The Sughd region of the ALC is home to a variety of wildlife, with no protected species listed in the Red Book residing in the area. Among the reptiles found here are the round head takyr, steppe agama, patterned runner, and Oriental boa constrictor. Bird species include the crow, common starling, house sparrow, field sparrow, barn swallow, little dove, ringed dove, gray blue, and common magpie.
Specially Protected Areas: The Kairakkum reservoir is the nearest protected area to the project sites in the Sughd region. Covering 523 km2 with a length of 56 km and a maximum width of 15 km, the reservoir supports diverse bird populations and has been designated as a Ramsar site. Species such as mallards, little cormorants, saker falcons, white-winged vultures, great bustards,

and many others can be found here. The industrial nature of the surrounding area ensures that the impact on biodiversity at this site remains minimal.
The impact on biodiversity at this site is negligible as it is located in an industrial area.

2.4. Socio-economic data

Population. According to TAJSTAT, the Sughd region in 2022 had a population of 2,823,900, with 1,319,100 (49.67%) being women. The urban area of Sughd housed 657,700 (24.7%) of the total population, while the remaining 2,166,200 resided in rural areas. The population density in Sughd is 105.5 people per square kilometer. Figure 4-12 illustrates the population growth in Sughd from 1992 to 2019. In 2019, Kanibadam city had a population of 208,400, Spitamen district had 139,200 residents, and B. Gafurov district was home to 374,300 individuals.
The population under the age of 30 in the Sughd region is 1,568,700 people, with 766,00 (48.8%) being women. The average registered number of family members in households in the Sughd region was 6.53 in 2017. The percentage of the population not working, representing those not typically in the labor force in that area, is 64.1%. The infant mortality rate in the Sughd region is 25.6 per thousand people.
Migration. A study by the International Organization for Migration (IOM) on “Environmental Degradation, Migration, Internal Displacement and Vulnerability of Rural Areas of Tajikistan” revealed that environmental reasons play a significant role in migration decisions for residents of the Sughd region compared to other regions of Tajikistan. More than half of the respondents (54.6%) from the Sughd region cited drought as a key reason for migration. Soil degradation also stands out as a major factor for migration in the Sughd region with a coefficient of 45.5%. Conflicts over natural resources, unstable harvests, and poor water quality are additional important factors contributing to population migration in the Sughd region.
Education. In the Sughd region, specifically in the districts of B. Gafurov, Spitamen, and the city of Kanibadam, there are a total of 68 preschool institutions, catering to the educational needs of young children. These institutions have a combined enrollment of 8,120 students, with 44% of them being female. Additionally, there are 176 secondary schools in the region, with a total student population of 139,648 during the 2019/20 academic year. Of these students, 44% were female.
In terms of technical education, there are 5 technical schools in the districts of B. Gafurov, Spitamen, and Kanibadam. These institutions have a total student population of 2,250, with 65% of them being female students.
Gender Based Violence. Polygynous unions are uncommon in Tajikistan, with 3% of women reporting their husband has other wives. The prevalence of polygynous unions increases with age, from less than 1% among women aged 15-24 to 5% among women aged 40-44. Women in Sughd, those with no or only primary education, and those in the lowest wealth quintile are most likely to have co-wives.
Estimates suggest that one-third to one-half of women in Tajikistan have experienced domestic violence. In a survey of over 4,400 women aged 15-49, almost one in five reported emotional, physical, or sexual violence from their partner. Current or former partners are most likely to use physical violence. There is no typical survivor of domestic violence, as women in all demographic categories experience it. Underage girls who are married are particularly vulnerable.
Tajikistan has laws and programs in place to prevent and respond to domestic violence, including support and crisis centers offering shelter, legal, and psychological counseling. The country also addresses human trafficking as a form of gender-based violence. The Law on the Prevention of Domestic Violence was enacted in 2013, with subsequent amendments to the Code of Administrative Offences to specify liability for violations. The State Programme for the Prevention of Domestic Violence aims to strengthen mechanisms to prevent domestic violence, with information and consultation services provided nationwide.
Vulnerable groups, including ethnic minorities, migrants, disabled individuals, the homeless, those battling substance abuse, isolated elderly individuals, and children, face heightened risks of poverty and social exclusion due to challenges like limited education and unemployment. In 2006, Tajikistan introduced social protection measures encompassing state-funded programs for mandatory social insurance and targeted aid for these vulnerable populations. Specific categories, such as veterans, children, disabled persons, unemployed individuals, and impoverished families, benefit from social assistance initiatives. Reforms aim to streamline aid programs and enhance

targeting strategies. The Targeted Social Assistance (TSA) scheme provides unconditional cash benefits to the poorest 15% of the population, with additional support offered to vulnerable households impacted by projects. Child protection efforts in Tajikistan primarily focus on basic income support and healthcare services rather than comprehensive care and family assistance as mandated by the UNCRC. Foster care and guardianship systems remain underdeveloped.

Recognizing the unique challenges faced by women in rural areas, especially those leading households, is crucial. These women often juggle multiple roles and responsibilities, which can hinder their access to education and income opportunities. Additionally, acknowledging the intersectionality of gender with other marginalized groups, such as individuals with disabilities and minority ethnic communities, is essential to ensure inclusive project planning and execution. By addressing these complexities and promoting inclusivity, projects can have a more meaningful and positive impact on the entire community.

Infrastructure. Data from the Republican Sanitary and Environmental Services in 2015-2018 shows that about 75% of Sughd region's population had access to centralized water supply systems. Those without rely on wells, springs, and open sources. In 2018, total water supply volume was 123.4 gm3/year, with 27.2 gm3/year treated. 7.8 gm3/year of water is lost. Per capita domestic water consumption was 17.8 m3. Water quality compliance is at 85.6% for coliforms but lower for fluoride, arsenic, and nitrates. The total length of water supply lines is 1456.3 km, with 377.7 km needing replacement in 2018.

Municipal solid waste collection occurs at designated sites in residential areas, with 75% of the population using this service in 2019. Waste is transported to 24 landfill sites covering 130.17 hectares in the region.

Agriculture. Tajikistan's Sughd region, in the north of the country, is a fertile area for agriculture. The region is surrounded by mountain ranges and has favorable conditions for growing cotton, grapes, and apricots. Irrigation is essential for agriculture in the hot Fergana Lowland. The Zeravshan Valley focuses on tobacco, grain crops, and livestock farming. Livestock farming complements crop cultivation in the region. Sughd contributes significantly to agricultural production, with a focus on cotton, rice, tobacco, fruits, and vegetables. The region is known for its rice, tobacco, and fruit production. Pastures cover a significant area in Sughd, supporting large and small ruminants. In 2017, there were over 1.6 million ruminants raised in the region. The total area occupied by agricultural crops in Sughd is 193,688 hectares. According to the data received, the amount of organic fertilizers used in the Sughd region in 2022 is 88.7 tons/year. While the amount of inorganic fertilizers in the same year is 19.1 tons/year, which is one fifth of the organic fertilizers used in the same region.

2.5. Purpose and Scope of the ESMP

The purpose of this ESMP is to provide an assessment of potential environmental and social issues that need to be taken into account in relation to the construction and maintenance of the subproject. The ESMP Is based on the principles, rules, guidelines and procedures set out in the Environmental and Social Management Framework for the whole project, and this ESMP identifies the potentially significant environmental and social impacts of the subproject Construction Agro-logistic center for Sugd region, and determining the appropriate environmental controls, mitigation measures and degree of control.

The ESMP provides an integrated approach to environmental and social management that has been adopted to confirm the potential environmental and social impacts of the subproject. The purpose of the ESMP is (i) to identify the potential environmental and social impacts of this subproject and (ii) to detail the measures to be taken during the implementation and operation of the subproject to eliminate or offset adverse environmental and social impacts, or to reduce them to an acceptable level, and (iii) to detail the actions needed to implement these measures; (iv) As well as to allow for meaningful and inclusive multi-stakeholder consultations and engagement throughout the lifecycle of the programme. The main objectives of ESMP are as follows:

- To provide an overview of the environment, health and safety (EHS), socio-economic and cultural heritage policies, standards and legal legislation that the Project is obliged to comply with,
- To provide guidance on how to manage EHS risks in the construction phase of the Project in compliance with EHS policies, standards and legal regulations and to ensure that Project commitments are fulfilled,

- To determine the roles and responsibilities of Imlementation agency, supervisors and contractors to ensure compliance with EHS requirements during the construction phase of the project,
- To ensure that construction activities are properly checked to ensure that the Project is in compliance with EHS policies, standards and legal regulations;
- Ensure reporting systems are developed and streamlined to deliver EHS compliance performance;
- Enabling ongoing development and EHS compliance coverage.

ESMP sets out the approach planned by the Project, thus PIU and its consultants and contractors, to prevent or reduce the identified environmental and social impacts. Environmental and social management plans within the ESMP, covering the construction and commissioning phases, have been prepared to be updated in line with the changing conditions as the Project progresses and the outputs regarding the stakeholder engagement process. In the operational phase of the Project, if the conditions determined in the ESIA process differ, the risks and impacts arising from the Project will be re-evaluated. At this stage, a new ESMP may be prepared to manage the activities, adapted to the new conditions.

2.6. Application of the ESMP

The ESMP (Environmental and Social Management Plan) will be implemented with an adaptive management approach to respond to changes occurring at different stages of the Project. As a living document, it will be updated to reflect the current status of the Project and site features, as well as management requirements when necessary.

The Project Implementation Unit (PIU) is obligated to implement the ESMP with adequate and qualified personnel working under an appropriate organizational structure. This implementation must be in line with Project standards, stakeholder participation, and information sharing requirements. The PIU must also ensure that contractors and subcontractors adopt management controls to adhere to the ESMP guidelines.

All sub-project bidding documents shall include a requirement for the implementation of the Environmental and Social Management Plan (ESMP). This ensures that environmental and social considerations are integrated into the construction process from the outset. The ESMP requirements will be detailed in the bidding documents and subsequently attached to the construction contracts. This ensures that all contractors are aware of their responsibilities regarding environmental and social management.

The ESMP requirements will be integrated into the construction contracts, including specifications and bills of quantities. Contractors will be required to include the cost of ESMP implementation in their financial bids. This ensures that the necessary resources are allocated for environmental and social management throughout the project lifecycle.

In accordance with the Environmental and Social Management Framework (ESMF), the roles and responsibilities of all parties involved in the project implementation process will be clearly outlined. This ensures that everyone understands their obligations and contributes to effective environmental and social management.

Monitoring and evaluation of mitigation and avoidance measures identified in the site-specific review and ESMPs will be an integral part of subproject implementation. This ensures that environmental and social risks are effectively managed throughout the project lifecycle. Contractors will be required to carry out environmental and social obligations during civil works to ensure compliance with the ESMP requirements.

All contractors will be required to use environmentally acceptable technical standards and procedures during the execution of works. This helps to minimize the project's environmental footprint and ensures that sustainable practices are followed throughout the construction process.

Contract clauses will include requirements for compliance with national construction, health protection, safeguard procedures, and rules, as well as environmental protection measures. This ensures that all contractors adhere to relevant regulations and standards to protect the environment and promote sustainable development.

Overall, integrating ESMP requirements into sub-project bidding documents and construction contracts is essential for ensuring that environmental and social considerations are prioritized throughout the project lifecycle. By outlining roles and responsibilities, monitoring and evaluation processes, and compliance requirements, all parties involved can work together to promote sustainable practices and minimize environmental and social impacts.

3. INSTITUTIONAL AND LEGAL FRAMEWORK

3.1. National Environmental Laws, Regulations, Guidelines, and Standards

Tajikistan has a well-developed legal and regulatory framework in the field of environmental protection. The current environmental legislation of Tajikistan includes legislative acts and laws on the following issues:

- Environmental protection;
- Environmental audit and monitoring;
- Protection of flora and fauna;
- Environmental Information and Education;
- Soil, Water and Air Quality;
- Biosafety;
- Human Health and Safety; and
- Waste and Chemicals Management.

These laws, as well as regulations approved by the government, provide a supportive legal framework for environmental protection, use and management of the country's natural resources. They also enshrine the rights of citizens to environmental safety, environmentally friendly products, ecologically clean environment, access to environmental information and the possibility of investing (moral, material and financial) in improving the environmental situation in the country.

Environmental legislation in Tajikistan includes the Constitution, codes and laws on air quality, noise, mineral resources, land management, forests, health and safety, and waste and chemical management. The Tajik Environment Framework Law was adopted in 1993, enacted in 1994, amended in 1996, 1997, 2002, 2004 and 2007, and replaced by a new law in 2011. The Water Code was adopted in 2000, amended in 2008, 2009, 2011 and 2012. The Land Code was adopted in 1996 and amended in 1999, 2001, 2004, 2006, 2006, 2008, 2011 and 2012. The Forest Code was adopted in 1993 and amended in 1997 and 2008.

Other important environmental legal acts, laws and regulations relevant to the project are listed in Table 1.

Table 1: Corresponding Environmental, Health and Safety Laws in Tajikistan

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
Law on Environmental Protection	No.760, entered into force August 2011, last updated June 2022	Environmental Protection Committee and its subdivisions at the district level	The law defines the state principles of environmental protection and sustainable socio-economic development, guarantees of human rights to a healthy and favorable environment, strengthening of the rule of law, prevention of negative impact of economic and other activities on the environment, management of rational nature use and ensuring environmental safety.	Chapter 6 requires environmental impact assessment, and Chapter 7 establishes requirements for siting, design, construction, reconstruction and commissioning of enterprises, buildings and other facilities.
Law on Environmental Impact Assessment	No. 1448, effective July 18, 2017	Environmental Protection Committee and its subdivisions at the district level	The law establishes the legal and institutional framework for environmental impact assessment, the interrelation with the state environmental expertise, as well as the procedure for registration and classification of environmental impacts.	The EIA law is essential for ensuring that the construction of an Agro-logistic center is carried out in a sustainable and environmentally responsible manner, taking into account the potential impacts on the surrounding environment and communities.
Law on Environmental Monitoring	No. 707, effective March 25, 2011 , last updated July 2014	Environmental Protection Committee and its subdivisions at the district level	The law defines institutional, legal, economic and social framework for environmental monitoring in the Republic of Tajikistan and regulates interrelations between state authorities, self-government bodies of settlements and villages, public associations and citizens in this sector.	The relevance of environmental monitoring laws to the construction of an agro-logistic center lies in ensuring that the project complies with environmental regulations and mitigates any potential negative impacts on the environment.
Law on Environmental Information	No. 705, entered into force on March 25, 2011	Environmental Protection Committee and its subdivisions at the district level	The Law defines legal, institutional, economic and social framework for availability of environmental information in the Republic of Tajikistan, promotes realization of the right of legal entities to receive a comprehensive, reliable and prompt environmental information, as well as governs interactions in this field.	The Law on Environmental Information to the construction of an agro-logistic center as it ensures that environmental data is collected, analyzed, and shared with stakeholders. Compliance with this law helps identify potential impacts, develop mitigation measures, and build trust with communities and regulators. This transparency promotes

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
				sustainable practices and minimizes negative environmental effects.
Law on Environmental Expertise	No. 818, entered into force on April 16, 2012	Environmental Protection Committee and its subdivisions at the district level	The present Law defines the principles and procedure of environmental expertise and is aimed at prevention of negative impact of planned economic and other activities on the environment and related social, economic and other consequences of realization of the object of environmental expertise.	This expertise helps identify risks, propose mitigation measures, and ensure compliance with environmental regulations. By conducting an environmental expertise, stakeholders can make informed decisions, minimize negative impacts on the environment, and promote sustainable development practices in the construction and operation of the agro-logistic center.
Land Code of the Republic of Tajikistan	Adopted in 1996, last amended June 2023	State Committee on Land Management and Geodesy of the Republic of Tajikistan and its subdivisions at the district level	Land legislation regulates relations on the use and protection of lands, land ownership and property relations arising from the obtaining (acquisition) or transfer of land use rights.	The code specifies the rights and responsibilities of landowners and users, as well as the procedures for acquiring and transferring land. This is important for the construction of an Agro-logistic center, as it ensures that the necessary land is legally acquired and used for the intended purpose.
Law on Plant Quarantine and Protection	No. 1567 became effective on January 2, 2019	Environmental Protection Committee and its subdivisions at the district level Ministry of Agriculture (MoA); Forestry Agency; Academy of Sciences (AS).	The law defines legal norms, organizational and economic bases of quarantine and plant protection, implementation of quarantine phytosanitary measures, handling of plant protection products, and is aimed at preservation of agricultural products, protection of human, animal and environmental health.	The Law on Plant Quarantine and Protection of Tajikistan is important for the Agro-logistic center as it sets regulations for inspecting, testing, and certifying plant products to prevent the spread of pests and diseases. Compliance with this law is crucial for the center's operations and ensuring the safe handling of plant products.

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
Law On the protection and use of plant life	No. 31 entered into force on May 17, 2004	Environmental Protection Committee and its subdivisions at the district level; MoA; and AS	The law establishes the state policy in the field of protection and rational use of plants, determines legal, economic and social principles of conservation and reproduction of plants.	Compliance with this law is essential for the construction of an Agro-logistic center to ensure the preservation of local plant life and promote responsible management of plant resources in the region.
Forest Code of the Republic of Tajikistan	Adopted 2 August 2011.	Forestry Agency under the Government of the Republic of Tajikistan and its subdivisions in districts; MoA	The law regulates the protection, ownership, rational use and restoration of forests in Tajikistan. It defines prohibited activities in the protection zones of forests and their prescription regimes and conditions for the implementation of permitted activities in the forest use zone and their prescription regimes.	The Forest Code of Tajikistan regulates the use of forest resources, which is relevant to building an Agro-logistic center that may involve wood products. Compliance with the code ensures sustainable sourcing and environmental protection.
Law on Preservation and Utilization of Historical and Cultural Heritage	No. 178 entered into force on March 3, 2006, last amended in 2017	Ministry of Culture; AS; CEP; Forestry Agency	The law establishes the legal basis for the preservation and use of historical and cultural heritage objects in the Republic of Tajikistan as the national heritage of the Tajik people.	The Law outlines the procedures for dealing with chance archaeological discoveries during construction projects.
Law on Subsoil	No. 983 became effective July 20, 1994, last amended in 2013	General Directorate of Geology; CEP	The law regulates the use and protection of subsurface resources for the benefit of present and future generations.	The Law on Subsoil in Tajikistan regulates the use of land and resources, including subsoil resources, for construction projects. It covers permit procedures, environmental protection, and safety standards. Compliance is essential for the Agro-logistic center project in Tajikistan
Soil Conservation Law	No. 555 entered into force on October 16, 2009	CEOC; committee on land management and geodesy; MOA	The law defines the basic principles of state policy, the legal basis for the activities of state authorities, individuals and legal entities for the effective and safe use of soils, the preservation of their quality, fertility and protection from negative impacts, and regulates a variety of relations related to the protection of soils.	The Law promotes sustainable land use practices to prevent soil erosion and degradation, including guidelines for construction to minimize their impact on soil quality. It emphasizes preserving soil health for sustainable agriculture and environmental conservation.

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
Water Code	Adopted April 02, 2020,	CEP, Ministry of Energy and Water resources (MEWP), MOA; Geology MOH	The purposes of the Water Code are: (i) protection of the state water fund and state water fund lands to improve the social situation of the population and the environment; (ii) combating water pollution, contamination, depletion, prevention and control of adverse impacts of water; (iii) improvement and protection of water bodies; (iv) strengthening the rule of law and protection of the rights of physical and legal persons in the field of water resources management.	The Water Code of Tajikistan sets rules for managing water resources. It requires adherence to water usage regulations, permits, recycling systems, and pollution prevention for projects like an Agro-logistic center to protect the local water supply and environment.
Law on Atmospheric Air Protection	No. 915 entered into force on December 28, 2012	CEP; MOH; Agency for Hydrometeorology	The law regulates the relations of individuals and legal entities, despite their form of ownership, in order to preserve and improve the atmospheric air and ensure environmental safety.	During constructing an Agro-logistic center in Tajikistan, it is crucial to comply with the Law on Air Protection to prevent negative impacts on air quality. This may involve reducing emissions, controlling pollutants, and managing waste properly to avoid fines or penalties.
Health Code of the Republic of Tajikistan	Adopted May 30, 2017, last amended in 2021	MOH	The Code regulates relations in the sphere of health care and is aimed at the realization of constitutional rights and public health and protection of citizens. Chapter 17 of the Code ensures sanitary and epidemiological safety.	The Health Code of Tajikistan sets rules for health and safety at construction sites. It covers sanitation, waste disposal, ventilation, and emergency response to prevent disease spread. Regulations on food storage and handling may also be included. Compliance is essential for worker and visitor well-being and disease prevention.
Law on the Protection of Population and Territories from Natural and Technogenic	No. 53 entered into force on July 15, 2004	Committee for Emergency Situations and Civil Defense (CoESCD) and its structural subdivisions	The Law in Tajikistan protects people, stateless persons, land, water, air, wildlife, resources, and industrial areas from emergencies. It manages prevention, response, and notification of the population in dangerous zones during emergencies.	The Law aims to ensure safety during disasters. Compliance involves risk assessments, safety measures, and emergency response plans for an Agro-logistic center.

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
Emergencies				
Law on wildlife protection	No. 354 entered into force on January 05, 2008, last amended in 2022	CEP; MOA; AS; Forestry Agency (FA)	The law regulates public relations in the field of protection, restoration and rational use of wildlife, and also establishes legal, economic and social foundations for the protection and restoration of wildlife resources	Compliance when building an Agro-logistic center involves environmental assessments, and measures to mitigate impacts on wildlife and habitats to ensure conservation efforts are not compromised.
Labor Code of the Republic of Tajikistan	Adopted July 23, 2016, last amended in 2022	The Ministry of Labor;	The Code regulates labor and other relations and is directly aimed at protecting the rights and freedoms of parties to labor relations, providing minimum guarantees of labor rights and freedoms.	The Labor Code of Tajikistan is crucial for the construction of an Agro-logistic center as it sets regulations for workers in construction projects, including working hours, safety, minimum wage, and labor rights. Compliance with the Labor Code is essential to ensure fair treatment of workers and legal operation of projects, with penalties for non-compliance.
Law on Fire Safety	No. 363 entered into force on March 20, 2008, last amended November 2023	Main Department of the State Fire Service of the Ministry of Internal Affairs of the Republic of Tajikistan (MIA)	The law defines the general legal, economic, social and organizational foundations of fire protection in Tajikistan; regulates relations between state authorities, local self-government bodies, organizations, other legal entities regardless of organizational and legal forms, as well as between state bodies, officials and citizens of the Republic of Tajikistan, foreign citizens and stateless persons.	The Law mandates fire prevention measures like alarms, sprinkler systems, and extinguishers. Compliance is necessary to protect people, property, and goods. Non-compliance can lead to fines, legal issues, or closure. Constructors and operators must understand and adhere to this law for a safe environment.

3.2. Legal Frameworks and Policies Related to Land Acquisition and Resettlement

The Constitution of the Republic of Tajikistan establishes exclusive state property on land whereas the state ensures its effective use in the best interests of the people. The amendments to the Land Code, that took place in August 2012 allow alienating land use rights and land use rights became subject to buying/selling, gift, exchange, pledge and other transactions. Amendments to the Mortgage Law, allow the individual land user to pledge his/her user rights to the land plot to another individual, bank or institution at the current market price. The implementing mechanisms for these amendments are being developed, although this right provides greater scope and flexibility to the land user. Cost of realty, constructions and assets should be compensated to physical persons.

The Land Code of the Republic of Tajikistan is the most systematized code of rules regulating the complex of legal relations arising during the process of exercising the land use rights. Matters related to suspension of land use rights, in case of their acquisition, and compensation of losses to land users and losses connected to withdrawal of land from the turnover are considered in two chapters and nine articles of the Land Code. These articles contain basic provisions on land acquisition for public and state purposes. The Code allows the state to seize the land from land users for the needs of projects implemented in the interests of state and at the state scale, and describes methods, system and order of protection of rights and interests of persons whose land is subject for withdrawal for the purposes of the project, and provides for the complex of compensatory measures to cover the land users' losses. The Regulation about an order of compensation of the land users' losses and losses of agricultural production, approved by the Resolution of the Government of the Republic of Tajikistan # 641, dd. 30th December 2011, establishes concrete and detailed order of reimbursement of the land users' losses.

Following are main provisions regarding the problem of involuntary resettlement indicated in the Land Code:

- Acquisition of the land plots for the purposes of the state and public needs have to be done after provision of the equivalent land plot;
- New dwelling, production and other buildings, similar to those seized, have to be constructed on the new plot in established order;
- Losses occurred during the land plot acquisition have to be compensated in full amount, including missed profit, and losses should be calculated at market cost;
- Construction of buildings and compensation of losses will be made by the institutions and organizations in whose favor the land is seized (project beneficiaries);
- Provision of the new land plot, construction of buildings, compensation of all types of losses, including lost incomes, have to be done before the official land acquisition from the land users.

According to the Articles 41 and 43 of the Land Code the land plot could be seized for the purposes of state or public needs but only upon equal compensation of realty, constructions and crops located on this plot. This compensation couldn't be less than the current market cost of such realty as the law states about the principle of compensation at the market price.

The Land Code requires that the institution which is interested in the land acquisition should justify the necessity of such acquisition and demonstrate that the plot of land should be seized and there is no alternative for the project implementation. The land plot could be seized in cases of need of construction of buildings and constructions or implementation of works of the state interest. If the project presents the interest of the state, the beneficiary of the project has to prepare a proposal on land acquisition required for the purposes of commencement of such acquisition. In accordance with the Law, the process of acquisition has to be completed and all people and households which

were included into the project zone provided with the compensation before permission is granted to commence construction.

Law on Land Administration (2016) obliges the authorities to map and monitor the quality of land, including soil contamination, erosion and logging.

Law on Pastures (2013) defines the basic principles of pasture use, including protection of pastures and the environment, and attraction of investments for more effective use and protection of pastures. The Law specifies the powers of local administrations to control environmental safety and pasture use in accordance with state regulations and standards. The law prohibits the implementation of a number of activities in pastures, such as cutting down trees or bushes, building roads, misuse of grazing land, pollution of the environment with waste, and grazing of livestock beyond the established rate. The law requires users to ensure effective use of pastures, including protection of pastures against degradation and pollution. It provides geobotanical research on pastures to assess the potential productivity of natural forage land.

Table 2: Laws and Regulations on Land Administration in Tajikistan

- The Constitution of the Republic of Tajikistan establishes land as an exclusive property of the state.
- The Land Code, Civil Code, rules on land allocation for individuals and legal entities.
- The Land Code of the Republic of Tajikistan is a systematized code of rules regulating complex of relations arising in the process of possession and use of land.
- The Civil Code of the Republic of Tajikistan is regulating the legal status of participants of civil circulation, grounds for arising of rights and order of their implementation, contractual obligations, property and non-property relations.
- The Law of the Republic of Tajikistan “On Land Valuation” establishes legal grounds for normative land valuation (2001)
- The Law of the Republic of Tajikistan “On Local Bodies of the State Authority” establishes normative grounds for allocation and reallocation of land (2004)
- The Law of the Republic of Tajikistan “On Land Management” regulates relations connected to legal grounds of activities in the sphere of land management (2008).
- The State Land Cadastre is a system of information and documentation on natural, economic and legal status of lands, their categories, qualitative characteristics and economic value.
- Regulation on the order of compensation for losses of land users and damage of the agricultural production process, approved by the Resolution of the Government of the Republic of Tajikistan # 641, establishes an order of compensation of losses of land users (2011).
- The Civil Procedural Code of the Republic of Tajikistan establishes an order, rules and terms of judicial protection in case of legal proceedings on matters related to involuntary resettlement.
- The Economical Procedural Code of the Republic of Tajikistan also establishes an order, rules and terms of judicial protection in case of legal proceedings on matters related to involuntary resettlement.

Law on Dekhkan Farms (2016) provides the legislative basis for the establishment and operation of private dehkan farms. It clarifies and fixes the rights of dehkan farm members as land users. The law improves the management of dehkan farms and defines the rights and duties of their members. It allows farmers to legally erect field camps on land as temporary buildings, which makes it possible to significantly improve productivity at the agricultural season. The law requires dehkan farms to take measures to improve soil fertility and improve the ecological status of lands, timely payments for water and electricity, and provide statistical information to government agencies.

Veterinary Law (2010) regulates the protection of the population against epizootic diseases, including their prevention and elimination, and establishes measures to ensure the safety of food products of animal and vegetable origin, as well as the safety of veterinary drugs, feed and feed additives.

Law on Food Security (2010) pays special attention to the allocation of state support funds on a competitive basis between national producers of agricultural products within the framework of the state policy on ensuring food security.

Law on Collection, Preservation and Rational Use of Plant Genetic Resources (2012) establishes the legal framework for state policy in the field of genetic resources of cultivated plants and their wild relatives and regulates their collection, conservation and rational use in agriculture and food production.

Law on Biological Management and Production (2013) establishes the legal basis for the activities of biological (organic) management, including the production, processing, storage, import and export, transportation, packaging, labeling and sale of organic products, i.e. Products produced without the use of GMOs or chemical and synthetic substances, with the rational use of water in the production process. The law establishes a system of standards and certification of organic products.

3.3 National Social Legal Provisions and Regulations

Law on Freedom of Information is underpinned by Article 25 of the Constitution, which states that governmental agencies, social associations and officials are required to provide each person with the possibility of receiving and becoming acquainted with documents that affect her or his rights and interests, except in cases anticipated by law.

Per the *Law on Public Associations*, a public association may be formed in one of the following organizational and legal forms: public organization, public movement, or a body of public initiative. Article 4 of this law establishes the right of citizens to found associations for the protection of common interests and the achievement of common goals. It outlines the voluntary nature of associations and defines citizens' rights to restrain from joining and withdrawing from an organization. August 2015 amendments to this legislation require NGOs to notify the Ministry of Justice about all funds received from international sources prior to using the funds.

The 2014 *Law on Public Meetings, Demonstrations and Rallies* (Article 10) bans persons with a record of administrative offenses (i.e. non-criminal infractions) under Articles 106, 460, 479 and 480 of the Code for Administrative Offences from organizing gatherings[1]. Article 12 of the Law establishes that the gathering organizers must obtain permission from local administration fifteen days prior to organizing a mass gathering.

[1] These provisions concern the hampering of gatherings (Article 106); disorderly conduct (Article 460); disobedience to police (Article 479); and violation of rules of conducting gatherings (Article 480).

Law on Local Governments (2004) assigns a district or city chairman the authority to control over the natural resource management, construction and reconstruction of natural protection areas, to oversee the local structures in sanitary epidemiological surveillance, waste management, health and social protection of population within the administrative territory. No public gathering is implemented without official notification of local government (district khukumat).

Law of Republic of Tajikistan on Appeals of Individuals and Legal Entities (2016) contains legal provisions on established information channels for citizens to file their complaints, requests and grievances. Article 14 of the Law sets the timeframes for handling grievances, which is 15 days from the date of receipt that do not require additional study and research, and 30 days for the appeals that need additional study. These legal provisions will be taken into account by the project-based Grievance Redress Mechanism.

Labor Code prohibits forced labor (Article 8). The Labor Code also sets the minimum age at which a child can be employed as well as the conditions under which children can work (Articles 113, 67, and 174). The minimum employment age is 15, however, in certain cases of vocational training, mild work may be allowed for 14-year old (Article 174 of the Labor Code). In addition, there are some labor restrictions on what type of work can be done, and what hours of work are permissible by workers under the age of 18. Examples of labor restrictions include: those between 14 and 15 cannot work more than 24 hours per week while those under 18 cannot work more than 35 hours per week; during the academic year, the maximum number of hours is half of this, 12 and 17.5 hours, respectively. These limitations are consistent with the ILO Convention on Minimum Age. In addition, Law on Parents Responsibility for Children's Upbringing and Education, makes parents responsible for ensuring their children not involved in heavy and hazardous work and that they are attending school.

3.4. Applicable World Bank Environment and Social Standards (ESS)

The impact assessment of the project has shown that it meets several relevant standards including ESS 1, ESS 2, ESS 3, ESS 4, ESS 5, ESS 6 and ESS 10. These standards play a critical role in ensuring that the project is implemented in a sustainable and responsible manner, taking into account various environmental, social and governance factors.

ESS1 Assessment and management of environmental and social risks and impacts

The environmental and social impacts of the project are expected to be mainly positive as it will contribute to improved agricultural production and increased capacity to identify effective agricultural, land and water management practices.

However, there are potential environmental risks associated with site-specific construction activities under this component, such as dust, noise, waste management, disposal of electronic or hazardous waste. Although these risks are temporary and localized and may include soil loss due to planting activities; temporary, construction-related air and water pollution, such risks are expected to be reversible, short-term and easily remedied.

The main social risks and impacts of the project are related to: a) exclusion: various small and medium-sized farms and individual farmers as well as other vulnerable populations may be excluded from project activities/outputs/benefits due to remoteness, lack of adequate knowledge and skills to access and utilize improved technologies, inaccessibility of seeds and services; b) minor involuntary resettlement impacts associated with the construction of several buildings; and c) increased exposure to hazardous agrochemicals. No significant labor influx and community safety risks are expected under the project as most of the project workers (for construction activities) will be recruited locally. The risk of sexual exploitation and violence and sexual

harassment is assessed as moderate mainly due to the status of national legislation on gender-based violence, gender norms and the rural location of most project activities.

ESS2 Labor resources and working conditions

The project involves small/medium scale infrastructure for the construction or rehabilitation of gene banks, seed laboratories and agro-logistics centers, so it is expected that most contractors will be from the local community. Most of the labor force is expected to be locally hired except for a few skilled workers.

During project preparation, a Labor Management Procedures (LMP) was developed to describe the types of project workers, working conditions and associated labor risks, and mitigation measures. There will also be measures to train and recruit as many workers as possible from the local communities where the activities will be implemented. As well as health and safety (HSE) aspects, including specific documents to be prepared by contractors prior to commencement of works (HSE checklists, codes of conduct, safety training, etc.). Contracts for construction works will include social and environmental mitigation measures based on the World Bank Group's Environmental Guidelines.

Child labor/forced labor risk is limited as contractors must comply with national laws on minimum employment age and contracts. The Tajik Labour Code allows the employment of 14 to 16-year-olds with parental permission for non-hazardous work outside of school hours. Child labor is not permitted for civil works, but children above 14 can assist in agricultural work outside of school hours. The MoA PIU will oversee contracts and ensure contractors do not use child/forced labor. Staff responsible for contractor supervision will monitor and report any cases of child/forced labor.

Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risk is assessed as moderate mostly due to the status of national Gender-Based Violence (GBV) legislation, gender norms, and the rural location of most project activities.

Labor risks associated with contracted workers at subproject level. Subprojects will be implemented by local contractors and most contracted workers will be hired locally with the exception of a few skilled workers. All contractors will be required to have a written contract with their workers materially consistent with objective of ESS2, in particular about child and forced labor.

Employment Risks. Contractors will hire workers either directly as employees or through contracts with subcontractors or service providers. Experience with World Bank-financed projects shows that subcontractors comply with labor and accounting laws and regulations. However, there is a risk that the practice of unrecorded working hours and unpaid overtime may persist. The Construction Supervision Consultant will track the working hours of contractor employees involved in the project through timesheets and limit overtime hours.

Non-discrimination and equal opportunity refer to the principles and practices that ensure fair treatment and equal access to opportunities for all individuals, regardless of their race, ethnicity, gender, age, religion, disability, or any other protected characteristic. These principles are essential in promoting a just and inclusive society. Ways to prevent discrimination and promote equal opportunity include education programs for diversity understanding, affirmative action policies, fair recruitment processes, accessible infrastructure, monitoring discrimination cases, and involving communities in decision-making.

Occupational health and safety requirements ensure the health and safety of employees. They include risk assessment, safety training, providing personal protective equipment, ergonomic design, controlling hazardous substances, emergency preparedness, machinery and equipment safety, workplace violence prevention, recordkeeping and reporting, and regular audits and

inspections. Mitigation measures include engineering controls, administrative controls, PPE, training, clear communication channels, reviewing and updating policies, promoting a safety culture, conducting inspections and audits, and investigating incidents. These requirements aim to create a safe working environment and minimize accidents, injuries, and illnesses.

ESS3 Rational use of resources, prevention and management of environmental pollution

As the project aims to expand and intensify horticultural production, there is a risk of increased pesticide use by farmers and farm managers who may not be adequately trained or equipped to safely handle and use pesticides. All infrastructure facilities, including ALCs, cold stores, offices and laboratories constructed and/or rehabilitated under the project will utilize energy efficient and climate resilient materials and structures.

In the context of construction of Agro-Logistics Centers, ESS 3 focuses on resource efficiency and pollution prevention. It encourages projects to minimize waste generation, reduce resource consumption and adopt clean technologies. During construction, achieving ESS 3 can be done by effectively managing waste through recycling and proper disposal. Additionally, incorporating energy efficient technologies and practices is essential. Implementing water conservation measures is also important, as is prioritizing the use of sustainable and local materials. Preventing pollution through proper handling and disposal of hazardous materials is crucial. Lastly, designing efficient storage facilities to minimize waste generation is necessary..

ESS4 Community health and safety

ESS 4 (Community Health and Safety) can also be applied to the construction of agro- logistics centers to ensure the well-being of workers and the surrounding community. At the agri-logistics center, several measures are in place to ensure the well-being of employees and the surrounding community. Health and safety protocols are strictly followed, including providing training and protective gear to all staff members. Regular inspections are conducted to identify any potential hazards and address them promptly.

ESS5 Land acquisition, land use restrictions and involuntary resettlement

New construction will inevitably require "land" but this will be limited to a few sites. While the project expects the Government to provide land, due diligence is required to ensure that there is no physical and/or economic displacement.

The land designated for the construction of the Agro-logistics center is currently under the ownership of the Khujand Municipality, and its Free Ecomomic Zone as stated in their balance sheet. Consequently, the Resettlement Policy Framework for the project has determined that the formulation of a resettlement action plan is not required.

ESS6 Biodiversity conservation and sustainable management of living natural resources.

ESS 6 (Biodiversity and Ecosystem Services) may not be directly related to the construction of agro-logistics centers as the logistics center will be located in populated areas. However, efforts can still be made to minimize impacts on local biodiversity and ecosystems. This may include the implementation of measures such as:

1. Green infrastructure: Incorporating green spaces such as gardens or public gardens into the agro-logistics center to promote biodiversity and provide habitat for local flora and fauna.

2. Sustainable landscaping: Use of native plants in landscaping to support local biodiversity and reduce the need for excessive water and chemicals.

3. Stormwater Management: Implementing stormwater management measures, such as the use of permeable surfaces or rain gardens, to prevent pollution of local water bodies and protect aquatic ecosystems.

4. Waste management: Implement appropriate waste management practices to minimize pollution and potential harm to local ecosystems. This may include recycling programs, composting, and proper disposal of hazardous materials.

ESS8 Cultural heritage

ESS 8 is assessed to be unrelated to the project. However, during construction of the agri-logistics centers, measures would be taken to identify and protect any unexpected archaeological or cultural artifacts that may be discovered. This is being done as a precautionary measure to ensure that important historic or cultural resources are not damaged or destroyed during construction. Chance find procedure for the project provided in Annex 2

ESS10 Stakeholder engagement and information disclosure

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive, and responsive relationships that are important for successful management of a project's environmental and social risks. Stakeholder engagement is most effective when initiated at an early stage of the project development process, and is an integral part of early project decisions and the assessment, management, and monitoring of the project's environmental and social risks and impacts.

The consultant conducted local public consultations on the draft ESIA and invited all interested stakeholder organizations, including local representatives of other government bodies such as health and labor departments, local khukumats, jamoats, mahalla leaders, and local NGOs from the target site. During the consultations, the consultant presented a summary of the draft ESIA, discussed resettlement issues, and shared the project's adopted GRM. The audience was informed about the screening process for the projects, the Environmental and Social Assessment for Substantial Risk sub-projects, potential impacts that may be generated, and the measures to be taken to prevent/mitigate these potential impacts.

3.5. Gap analysis between national legislation and the World Bank ESS

The table below provides a brief analysis of the gaps and differences between Tajikistan's national legislation and World Bank requirements, and details how these gaps will be addressed by the project.

Table 3: Gap analysis between the legislation of Tajikistan and the WB

Legislation of Tajikistan (Identified gaps)	World Bank Requirements	How to Address by Project
Tajikistan's legislation does not provide for the development of a specific stakeholder engagement plan for public consultations.	Stakeholder consultation and public engagement is an integral part of the development and implementation of the RWSP	The Project will undertake a comprehensive consultation process with project-affected persons, local and state governments, and other stakeholders as needed through public disclosure meetings, individual consultations, and public consultations
There are provisions in Tajikistan's legislation that allow citizens to file complaints, but these provisions do not allow for anonymity.	World Bank ESS 10 allows for anonymous submission of complaints	The project will apply the World Bank standard and allow anonymous submission of complaints
Tajikistan's legislation does not contain special provisions for addressing the problems of vulnerable groups during the consultation process	ESS10 specifically provides for the identification and engagement with vulnerable groups that may be affected by the project to ensure that these groups also benefit from project activities.	The SEP under the project will identify affected vulnerable persons and engagement mechanisms to ensure that their voices are heard and concerns are addressed to the maximum extent possible under the project.
Land, subsoil, water, airspace, animal and plant life and other natural wealth is the property of the state	ESS 5. Speaks about the procedure of land withdrawal when necessary for state needs. Each PAP is entitled to compensation for damages.	The project restricts land use rights and compensates affected persons
The Environmental Protection Act gives the right to preserve cultural value to places of worship, pilgrimage	ESS3, ESS8 Pollution prevention and cultural heritage. Gives a broad right to the preservation of cultural property and the prevention of	Calls for the adoption of modern environmental standards for water, air, soil, solid waste, toxic waste, and noise abatement, subject to maximum permitted

centers, and cemeteries.	pollution	amounts.
The minimum age of employment is 15 years old, but in some cases of vocational training, 14 year olds may be allowed light work	14-15 year olds are limited to working hours of 24 hours per week. 18 year olds are limited to 35 hours per week. Areas with difficult working conditions do not allow teenagers under 20 years of age to work.	These limits are in line with the ILO minimum age convention

4. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

The Environmental and Social Management Plan (ESMP) plays a crucial role in ensuring that environmental and social considerations are effectively integrated into project planning and implementation. It serves as a roadmap for identifying potential impacts, outlining mitigation measures, and establishing monitoring and reporting mechanisms to track progress and compliance with regulatory requirements.

One of the key functions of the ESMP is to provide a detailed account of the actions that will be taken to address environmental and social risks associated with the project. This includes a comprehensive description of the measures that will be implemented to prevent, minimize, and mitigate adverse impacts on the environment and affected communities. By outlining these actions in sufficient detail, the ESMP provides a clear framework for assessing the effectiveness of mitigation measures and ensuring that commitments made in the Environmental and Social Impact Assessment (ESIA) are upheld.

In addition to detailing mitigation measures, the ESMP also establishes responsibilities and timelines for implementing these actions. This includes assigning roles and responsibilities to project stakeholders, setting deadlines for the completion of specific tasks, and establishing procedures for monitoring and evaluating progress. By clearly defining responsibilities and timelines, the ESMP helps ensure that mitigation measures are implemented in a timely manner and that all parties involved in the project are held accountable for their commitments.

Furthermore, the ESMP serves as a tool for monitoring and reporting on the implementation of environmental and social management measures. It outlines the indicators and parameters that will be used to assess the effectiveness of mitigation measures, as well as the frequency and methods for monitoring and reporting on progress. By establishing a robust monitoring and reporting framework, the ESMP enables project stakeholders to track progress, identify areas of concern, and take corrective action as needed to ensure compliance with regulatory requirements and project commitments.

Another important aspect of the ESMP is its role in facilitating communication and consultation with stakeholders. The plan outlines the mechanisms that will be used to engage with affected communities, local authorities, and other relevant stakeholders throughout the project lifecycle. By providing a platform for dialogue and feedback, the ESMP helps build trust, foster collaboration, and address concerns raised by stakeholders in a transparent and inclusive manner.

Overall, the ESMP is a critical tool for ensuring that environmental and social considerations are effectively integrated into project planning and implementation. By detailing actions to be taken in sufficient detail, establishing responsibilities and timelines, setting up monitoring and reporting mechanisms, and facilitating communication with stakeholders, the ESMP helps ensure that project impacts are effectively managed, regulatory requirements are met, and project commitments are upheld. Through its comprehensive approach to environmental and social management, the ESMP plays a key role in promoting sustainable development and responsible business practices.

The main objectives of the Environmental and Social Management Plan (ESMP) are to:

- Outline the mitigation measures required for avoiding or minimizing the potential impacts identified in the ESIA.
- Develop monitoring mechanisms and identifying the monitoring parameters to confirm effectiveness of the mitigation measures recommended in the ESIA.
- Define roles and responsibilities of the project proponent for the implementation of the ESMP and identifying areas where these roles and responsibilities can be shared with other parties involved in the execution and monitoring of the Project.
- Define the requirements necessary for documenting compliance with the ESMP and communicating with the concerned regulatory agencies.
- Provide an Auditing Mechanism to ensure the compliance with environmental and social legislation and safeguards.
- Identify the resources required to implement the ESMP and outline the corresponding financing arrangements.

Table 14 below presents the ESMP. This Plan includes also pre-construction and operation phase.

4.1. Applicability of the environmental and social screening process:

4.1.1. Environmental and Social Responsiveness

The sub-project meets environmental and social criteria and all potential environmental and social impacts and risks are limited to the sub-project area/activity and can be mitigated.

4.1.2 Implementation Applicability

Based on the risk assessment, the subprojects may entail some occupational health, safety and health impacts, such as occupational health and safety impacts. The occupational health, safety and health impacts have been considered in the design, tender documents and bill of quantities, and mitigation measures will be implemented.

4.1.3. Eligibility:

These subprojects are eligible for support because they do not have any of the attributes listed in the following exclusion list, which is presented in Table 4.

Table 4. List of unacceptable activities for subprojects

• There are irreversible negative environmental or social impacts that create cumulative impacts and/or cannot be adequately mitigated;
• Production of or trade in any products or activities that are illegal under host country laws or regulations, or international conventions and agreements, or are subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone-depleting substances, PCBs, wildlife, or CITES-regulated products;
• Production of or trade in unlimited quantities of asbestos fibers;
• Production of or trade in timber or other forest products, except for those from sustainably managed forests;

- • Production, trade, storage, or transportation of significant quantities of hazardous chemicals, or the use of hazardous chemicals on a commercial scale (gasoline, kerosene, and other petroleum products);
- • Production and processing of genetically modified organisms (GMOs);
- • Use of banned pesticides;
- • Use of species listed in Appendix 1 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora;
- • Will have a significant negative impact on income/livelihoods;
- • Will involve any forced displacement of people;
- • Does not meet required technical and quality requirements;
- • Excludes poor/disadvantaged or otherwise vulnerable groups; Финансируются или должны финансироваться правительством или другими партнерами по развитию;
- • Are or are expected to be financed by the government or other development partners;
- • Involves compensation for loss of land or assets from World Bank financing;
- • Involves production or activities involving forced labor;
- • Involves activities that cause or result in child abuse, exploitation of child labor, or trafficking in persons: no child under 15 years of age shall be employed in the construction, rehabilitation, or maintenance of the subproject;
- • Involves the purchase or use of illegal/illegal drugs, military equipment, or other potentially hazardous materials and equipment, including pesticides, insecticides, herbicides, asbestos (including asbestos-containing materials), or other investments that harm livelihoods, including cultural resources;
- • Involves the development of new settlements or the expansion of existing settlements within critical habitats, protected areas, or areas that are within a defined level of national conservation (e.g. forest reserves).

4.1.4. Environmental and social screening

Environmental and social screening was carried out using the screening form of the ESMF, which is provided in Table 5. The subproject activities will be carried out on the territory of the ALC construction sites and state facilities and will not include activities that may have high potential environmental and social impacts.

Health, safety, environmental and social requirements, as well as COVID-19 prevention measures, will be included in the contract and tender documentation so as not to create disruption to the local population

Table 5 PRELIMINARY SOCIAL EXAMINATION (SCREENING) CHECKLIST

	Activities	**Yes**	**No**	**Notes**
1	Acquisition of land, buildings (residential and commercial)			If "Yes" and the answers to other questions are "No", please provide the relevant documents available to complete the final purchase and sale transaction

2	Acquisition or expansion of business to be undertaken by demolition/relocation landlords, tenants, formal and informal user assets			If the answer is "Yes", please provide further details
3	Acquisition of assets that will result in loss of access of people or a specific community/groups, especially ethnic minorities, to: · Natural resources · Traditional places of residence · Traditional activities · Public utilities			If the answer is “Yes”, please provide further details
4	Acquisition/or expansion of a business that may increase/increase the risk of: 1. Violations of labor codes and laws, including the use of child labor 2. Persecution of ethnic minority groups in the project areas (related to their identity, dignity, and sources of livelihood, life support systems, cultural identity) 3. Human trafficking			If the answer is "Yes", please provide additional details
5	Will the land acquisition be carried out using the law on the state's right of compulsory alienation of property?			If the answer is "Yes", please provide additional details
6	Will there be permanent or temporary loss of housing and residential land due to land acquisition?			If the answer is "Yes", please provide additional details
7	Will there be a permanent or temporary loss of agricultural and other productive assets associated with the acquisition of land?			If the answer is "Yes", please provide additional details
8	Will there be any loss of crops, trees and fixed assets due to land acquisition?			If the answer is "Yes", please provide additional details
9	Will there be a permanent or temporary loss of business or entrepreneurship due to the acquisition of land?			If the answer is "Yes", please provide additional details
10	Will there be permanent or temporary losses of income sources and livelihoods due to the land acquisition?			If the answer is "Yes", please provide additional details
11	If land or private property is acquired through the willing buyer and willing seller principle, will this result in a permanent or temporary move or displacement of landlords or tenants?			If the answer is "Yes", please provide additional details

12	If land or private property is acquired through negotiations or through the willing buyer, willing seller principle, will this result in the permanent or temporary displacement or relocation of informal land users (people without legal rights to the land) or squatters?			If the answer is "Yes", please provide additional details
13	Will the project involve any permanent or temporary restrictions on land use or access to protected parks or areas, thereby causing people or any community to lose access to natural resources, traditional habitats, communal lands or facilities?			If the answer is "Yes", please provide additional details
14	Will the project use government lands or any public land or property that will require permanent or temporary displacement of informal residents or users (residential or economic)?			If the answer is "Yes", please provide additional details

4.2. Institutional Responsibilities

Table :Roles and Responsibilities of Key Role Player for Implementation of ESMP

Position	Responsibility	The organization
Project Manager	Ensure ESMP Implementation; Supervise procurement and hiring of staff; and Overall supervision of project.	Implementing Partner (UWSSP)
Environment and Social Safeguards Officer (assisted by Implementing Partner supervision consultant (Supervisor) and contractor HSSE officer)	**Environmental Aspects** Ensure that the contracts include clauses for ESMP implementation; Ensure implementation of the ESMP during various phases of design and implementation; Certify timely and robust environmental monitoring in the field by local facilitators and technical resource persons; Ensure that environmental trainings are planned and implemented; Overall monitoring and reporting of environmental impacts and ensuring water quantity and quality tests are conducted by the National Water Resources Authority (NWRA) in coordination with the WSLC Facility Administration; Coordinate and ensure development of awareness material; Prepare environmental Progress Reports including monitoring reports for the project.	UNOPS

Position	Responsibility	The organization
	Monitor and check the proper implementation of all occupational health and safety mitigation measures as suggested in ESMP through field visits as well as site records; Ensure that environmental trainings regarding occupational health and safety are planned and implemented; Overall monitoring and reporting of occupational health and safety issues; and Prepare Progress reports regarding compliance of mitigation measures for occupational health and safety for the project.	
	Social Aspects Monitor and check the proper implementation of all social mitigation measures as suggested in ESMP; Monitoring and evaluation of social related matters of the project and maintain a social complaint register to document social issues; Certify timely and robust social monitoring in the field by local facilitators and technical resource persons Ensure inclusion of ESMP requirements in project designs; Remain the focal point for managing the project GM, and maintain analysis and reports on types of complaints received, resolved, time taken to action, etc. Provide technical lead to the field teams regarding gender mainstreaming activities of the project; Linkages development with NGOs and public-sector entities working on empowerment of women and marginalized segments of society; Ensure the GM is gender friendly; Provide assistance and advice to field staff for resolving grievances related to gender arising on account of project implementation; and Prepare Grievance Reports as and when required	
Site Supervisor (Supervision Consultant)	Assist UNOPS ESSO in managing and monitoring all HSSE related activities on the ground	UWSSP
HSSE Officer	Performing all HSSE activities on the ground including toolbox, training, inspections, reporting and etc.	Contractor
Designing Engineer	Coordination to provide technical data and information for UWSSP designer engineer Participation in the inspection of supplied materials.	UWSSP

Position	Responsibility	The organization
	Provide facility in supervision the project's activities (Coordination to enable the contractor to commence work) Provide information on the Project 's progress Participation in the primary receipt of implemented project activities from the contractor Evaluation of project technical performance Coordination to remove waste and debris from working sites to the assigned landfill Coordination to organize and facilitate traffic movement	
TPM	Evaluation of ESMP implementation; Supervision of implementation contractor; and Reporting to higher authorities.	Third Party

4.3. Role and Responsibilities of the CSC

The CSC is tasked to review designs and ensure safeguard compliance of civil works for each specific subproject including the monitoring of implementation of the ESMPs through the Contractors EMP and related aspects of the project. It is envisaged at this stage one CSC will be engaged for the Project.

The CSC will also be tasked with following activities:

Safeguard Compliance Monitoring: Develop a robust framework for ongoing monitoring of Environmental and Social Management Plans (ESMPs) during construction. Implement a regular reporting system that tracks compliance with environmental regulations and social commitments.

Training and Capacity Building: Expand initial training for the Project Implementation Unit (PIU) Environmental, Health, Safety, and Social (EMHSS) Specialist to include advanced topics on risk management, community engagement, and adaptive management strategies. Organize periodic workshops throughout the construction phase to reinforce knowledge and share best practices.

Community Engagement: Establish a community liaison function to facilitate communication between the project team, contractors, and local communities. Implement grievance redress mechanisms that are accessible to affected communities, ensuring concerns are addressed promptly.

Environmental and Social Performance Indicators: Develop specific performance indicators to measure the effectiveness of environmental and social management practices. Regularly review and adjust indicators based on project developments and stakeholder feedback.

Risk Assessment and Mitigation: Conduct comprehensive risk assessments focusing on environmental and social impacts prior to construction activities. Develop tailored mitigation strategies for identified risks, ensuring they are integrated into contractor plans.

Operational Phase Planning: In addition to preparing the Emergency Response Plan, Occupational Health and Safety Plan, and Pest Management Plan, develop a comprehensive Sustainability Management Plan that outlines long-term strategies for minimizing environmental impact post-construction. Ensure that operational plans include clear roles, responsibilities, and training requirements for personnel involved in implementation.

Collaboration with Other Stakeholders: Foster partnerships with local NGOs, government agencies, and community organizations to enhance project sustainability and social acceptance. Collaborate with environmental

experts to ensure best practices in biodiversity conservation and resource management are integrated into project execution.

Reporting and Documentation: Establish a systematic approach for documenting compliance with ESMPs, including regular audits and inspections. Prepare detailed reports for stakeholders that summarize environmental and social performance, challenges encountered, and corrective actions taken.

Feedback Loop for Continuous Improvement: Create a mechanism for capturing lessons learned throughout the project lifecycle to inform future projects. Encourage feedback from contractors, local communities, and PIU staff to continuously refine processes and improve outcome

4.4. Contractor Requirements

1. The Contractors for each of the subprojects will be responsible for the preparation of a CEMP. The CEMP will need to be fully compliant with the relevant specific EMP and this ESMP as a whole and will need to be prepared within 30 days of contract award and approved 10 days prior to access to the site.

2. During construction, the Contractor must retain the expertise of an Environmental, Health and Safety Officer (EHSO) and Social Officer to implement and continually update the CEMP and to oversee and report on the operation throughout the contract period. The EHSO and Social Officer will be full-time members of staff on the Contractors roster and will be on-site at least five days per week.

3. The EHSO and Social Officer will be responsible for the preparation of weekly environmental checklists and an environmental section of the Contractor's monthly progress reports that shall be submitted to the CSC for review.

4. The monthly reports, which will include the weekly environmental checklists, shall contain sections relating to:

- General Progress of the Project.
- Environmental Incidents, e.g. spills of liquids, accidents, etc.
- Progress of any environmental initiatives, e.g. energy savings, recycling, etc.
- Records of any environmental monitoring.
- Conclusions and Recommendations.

5. The EHSO shall provide daily toolbox training to workers at the various construction sites and keep a record of all monthly training and toolbox training undertaken.

6. The social officer will be responsible for organizing and conducting a monthly meeting with the community to discuss the construction of the agro-logistic center. The purpose of the meeting is to inform the community about the project, address any concerns or questions they may have, and gather feedback from them.

4.5. "Environment and Social Incident Response"

"Incident" is defined as an accident, incident, or negative event resulting from failure to comply with identified risk management measures OR conditions that occur because of unexpected or unforeseen environmental or social risks or impacts during project implementation. Examples of environmental or social incidents include: fatalities, serious accidents and injuries; social impacts from labor influx; sexual exploitation and abuse (SEA) or other forms of gender- based violence (GBV); major environmental contamination; child labor; loss of biodiversity or critical habitat; loss of physical cultural resources; and loss of access to community resources. In most cases an incident is an accident or a negative impact arising if the contractor does not comply with the WB security policy or unforeseen events which occurred during the Project implementation.

The Environment and Social Incident Response will follow the recommendations of the World Bank Environment and Social Incident Response Toolkit and includes several stages^

Stage 1. Initial informing about the incident. The contractor, executor, supervisor, is informing the PIU and local authorities, the public, providing urgent health care and providing the necessary safety measures for workers. All measures must be taken immediately. In parallel, all necessary data about the incident are collected - its scope, degree of danger to public health and environment, location, cause of occurrence, duration, what decisions are taken by the Executor, what actions should be taken next, etc.

Stage 2. Assess severity of the incident. The contractor should promptly provide information to the PIU about the incident and its degree of danger.

Stage 3. Notification. The contractor together with the PIU is preparing an incident notification for the WB. Submission of a notification in the event of an incident should be determined when signing a contract with the Contractor.

Stage 4. Investigation of the incident. The Contractor and PIU provides any information requested by the WB and does not prevent to visit the incidence scene. The Contractor is also obliged with the assistance of the PIU to analyze the causes of the incident and to document the information received. The Contractor may need to involve external experts in investigation of the incident. The term of the investigation should not exceed 10 days after the incident. The findings of the investigation should be used by the PIU and the Contractor to develop corrective actions and draw up a corrective action plan (CAP) to avoid any future repetition of what happened. Besides, the conclusions should be submitted to the WB.

Stage 5. Corrective Action Plan. The Contractor with the help of the PIU develops a CAP with specific actions, responsibilities, implementation dates and monitoring program and discusses it with the WB. In case of serious incidents, the WB and the PIU agree on a set of measures to eliminate the major causes of sources for such incidents. The CAP indicates actions, duties and terms that should be performed by the PIU and the Contractor, who will be jointly responsible for implementation of the CAP. The CAP may include development or modernization of technical measures to protect the environment and prevent further pollution, conduct training, including on issues of emergency health care, compensation for insurance claims of injury or death. If the PIU considers that the CAP measures are not effective, and/or the Contractor has shown unwillingness or inability to take corrective measures, the PIU may consider a decision on complete or partial suspension of the contract payments until such actions are taken, or in some cases it may consider a question of cancellation of the whole or part of the contract after its suspension. Such decisions of the PIU are transferred to the Ministry of Agriculture authorities to determine the appropriate actions.

Stage 6. Monitoring execution of the CAP. The Contractor performs the CAP, monitors execution of individual CAP items and provides a report on implementation to the PIU. The PIU submit a report to the WB basing on the information received from Contractor.

It will be mandatory for all project participants immediately report on the OHS (on severe and serious) incidents (by by subcontractors - to Contractor, by contractors - to the PIU, by PIU - to the World Bank). It is required that PIU is to be notified about each incident within 24 hours and World Bank is to be notified about each severe and serious incident within 24 hours.

4.6. ESMP Costs Estimates

7. Most costs associated with the environmental recommendations of the EMP are part of preparing the bid and contract documents and ensuring that proper environmental provisions are incorporated therein. The use of PPE, for example, is a necessity, but not generally considered as an additional “cost”. Environmental monitoring costs are provided in Table 6.

Table 4: EMP Preliminary Estimated Mitigation Costs by Subproject (Contractor)

Activity	Item	Unit cost	Total cost
Pre-Construction			

Contractor's EMP	Contractor's EMP	Included in Project Budget	-
Construction			
Standard site management Additional environmental measures	Mobile toilets	$500	$1,000
	Spill Kits	$200	$400
	Bunds for fuel and oil storage	Included in Project Construction costs	-
	Waste containers	Same as above	-
	Mobile bunds	$250	$1,000
	Waste collection and disposal	Included in Project Construction costs	-
	Storage areas for hazardous materials	Included in Project Construction costs	-
	Temporary bridging for access	Included in Project Construction costs	-
	Fencing of construction sites	Included in Project Construction costs	-
	Warning signs around construction sites	Included in Project Construction costs	-
	Fire safety	Included in Project Construction costs	-
	PPE – including hi- vis life vests	Included in Project Construction costs	-
	First aid facilities	Included in Project Construction costs	-
	Water bowsers	Included in Project Construction costs	-
	Tarpaulins	Included in Project Construction costs	-
Tree cutting /tree removal (estimated)	Labor and machinery	$15	$1,000
General Tree planting	Saplings and labor	$5	$3,000
Monitoring of environmental quality	Sampling (air and noise)	$500	$5,000
Tree maintenance	Labor and water	Included in Project Construction costs	-
Training	Health and Safety Training	Included in Project Construction costs	-
	Environmental Training	Included in Project Construction costs	-
	Toolbox Training	Included in Project Construction costs	-
	PIU Training	Included in Project Construction costs	-
Safeguard Staff	Contractors EHSO	$ 2,000	$48,000
Total Mitigation Costs			$**59,400**

*Actual cost should be updated by the contractor and during preparation of SSEMP

The budget for the implementation of the ESMP may include potential costs that can be estimated by the contractor and presented in commercial proposals.

- **5. LAND ACQUISITION AND RESETTLEMENT**

During a visit to the site, it was discovered that, despite the industrial designation of the land, a resident from a nearby village had been cultivating it without authorization. The Balkhi Hukumat, in collaboration with the PIU and the Consultant, established a commission to assess the compensation owed. By conducting interviews with community members, the individual responsible for using the land was identified. The compensation was then accurately calculated and duly disbursed to rectify the situation.

Fair, prompt, and negotiated compensation for all crops and tree loss will be provided in accordance with the Tajik or the WB resettlement policy, ensuring that compensation is equal to or greater than the cost to replace the asset. In cases where land is temporarily acquired for the construction of campsites, rental terms will be negotiated to the satisfaction of the farmers, with agreements being made in their local language. The land will be reinstated to its initial conditions once the temporary use is over.

The Project Management Unit (PMU) will oversee the process of land rehabilitation upon project completion, ensuring that farmers are compensated according to lease agreements and that restoration actions agreed upon by contractors are carried out. Photo-documentation of the land's condition before temporary acquisition will be conducted to aid in resolving any conflicts between landowners and contractors.

Project facilities will be situated at least 500 meters away from existing settlements, built-up areas, streams, wildlife habitats, and archaeological or cultural sites. Before commencing construction activities, the Contractor must submit a development plan for scrutiny and approval by relevant authorities. Unused land will be utilized for project infrastructure wherever possible.

No individual should suffer negative impacts until compensation is provided.

5.1. LAND ACQUISITION MECHANISM, DESCRIPTION OF COMPENSATION AND OTHER TYPES OF SUPPORT DURING RESETTLEMENT

The mechanism is determined by the regulatory act on the procedure for compensating damage and losses of agricultural products of land users, approved by the Decree of the Government of the Republic of Tajikistan dated December 30, 2011 No. 641, which establishes a specific and detailed procedure for compensating losses of land users.

In this particular case, when comparing the requirements of regulatory acts of the Republic of Tajikistan and the socio-environmental standards of the World Bank, some points were identified, the implementation of which will be carried out taking into account the requirements of the socio-environmental standards ESS 5 of the World Bank. Namely, the legislation of the Republic of Tajikistan does not provide for compensation for illegal use of land. In accordance with the conditions specified in the Environmental and Social Framework developed for the Agricultural Sustainability Project, payments to the user must be made regardless of the form of land use.

5.2. COMPENSATION AND BENEFITS FOR AFFECTED PERSONS

If land acquisition or land use restrictions (permanent or temporary) are unavoidable, the Borrower shall offer the affected persons compensation at replacement cost and other necessary assistance to help them improve or at least restore their standard of living or livelihoods. Compensation rates for different categories of land and real estate shall be made public and applied on a uniform basis. In case of negotiations, compensation rates may be adjusted upwards. In any case, a clearly defined basis for calculating the amount of compensation shall be documented and transparency in the distribution of compensation shall be ensured.

Key provisions to reconcile the differences between the Land Code of the Republic of Tajikistan and the World Bank’s ESS 5 include:

• Any PAPs, regardless of entitlement, will be entitled to compensation (for structures, crops and trees) and rehabilitation activities under the project. This includes landless people using land and squatters.

• PAPs and affected communities will be consulted on options and any impacts of land acquisition and resettlement.

• Social screening will be conducted to determine the level of potential impacts and appropriate mitigation measures.

• Where provision of land for land compensation is technically impossible or socially impractical, compensation will be in cash at full replacement cost at current market value.

• Compensation for any other affected assets (structures, crops and trees, and business/income losses) will be in cash or in kind at full replacement cost at current market value. Vulnerable and poor PAPs will be entitled to additional measures as needed and gender issues will also be addressed.

• Maintenance works will avoid or minimise, to the extent possible, the need for land acquisition and resettlement.

• Compensation will be provided for temporary loss of land or assets, or temporary loss of income-earning capacity.It is important to note that under the WB ESS 5, the status of those without title is clearly defined. Under this policy, those who do not have formal legal title or judicial rights to use land but still use state land are entitled to compensation based on the investment they have made in state land, their labour and lost assets, but not for the ownership of the land as is the case with the title holder. Instead, alternative plots are allocated for their use or other forms of assistance in lieu of land compensation are provided to those who informally use or occupy land until the deadline.

In cases not provided for by the terms of this document, when in the course of work the contractor requires additional land plots not provided for within the allocated plot or in any other situations, and in the event of damage to the affected parties/adjacent buildings by the contractor, all costs must be paid by the contractor at market price in accordance with the entitlement matrix established in the Resettlement Policy Framework (RPF).

6. ENVIRONMENTAL AND SOCIAL MONITORING PLAN

6.1 Environmental and Social Monitoring Plan

The Environmental and Social Monitoring will outline the roles and responsibilities during the construction period. Additional monitoring may continue through the operation phase as determined by the MoA. Parameters and frequency of monitoring activities described in ESMP will be followed by Contractor in stage project detailed design.

Objectives of environmental and social monitoring are as follows:

- To ensure construction activities comply with and adhere to all government regulations and conditions of the ESIA;
- To determine if mitigation measures were successful in reducing potential environmental and social impacts;
- To obtain additional environmental and social baseline data;
- To review feedback on the success of mitigation from local communities; and

To enforce compliance and implement contingency plans where warranted, if proposed mitigation measures are unsuccessful in minimizing or eliminating impacts associated with the Project.

Monitoring during construction of the Project will include the following two activities:

- Measuring the success of the implemented mitigation measures; and
- Collection of data to evaluate environmental conditions before and after construction.

Visual observations, to identify potential environmental and social concerns, in conjunction with checklists are the major component of construction monitoring. Enforcement of government laws and regulations as well as conditions of the ESIA shall also occur during monitoring to ensure compliance.

Table 14 below presents the Environmental and Social monitoring plan.

Table 5: Environmental Management and Monitoring Plan

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
I. PRE-CONSTRUCTION PHASE					
Impact on land acquisition and public assets	1. Access roads will be designed to the minimum required width within the right-of-way if possible.	PIU/Design Consultant (DC) – Any access road to be rehabilitated must be properly designed and maintained by both the PIU and the consultant	Once	Consultant for design	PIU
Impact from natural disasters	. Incorporating seismic design provisions in building codes is essential. These codes provide guidelines for designing structures that can withstand the forces generated by earthquakes. . Buildings should be designed to resist seismic forces through various techniques such as using reinforced concrete or steel frames, shear walls, and moment-resisting frames. These structural elements help distribute and absorb the energy generated during an earthquake.	PIU/Design Consultant (DC) –	Once	Consultant for design	PIU
Impact on planted ornamental trees	1. Tree cutting will be carried out in accordance with the approved design and only after the approval of the local government. 2. Tree cutting and damage to local vegetation will be prevented as much as possible; minimized.	PIU/Consultant will ensure replacement of all felled trees with the approval of the local government authority.	Once	Consultant for design	PIU
Preparation of a site-specific environmental management plan	1. The appointed contractor will, within one month of awarding the contract, prepare the required Contractor's Site-Specific Environmental Management Plan (SSEMP) based, inter alia, on the ESIA, the construction methodology it will use, the work schedule and site conditions of its selected area.	The PIU will review and approve the Contractor's SSEMP.	Once	Consultant for design	PIU
II. CONSTRUCTION PHASE					
Air pollution	1. Prior to the commencement of any construction work, the Contractor will obtain site air quality measurements which will serve as a baseline air quality level. 2. Ban on open burning of solid waste (plastic, paper, organic substances).	Periodic monitoring and reporting by the PIU. Complaints received from the population will be transferred to the PIU and documented.	Daily	Contractor	Construction Supervision consultant / PIU

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	3. The Contractor will be required to cover the materials with tarpaulins or other suitable materials during transport to avoid spillage of the materials. 4. Earthen roads, especially roads near residential buildings and in the city, will be wetted in dry and dusty weather. 5. A speed limit will be introduced for construction equipment. 6. The Contractor will regularly spray water on exposed soil during construction. 7. Construction equipment and vehicles will be regularly serviced to control air emissions during vehicle operation. 8. The Contractor will be required to water the surrounding open soil regularly. 9. The Contractor will be required to cover temporary stocks of soil, materials with tarpaulin or other suitable materials during transportation to avoid spillage of materials. 10. Provide construction workers with masks and personal protective equipment (PPE) to minimize inhalation of inhalants (suspended solids). 11. Use of liquefied petroleum gas or kerosene as fuel in construction camps instead of firewood. Tree cutting for firewood will be limited. 12. Installation of exhaust chimneys of appropriate height for diesel generator sets. 13. Use of low sulfur diesel fuel for generator sets as well as other machinery. 14. Conducting periodic monitoring of air quality during the construction phase, as well as upon receipt of complaints about air quality violations. If the monitored parameters exceed the specified limit, appropriate control measures will be applied.				
Noise and vibration	1. Prior to the commencement of any construction work, the Contractor will receive measurements of noise levels at the site, which will serve as baseline	The EMP will be included in the tender documents and contract.	Daily	Contractor	Construction Supervision consultant / PIU

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	parameters. 2. The ambient noise level in the workplace should not exceed 45 dBA and should be controlled by the Contractor. 3. Temporary construction sites such as labor camps, vehicle and earth-moving equipment maintenance workshops will be located as far as possible from populated areas and other sensitive site. 4. Silencers will be installed on construction equipment and machinery and will be properly maintained. 5. Equipment and machinery with a lower noise level will be selected for the competition. 6. During periods of work with high noise levels, workers will be provided with protective devices such as earplugs/or headphones. 7. Noise levels will be measured regularly to ensure the effectiveness of noise abatement measures. 8. Construction works, in particular the operation of noise equipment, will be limited to daytime hours from 07:00 to 19:00 only to avoid disturbing nearby settlements at night. Only in extreme cases will it be possible to work beyond these hours. 9. Noise barriers, such as earthen berms or walls made of wood or metal, that form a solid barrier between the construction site and adjacent buildings will be used. 10. Proper information and notification to the relevant local government authority will be carried out to avoid disturbance and inconvenience to local residents and other nearby areas. 11. Stationary equipment that produces high noise levels, such as diesel generators, will be located as far as possible from sensitive equipment. 12. Temporary barriers made of sound-absorbing materials will be installed around the construction sites, especially near residential buildings.	Complaints received from the population will be transferred to the PIU and documented.			

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	13. Noise reduction devices will be installed in noise-generating rooms. 14. Drivers will be required to minimize horn blowing and comply with speed limits. 15. Academic community and communities in the impact area of the subproject will be provided with information about construction work and construction schedule through billboards. 16. Noise barriers and noise-absorbing facades will be erected around the buildings under construction. 17. Construction activities, in particular the operation of noise equipment, will be limited to daytime. 18. Noise reduction devices will be installed in noise-generating rooms. Drivers will be required to minimize blowing from the horn and comply with speed limits.				
Water pollution	1. Do not store fuel on the site 2. Ensure that the safe storage of fuels and other hazardous substances complies with national and local regulations to prevent contamination and water pollution. 3. Ensure that all storage containers are in good condition and properly labeled. 4. Used oil and other residual toxic and hazardous materials will be disposed of at an authorized facility. 5. Ensure that spill cleanup materials (e.g., absorbent pads, etc.) specifically designed for the storage of petroleum products and other hazardous substances are available where such materials are stored; Leaks, if any, will be repaired immediately with extreme care to leave no traces. Spilled waste will be disposed of at approved landfills. Sewage from workers' settlements, but not contaminated with hazardous substances, must be discharged into the city sewer system. 7. Accumulated wastewater in any portable toilets should be transported to the municipal wastewater	Periodic monitoring and reporting by the PIU. Any complaint received from local residents or the community will be referred to the PIU and documented.	Daily	Contractor	Construction Supervision consultant / PIU

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	treatment plant. 8. Water contaminated with silt should be stored in containers to allow the silt to settle and delivered to municipal wastewater treatment plants. 9. Any chemicals or hazardous materials to be used in construction should be handled carefully to avoid spillage and stored in a covered shed with an impervious slab and 6. inside a containment shell with 110% liquid storage capacity as precautions in case of sudden explosion.				
Use of hazardous materials	1. Ensure safe storage of fuel and other hazardous substances. 2. Hydrocarbons, toxic materials and explosives (if necessary) will be stored in appropriately protected areas in accordance with national and local regulations to prevent contamination and water pollution. 3. Equipment/vehicle repair/maintenance and refueling areas will be limited to areas of construction sites designated for the collection of spilled lubricants and fuel. Such areas will need to be equipped with a specific perimeter and drainage system leading to an oil/grease and water separator which will regularly skim the oil to prevent spilled oil/grease from draining onto the ground surface. 4. Management and storage of fuel, used oil and hazardous substances will be planned in accordance with the EHS General Guidelines for the Management of Hazardous Materials. This includes the use of appropriate secondary containment structures capable of holding 110% of the largest tank or 25% of the total tank volume in areas with above ground tanks with a total storage volume equal to or greater than 1000 litres. Fuel storage tanks must be placed under the roof and on a concrete slab from a berm or dam to contain spills in a protected location; 5. Separate hazardous waste (oily waste, used	Periodic monitoring and reporting by the PIU. Any complaint received from local residents or the community will be referred to the PIU and documented.	Daily	Contractor	Construction Supervision consultant / PIU

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	batteries, fuel drums) and ensure that storage, transportation and disposal are non-polluting and in accordance with national and local regulations; 6. Ensure that all storage containers are in good condition and properly labeled; 7. Check containers regularly for leaks and make necessary repairs or replacements; 8. Store hazardous materials above flood level; 9. Discharge of oil-contaminated water will be prohibited; 10. Waste oil and other residual toxic and hazardous materials will not be spilled onto the ground; 11. Used oil and other residual toxic and hazardous materials will be disposed of at an authorized facility. 12. Adequate precautions will be taken to prevent oil/lubricants/hydrocarbons from polluting the river. channels; 13. Spill response equipment (e.g., absorbent pads, etc.) specifically designed for petroleum products and other hazardous substances will be stored on site. In the event of an accidental spill, immediate cleanup will occur and all cleanup materials will be stored in a safe location for future disposal. Disposal of such waste will be carried out by a waste management company hired by the Contractor. The waste management company must have the necessary licenses to transport and dispose of any hazardous waste before such waste is removed from the site. Contractors will keep copies of company licenses and provide waste disposal declarations at their camp site for routine inspection by an engineer; 14. Leakage, if any, will be repaired immediately with utmost care so as not to leave any trace; 15. Leaked waste will be disposed of at approved locations; 16. All premises intended for the storage of				

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	hazardous materials will be quarantined and provided with adequate means to deal with emergency situations in compliance with all applicable legal provisions; 17. The Contractor will be required to provide Material Safety Data Sheets (MSDS) in all work areas and train workers in the safe use of these materials, including the provision of safety equipment for handling them. 18. The Contractor will appoint an ESO to be responsible for hazardous substance storage areas. materials. Entry will be allowed only with authorization.				
Waste generation (domestic/construction solid hazardous/non-hazardous waste, wastewater)	• For municipal solid waste: 1. The Contractor shall have a plan to prevent and minimize the generation of solid waste, which will be communicated to his work team. 2. Waste should be separated to facilitate recycling and maintain high economic value for recyclers. 3. The Contractor shall provide sufficient number of containers for the generated solid waste. 4. Ordinary solid waste generated should be booked for collection by existing collectors on site for disposal. 5. Construction waste can be recycled and handed over to recyclers. • For hazardous waste: 6. Materials should be handled with care to ensure avoid of spills or releases to the environment 7. The storage order must correspond to the material data of the sheet. 8. Unused leftovers must be brought to approved facilities in the city for proper disposal • In the case of waste asbestos cement materials (ACM), asbestos-containing materials must be managed in accordance with the Good Practice Guide for Asbestos Management and Control. Wastewater:	Periodic monitoring and reporting by the Consultant and the PIU. Any complaint received from local residents or the community will be referred to the PIU and documented in social monitoring reports.	Weekly	Contractor	Construction Supervision consultant / PIU

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	9. Wastewater in any workers' camps must be connected to the sewerage system, if there is one at the sites. 10. If there is no sewerage system, accumulated sewage and wastewater in mobile toilets used by workers must be transported by sewerage trucks to the city sewage treatment plant. 3. Water contaminated with silt should be stored in containers to allow the silt to settle and delivered to municipal wastewater treatment plants.				
Generation of dredged material and sludge runoff	1. Develop and implement a Waste Management Plan 2. Excavated materials should be used for backfill when necessary and excess material should be removed and disposed of at sites approved by local authorities. 3. Excess excavated material/soil cut from construction will be used as fill material for low-lying areas identified by local authorities. 4. The Contractor may provide the excavated materials to any property owner who would be interested in using them as backfill on their land. The city landfill can use these surplus materials such as soil cover. 5. Under no circumstances will the contractor be allowed to throw them onto any surface of water. 6. Do not store waste on site.	Periodic monitoring and reporting by the Consultant and the PIU. Complaints received from local residents or the community will be referred to the PIU and recorded in social monitoring reports.	Weekly	Contractor	Construction Supervision consultant / PIU
Vegetation loss	1. Tree cutting will be carried out according to the approved project/design and only after approval from the relevant authorities. Tree cutting will be prevented as much as possible and damage to native vegetation will be kept to a minimum. 2. Where possible, trees will be balled, replanted and maintained until they survive. Trees to be cut down will be replaced with a minimum of two (2) seedlings. 3. Landscaping and planting of trees/vegetation will be carried out at the construction sites.	Periodic monitoring and reporting by the Consultant and the PIU. Complaints received from the population will be transferred to the PIU and recorded in social monitoring reports.	Weekly	Contractor	Construction Supervision consultant / PIU
Temporary	1. Residential dirt paths/access to affected	Periodic monitoring and	Monthly	Contractor	Construction

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
destruction of public roads, paths/trails and property access	properties and driveways will be maintained and temporarily covered with durable materials for safety purposes (e.g. paving stones). Particular attention will be paid to ensuring safety on roads and trails used by pedestrians. 2. Long-term parking of construction equipment on side streets will not be tolerated. 3. The Contractor will be obliged to immediately restore the excavated areas. and any damaged road and trail sections.	reporting by the consultant and PIU. Report any complaints received from the community to the PIU and document them in social monitoring reports.			Supervision consultant / PIU
Traffic Violation	1. The Contractor will prepare and submit to the PIU a traffic management plan (as part of the EMP) detailing the detours and management measures that will be taken during the work. 2. Signs and other appropriate safety equipment will be used to indicate construction activities. 3. A clause in the contract stating that during construction, precautions must be taken to ensure that disruption to access and traffic is kept to a minimum and that access to campus buildings and facilities is maintained at all. 4. Providing adequate protection for the public near the work site, including advance notice of work, installation of safety barriers if required by educational institutions and the community, and signage or marking of the work area.	Periodic monitoring and reporting by the Consultant and the PIU. Report any complaints received from the community to the PIU and document them in social monitoring reports.	Daily	Contractor	Construction Supervision consultant / PIU
Impact on living conditions in a construction camp	1. A work camp management plan will be prepared taking into account accommodation: processes and standards[2] [3] as part of the EMP and implemented. 2. Workers will be provided with adequate housing, sanitation and recreational conditions. The Contractor will provide acceptable camp facilities with potable water, sanitation and cleaning supplies, a kitchen and associated cooking utensils, nutritious food rations and recreational facilities to either meet the requirements of the relevant labor regulations of	Periodic monitoring and reporting by the Consultant and the PIU. Complaints received from local residents or the community will be referred to the PIU and recorded in social monitoring reports.	Daily	Contractor	Construction Supervision consultant / PIU

[2] 3 Source: IFC and EBRD Handbook, Worker Placement: Processes and Standards (August 2009).

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	the Republic of Tajikistan or an acceptable international standard, as appropriate.				
Heating water in the camp and using firewood for cooking	1. Providing gas and kerosene for heating water and cooking. 2. Locate camp away from significant forested areas and prohibit the collection and use of fuel. 3. The Contractor will impose sanctions on all workers collecting timber or non-timber resources.	Periodic monitoring and reporting by the Consultant and the PIU. Complaints received from local residents or the community will be referred to the PIU and recorded in social monitoring reports.	Daily	Contractor	Construction Supervision consultant / PIU
Social conflict between workers and society	1. Workers from local communities will be offered priority employment as unskilled labor. 2. 2Workers will also be required to undergo regular screenings to minimize the risk of contracting and spreading HIV and other related diseases. 3. If ever, the camps will be located at a considerable distance from nearby population centers to avoid social conflicts. Because the area is highly urbanized and has good ground transportation, most workers probably just commute to work daily. 4. Workers will be provided with cultural awareness training if they come from outside the region.	Periodic monitoring and reporting by the Consultant and the PIU. Complaints received from local residents or the community will be referred to the PIU and recorded in social monitoring reports.	Daily	Contractor	Construction Supervision consultant / PIU
Impact on physical cultural resources (PCR)	1. Prepare “chance find” procedures within the framework of the EMP and implement them in the chance find/discovery; 2. The Contractor will instruct personnel that in the event of an accidental discovery of relics, they will immediately stop any work on the territory and immediately report the discovery to their supervisors; 3. Accidental discoveries must be notified to the PIU for proper approval by the government agency. Excavation workers should be informed of the low risk of the presence of underground artifacts and instructed in the procedures to follow if any artifacts/remains are discovered.	Periodic monitoring and reporting by the Consultant and the PIU. Complaints received from local residents or the community will be referred to the PIU and recorded in social monitoring reports.	Monthly	Contractor	Construction Supervision consultant / PIU
Risk to public health	Trucks and other vehicles are maintained in safe	Periodic monitoring and	Daily	Contractor	Construction

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
and safety	operating condition. All drivers and equipment operators act responsibly; 2. All loads must be secured and all loads containing volatile materials (such as excavated soil and sand) must be covered with a protective cover; 3. Any excavation on site will be properly secured to avoid impact on adjacent buildings and also to prevent collapse due to soil instability; 4. Construction safety nets must be securely installed to catch any falling materials or debris 5. The Contractor must resolve problems in accordance with the GRM. 6. A complaint box will be created for the academic community. 7. The contractor will install construction networks around the building under construction. 8. Contractor's Traffic Management System Plan. 9. Designations and corresponding speed limits 10. Require suppliers to ensure that delivery vehicles carrying construction materials are maintained in safe operating condition, that loads are secured, and that all shipments containing volatile materials (such as excavated soil and sand) are covered with a tarp. 1. All drivers and equipment operators act responsibly.	reporting by the consultant and PIU. Any complaint received from local residents or the community will be referred to the PIU and documented in social monitoring reports.			Supervision consultant / PIU
Occupational Health and Safety Risk	2. Before commencing work, the contractor will be required to prepare a brief technical specification, which will indicate the hazards arising in a particular case. 3. A brief description of the approved work order and details of the protective equipment to be used by any person entering the specified work area, as well as the emergency response procedure within the framework of the EMP to deal with serious accidents and the designation of a person who can be immediately contacted at in case of an accident, should also be included in the EMP. 4. A copy of the EMP and the name of the person	Periodic monitoring and reporting by the consultant and PIU. Report any complaint received from the local community to the PIU and document it in social monitoring reports.	Daily	Contractor	Construction Supervision consultant / PIU

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	who can be contacted in the event of an emergency must be posted on site so that it is visible to all employees. Before starting work, the contractor must discuss the requirements of the Emergency Response Procedure with the workers. 5. Prepare a site safety plan and appoint a safety inspector to monitor safety measures during construction. These safety measures include the use of personal protective equipment and clothing, warning signs, and excavation shelters and fencing. Arrangements will also be made to provide immediate medical assistance in case of accidents; 5. Install warning signs and barriers around the site; 6. No drugs or alcohol allowed on site; 7. Noise and dust to be controlled; 8. All workers are provided with protective equipment appropriate to the task they perform; 9. Provide potable water, portable toilet with hand washing facility at the construction site. The work camp will be equipped with a locker room with storage space for clothes, washbasins and showers; 10. Work assignments prepared for each type of activity; 11. Before entering the site for the first time, workers must be familiarized with the site and explained the hazards on the site, as well as the safety procedures for the workplace; and 12. Medical services and first aid supplies provided in conjunction with a person qualified in first aid. 13. The Contractor will be required to implement a construction health and safety plan in accordance with the EHS Guidelines[3] as a minimum standard. The Contractor will appoint a full-time and qualified Environmental Safety Officer (ESO), a full-time and qualified Health and Safety Officer (HSO), and full-				

[3] Environment, Health and Safety Guide (ifc.org)

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	time medical personnel to ensure implementation of the plan. The plan will include the following: 14. Providing first aid supplies readily available to workers; 15. Provision of personal protective equipment such as helmets, gloves, rubber boots, etc.; 16. Mandatory wearing of personal protective equipment when working on site and installation of safety signs/reminders at strategic construction sites; 17. Installation of sufficient lighting at night; 18. Ensure proper licensing and training of vehicle and equipment operators; Training of employees on the prevention of infectious diseases and HIV/AIDS.				
Complaints from local residents and workers	1. Provide adequate safety and other work-related signs. Include on billboards the names and contact information of persons authorized to handle complaints. 3. Maintain good relationships with the local community 4. Provide sufficient notice on billboards, social media or print media. Provide multiple complaint boxes for complainants to submit their complaints. 5. Resolve issues in a timely manner to prevent matters from reaching a dead end. 6. Delegate personnel who will deal with complaints 7. Interaction with GRM members on any issues raised. 2. Keep a good record of questions and concerns raised.	Periodic monitoring and reporting by the consultant and PIU. Report any complaint received from the local community to the PIU and document it in social monitoring reports.	Daily	Contractor	Construction Supervision consultant / PIU
Construction sites and Contractor's facilities after completion of construction work	8. Every effort will be made to ensure that all waste, equipment and any contaminated soil are removed from the site and properly disposed of at approved disposal sites. 9. All construction sites and work areas must be repaired and restored so that they can be returned as close to their previous condition as possible. 10. Stabilization and landscaping of all construction	Periodic monitoring and reporting by the consultant and PIU. Report any complaint received from the local community to the PIU and document it in social monitoring reports.	Once after completion of construction works	Contractor	Construction Supervision consultant / PIU

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	sites to restore drainage should be undertaken as soon as possible as work is completed. 11. Any contaminated soil must be removed from fuel and oil storage areas and from the site. 12. After completion of the work, there should be no waste left that is not natural and safe. 13. If the waste is not removed, the PIU has the right to withhold payment and arrange for cleaning and deduct that expenses for cleaning from the final payment amount less of an additional 10% for completing this task.				
III. OPERATION PHASE					
Impact on the health and safety of the local community	1. For solid waste: a. Management of solid waste should be carried out in a manner that avoids its generation, minimizes its quantity and, where possible, reuses it or recycles and disposes of it in an appropriate manner. b. Separate containers must be provided for proper separation of waste. c. The issuance procedure must be agreed upon and correspond to the territory of the ALC. 2. For wastewater: If possible, connect to the city sewer system into which all wastewater and wash water is discharged. In cases where connection to the city sewer system is not possible, alternative wastewater management methods should be explored. 3. For noise: Every occupant of that building must be advised to minimize noise and abide by community rules. To ensure safety: watchmen/security officers to be hired to secure facilities around the clock. This will minimize security risks to the community.	Periodic monitoring and reporting by the operator	Monthly	ALC	MoA
Increased traffic and transportation activities can lead to air pollution and greenhouse gas emissions.	1. Implementing a comprehensive transportation management plan to optimize vehicle routes, reduce empty trips, and encourage the use of low-emission vehicles. 2. Promoting the use of alternative transportation modes such as rail or waterway transport for long-	Preparing traffic management plan	Monthly	ALC	MoA

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	distance shipments. 3. Installing air pollution control devices on vehicles and equipment to reduce emissions of pollutants such as particulate matter and nitrogen oxides. 4. Encouraging the adoption of electric or hybrid vehicles for transportation within the facility. 5. Implementing regular maintenance and inspection programs to ensure that vehicles are operating efficiently and meeting emission standards. 6. Providing incentives for employees to carpool or use public transportation to reduce the number of single-occupancy vehicles on the road. 7. Planting trees and vegetation around the facility to help absorb carbon dioxide and improve air quality. 8. Monitoring air quality around the facility and taking corrective actions if pollution levels exceed regulatory limits.				
Use of pesticides and fertilizers in the storage and handling of agricultural products can contaminate the environment.	1. Integrated Pest Management (IPM): Implementing IPM practices can help reduce the reliance on chemical pesticides by using a combination of biological, cultural, and physical control methods to manage pests. 2. Proper storage and handling practices: Ensure that pesticides and fertilizers are stored in a secure location away from water sources and that proper handling procedures are followed to minimize spills and leaks. 3. Training and education: Provide training for farmers and agricultural workers on the safe use and handling of pesticides and fertilizers, as well as the importance of following label instructions. 4. Use of organic and natural alternatives: Consider using organic or natural fertilizers and pesticides that are less harmful to the environment and human health. 5. Monitoring and testing: Regularly monitor soil and water quality for contamination from pesticides and fertilizers, and conduct testing to ensure compliance with regulations.	Preparing pest management plan	Daily	ALC	MoA

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	6. Proper disposal: Dispose of empty pesticide containers and unused chemicals properly according to local regulations to prevent environmental contamination. 7. Buffer zones: Implement buffer zones around water bodies and sensitive areas to reduce the risk of pesticide runoff.				
Poor working conditions for laborers employed in the centers, including low wages and lack of safety measures	1. Implement fair labor practices: Ensure that laborers are paid fair wages and provided with benefits such as health insurance and paid time off. 2. Improve working conditions: Provide proper safety measures such as protective gear, training on safety protocols, and regular inspections to ensure a safe working environment. 3. Conduct regular audits: Regularly monitor and audit the working conditions in agro-logistic centers to identify any issues and take corrective actions. 4. Provide training and education: Offer training programs to educate laborers on their rights, safety procedures, and ways to improve their skills and productivity. 5. Collaborate with stakeholders: Work with government agencies, labor unions, and other stakeholders to address poor working conditions and implement sustainable solutions. 6. Implement grievance mechanisms: Establish a system for laborers to raise concerns and complaints about working conditions without fear of retaliation.	Implementation of Labor management plan	Daily	ALC	MoA

Table 5: Environmental and Social Monitoring Plan

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implementation	Monitoring
PRE-CONSTRUCTION/DESIGN PHASE							
All environmental impacts and health and safety issues	Constitution of Contractor's Project HSE organization, nomination of Contractor's HSE Manager	Review of reports, meeting	Once	Before taking any possession at sites	Office of Contractor	Contractor	PIU
All environmental impacts and health and safety issues	Preparation of Contractor's Site specific HSE Plan	Review of contractual commitments, Review of the document	Once	Before taking any possession at sites	Project site	Contractor	CSC, PIU
Emergencies	Preparation of Contractor's Emergency Preparedness and Response Plan	Review of the document	Once	Before taking any possession at sites	Office of Contractor, Documents forder if office of CSC	Contractor	PIU
All environmental impacts and health and safety issues	HSE briefing and training for Contractor's staff completed	Check the documentation (toolbox, progress repoets, photodocumentations, lists of attendants)	Once (later on regularly)	Before field work execution	Office of Contractor	Contractor	PIU/CSC
Soil erosion and contamination	Land clearing, vegetation removal, spills; Team report and log book, field inspection	Visual observations, photodocumentation	Weekly during activities	During surveying and soil investigation	Project site	CSC	PIU/CSC
Air quality	Condition of vehicles and machinery; field inspection	Visual observation, , photodocumentation, check	Regularly	During surveying and soil investigation	Project site	CSC	PIU/CSC

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implementation	Monitoring
		maintenance log book					
Noise and vibrations	Condition of vehicles and machinery; field inspection	Field inspections Instrucmental measurements in case of complaints	Regularly	During surveying and soil investigation	Project site	CSC	PIU/CSC
Waste management	prepare Waste Management Plan	Review of document	Before the commencement of civil works	Before the commencement of civil works	Office of Comtractor, CSC and PIU	Contractor	CSC/PIU
Land acquisition	Resettlement Action plan implemented, compensations paid	Review of reports	Before the commencement of civil works	Before taking any possession at sites/Throughout the Project	Project site	PIU/CSC	PIU/CSC
Grievance Redress Mechanism	Grievance Redress Mechanism established	Meetings, review of reports, Complaints logbooks in place	Once	Before Project implementation	Project districts and jamoats	PIU/CSC	WB
CONSTRUCTION							
All environmental impacts and health and safety issues	Contractor's internal HSE inspections performed by HSE Manager and site supervisory personnel	Visual Inspection	Weekly	Throughout the Project Phase	Project site	Contractor	PIU/CSC
All environmental impacts and health and safety issues	Contractor's internal HSE audits performed by HSE Manager and site supervisory personnel	Visual Inspection	Monthly	Throughout the Project Phase	Project site	Contractor	PIU/CSC
All environmental impacts and health and safety issues	In general, ensure through field inspections that mitigation activities are implemented and executed.	Visual Inspection	1.Regularly 2.Monthly	Throughout the Project Phase	Project site	Contractor	1.CSC 2.PIU

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implementation	Monitoring
	Main mitigation activities are presented in Environmental Management Plan and Contractor's Environmental Management and Monitoring Plan.						
All environmental impacts and health and safety issues	In general, ensure through audits that mitigation activities are implemented and executed. Main mitigation activities are presented in Environmental and Social Management Plan and Contractor's Environmental Management and Monitoring Plan.	Visual Inspection	Twice a year	Throughout the construction Phase	Project site	Contractor	MoA/PIU/ external international environmental expert
All environmental impacts and health and safety issues	Mitigation Measures reviewed to cover any unidentified impacts	Visual Inspection	Monthly	Throughout the Project	Project site	CSC	PIU
All environmental impacts and health and safety issues	HSE briefing and training for Contractor's staff completed; field inspections, Contractor's HSE audit and inspection reports	Visual Inspection	Regularly	Throughout the Project	Project site	Contractor	PIU/CSC
Vegetation Clearing	Clearing boundaries and concerns defined in ESMP	Visual observations	Weekly during clearing activities	Weekly during clearing activities	Project site	Contractor	PIU/CSC
Soil erosion and contamination	Proper Waste Management practices, land clearing, vegetation removal, spills; field inspections, Contractor's HSE audit and inspection reports, HSE Incident Reports	field visual inspections	Monthly	Throughout the Project	Project site	Contractor	CSC/PIU
Traffic safety	Smooth flowing of traffic; and placement of traffic signs and flag-person	Mobile monitoring for traffic management	monthly	Throughout the Project	Access roads	Contractor	CSC/PIU

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implementation	Monitoring
Hydrocarbon and chemical storage and handling	No leakages from the containers in the storage. Handling follows procedures to avoid spillages	Visual inspections	Monthly	Throughout the Project	Construction camps and yards	Contractor	CSC/PIU
Dust, Air quality	Good Condition of vehicles and machinery; No dust generation from the construction activities	Visul inspections, checking of maintenance books	monthly	Throughout the Project	Project site, access roads	Contractor	CSC\PIU
		Instrumental measurement	In case of complaints	In case of complaints	Project site, access roads	Contractor	CSC\PIU
Water Pollution	Water quality of river near the project site (Aksu, Karasu rivers)	Instrumental measurements in case of spills, complaints	in case of spills, complaints	in case of spills, complaints	Project site near the Aksu, Karasu rivers	Contractor	CSC/PIU
Noise and vibrations	Condition of vehicles and machinery; Compliance with NEQS standards. Baseline data will be established by contractor during pre-construction	Visual inspection to ensure good standard equipment Noise measurement using potable noise meter	Weekly monthly	Throughout the Project	Project site Settlements in close proximity	Contractor	CSC/PIU
Waste management	Proper Waste Management practices; field inspections, Contractor's HSE audit and inspection reports, HSE Incident Reports Records on waste production and discposal to be kept by Contractor The facilities are clean with no waste at the works sites	Visual inspections, reports	Weekly	Throughout the Project	Project site	Contractor	CSC/PIU, CEP, communal services in the districts, MoH (Sanitary epidemiological service

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implementation	Monitoring
Safety hazards	Contractor's Emergency Preparedness and Response Plan implemented, and training given to all workers;, Contractor's HSE audit and inspection reports; All workers should be provided with, and use necessary PPEs	field inspections	Ongoing, weekly	Throughout the Project	Project site, construction sites	Contractor (HS specialists, ES specialist)	PIU/CSC
Discovery of cultural or historical significant artefact or site	Implement Chance Find Procedures	Visual observations	Daily	Throughout the Project	Project site	Contractor	PIU/CSC
Grievance Redress Mechanism	Grievance Redress Mechanism functional; amount of grievances and processing time of grievances, paid compensations	Regular records in Complaints log books	Ongoing	Throughout the Project implementation	Project site /jamoats	PIU/CSC	MoA
Sites/roads Reclamation/restoration	Post-construction condition of soils, vegetation, water resources, flora and fauna	Field inspection/audit, Visual observations, Photo documentations, Filling of post-construction environmental audit check-list	Post-construction	Post-construction	Completed construction sites, used access roads	Contractor	CSC/PIU/ MoA
OPERATION AND MAINTENANCE							
Ecological Resources	Reported fauna disturbance	Reports of MoA, CEP departments in the dictricts	Every time when the birds killed	During operation and maintenance	OHL alignment	MoA/OHL management	CEP

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implementation	Monitoring
Waste management	Company's Environmental Management System and related instructions implemented	Reports review	Regularly on monthly basis	During operation and maintenance	OHL alignment	MoA/OHL management	CEP, communal services in the dictricts, region
Health and Safety	1. Company's H&S plan implemented 2. Good engineering practices 3. EMF measured	1. Reports review 2. Reports review 3. Received data review	4. Daily 5. Ongoing 6. Yearly	During operation and maintenance	1. OHL alignment 2. OHL alignment 3. OHL alignment, near villages	MoA/OHL management	MoH
Environmental and Social Risks Management	Environmental, Health and Safety Management Plans adopted and implemented by the Company	Review of plans, Review of progress reports	Yearly Ongoing	During operation and maintenance	OHL alignment	OHL Maintenance Company	CEP
Community Safety	Community outreach activities and safety instructions disseminated	Community awareness tools	Regularly	During operation and maintenance	OHL alignment, near villages	MoA/ Maintenance Company	MoH
Labour Management	All workers will be required to have a written contract materially consistent with the local legislation on labour relations, in particular following requirements on no child and forced labor.	documentation inspections	Random checks	During operation and maintenance	OHL Management Company	MoA/MoL Inspection	MoLSP

7. GRIEVANCE REDRESS MECHANISM

7.1. .Structure of the Project's operational grievance redress mechanism.

The primary objective of the Grievance Redress Mechanism (GRM) is to support the resolution of grievances and complaints in a timely, effective and efficient manner that satisfies all parties involved. Specifically, it provides a transparent and credible process to achieve fair, effective and sustainable outcomes. It also builds trust and cooperation as an integral component of broader community consultations that facilitate the implementation of corrective actions. Specifically, the GRM:

Provides affected persons with an opportunity to lodge a complaint or resolve any dispute that may arise during project implementation;

• Ensures that appropriate and mutually acceptable corrective actions are identified and implemented to the satisfaction of complainants;

• Avoids the need to resort to litigation.

The PMU will establish a GRM specifically for the project to address all citizen complaints and inquiries related to the project. The day-to-day implementation of the GRM and reporting to the World Bank will be the responsibility of the PMU. Social Development Officers/Consultants will be the key officers of the MGRP in the central and regional offices of the PMU. The project will encourage the receipt of complaints through various channels, including anonymous complaints, at different levels. The MGRP will also be responsible for handling complaints of a confidential and sensitive nature regarding the SE/SD.The system and requirements (including staffing) for the chain of events for handling complaints – from registration, triage and processing, to confirmation and follow-up, to verification and action, and finally to feedback, are included in the MGRU.

To ensure management oversight of the complaints process, the Monitoring and Evaluation Unit specialist will be responsible for monitoring the entire process, including checking the implementation of agreed decisions.

Complaints can be submitted at the following three levels:

Local level: A Local Grievance Redress Unit (LGRTU) will be established in each district administration (khukumat), with the assistance of agricultural departments. The unit will be headed by the deputy head of the khukumat and will include representatives from the Ministry of Agriculture (MA); environmental protection; the land management committee; jamoats; and other civil society organizations. The representative of the USH will act as the Secretary of the MGPRJ and the Local Complaint Coordinator (LCC), who will be responsible for maintaining the feedback logs. If the problem cannot be resolved at the local level, it will be transferred to the regional level. Members of the mahalla committee, community leaders and other civil

society organizations will fully cooperate with local communities and individuals and provide mediation support in general and in particular in the consideration of complaints.

Regional level: A Regional Complaint Handling Group (RCG) will be established in each target region.The WGPR will be chaired by the Regional Project Officer and will consist of representatives from the Department of Agriculture; Environment; Land Management Committee; Regional Farmers Associations and other civil society organisations. The Social Development Consultant of the CPMU at the oblast level will act as the WGPR Secretary and the Regional Grievance Redress Coordinator (RGRC) for filing complaints and appeals. If the issue cannot be resolved at the regional level within 15-30 days depending on the additional research required, it will be escalated to the national level.

National Level: In situations where there is no response from the RGRC at the local or regional level, or if the response is unsatisfactory, complainants and feedback providers have the opportunity to directly contact the GCRC to discuss the issue. The National Grievance Redress Group (NGPRG) will be chaired by the CPMU Director and will include representatives from the MOA, CEP, LRMC and national NGOs. The Social Development Officer of the CUP will act as the Secretary of the NGPRW and the National Grievance Coordinator (NGGCO) for the submission of complaints and appeals. He/she will be responsible for collating the number and types of all complaints and issues received in the districts and the two regions.

7.2 Grievance mechanism for workers

Workers must use the general GM system described earlier to raise any grievances that concern them. These grievances may include, but are not limited to:

• Dismissal/termination,

• Breach of employment

• Injury

• Discrimination

• Sexual harassment

• Pay

• Wrongful dismissal

• Suspension

• Waiver

GM must adhere to the following principles:

● Provision of information. All workers must be informed of the grievance mechanism when they join the organisation and details of how it works must be made readily available, for example in work documents or on notice boards.

● Transparency of the process. Workers must know who they can contact if they have a complaint and the support and sources of advice that are available to them. All line and senior managers must be familiar with the grievance procedure in their organisation.

● Maintaining relevance. The process should be reviewed and updated regularly, for example by referring to any new regulations, changes in contracts or representation.

● Confidentiality. The process should ensure that the complaint is treated confidentially. While procedures may state that complaints should first be made to the employee's immediate manager, it should also be possible to first make a complaint to an alternative manager, such as the HR manager.

● Non-recourse.Procedures should ensure that any worker who makes a complaint will not face any form of reprisal.

● Reasonable timeframes. Procedures should allow time for complaints to be fully investigated, but should aim for a prompt resolution. The longer a complaint persists, the more difficult it is for both parties to return to normal life afterwards. Time limits should be set for each stage of the process, for example a maximum time between lodging a complaint and arranging a meeting to investigate it.

● Right to appeal. The worker should have the right to appeal to the World Bank or national courts if he or she is not satisfied with the initial finding.

● Right to be accompanied. At any meetings or hearings, the worker should have the right to be accompanied by a colleague, friend or trade union representative.

● Record keeping. Written records should be kept at all stages. The initial complaint should be in writing, if possible, along with the response, notes of any meetings and the findings and reasons for the findings. Any SEA records must be kept separately and in the strictest confidence.

● Relationship with collective agreements. Grievance procedures must comply with any collective agreements.

● Relationship with regulations. Grievance processes must comply with the national labour code.

7.3 . Available channels

• Hotline operator telephone number: The telephone number for the grievance hotline operator must be widely distributed to sub-project stakeholders.The hotline operator is available every day from 8:00 to 17:00 on a toll-free number. Anyone with a problem can call the hotline number and lodge a complaint with the Project. Operators will respond in Tajik or Russian.

• Phone call and/or WhatsApp message: A GM officer will receive complaints 24 hours a day, seven days a week on the WhatsApp number provided to all stakeholders.

• Complaint boxes to be installed at sub-project sites. Complaint boxes provide a more anonymous way of lodging a complaint or providing feedback. Complaints or feedback sent to the complaint box must be in writing. The boxes are clearly marked as a complaint box and a complaint mechanism.

7.4 Tracking, Investigation and Resolution of Complaints

A GM log maintained by the NGO will track the date the complaint was received, the date of response, the type of response and whether the complaint was resolved to the satisfaction of the complainant.

The NGO will coordinate with local partners, local field staff and local government officials to ensure prompt follow-up to each complaint. More specifically, the GM Coordinator will list the complaints:

Inform the complainant whether the complaint is accepted or rejected within 3 days of receipt of the complaint; any technical data from the project engineers; if necessary, the response will require data from the project engineers

The Grievance Redress Mechanism (GRM) includes the following 2 stages of grievance redress:

Table 6: Grievance Redress Process

Step	Level of action	Process	Timeframe
Step 1	**Local level**	The complaint is first filed and reviewed at the local level. The complainant submits their complaint to the local designee (LD), who then activates the Grievance Resolution Committee (GRC) to assess the situation and work towards a resolution through negotiation with the complainant. If the complainant is not content with the decision made locally, they can, with the assistance of the LD, formally submit their complaint in writing to the central GRC under the Ministry of Administration (MoA). This submission should include the conclusions and supporting documents prepared at the local level.	15 days

Step 2	**Central level**	If the local-level grievance is not resolved within 15 days, the applicant, with the assistance of the local designee, may escalate the grievance to the central level. A decision will then be made at the central level and submitted to the Executive Agency for review. The final decision will be made at the central level.	15 ays

If attempts to resolve issues at the central level, where final decisions are made, are unsuccessful and the applicant remains dissatisfied with the resolution, they have the option to appeal to the World Bank Grievance Redress Service (GRS) or seek recourse through judicial authorities. The GRS provides an avenue for individuals to escalate their concerns and seek a fair and impartial review of their grievances. Alternatively, seeking recourse through the judicial system allows for legal avenues to be pursued in order to address any unresolved issues. These options provide applicants with avenues for seeking redress and ensuring that their concerns are addressed appropriately.

7.5 Activities to reduce the risks of gender-based violence, sexual exploitation and harassment:

14. Include in the Contractor's Staff Code of Conduct a clause on the inadmissibility of sexual exploitation, violence, and harassment against the local population. Notify employees that the WB Directives and the Legislation of the Republic of Tajikistan provide for penalties for gender-based violence.

    An example of a contractor's code of conduct is provided in Appendix No. 1 to this ESMP.

15. Contact information to apply with questions and complaints related to the project implementation: ***Tajikistan, Dushanbe, Shokhmansur district, st. 1-May, no. 432, phone: +992 446100013, E-mail: info@aedpmu.tj***

7.6. The World Bank Grievance Redress Service (GRS)

16. Project-affected-persons (PAPs) have multiple avenues to address grievances within the project framework. They can utilize the existing mechanisms at the project level or opt to directly approach the World Bank Grievance Redress Service (GRS). The GRS promptly reviews complaints to address any project-related concerns effectively.

17. In the event of unresolved issues, project staff can escalate their grievances by filing a complaint with an independent World Bank panel. This panel assesses whether any non-compliance with World Bank policies and procedures has led to, or may lead to harm. This process ensures accountability and transparency in addressing employee concerns.

18. For detailed guidance on how to initiate a complaint with the World Bank Complaint Service, individuals can access further information by visiting:

    https://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service

19. It should be noted that the complainant can go through each step of the described grievance process before, during, or after filing a complaint with the World Bank.

Annex 1.

CODE OF CONDUCT TO BE ADHERED BY CONTRACTORS

Code of Conduct for Contractor's Personnel (ES) Form

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [*enter name of Contractor*]. We have signed a contract with [*enter name of Employer*] for [*enter description of the Works*]. These Works will be carried out at [*enter the Site and other locations where the Works will be carried out*]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the

Note:

The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Contractor may add requirements as appropriate, including to take into account Contract-specific issues/risks.

Works. It applies to all our staff, labourers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as "**Contractor's Personnel"** and are subject to this Code of Conduct.

This Code of Conduct identifies the behavior that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

carry out his/her duties competently and diligently;

comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;

maintain a safe working environment including by:

ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;

wearing required personal protective equipment;

using appropriate measures relating to chemical, physical and biological substances and agents; and

following applicable emergency operating procedures.

report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;

treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;

not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;

not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;

not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;

not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;

complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH);

report violations of this Code of Conduct; and

not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

Contact [*enter name of the Contractor's Social Expert with relevant experience in handling sexual exploitation, sexual abuse and sexual harassment cases, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters*] in writing at this address [ ] or by telephone at [ ] or in person at [ ]; or

Call [ ] to reach the Contractor's hotline *(if any)* and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor's contact person(s) with relevant experience*] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Contractor:

Signature: _____

Date: (day month year): _____

ATTACHMENT 1: Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors and behaviors constituting Sexual Harassment (SH)