ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

KHATLON REGION

DRAFT VERSION

PROJECT STRENGTHENING RESILIENCE OF THE AGRICULTURE SECTOR

Feasibility Study – Business Plan – ESIA / Detailed Design / Cost Estimate for three ALCs and Supervision of works

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

TBALE OF CONTENT

1. EXECUTIVE SUMMARY

1. 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 Khatlon 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.

2. **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 Uzbekistan. 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.

3. **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 Agriculture Commercialization Project (ACP) that promotes an increased competitiveness of and inclusion of smallholders in dairy, fruit, and vegetable value chains, and the recently declared effective Rural Economy Development Project (REDP), which supports dairy value chains and productive partnerships and agro-tourism in Khatlon, Sughd, and RRS regions.

4. The agrologistic center for the Khatlon region will be established in Jaloliddin Balkhi district, situated west of Bokhrat city.

5. **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.

6. **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.

7. 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.

8. **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.

9. 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.

10. **Land acquisition** During the site visit, it was discovered that despite the industrial designation of the land, a nearby villager was cultivating it without permission. The Hukumat of the Balkhi identified the land user and, in collaboration with the consultant, calculated compensation for the crops lost and duly reimbursed the villager.

11. **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.

12. **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.

13. PIU/Regional office will carry out regular monitoring of sub-projects during construction and operation to ensure that ESMP/checklists are properly implemented. If PIU/Regional office 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.

14. **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.

15. **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.

16. 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

17. 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).

18. 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.

19. 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:

20. **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.

21. **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.

22. 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.

23. 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.

24. 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.

25. **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.

26. **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

27. 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.

28. 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.

29. 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.

30. 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.

31. 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 Bokhtar, 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.

32. 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.

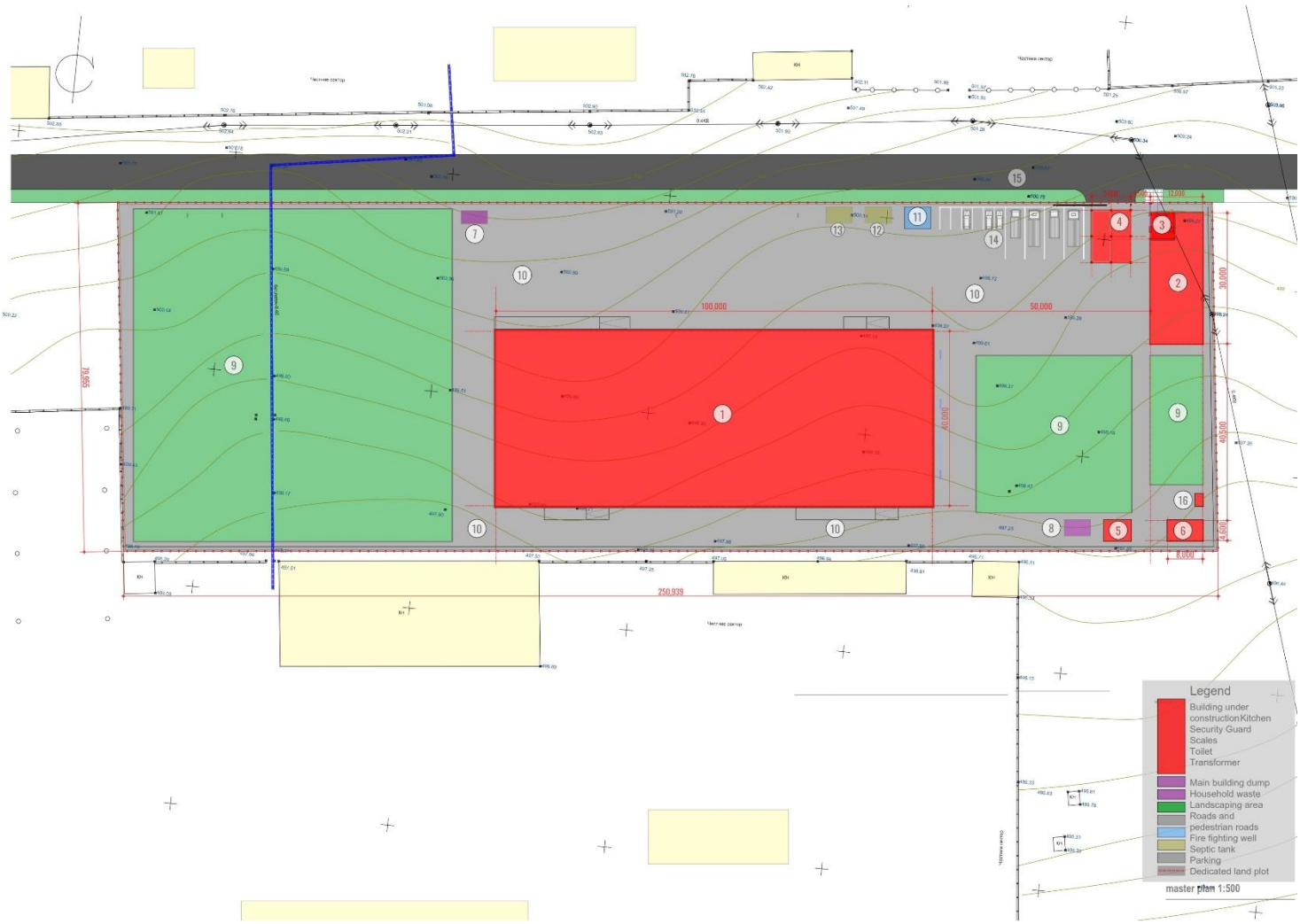

Figure 1: Master plan of the proposed ALC facilities

2.3. Socioeconomic and Environment Overview of Project Area

33. The Agro-Logistics Center in the Khatlon region will be situated in the Jaloliddin Balkhi district, within a significant area officially designated as industrial land by the Hukumat of the Khatlon region.

34.

35. The "Mohir Cement" plant, located on the eastern side of the plot, serves as a crucial industrial hub that plays a significant role in boosting the local economy. Its presence underscores the area's industrial significance. On the western side, the cotton cleaning plant adds to the diverse industrial activities in the vicinity.

36. The strategic positioning of the site, with convenient access to major highways such as the Dushanbe-Panj and Bokhtar-Jilikul highways, makes it an ideal location for establishing an Agro-logistic center. Its proximity to these key transportation routes streamlines logistics, ensuring efficient movement of goods and materials, thus making it a desirable choice for an Agro-logistic center.

37. Surrounded by vacant industrial land on all other sides, the property offers ample space for potential expansion of the Agro-logistic center. This paves the way for future growth and development, allowing the center to expand its operations and meet the increasing demand in the region. The availability of additional land also provides flexibility to tailor and optimize the site according to specific requirements.

2.3.1. Geography and topography

38. Tajikistan, a highland country, has three main soil belts: gray soils in valleys, brown soils in middle mountains, and highland soils. There's a gradient from wetter north to dry south. Agriculture is prevalent, but irrigation is necessary in the southern region. Soil erosion is a major issue due to seismic activity and human practices. The project area has loess, loamy sands, and loamy soils, requiring irrigation and fertilization for agriculture.

39. The Boktar area features folded Miocene sedimentary rocks with thick deposits of fluvial plains. Subsequent folding created a northeast-trending mountain-valley topography. Erosional strata and coarse fluvial deposits filled the valley. Evaporites and salt deposits degrade water quality. Geologic risks include diverse landslides, varying from significant material slides to small localized ones. Landslides can occur in surficial deposits or underlying Paleozoic sediments, with volumes reaching several million cubic meters, blocking river channels and forming lakes.

40. Geological risks in the project area stem from landslides, which can vary in size and occur due to diverse conditions. Landslides range from small surface ones to large material slides, often blocking river channels and forming lakes. They predominantly occur in mountainous regions at altitudes of 1600-1800m, mainly in March-May during heavy precipitation. March sees the highest landslide activity, with up to 60% occurring then. Mudflows are common, especially in regions with

loess rocks, steep slopes, and heavy rains. They are most destructive when natural dams fail, causing catastrophic mud flows in various mountain ranges. Mudflows are particularly prevalent in the southern slopes of the Gissar Range, with frequent occurrences in dry gullies, leading to damage to agricultural areas.

41. Mudflows typically range from 30 to 515 m3/s, occasionally exceeding 1000 m3/s. Debris flows caused by heavy rains occur 2-5 times a year in seasonal watercourses, with heights ranging from 1-2 to 3-5 meters in valleys. Avalanches are common on northern slopes, mostly on steep slopes of 25-30 degrees. Snow avalanches happen in late winter to early spring, reaching speeds of 80-100 m/s and impact strength of up to 60 tons/m2. Flat flows during heavy rains depend on surface steepness, with half-flows more common on south-facing slopes. Erosion occurs in watercourses, particularly intense in river channels. In the South Tajik region, factors like terrain dissection, geological structure, tectonic activity, and exogenous processes contribute to landslides, rockfalls, and debris flows. Loess-like rocks prevail in economically important areas, with poor resistance to water and suffosion processes occurring mainly in middle Quaternary age rocks.

2.3.2. Environmental resources

42. **Climate.** The Khatlon region has a diverse climate due to its location in central Eurasia, with continental, subtropical, and semi-arid zones. The region experiences significant temperature and humidity fluctuations, with hot summers and mild winters in central and southwestern regions. Precipitation mainly occurs from December to May. Climate change has led to a noticeable warming trend, with temperatures rising faster than the global average. Tajikistan's vulnerability to climate change is high, with increasing temperatures since the 1980s attributed to human activities. Desertification in some regions is exacerbated by factors like deforestation and soil degradation. By 2030, temperatures are projected to rise further, leading to shifts in precipitation patterns with potential risks of floods and droughts. Tajikistan's CO2 emissions are relatively low compared to global levels. In recent decades, temperature increases have been most pronounced in cities like Dangara and Dushanbe.

43. **Water resources.** The project area is located in the Vakhsh River basin. The Vakhsh River is the only major watercourse flowing in Khatlon oblast, where this section of the communication line and access roads are located. The Vakhsh River is fed by melting snow/glaciers and precipitation (snow-rain). Water mineralization is about 500-800 mg/l in high water and 800-1000 mg/l in low water period, water composition - calcium sulphate. Numerous seasonal streams occur during snowmelt and heavy rains.

44. **Air quality.** Air quality in all project regions is very good due to the absence of industrial pollutants and relatively low levels of vehicle use. However, seasonal dust storms are a problem, especially where vegetation has been destroyed to open up the soil. Dust will be a temporary problem in the summer during the proposed construction activities.

45. There are no regular instrumental data on air quality in Bokhtar. Other emission sources are: (i) vehicle engine emissions; and (ii) dust, including dust from vehicle traffic. The main emissions from fuel combustion in vehicle engines include oxides of nitrogen (NOx), carbon monoxide (CO), volatile organic compounds (VOC), carbon dioxide (CO2), and particulate matter (PM). At current rates, these emission levels are relatively low compared to the regions.

2.3.3. Biodiversity and natural life

46. **Flora:** The project area near Bokhtar features degraded habitats of herbaceous plants like bluegrass and sedge, with almond and pistachio trees. The Vakhsh valley has desert-steppe, lowland, and river valley vegetation. Human activity has heavily impacted the natural vegetation, with agriculture dominating the area. Common plant species include bluegrass, sedge, astragalus, wormwood, and others. The immediate vicinity of the project area lacks diverse flora, mostly

comprising agricultural crops and orchards. No significant rare or endangered plant species have been identified in the area.

47. **Fauna:** The foothill semi-desert-desert in Khatlon Province hosts unique wildlife adapted to open, arid areas. The region boasts 2 amphibian, 15 reptile, and 39 mammal species, with 6 reptiles and 20 mammals listed in Tajikistan's Red Book. Additionally, 3 reptiles and 3 mammals are on the IUCN Red List. Common species include the Turkestan gecko, Turkestan and steppe agama, eastern blindfoot, house mouse, Turkestan rat, and red-tailed gerbil. No rare or endangered species were found in the ALC impact corridor, and there are no protected areas like forest reserves or wildlife refuges. The direct impacts of ALC and access roads on fauna are considered minimal compared to other environmental factors, with full compliance with regulations.

48. **Specially Protected Areas:** The Tigrovaya Balka, located in the Khatlon region, stands as the nearest protected area to the project sites. The 460 km2 reserve is described by the WWF as the most important nature reserve in Central Asia, because of its large size and ecological diversity. In addition it is very important for rare species of tugay, or riparian forest, ecosystems. It functions as a crucial refuge for a diverse array of plant and animal species, significantly contributing to the preservation of biodiversity and ecosystems within the region. Despite its proximity to an industrial zone, the impact on biodiversity at this site is minimal.

2.4. Socio-economic data

49. **Population.** According to TAJSTAT, the Khatlon region in 2022 had a population of 3,348,300, with 1 720 021 (51.37%) being women. The urban area of Khatlon housed 657,700 (24.7%) of the total population, while the remaining 2,166,200 resided in rural areas. The population density in Khatlon is 123.9 people per square kilometer.

50. The population under the age of 30 in the Khatlon region is 1,568,700 people, with 836,00 (53.3%) being women. The average registered number of family members in households in the Khatlon region was 6.53 in 2021. The percentage of the population not working, representing those not typically in the labor force in that area, is 67.2%. The infant mortality rate in the Khatlon region is 25.6 per thousand people.

51. **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 Khatlon region compared to other regions of Tajikistan. More than half of the respondents (57.2%) from the Khatlon region cited drought as a key reason for migration. Soil degradation also stands out as a major factor for migration in the Khatlon region with a coefficient of 46.9%. Conflicts over natural resources, unstable harvests, and poor water quality are additional important factors contributing to population migration in the Khatlon region.

52. **Education.** School attendance is compulsory between the ages of 7 and 17, but many children do not attend due to economic needs and, in some regions, security concerns. Tajikistan's education system suffers from poor infrastructure and a severe shortage of teachers at all levels. This problem will be exacerbated by the relatively high birth rate. The official literacy rate is 98%, but the poor quality of education since 1991 has led to a decline in skills among the younger generation. Table 6 presents data on educational facilities in the subproject districts and cities.

53. **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 Khatlon, those with no or only primary education, and those in the lowest wealth quintile are most likely to have co-wives.

54. 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.

55. 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.

56. **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.

57. 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.

58. **Infrastructure.** The project area in Jalolidin Balkhi district of Khatlon region boasts a well-established infrastructure that caters to the needs of its residents. With 72 secondary schools providing education to the youth, along with 3 kindergartens and a center for children and adolescents, the community is well-equipped for the development and growth of its younger population. Additionally, a maternity hospital ensures proper healthcare for expectant mothers and newborns.

59. In terms of healthcare services, the area is served by 9 polyclinics, offering a range of medical services to the residents. The population also benefits from a network of shopping and service centers, making daily necessities easily accessible. For relaxation and leisure, there are bathhouses and saunas available, providing opportunities for residents to unwind and rejuvenate. Furthermore, small markets in the area offer a variety of goods and products, contributing to the vibrant local economy.

60. **Economy.** Agriculture is the primary income source for most in the area, leading to a mix of subsistence farming, labor migration, and trade for livelihood. People diversify by taking up various roles like drivers, laborers, vendors, tailors, etc. Labor opportunities are scarce locally, pushing many to migrate to Russia for work. Women face challenges and opportunities due to increased migration post-independence, with some becoming heads of households. Decision-making traditionally favors men in households, but female-headed households often face interference. Women handle most domestic and agricultural tasks, especially with male out-migration. Migration accounts for about 10% of the able-bodied population in villages, mainly to Russia for seasonal or long-term work. Despite a small percentage leaving for migration, they contribute significantly to household incomes, crucial due to high local unemployment rates.

2.5. Purpose and Scope of the ESMP

61. 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 Khatlon region, and determining the appropriate environmental controls, mitigation measures and degree of control.

62. 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.

63. 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

64. 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.

65. 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.

66. 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.

67. 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.

68. 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.

69. 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.

70. 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.

71. 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.

72. 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

73. 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.

74. 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.

75. 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.

76. 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

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
				build trust with communities and regulators. This transparency promotes 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);	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

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
		Forestry Agency; Academy of Sciences (AS).		the safe handling of plant products.
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

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
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.
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

Law	Adopted and amended	Responsible agency	Brief description	Relevance to Project
				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 Emergencies	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 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	Adopted and amended	Responsible agency	Brief description	Relevance to Project
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

77. *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.

78. *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.

79. 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.

80. 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.

81. 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.

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

83. *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.

84. *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.

85. *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.

86. *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.

87. *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.

88. *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

89. *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.

90. 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.

91. 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.

92. *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).

93. *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.

94. *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)

95. 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

[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).

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 workers 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 Dushanbe Municipality, 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

96. 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 centers, and cemeteries.	ESS3, ESS8 Pollution prevention and cultural heritage. Gives a broad right to the preservation of cultural property and the prevention of pollution	Calls for the adoption of modern environmental standards for water, air, soil, solid waste, toxic waste, and noise abatement, subject to maximum permitted 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	These limits are in line with the ILO minimum age convention

	age to work.	

4. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

97. 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.

98. 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.

99. 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.

100. 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.

101. 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.

102. 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.

103. 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.

Table 4: 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 independent consultant
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) – Any access road to be rehabilitated must be properly designed and maintained by both the PIU and the consultant	Once	Consultant for design	PIU independent consultant
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 independent consultant
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 independent consultant
II. CONSTRUCTION PHASE					

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
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). 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	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
	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 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	The EMP will be included in the tender documents and contract. 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
	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. 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.				

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	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 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	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
	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 batteries, fuel drums) and ensure that storage, transportation and disposal are non-polluting and in accordance with national and	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
	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				

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	any trace; 15. Leaked waste will be disposed of at approved locations; 16. All premises intended for the storage of 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	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
	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: 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.	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

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	5. Under no circumstances will the contractor be allowed to throw them onto any surface of water. 6. Do not store waste on site.				
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 destruction of public roads, paths/trails and property access	1. Residential dirt paths/access to affected 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.	Periodic monitoring and reporting by the consultant and PIU. Report any complaints received from the community to the PIU and document them in social monitoring reports.	Monthly	Contractor	Construction 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.	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

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	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.				
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 the Republic of Tajikistan or an acceptable international standard, as appropriate.	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
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	1. Workers from local communities will be	Periodic monitoring and	Daily	Contractor	Construction

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

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
between workers and society	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.	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.			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 and safety	Trucks and other vehicles are maintained in safe 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;	Periodic monitoring and 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	Daily	Contractor	Construction Supervision consultant / PIU

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	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.	monitoring reports.			
Occupational Health and Safety Risk	1. Before commencing work, the contractor will be required to prepare a brief technical specification, which will indicate the hazards arising in a particular case. 2. 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	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
	designation of a person who can be immediately contacted at in case of an accident, should also be included in the EMP. 3. A copy of the EMP and the name of the person 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. 4. 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				

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	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-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	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

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

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	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.				
Construction sites and Contractor's facilities after completion of construction work	1. 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. 2. 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. 3. Stabilization and landscaping of all construction sites to restore drainage should be undertaken as soon as possible as work is completed. 4. Any contaminated soil must be removed from fuel and oil storage areas and from the site. 5. After completion of the work, there should be no waste left that is not natural and safe. 6. 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.	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
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	Periodic monitoring and reporting by the operator	Monthly	ALC	MoA

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	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.				
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-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.	Preparing traffic management plan	Monthly	ALC	MoA

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
	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. 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.	Preparing pest management plan	Daily	ALC	MoA
Poor working	1. Implement fair labor practices: Ensure that laborers are paid fair wages and provided with	Implementation of Labor	Daily	ALC	MoA

Impacts	Mitigation Measures	Monitoring		Responsible party	
		Item	Frequency	Implementation	Monitoring
conditions for laborers employed in the centers, including low wages and lack of safety measures	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.	management plan			

4.1. Land Acquisition and Resettlement

104. During the site visit, it was discovered that despite the industrial designation of the land, a resident of a nearby village was cultivating it without permission. The Hukumat of Balkhi, in collaboration with the PIU and the Consultant, established a committee to assess the compensation due. Through interviews with community members, the person responsible for the use of the land was identified. Compensation was then accurately calculated and appropriately paid to rectify the situation.

105. Fair, prompt and agreed compensation for all crop and tree losses will be provided in accordance with the resettlement policies of Tajikistan or the World Bank, ensuring that compensation is equal to or greater than the replacement cost of the asset. In cases where land is temporarily acquired for the construction of campsites, lease terms will be agreed to the satisfaction of the farmers and agreements will be concluded in their local language. The land will be restored to its original condition after the end of the temporary use. In accordance with the requirements of Social and Environmental Standard No. 5, an abbreviated resettlement plan was developed and implemented, the full document can be found on the PMU website at www.aedpmu.com

106. The Project Management Unit (PMU) will oversee the land restoration process after the project is completed, ensuring that farmers are compensated in accordance with their lease agreements and that the restoration actions agreed by the contractors are carried out.Photographic documentation of the land condition prior to temporary acquisition will be undertaken to assist in resolving any conflicts between landowners and contractors.

107. Project sites will be located at least 500 metres from existing settlements, built-up areas, streams, wildlife habitats and archaeological or cultural sites. Before construction work commences, the contractor will submit a development plan for review and approval by the relevant authorities. Unused land will be used for project infrastructure where possible.

108. No person shall suffer adverse impacts until compensation has been provided.

4.2. Monitoring Plan

109. 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.

110. 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.

111. 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.

112. 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.

113. Table 14 below presents the Environmental and Social monitoring plan.

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 independent consultant
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/ independent consultant
Air quality	Condition of vehicles and machinery; field inspection	Visual observation, , photodocumentation, check	Regularly	During surveying and soil investigation	Project site	CSC	PIU/CSC/ independent consultant

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/ independent consultant
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/ independent consultant
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/ independent consultant
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/ independent consultant
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/ independent consultant
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 / independent consultant

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implement ation	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 environment al 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/ independent consultant
Vegetation Clearing	Clearing boundaries and concerns defined in ESMP	Visual observations	Weekly during clearing activities	Weekly during clearing activities	Project site	Contractor	PIU/CSC/ independent consultant
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/ independent consultant

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implementation	Monitoring
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/ independent consultant
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/ independent consultant
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/ independent consultant
		Instrumental measurement	In case of complaints	In case of complaints	Project site, access roads	Contractor	CSC\PIU/ independent consultant
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/ independent consultant
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/ independent consultant
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	Visual inspections, reports	Weekly	Throughout the Project	Project site	Contractor	CSC/PIU, CEP, communal services in the districts, MoH (Sanitary

Environmental concern	Performance indicator and activities	Means of monitoring	Frequency to Monitor	Timing to check	Location	Responsibility	
						Implementation	Monitoring
	The facilities are clean with no waste at the works sites						epidemiological service
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/ independent consultant
Discovery of cultural or historical significant artefact or site	Implement Chance Find Procedures	Visual observations	Daily	Throughout the Project	Project site	Contractor	PIU/CSC/ independent consultant
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

4.3. ESMP Costs Estimates

114. 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 6: 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

4.3. Institutional Responsibilities and Implementation Arrangements

4.3.1. Project coordination

115. The Agency for Implementation of Project the Ministry of Agriculture of the Republic of Tajikistan (MOA). The MoA will have an overall responsibility for coordinating all aspects of the project, including contributions by the different relevant ministries and agencies participating in the project's implementation. The main responsibilities of the MoA will include project oversight, coordination, planning, technical support, financial management, procurement support and monitoring and evaluation. The MoA will be accountable for authorizing and verifying all project transactions and will work closely with the World Bank's Task Team during project implementation. To fulfill its responsibilities, the MoA will use the institutional mechanisms established for the implementation of ACP, including the ACP implementation Unit (ACP-PIU) and Project Steering Committee (PSC) and establish others as deemed necessary.

116. **Project Steering Committee (PSC)** As in ACP, the project's oversight and strategic direction will be performed by PSC. This is important since project implementation involves a number of institutions, including those that were not part of the ACP. The PSC will ensure coordination and effective and enhanced project implementation. In this regard, the project will use the Project Steering Committee (PSC) established for the ACP with additional members, as deemed necessary, by drawing from institutions involved in project implementation.

117. The PSC, chaired by the Minister of Agriculture, will provide strategic guidance for Project implementation, ensure coordination as well as help identify key issues that need to be brought to the attention of the Government and facilitate their resolution. It shall have the following broad responsibilities: (i) establishing policy guidelines and providing overall oversight and strategic guidance; (ii) review of project's progress towards the PDO, (iii) review and approve the Annual Work Plans and Budgets (AWP&Bs) submitted by the PIU, (iv) review and approve annual implementation performance report prepared by the PIU and overseeing the implementation of corrective actions, and (v) ensure inter-ministerial coordination, harmonization and alignment among donors. The PSC will meet bi-annually focusing on review and approval of annual work plans and budget and monitoring of project performance on the basis of annual and bi-annual reports. The membership, terms of reference, duties and responsibilities, frequency of meetings as well as modalities of the PSC will be determined in the Project Operations Manual (POM).

118. **Project Implementation Unit (PIU).** The MOA and PSC will be supported by the PIU. The PIU to be established under the MOA, will be responsible for the project management and coordination. In addition to the PIU in Dushanbe, the MoA will also establish two regional project offices (RPOs) - one in Sughd and one in Khatlon. The PIU and RPOs will be staffed, equipped, and strengthened to support project management and coordination. They will be responsible for facilitating day-to-day implementation of the project in close collaboration with other implementing institutions at national, regional, and local levels. They will also be responsible for following up fiduciary and ESF aspects of the project implementation and provision of support to the implementing institutions. The Environmental and Social Specialists will be recruited on permanent basis at the PIU. These specialists will have significant agricultural and pest management experience. RPOs will recruit part time consultants to cover ESF issues in the fields. The composition of PIU staff, including specialization, responsibility, salary scale and benefits and incentives e.g. annual and sick leave etc. will be detailed in the POM.

119. **Project Implementation Unit (PIU) Environmental and Social Focal Persons** Under the PIU has designated a full-time Social Specialist (SS) and Environmental Management, Health and Safety Specialist (EMHSS) to supervise the Contractors in their EMP implementation to ensure overall compliance with ESF requirements and project environment-related legal covenants. The PIU's EMHSS and SS will be supported by a CSC's. With assistance of the CSC, the EMHSS and SS will regularly prepare Monitoring reports. Within three months after completion of all civil works, a report on the project's environmental compliance performance (including lessons learned that may help MoA in their environmental monitoring of future projects) will also be prepared. This report will be part of the input to the overall Project Completion Report. The Monitoring reports will be

disclosed on Project and MoA websites. The relevant information of the reports in Russian language will also be disclosed to the affected people by posting on websites with the full reports (in English). In addition to the above-mentioned reports, in case of any accident related to occupational and community health and safety, MoA is expected to (i) report to WB within 72 hours, and (ii) prepare and submit an incident report with action plan within 7 days of the occurrence. PMU will support MOA in preparing such reports. The PIU-EMHSS and SS will also update the ESMP in case of unanticipated impacts and make sure that the GRM is operational to effectively handle environmental and social concerns of project affected persons. The PIU will also be responsible for reviewing and approving the monthly reports prepared by the Contractor responsible for implementing the specific activities.

120. PIU will continue the process of public consultation and information disclosure during detailed design / pre-construction, construction and operation phases. The SEP for the project documents the information disclosure, consultation and public participation measures to meet WB and National standards for ongoing and meaningful consultation during construction and operational works.

4.3.2. Contractor Requirements

121. The Contractors for each of the subproject 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 andapproved 10 days prior to access to the site.

122. 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 member of staff on the Contractors roster and will be on site at least five days per week.

123. 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.

124. 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.

125. 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.

126. 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.

127.

Contractor’s Environmental and Social Progress Reporting

Contractors shall monitor, keep records and report on the following environmental and social issues:

- Safety: hours worked, lost time injury, lost workdays, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).

- Environmental incidents and near misses: environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.

- Major works: those undertaken and completed, progress against project schedule, and key work fronts (work areas).

- ESHS requirements: noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other ESHS requirements.

- ESHS inspections and audits: by Project Company, Independent Engineer, PMU and its implementing partners, or others—to include date, inspector or auditor name, sites visited and records reviewed, major findings, and actions taken.

- Workers: list of workers at each site, confirmation of ESHS training, indication of origin (expatriate, local, nonlocal nationals), gender, age with evidence that no child labor is involved, and skill level (unskilled, skilled, supervisory, professional, management).

- Training on ESHS issues: including dates, number of trainees, and topics.

- Footprint management: details of any work outside boundaries or major off-site impacts caused by ongoing construction—to include date, location, impacts, and actions taken.

- External stakeholder engagement: highlights, including formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).

- Details of any security risks: details of risks the Project Company may be exposed to while performing its work—the threats may come from third parties external to the project.

- Worker grievances: details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.

- External stakeholder grievances: grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender-disaggregated.

- Major changes to Contractors environmental and social practices.

- Deficiency and performance management: actions taken in response to previous notices of deficiency or observations regarding ESHS performance and/or plans for actions to be taken should continue to be reported to PMU until it determines the issue is resolved satisfactorily.

The final form of the contractors' environmental and social report will be developed in the site-specific environmental and social management plan.

4.3. CSC Role on Environmental and Social Compliance Monitoring

128. 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.

129. The CSC will also be tasked with two specific activities:

- Provide initial training to the PIU EMHSS and Social Specialist prior to the start of the Construction works; and

- Prepare the operational phase plans for MoA including Emergency Response Plan, Occupational health and Safety Plan and Pest Management Plan.

5. CONSULTATION AND STAKEHOLDER ENGAGEMENT

130. The project interventions are countrywide; therefore, the project team needs to be strategic in designing the SEP. The project stakeholder engagement activities need to be streamed horizontally and vertically. The horizontal stream implies an engagement with stakeholders at the national level. Activities on the horizontal level are assumed to improve awareness and coordination of efforts in the agriculture sector of the country. Whereas, vertical stream implies the application of cascading mode which will allow the project to establish the communication with project-affected parties. As part of SEP the project will finance activities to improve the system of beneficiaries' outreach and education: development and delivery of training courses and modules in different formats, which among other things, will promote and embed formal and regular consultation with farmers, civil society, and other stakeholders. The outreach and education activities will provide specific stakeholder groups with relevant information and opportunities to voice their views on topics that matter to them.

5.1. Proposed strategy for information disclosure

131. The outreach and education approaches will be expanded by development and delivery of training courses and modules for (a) personnel involved in the development of policy and legal provisions as well as strategies and development programs; (b) research and academic institutes, including short-term training for researchers and technical assistants, workshops and knowledge sharing visits; (c) technicians of existing seed production and multiplication facilities, consulting support services and other associated personnel through participation in individually targeted training (both short and long-term), workshops, and conferences; (d) capacity building of potential management staff for operation and management of agro- logistical centers (ALCs) through specialized trainings; technical assessments, workshops, and study tours. (e) strengthening the capacity of relevant public institutions on soil fertility management and locust control.

5.1.1. Website coverage

132. The SEP and other ESF instruments have been disclosed at the MoA website on April 8, 2021. Currently MoA website (http://www.moa.tj) is being used to disclose proj ect related information in Tajik and Russian. The project will include enhancing the MoA website. The MoA will create a webpage on the Project on its existing website. All future proj ect-related monitoring reports listed in the above sections will be disclosed on this webpage. Project updates will also be posted on the homepage of MoA website.

5.1.2. Mass/social media communication

133. PIU Social Development Specialist (from PIU staff or an external consultant) will be engaged during the project implementation in order to maintain close communication with stakeholders. The PIU representative will be responsible for posting relevant information on the dedicated MoA webpage, social media channels and on information boards throughout the project's lifecycle. PIU will also inform citizens about the project progress through radio & TV programs.

5.1.3. Communication materials

134. Written information will be disclosed to the public via a variety of communication materials including articles in newspapers, brochures, flyers, posters, etc. A public relations kit will be designed specifically and distributed both in print and online form. MoA will also update its website regularly with key project updates and reports on the project's performance in Tajik, Russian and English. The website will also provide information about the grievance mechanism for the project.

5.1.4. Information Desks

Information Desks in target regions and districts will provide information on stakeholder engagement activities, project interventions, contact details of the focal point, etc. The focal point, in turn, will set up these information desks, either in their offices or other easily accessible places where they can meet and share information about the project with PAPs and other stakeholders. Brochures and fliers on various project related social and environmental issues will be made available at these information desks. The E&S documents prepared for the project will be also physically available in the local language at the information desks in the target regions and districts.

5.2. Proposed Strategy for consultation

135. **Beneficiary Perceptions Surveys (mid-term and end of the project)** The Project has been designed to support mechanisms for citizen engagement. It will finance periodic assessments to measure the progress and make necessary adjustments to the project, including mid-term, and end of project surveys and studies to be carried out by independent specialists that will be recruited under the proposed Project. Semi-annual joint implementation support missions with representatives from WB and GoT will ensure compliance with legal covenants and implementation progress. A mid-term review will be undertaken three years after project effectiveness to review progress and, if necessary, adjust project design.

136. **Focus Group Discussions** Focus group discussions will be primarily conducted with the women engaged in agriculture on the ground, to gather their perspective on their specific needs and issues that women encounter as they navigate the work environment. In a well-facilitated FGD, a discussion between participants is possible that enables to record voices expressing the risks, barriers and needs from their perspective. This forum will provide a more dynamic environment for women to express their viewpoints on the relevant issues. The results of the FGD will form part of a gender gap analysis to promote equal opportunities and help increase female participation in all levels.

137. **Grievance Mechanism (GM)** In compliance with the World Bank's ESS10, a project-specific grievance mechanism will be set up to handle complaints and issues, and this will be integrated into the GM country system that are available to citizens. Dedicated communication materials (specifically, a GM brochure or pamphlet) will be developed to help residents become familiar with the grievance redress channels and procedures. Locked suggestion/complaint boxes will be posted in regional PIU offices and selected national service provider (local NGO) will maintain a grievance register in order to capture and track grievances from submission to resolution and communication with complainants.

138. Also, details about the Project Grievance Mechanism will be posted on the MoA website. An online feedback mechanism will also function as a grievance mechanism, allowing data-users to provide comments or lodge complaints. Contact details of the PIU representative will also be made available on the MoA website.

5.3. Proposed strategy to incorporate the view of vulnerable groups

139. The SRASP will focus on closing two gender gaps (low use of new technologies and of agricultural inputs) and on contributing to reducing gender stereotypes in the agriculture sector. The project will address gender disparities in the agriculture that hamper female productivity and entrepreneurship: (i) under Component 1, by promoting gender-inclusive development of technology (e.g. consideration of both male and female physiques; mechanization of women's traditional tasks in agriculture, such as weeding); (ii) under Component 2, by taking into

consideration how accessible agro-logistics centers are for women entrepreneurs. Prospective contractors will be responsible for suggesting in their bidding documents ways to make ALCs female-friendly (e.g. by providing for childcare options, etc.); and under Component 3 by paying attention to channel information through technologies that are accessible also to women farmers and agri-entrepreneurs. The project will contribute to reducing gender biases in agriculture by incorporating in capacity building messages that do not confine women to defined gender roles and social expectations. Within three months of the project effectiveness date, the Project will develop the Gender Action Plan, which summarizes the project actions planned to fill in the gender gaps identified.

140. Based on the experience of the Agricultural Commercialization Project (ACP), the new project will ensure inclusion of disadvantaged and vulnerable groups throughout the project activities. Within the ACP a training series on “Production and storage of food (agricultural products) and its diversity” were implemented for women, labor migrants, housewives, women or people with disabilities. In total, 1238 women and girls were covered by the training activities. Overall, the ACP's indicator was no less than 30% of the project beneficiaries should be women and 15% young people (age 18-35). Similar approach will be applied by the follow-on project.

141. The new project will undertake stakeholder engagement activities to ensure that these groups are not disproportionately affected and have equal opportunity in partaking in project benefits. Such activities will include awareness and information campaigns including targeting women and mahalla-level meetings which community members of all backgrounds can join, distributing information materials through multiple channels such as media, social media, and mahalla leaders, emphasizing the rules and principles of equity and non-discrimination for example in relation to employment opportunities in all training and consultation activities. Where ethnic and linguistic minorities are present, the project will ensure that information materials and consultations are accessible in the simple language common to the local groups. Where gender balanced consultations cannot be ensured, the project will undertake separate consultations with women in order to record and consider their feedback, questions, and concerns. Community liaison officers will identify, map, and ensure tailored outreach to women, disabled, socially or spatially isolated communities to ensure that they are aware and able to participate in project-related activities. This may include, for instance, tailored information meetings for small farmers, female farmers on benefitting from project-financed services (such as extension and advisory services), support to farmer cooperatives to link to export value chains, mahalla-level meetings on project benefits for farmers as well as the broader community, among others. Such meetings and consultations will highlight project commitments with regard to good environmental, social, labor/OHS, and stakeholder engagement practices, as well as explain the project grievance mechanism to raise awareness on the above among vulnerable groups and their communities.

142. A listing of disadvantaged groups and/or individuals may be by the following associations and unions:

a. Dehkhan farmers with low skills/experience and women farmers may be represented by the National Association of Dekhan Farms (NADF)
b. Disabled farmers may be represented by the Association of Disabled People of Tajikistan.

143. Ultimately the objective of engaging with the different categories of stakeholders above is to create an atmosphere of understanding that actively involves project-affected people and other stakeholders in a timely manner, and that these groups are provided sufficient opportunity to voice their opinions and concerns that may influence Project decisions.

144. The project will also support measures to ensure no forced labor and child labor are used within the project activities. The mitigation measures will include engagement of district level children rights departments in raising awareness of local dehkan farms on legal restrictions on the use of child labor; and capacity building of regional project offices (RPOs) in monitoring of child and forced labor at the project sites. For this purpose, PIU will collaborate with specialists from the International Labor Organization (ILO) and labor inspectors from the Ministry of Labor, Migration and Employment (MoLME) to: (i) provide regular trainings to local governments and RPO staff on labor practices and use of monitoring tools; (ii) monitor and report on any cases identified; and (iii)

implement a public awareness campaign on labor rights, practices, and grievance mechanisms. The PIU will build an internal communications channel with MoLME's State Supervision Service to report on cases of forced and child labor submitted through the Project's GM and facilitate the investigation process. The PIU will also engage with the Employers' Association Republic of Tajikistan and National Association of Dehkan Farms of Tajikistan to raise awareness of farmers and agricultural employers on legal restrictions on the use of child labor and forced labor.

5.4. Timeline of SEP

145. Keeping the above in mind, following is the tentative work plan and timeline:

Table 7: Proposed tentative strategy for stakeholder engagement activities during implementation

Activity	Purpose	Stakeholders	Responsible	Timeline/ Frequency
Construction Stage				
Community awareness campaigns	To keep informed about the upcoming and ongoing civil works	All stakeholders at national and local level	MoA/PIU/NGO	Based on annual plan timelines
Information campaign on legal restrictions on the use of child labor	Raising awareness on legal restrictions on the use of child labor	Local contractors, dehkan farms	PIU/RPO/Local Governments/ Associations	Before the launch of any civil works, upon completion of the capacity building trainings for local governments
Monitoring of the use of child labor and LMP implementation at the project sites Monitoring of ESMP	To comply with ESS2 To comply with ESS1	Local contractors Contracted vendors and contractors	PIU/RPO/Local Governments/ Associations	During civil works
Beneficiary Perception Survey	To facilitate independent feedback from a wide range of stakeholders on the project interventions progress and	All stakeholders (disaggregated by gender to better tailor interventions)	PIU/MoA	Mid-term of the project
Operations Stage				
Stakeholder awareness, education and consultations campaigns	To keep informed about the project achievements; to improve knowledge and skills in respective agriculture	All stakeholders at national and local level	MoA/PIU/NGO	Based on annual plan timelines
Beneficiary Perception Survey	To facilitate independent feedback from a wide range of stakeholders on the project interventions progress and	All stakeholders (disaggregated by gender to better tailor interventions)	PIU/MoA	End of the project
Implementation of public awareness campaigns	To address the social exclusion risk, labor rights & practices, and grievance mechanism.	All stakeholders from private sector.	PIU/RPOs, local governments, associations	Continuously throughout project implementation

Project Steering Committee (PSC) Meetings	(i) review of proj ect's progress towards the PDO and overseeing the implementation of corrective actions, and (ii) ensure inter-ministerial coordination, harmonization and alignment among	Representatives of relevant ministries, agencies and MOA substructures, farmer associations	MoA	Semiannually
Project Technical Committee (PTC) meetings	The PSC will be assisted by a project technical committee (PTC) to be established. The PTC will be responsible for providing technical advice to the PIU on the quality of implementation reports and special studies, guidelines, documentation of best practices, and M&E reports under the project's responsibilities providing recommendations and advising on	The PTC will be chaired by the Deputy MoA and represented by technical experts from various entities involved in project implementation.	MoA/PIU	Quarterly, on needed basis
Interdepartmental Coordinating Council on the Elimination of the Worst Forms of Child Labor (ICC)	Performance on implementation of the National Program for the Elimination of the Worst Forms of Child Labor and the results of statistical surveys, evaluation and monitoring are considered during its sessions.	The ICC includes representatives of the MoLEM, MoES, MoH, MoJ, MoIA, MoF, MoA, National Children's Rights Commission, Children's Rights Ombudsman, Statistics Agency, Federation of Independent Trade Unions, Employers' Association, Women Committee, Youth Committee, international organizations, interdepartmental commissions, and CSOs	Ministry of Labor, Employment and Migration	Semiannually
Operational meetings	To implement the project components.	Provincial and district level departments of MoA and PIU	MoA/PIU/ NGO	Quarterly

6. GRIEVANCE REDRESS MECHANISM

146. The Grievance Redress Mechanism (GRM) is an essential component of any development project to ensure accountability, transparency, and responsiveness to the concerns of project-affected individuals. It provides a platform for people to raise complaints, grievances, or feedback related to project activities, potential negative impacts, or issues with project implementation.

147. The GRM typically involves establishing clear procedures and channels through which individuals can submit their grievances, such as complaint boxes, hotlines, email addresses, or designated focal points. These mechanisms should be accessible to all stakeholders, including vulnerable and marginalized groups, and should be well-publicized to ensure awareness.

148. Once a grievance is received, it should be documented, acknowledged, and investigated promptly. The investigation process may involve verifying the facts, consulting with relevant stakeholders, and assessing the potential impacts of the grievance. Based on the findings, appropriate actions should be taken to address the issue, mitigate any negative impacts, and provide redress to the affected individuals.

149. Additionally, the GRM should maintain confidentiality, protect complainants from reprisals, and ensure that all grievances are handled impartially and fairly. Regular monitoring and reporting on grievance handling processes are essential to track trends, identify systemic issues, and improve the overall effectiveness of the mechanism.

6.1. Grievance Redress Committee (GRC)

150. During the project implementation period, a **Grievance Redress Committee (GRC)** will be established by Order of the Ministry of Agriculture (MoA) to address any issues related to the project.

151. The GRC's responsibilities include reviewing complaints, evaluating their validity, assessing the potential impact, and addressing social, environmental, and other related concerns.

6.2. Grievance Submission Methods

152. Complaints can be submitted through various channels, including mail, email, phone, the project website, or in person. Recognizing the prevalence of mobile usage among citizens, the project will also establish dedicated groups on popular platforms such as Telegram and Facebook to make it easier for people to voice their concerns.

153. In cases of appeal in electronic form, the applicant in his appeal indicates his surname, first name, patronymic, contact phone number (home, mobile or work), residence address, and sets out the essence of the appeal.

6.3. Complaint log

154. Each party involved in the Grievance Redress Mechanism (GRM) at both local and central levels should maintain a record book for registering complaints. GRM members are responsible for reporting details of grievances to the designated person on a regular basis, including information about the grievances and the status of their resolution.

155. The designated person should coordinate with each GRM member at the local and regional levels, gather relevant documents, maintain a consolidated register of complaints received at the GRM level, monitor the resolution status of each complaint, update a comprehensive database of complaints, and provide reports accordingly.

156. All grievances will be documented and will include, but are not limited to, the following data:. Contact information for the complainant;

- Date and place where the complaint was received;
- Name of the person who registered the complaint;
- A brief description of the complaint;
- Resolution of the complaint.

6.4. Grievance Resolution Process

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

Table 8: 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.	15 days

		The final decision will be made at the central level.	

158. 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.

6.5. The World Bank Grievance Redress Service (GRS)

159. Project affected persons 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.

160. 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.

161. 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

162. 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.

6.6. Complaint monitoring and analysis

163. All complaints received are classified and systematized by the nature - issues of complaints, complaints and monitoring data are counted (number of complaints received, number of complaints considered and found valid, number of repeat complaints, number of complaints processed and closed) in order to identify systematic (repeat) and single complaints, assess trends in different categories of complaints.

164. According to the results of the reporting period, responsible persons on work with complaints form a report-analysis, which includes information:

- on the dynamics of changes in the number of written and oral appeals, complaints, as well as the dynamics of changes in the number of repeated appeals, complaints, appeals recognized as justified;
- on the strengths and weaknesses of the services, processes, working methods.

6.7. Grievance Redress Mechanism for communities/road users

165. According to the Order of the MoA, GRC will be established at the local and central levels. The composition of GRC at the local level will be established in the area covered by the project activities, providing the following composition:

Table 9: Composition of the local GRC

Group members	Position
Local designee	Group Chairman
Representative of the Supervision Consultant	Group Member
PMU representative	Group Member
Community Representative/Head of Jamoat Leader (as agreed)	Group Member
Representatives of the local NGO/Obmudsman, etc. (as agreed)	Group Member

6.8. Duties of GRC members at the local level

6.8.1. Local designee (LD):

166. The Chairman of the GRC shall take the following actions:

- presides over the meetings of the GRC and ensures that minutes of the meetings are shared with all interested parties;
- acquainted with the content of each decision drafted after discussions to ensure correctness;
- provides administrative and organizational support for the work of the GRC members;
- supports the decision made by the GRC and ensures control over its implementation;
- prepares a grievance note, which shall be signed by the complainant and the LD, indicating the name of the complainant, date and place of the complaint, describing the complaint and providing supporting documents (if any);
- sends a note with the complaint to all members of the local GRC, convenes them to a meeting of the GRC and sets a date for the first meeting to consider the complaint (and, if necessary, subsequent ones);
- transmits requests and questions from complainants to the MOA and other members of the GRC at the local level;
- minutes all meetings and contacts with applicants;
- provides administrative and organizational support to GRC members;
- disseminates information about the greviance to affected local communities.

6.8.2. The representative of the PMU

167. Upon receipt of the notice of complaint and the invitation to the complaint meeting from the PAP, the representative of the PMU shall take the following actions:

- contacts the complainant and writes a note with his/her understanding of the complaint;
- registers the complaint and supporting documents submitted;
- participates in all meetings to review the complaint, expresses his/her opinion and analysis, takes minutes of discussions;
- based on reports of GRM members stating their position and their understanding of the case (essence of the grievance) prepares final report on grievance review and recommendations, which will be sent to the complainant, other members of GRM. The report may state that: i) the case is resolved; ii) the case remains unresolved;

- When notified by the LD that a complainant with an unresolved grievance wants to file his/her grievance at a higher level, informs the MOA.

6.8.3. Community representative/Head of Jamoat

- provides relevant information related to the complaint filed;
- provide the other members of the GRC with a note stating their position, which will be reflected in the final report of the meeting.

6.8.4. Representatives of the local NGO/Obmudsman

168. Upon receipt of a notice of complaint and an invitation to a meeting to consider a complaint, the Representatives of the local NGO/Ombudsman takes the following steps:

- contacts the complainant and writes a note with his or her understanding of the complaint;
- if needed, participates in all meetings of the grievance, expresses his/her opinion and analysis;
- provides other members of the GRC with a note outlining his/her position, which will be reflected in the final report of the meeting.

6.8.5. Duties of GRC members at the Central level

169. At the Central level, the GRC will include the following staff:

Table 10: Composition of the Central GRC

Group members	Position
Director of PMU or representative of the MoA	Group Chairman
PMU Safeguards Specialists	Group Member
PMU Technical specialist	Group Member
and others as agreed	Group Member

6.8.6. Chairman of the GRC / Director of the PMU/ representative of the MoA

170. The Chairman of the GRC shall take the following actions:

- presides over the meetings of the GRC and ensures that minutes of the meetings are shared with all interested parties;
- acquainte with the content of each decision drafted after discussions to ensure correctness;
- provides administrative and organizational support for the work of the GRC members;
- supports the decision made by the GRC and ensures control over its execution.

6.8.7. PMU Safeguard Specialists

171. When notified that a claimant has filed his or her claim at the central level, the safeguards specialists of PIU take the following action:

- prepare a chronology of events in order to understand the sequence of circumstances that led to the complaint;
- express their views on environmental and social protective measures in relation to the impact the complainant is referring to;
- request meetings (if necessary) with the GRC Chair;

- liaise between the GRC and the complainants;
- the complaints log is kept in the PIU.

6.8.8. Technical Specialist

172. When notified of the need for professional advice for the impact assessment claimed by the complainant, the appropriate technician will conduct the necessary research and prepare a report, which will be shared with the complainant and other members of the GRC. The tasks of the technical specialist include the following:

- Provide an appropriate technical opinion on the case at hand;
- Conduct the necessary research according to his or her qualifications.

6.9. Grievance Redress Mechanism for Contractor's staff

173. The Contractor is responsible for establishing and implementing a comprehensive grievance mechanism (GRM) specifically designed for its staff. This mechanism should provide employees with a formal process to address any concerns or complaints they may have in the workplace. It is important to note that the Contractor's GRM should not restrict employees from seeking legal recourse through court procedures if they feel that their grievances are not adequately addressed through internal channels.

174. Upon hiring, all employees must be made aware of the existence of the GRM and provided with clear information on how to access and utilize it. This ensures that employees are informed of their rights and have the necessary tools to address any issues that may arise during their employment. By promoting transparency and accountability, the Contractor's GRM can help foster a positive work environment and ensure that employee concerns are addressed in a timely and effective manner.

6.9.1. The ways to file a complaint

175. Complaints can be submitted through various channels, including mail, email, phone, the project website, or in person. Recognizing the prevalence of mobile usage among citizens, the project will also establish dedicated groups on popular platforms such as Telegram and Facebook to make it easier for employees to voice their concerns, etc. The anonymous complaint option can also be applied. PIU and MoA will have boxes for anonymous complaints, feedback will be provided through the official websites.

6.9.2. Complaint log

176. Each party involved in the GRM at local and central levels should keep a record book for registering grievances. GRM members shall regularly report details of grievances to the coordinator: about the grievances and status of their resolution.

177. All grievances will be registered and include, but not limited to the following data:

- Applicant's contact information;
- Date and place where the grievance was received;
- The name of the person who registered the grievance;
- A brief description of the grievance;
- Decision on grievance.

178. According to the results of the reporting period responsible persons for handling complaints prepare a report-analysis, which includes information:

- on the dynamics of changes in the number of written and oral appeals, complaints, as well as the dynamics of changes in the number of repeated appeals, complaints, appeals recognized as justified;
- on the strengths and weaknesses of the services, processes, working methods.

6.9.2. Structure of the GRM and timelines for handling complaints

179. The GRM for contractor personnel will operate at two levels: at the local level and at the central level (Executive Agency/Supervision Consultant).

180. **1. Contractor (local level).** The authorized person appointed by the contractor will keep a record of grievances and appeals of workers and speed up the process of grievance resolution. If the problem cannot be resolved at the contractor level within 15 days, the issue will be referred to the central level.

181. **2. Central level.** If the contractor does not resolve the grievance received, or if the response received does not satisfy the applicant, then the person who sent the grievance and the authorized person has the right to apply directly to the MoA/PIU/Supervision Consultant. At the central level a final decision is made within 15 days.

182. If the issue is not resolved at the central level, the applicant may appeal to the World Bank Grievance Redress Service (GRS) or to the judicial authorities.

6.9.3. Monitoring of GRM

183. All received complaints are classified and systematized according to the nature - issues of complaints, complaints and monitoring data are counted (number of complaints received, number of complaints considered and found valid, number of repeat complaints, number of complaints processed and closed) in order to distinguish systematic (repeat) and single complaints, assess trends of different categories of complaints.

6.10. Grievance Redress Mechanism for Gender-Based Violence

184. Gender-based violence (GBV) is a pressing global problem that women face in their lives.

185. The World Bank is actively involved in combating gender-based violence in all its forms and considers it absolutely unacceptable in the framework of projects carried out with financial support of the World Bank.

186. Construction, especially large infrastructure projects, can be a high-risk environment in terms of GBV affecting local communities and construction workers. Risks of GBV can increase in local communities when there is a large influx of male workers from outside. These risks increase when workers come into close contact with local communities.

6.10.1. Filing and Handling Grievances

187. Since gender-based violence is one of the sensitive aspects of most communities, this form of violence requires an ethical, sensitive and confidential approach to handling such cases in order to provide the victim and the victim's family with effective support and safety.

188. Given the local mentality, the nature of the GBV grievance is compounded by the culture of silence, fear of publicity and fear of public condemnation.

189. Confidence in the Grievance Redress Mechanism (GRM) can be strengthened by offering multiple grievance options through which affected individuals can be registered in confidence:

- Local GRC designee, preferably female

- At the request of the injured person, it is necessary to provide the opportunity to submit a complaint anonymously;
- Victims may want a female investigator to handle crimes of violence against women.

6.10.2. Structure of the Grievance Redress Mechanism (GRM) and timelines for grievance redress

190. The GRM on GBV will operate at two levels: at the local level and at the central level (Executive Agency).

191. **Local level**. A designated authorized person will keep a record of grievances and appeals. If the problem cannot be solved at the local level within 15 days, the issue will be referred to the central level.

192. **Central level.** If the grievance cannot be resolved at local level, or if the response received is not satisfactory to the complainant, the complainant and the authorized person have the right to apply directly to the MoA/PIU/Supervision Consultant. At the central level a final decision is made within 15 days. If the issue is not resolved at the central level, the complainant can appeal to the World Bank Grievance Redress Service (GRS) or to the judicial authorities.

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

193. 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.

194. 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***