

STATE AGENCY FOR ENVIRONMENTAL PROTECTION AND  
FORESTRY UNDER THE GOVERNMENT OF THE KYRGYZ REPUBLIC  
REPUBLIC

DEPARTMENT OF FOREST ECOSYSTEMS DEVELOPMENT

WB/GEF project

"Integrated Management of Forest Ecosystems of the Kyrgyz Republic".

**PLAN  
ENVIRONMENTAL MANAGEMENT**

**subproject "Creation of a fruit tree  
plantation on the territory of  
Aksy leskhoz".**

Environmental Management Consultant

JSabirova

**AKCS -2019**

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**Abbreviation**

AAAAil Aimak	
AOAiyl okmotu	
ASMAbestos-containingmaterials	
WBWorld Bank	
SAEPF State Agency for Environmental Protection and Forestry	GOST State Standard
State Forest Fund	
StateEnvironmental Expertise	State
Environmental Expertise	State Environmental Expertise
Housing and communal services	KBU
Containers of safe destruction	
ACCC-advisory and coordinationboard	
EIA-environmentalimpactassessment	
OOPTNProtected natural areas	OPO-
operationalpolicy	
Project Implementation	Unit
PIULEProject for integrated forest ecosystem management	
POOPlan for environmental protection	
PP/MPP subprojects/microprojects	
PHCPPprimaryhealth care	PRSP
soil and vegetation slice	
Design and	
estimateddocumentation	
SanPinSanitaryrules and norms	
SNiPPstroitelnyenorms and rules	
c/Agricultural	
Municipal	solid waste
TU Territorial Administration	
ESElectricity	
EE environmental assessment	

## INTRODUCTION

The project "Integrated Management of Forest Ecosystems of the Kyrgyz Republic" is aimed at supporting the approach of effective management of forest ecosystems (forest, pastures, infertile or low fertility lands, wood and non-wood forest products, etc.). This work will be carried out through assistance to institutional reforms and capacity building, implementation of integrated management plans of the pilot forest farms with the active participation of the public, beneficiaries.

The executor of the Project is the State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic (Department of Forest Ecosystems Development, the State Institution "Kyrgyz Forestry Management", territorial department of SAEPP, 14 pilot forestry farms).

The goal of the Project is to strengthen the capacity of government agencies and communities to improve the sustainable management of forest ecosystems through investments in management planning, ecosystem restoration, and infrastructure.

To achieve this goal, the project consists of three components: Component I

- Institutional Reform;

Component II - Strategic Investments and Testing Sustainable Management Approaches;

Component III - Project Management, Monitoring and Evaluation.

Project implementation period: April, 2017 - September, 2021.

As part of the project "Integrated Management of Forest Ecosystems of the Kyrgyz Republic" (IWEMP), an overall Environmental Management Plan (EMP) has been prepared. The EMP aims to ensure compliance and requirements of environmental policies and laws of the Government of the Kyrgyz Republic, as well as the policy of the World Bank on environmental security measures.

The purpose of an environmental assessment (EA) is to identify the significant environmental impacts (positive and negative) of a proposed project, identify appropriate preventive and mitigation measures to prevent, minimize, or eliminate any anticipated irreversible impacts.

The EMP serves as a management tool to ensure that environmental impact prevention and mitigation measures are properly implemented, and that recommended measures are monitored and institutionally reinforced during the implementation of the proposed project.

## Explanatory note/Description of the project

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**Name of subproject:****"Establishment of a fruit tree plantation on the territory of Aksy leskhoz"**

**Location:** Aksy forestry, Renjit forestry 2ha, 85 km. Aksy district of Jalal-Abad region

**Brief description of the project:** Aksy leskhoz annually plants forests on the territory of the state forest fund about 60-72 hectares. Several factors influence the survival rate of forest crops: climatic, soil and anthropogenic. One of the main and widespread factors of low survival rate is cattle grazing. The total area covered by this subproject will be about 2 hectares.

Fruit tree plantations are a source of income as the demand for Kyrgyz apples in the world is steadily increasing. There is an area of 2 hectares in Aksy leskhoz for implementation of the subproject. To develop this plot for fruit gardens it is proposed to develop this plot gradually, first of all to conduct water. Next, to fence the plot and conduct planning of the plot. The next step is planting apple seedlings and arrangement of drip irrigation. The amount of the project is 1939000 soms.

**Forest crops project**

More detailed information about afforestation of each plot is reflected in the Project of forestry crops of Aksy pilot leskhoz, developed by the consultant of FFS IULE on silvicultural activities V. Domaev (2019). The project of forest crops for the pilot leskhoz, developed as part of the WB IUE Project was approved by the order of the SAEPF under the PCR dated 10.07.2019. Recommendations on forest planting are given on the basis of the material on forest management (GUKLOU, 2008), taking into account physical, geographical and ecological conditions of the area. Planting method for mountainous areas is manual digging of holes. Mountainous areas are difficult to access and forest planting without the participation of machinery, transport.

**Type of project:** economic infrastructure and income-generating activities;

**Environmental value of the project:** forest protection.

**Expected results:** as a result of the subproject implementation it is planned to create 2 hectares of plantation of fruit trees for apples. According to the specified characteristics, the first harvest from fast-growing fruit trees can be obtained in the 3rd year of growth. It is planned for the third year to receive 20 kg of apples from each tree. Accordingly, you can get up to 80 tons of apples. The implementation of the produced products will significantly increase additional income of the leskhoz and ensure self-financing.

## ENVIRONMENTAL MANAGEMENT PLAN

**Possible risks:** the market.

**Expected activities of the project after the completion of funding:** as a result of the implementation of the subproject, it will be possible to dramatically increase the income of the leskhoz through the sale of apples. Local workers will be hired to work in the plantation.

**Analysis of alternatives:** Planting forest crops of common pistachio.

## LEGISLATIVE SUPPORT

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- Law of the Kyrgyz Republic "On Environmental Protection".
- Law of the Kyrgyz Republic "On Environmental Expertise".
- Law of the Kyrgyz Republic "General technical regulations to ensure environmental safety in the Kyrgyz Republic.
- Law of the Kyrgyz Republic "On Protecting the Fertility of Land Agricultural Land".
- Law of the Kyrgyz Republic "On Management of Agricultural Land".
- Law of the Kyrgyz Republic "On Pastures
- Law of the Kyrgyz Republic "On Mountain Territories of the Kyrgyz Republic.
- The Law of the Kyrgyz Republic "On Specially Protected Natural Areas".
- Law of the Kyrgyz Republic "On Electric Power Industry.
- Law of the Kyrgyz Republic "On Renewable Energy Sources".
- Law of the Kyrgyz Republic "On Chemicalization and Protection of Plants.
- Law of the Kyrgyz Republic "On Fisheries".
- Law of the Kyrgyz Republic "On Wildlife".
- Law of the Kyrgyz Republic "On Protection of Flora" Law of the Kyrgyz Republic "On Associations (Associations) of Water Users.
- Law of the Kyrgyz Republic "On Water" Water Code of the Kyrgyz Republic
- Land Code of the Kyrgyz Republic
- Forest Code of the Kyrgyz Republic
- The Code of the Kyrgyz Republic on Administrative Responsibility Chapter 16 (articles 158-184) regulates responsibility for administrative offenses in the sphere of environmental protection and use of natural resources.
- The Criminal Code of the Kyrgyz Republic Chapter 26 (Articles 265-279) regulates responsibility for environmental crimes.
- Regulations on the procedure of state environmental expertise in the Kyrgyz Republic, approved by the Government of the Kyrgyz Republic on May 7, 2014 N 248.
- Instruction on the procedure of legal, human rights, gender, environmental, anti-corruption expertise of draft by-laws of the Kyrgyz Republic, approved by the Government of the Kyrgyz Republic on December 8, 2010 № 319.
- Regulations on the procedure of EIA in the Kyrgyz Republic, approved by the Government of the Kyrgyz Republic on February 13, 2015 № 60.
- The use of pasture resources for purposes other than grazing, which include, but are not limited to, hunting, beekeeping, collection of medicinal herbs, fruits and berries, preparation of hay and fuel, extraction of common minerals, tourism and recreation of citizens is regulated by the Resolution of the Government of the Kyrgyz Republic dated September 13, 2013 № 515 "On the procedure for granting the right to use pasture resources for other purposes not related to cattle grazing".
- Construction standards and regulations of the Kyrgyz Republic
- SanPiN KR

ENVIRONMENTAL MANAGEMENT PLAN

**General information about the facility/site**

<b>ORGANIZATIONAL AND ADMINISTRATIVE CONDITIONS</b>				
Project Management Acting Director of the ORP <b>K. Zhantaev</b>		Local party and/or recipient Director of Aksy Forestry <b>P. Zhabaykulov</b>		<b>Date of visit</b> 16.03.2019r.
Supervision of environmental safety measures  <b>Z.Sabirova</b> Environmental Specialist of the IULA Environmental Protection Department	Oversight of the work of the local contractor  <b>D. Naraliev</b> Technical Engineer of the PSO IULE	Supervision of work by the Ecotechnical Inspectorate  <b>J. Arstanbekov</b> Representative of TU Ecotechnical Inspectorate	Oversight by the SAEPF under the PCR  <b>J. Aitmamatov</b> Representative of the Department of TU SEE SAEPF at PKR	<b>Contractor</b> <b>(Name, Name and contacts)</b>
Contractor's obligations	<ul style="list-style-type: none"> <li>• obtaining a permit to begin construction work from the district building and architecture supervision service;</li> <li>• Obtaining a permit for quarrying soil (if required);</li> <li>• obtaining a permit for the use of ground/surface water, etc;</li> <li>• Obtaining permission (contract) from the "Housing and Communal Services" (HCS) to remove, dump construction garbage and asbestos cement waste burial at the district landfill (specify km).</li> <li>• Compliance with occupational health and safety rules for employees;</li> <li>• participation in the EIA and implementation of the EMP, mitigating measures of negative consequences.</li> </ul>			
<b>PUBLIC CONSULTATIONS</b>				
Specify where and when the meetings took place in the process public consultation	<i>The draft of this EMP before the start of the public consultation was Available at <a href="http://les.ecology.gov.uz">http://les.ecology.gov.uz</a> on December 30, 2019. The public hearing was held on January 18-19, 2020 in Aksy LH, AO.</i>			
<b>INSTITUTIONAL CAPACITY DEVELOPMENT</b>				
Is development expected potential?	<input type="checkbox"/> No or <input checked="" type="checkbox"/> Yes. <b>Conducting education (trainings) Specify what kind of trainings are required and what kind of participants are expected (local communities, representatives of contractors, representatives of local authorities, leskhoz, etc.)</b>			



ENVIRONMENTAL MANAGEMENT PLAN

**Current activities and history of the site:**

The total area of the entire site and the area allocated for subproject/microproject activities?	2 ha
Belonging of the site to the territory of the GLF, AA, AO, city, PA, tenant, private person or others.	State forest fund
Technical passport, certificate of land use right, number, who and when issued (if not required, specify the grounds)	Not required
Type of use of the site and surrounding area and land users	Grazing
How was the site used before? Who were the previous users of the site? <i>Specify the dates, if possible.</i>	Not used

**Current status of the facility and associated environmental risks**

Related objects	Status	Risks											
<table border="1"> <tr> <td>Building / cordon</td> <td rowspan="9">no</td> <td rowspan="9">no</td> </tr> <tr> <td>Year of construction</td> </tr> <tr> <td>Building exterior dimensions</td> </tr> <tr> <td>Foundations</td> </tr> <tr> <td>Walls</td> </tr> <tr> <td>Overlap</td> </tr> <tr> <td>Covering the roof</td> </tr> <tr> <td>Visible deformations of supporting structures</td> </tr> <tr> <td>Note</td> </tr> </table>	Building / cordon	no	no	Year of construction	Building exterior dimensions	Foundations	Walls	Overlap	Covering the roof	Visible deformations of supporting structures	Note		
Building / cordon	no			no									
Year of construction													
Building exterior dimensions													
Foundations													
Walls													
Overlap													
Covering the roof													
Visible deformations of supporting structures													
Note													
Water supply	The source of water in the form of a well is not functioning well. It is necessary to rehabilitate. It is possible to bring water from a spring. Need a reservoir for drip irrigation.	Spring drying up will lead to the death of the seedlings.											
Sewage	no	no											
Heating	no	no											
Electricity	no	no											
Availability of ACM	no	no											

**Licenses and permits**

Does the site require licenses or permits to conduct the proposed activity?	Not required
What other government agencies have jurisdiction over the site?	SAEPF, Aksy Forestry

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**Supply of construction materials for design works**

The nearest available market for basic building materials. <i>(specify and distance in km)</i>	r. Kerben
Quarry of inert materials ( <i>crushed stone, gravel, sand</i> ). <i>Specify the distance in km.</i>	5 km

**Waste management**

Types and volumes of waste at the moment	no
Expected types and volumes of waste during work performance	is not planned
Current waste management practices	no
Risk and needs assessment	

**Socio-environmentalsituation**

<b>Problems</b>	<b>Description</b>	<b>Possible environmental risks</b>
The presence of any specific, vulnerable objects in the vicinity of the site (protected areas, cultural monuments, historical sites).	no	no
Are there any other facilities nearby: ( <i>with indication of distance</i> ) schools, children's Gardens, apartment buildings, medical, health and recreation facilities, industrial enterprises, etc.	no	no
The presence of nearby bodies of water, or on the site.	no	no
Relief of the site ( <i>flat, slope, specify slope in degrees</i> ).	flat	no
Are there any flooding or landslides on the site? Are there any signs of soil erosion?	no	no
Will the proposed site provide impact on transportation or utility infrastructure?	no	no
<b>Water Resources.</b> Will the project impact the watershed?	Project provision is made to create a water reservoir drip irrigation	no
Will the project affect groundwater and groundwater quality?	no	no
Does the project envisage use of water for any other purposes, needs?	For garden irrigation, drip irrigation	no
Whether a water permit is required ( <i>H r: AO, schools, etc.</i> )	Yes	no
Will any wastewater be produced as part of the proposed project?	no	no
Is there a drainage system on the site for surface water or wastewater?	no	no
Availability of a water reserve tank	provided by	no
Water quality control	no	no
Does the project provide for work on the water?	no	no
<b>Soil and vegetation cover.</b> Will there be an ORS, logging green areas of the site during the design work?	no	no
Describe briefly the surface of the earth. What is the purpose of the land ( <i>agricultural land, pasture, undeveloped land, etc.</i> )?	Land of the state forest fund category	no
Is there a possibility of damage to the soil by project work?	no	no
The possibility of a significant impact of design work on the landscape?	no	no

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Does the project provide for excavation work?	Only when planting seedlings	no
<b>Biological Habitat.</b> Describe briefly the vegetation cover on the the territory of the object, site (condition of the grass cover, dendroflora).	Grass cover is dense, motley grass	no
Whether cutting down green spaces or uprooting dendroflora is not required (specify number)?	no	no
Presence of rare, red-listed, endemic or other valuable plant and animal species on or near the property?	no	no
Presence of migratory bird nests, animal dens, or wildlife routes?	no	no
<b>Air Environment.</b> Does it provide for emissions by the project, as well as noise and other atmospheric pollution?	no	no
Does the project provide for other physical effects ( <i>radiation, electricity, heating, etc.</i> ) on the environment?	no	no





ENVIRONMENTAL MANAGEMENT PLAN

**Photos of the site in its current state**

(attach several photos from different sides of the outside and inside)



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**PART 1: MITIGATION PLAN**

<b>Environmental component Types of work and examples possible problems and/or impacts</b>	<b>Phase (C, E or O)</b>	<b>Mitigation Measures</b>
When controlling agricultural pests	3	Where possible, the following alternatives to pesticides should be considered: a) Use pest-resistant crop species; b) Use mechanical weed control and/or thermal weed control; c) Maintain and use beneficial organisms such as: insects, birds, mites and microbial agents for biological pest control; d) Protect natural enemies of agricultural pests by providing favorable habitat, such as: shrubs for nesting sites and other natural vegetation that can serve as habitat for pest eaters, avoiding the use of a wide range of pesticides; Use mechanical controls such as: manual removal, traps, barriers, lights and sound to kill, relocate and repel agricultural pests.
When handling fertilizers and/or pesticides	3	a) Proper storage space/room must be provided: <ul style="list-style-type: none"> <li>• all fertilizer/pesticide storage areas and/or facilities must be suitable and safe;</li> <li>• storage areas/premises must be protected from weather conditions and must be able to exclude runoff from other areas;</li> </ul> b) Proper storage conditions must be ensured: <ul style="list-style-type: none"> <li>• Do not store near heat sources such as open flames, steam pipes, radiators or other combustible materials;</li> <li>• Fertilizer/pesticide stocks should not be stored in contact with the ground;</li> <li>• do not store with urea;</li> <li>• Do not contaminate fertilizers and pesticides with other substances;</li> <li>• In case of fire, fill the area with water;</li> <li>• if a screw conveyor is used to move material, ensure that no residue is left in the immediate vicinity and that everything is removed.</li> </ul> Dispose of empty bags properly; <ul style="list-style-type: none"> <li>• Store fertilizer/pesticides in minimal quantities and covered to avoid contact with open air;</li> <li>• Keep spreaders and air sprays that are left closed overnight;</li> <li>• Keep spreaders and air sprays closed between jobs;</li> <li>• ensure that the planter, spreader and air sprayer and/or fertilizer box are completely empty at the end of the day;</li> </ul>



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		<ul style="list-style-type: none"> <li>• If the planter, spreader and air sprayer and/or fertilizer box cannot be completely empty, fill them to capacity before you leave them overnight;</li> <li>• Do not store dry urea with dry nitrate;</li> <li>• keep the minimum required amount of fertilizer and soil conditioner for use;</li> <li>• Store each fertilizer in a separate storage container and/or position indoors and/or outdoors. Using less harmful (non-persistent) pesticides             <ul style="list-style-type: none"> <li>c) Proper application of fertilizers/pesticides is necessary</li> </ul> </li> <li>• Do not apply more fertilizer/pesticides than necessary.</li> <li>• Ensure proper handling of fertilizers and pesticides in order to avoid contamination of surface runoff and health safety of greenhouse workers (protective clothing, masks, sprayers, etc.).</li> <li>• seed quality control will be established</li> <li>• If necessary, timely treatment with approved drugs (see Appendix)</li> <li>• Water and soil quality will be monitored             <ul style="list-style-type: none"> <li>d) Employees must be properly trained and/or instructed before working with fertilizers and other chemicals.</li> </ul> </li> </ul> <p>Managers (contractor, grantee) will develop, implement and monitor the effectiveness of risk management procedures.</p>
<p><b>General conditions of work</b> Alerting, instructing and ensuring the safety of employees</p>	<p><b>C</b></p>	<p>(a) Local inspections that control construction work and environmental safety, as well as local residents, are duly notified of the upcoming project work.</p> <p>(b) The local public is properly notified of the work through appropriate publications and/or media reports and/or signs in public areas (including the work site).</p> <p>(c) Proper fencing around the construction site has been installed to guarantee the safety of the public and children.</p> <p>(d) Obtained all permits required by law (in particular permits for the use of land, natural resources, landfill, permission from the sanitary inspection, etc.) for construction or restoration work on the site.</p> <p>(e) All work must be carried out in the safest and most disciplined manner possible and be organized so as to minimize the negative effects of the production process on local residents and the natural environment.</p> <p>(f) Workers' personal protective equipment must meet international best safety standards (with mandatory wearing of helmets, safety masks where necessary, safety glasses, safety harnesses and safety shoes at all times).</p> <p>(g) Adequate signage and information signs must be posted on the site to inform workers of the basic rules and standards for the work to be performed.</p> <p>If the Contractor engages visiting personnel for repair and construction work, who will be permanently on site, all necessary living conditions must be provided for them, including rooms for sleeping and eating, showers, toilets, and normal meals.</p>

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Impact on biodiversity	O	<ul style="list-style-type: none"><li>• Avoid creating new terraces as this causes loss of topsoil, etc.</li><li>• Avoid, if possible, cutting down trees and other natural vegetation, etc. If unavoidable, replant valuable species on the site, plant new tree seedlings at the expense of those cut down.</li><li>• Minimize loss of natural vegetation/maximize preservation of vegetation during construction.</li><li>• Where possible, fence off the area for construction to reduce incidental impacts on habitats and biodiversity.</li><li>• Where possible, create (or maintain) green corridors to ensure movement of terrestrial fauna). Avoid introducing non-native species into natural water bodies</li></ul>
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ENVIRONMENTAL MANAGEMENT PLAN

PART 2. ENVIRONMENTAL PLAN

Phase	Impact on environment	Mitigating Measures	Expenses		Institutional Responsibility		Notes
			Chiefs	Operational	The initial	Operational	
Fencing the area of forests crops	General conditions of work	<ul style="list-style-type: none"> <li>Local inspections, supervisors of construction work and environmental safety, as well as local residents, are duly notified of the impending project work.</li> <li>The local public is properly notified of the work through appropriate publications and/or media reports and/or signs in public areas (including the work site).</li> <li>Proper fencing around the construction site has been installed to guarantee the safety of the public and children.</li> <li>Obtained all permits required by law (in particular permits for the use of land, natural resources, landfill, permission from the sanitary inspection, etc.) for construction or restoration work on the site.</li> <li>All work must be performed in the safest and most disciplined manner possible and must be organized so as to minimize adverse effects of the production process on local residents and the natural environment.</li> <li>Personal protective equipment for workers must meet the international best standards of work safety (with the mandatory wearing of helmets at all times, safety masks where necessary, safety glasses, safety harnesses and safety shoes).</li> <li>Adequate signage and information signs must be posted on the site to inform workers of the basic rules and standards for the work to be performed.</li> <li>If the Contractor engages visiting personnel to carry out repair and construction work, who will be permanently on site, all necessary living conditions must be provided for them, including rooms for overnight stays and meals, showers, toilets, as well as normal meals.</li> </ul>		At the expense of the Contractor	Contractor	Contractor	
	Effects on biodiversity plants	<ul style="list-style-type: none"> <li>Avoid creating new terraces as this causes loss of topsoil, etc.</li> <li>Avoid, if possible, cutting down trees and other natural vegetation, etc. If unavoidable, replant valuable species on the site, plant new tree seedlings at the expense of those cut down.</li> <li>Minimize loss of natural vegetation/maximize preservation of vegetation during construction.</li> <li>Where possible, fence off the area for construction to reduce incidental impacts on habitats and biodiversity.</li> </ul>			Contractor	Contractor	

ENVIRONMENTAL MANAGEMENT PLAN

		<ul style="list-style-type: none"> <li>• Where possible, create (or maintain) green corridors to ensure the movement of terrestrial fauna).</li> <li>• Avoid introducing non-native species into natural water bodies</li> </ul>					
<i>Care of forests crops and</i>	At pest control mi	<p>Where possible, the following alternatives to pesticides should be considered:</p> <p>e) Use pest-resistant crop species;</p> <p>f) Use mechanical weed control and/or thermal weed control;</p> <p>g) Maintain and use beneficial organisms such as: insects, birds, mites and microbial agents for biological pest control;</p> <p>h) Protect natural enemies of agricultural pests by providing favorable habitat, such as: shrubs for nesting sites and other natural vegetation that can serve as habitat for pest eaters, avoiding the use of a wide range of pesticides;</p> <p>Use mechanical controls such as: manual removal, traps, barriers, lights and sound to destroy, relocate and</p> <ul style="list-style-type: none"> <li>• repelling agricultural pests.</li> </ul>				Leskhoz	Leskhoz
	When working with fertilizer m/petes f	<p>e) Adequate storage space/room must be provided:</p> <ul style="list-style-type: none"> <li>• all fertilizer/pesticide storage areas and/or facilities must be suitable and safe;</li> <li>• storage areas/premises must be protected from weather conditions and must be able to exclude runoff from other areas;</li> </ul> <p>(f) Proper storage conditions must be provided:</p> <ul style="list-style-type: none"> <li>• Do not store near heat sources such as open flames, steam pipes, radiators or other combustible materials;</li> <li>• Fertilizer/pesticide stocks should not be stored in contact with the ground;</li> <li>• do not store with urea;</li> <li>• Do not contaminate fertilizers and pesticides with other substances;</li> <li>• In case of fire, fill the area with water;</li> <li>• If a screw conveyor is used to move material, ensure that no residue is left in the immediate vicinity and that everything is removed.</li> </ul>				Leskhoz	Leskhoz

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		<ul style="list-style-type: none"> <li>• Dispose of empty bags properly;</li> <li>• Store fertilizer/pesticides in minimal quantities and covered to avoid contact with open air;</li> <li>• Keep spreaders and air sprays that are left closed overnight;</li> <li>• Keep spreaders and air sprays closed between jobs;</li> <li>• ensure that the planter, spreader and air sprayer and/or fertilizer box are completely empty at the end of the day;</li> <li>• If the planter, spreader and air sprayer and/or fertilizer box cannot be completely empty, fill them to capacity before you leave them overnight;</li> <li>• Do not store dry urea with dry nitrate;</li> <li>• keep the minimum required amount of fertilizer and soil conditioner for use;</li> <li>• Store each fertilizer in a separate storage container and/or position indoors and/or outdoors. Using less harmful (non-persistent) pesticides</li> <li>g) Proper application of fertilizers/pesticides is necessary             <ul style="list-style-type: none"> <li>• Do not apply more fertilizer/pesticides than necessary.</li> <li>• Ensure proper handling of fertilizers and pesticides in order to avoid contamination of surface runoff and health safety of greenhouse workers (protective clothing, masks, sprayers, etc.).</li> <li>• seed quality control will be established</li> <li>• If necessary, timely treatment with approved drugs (see Appendix)</li> <li>• Water and soil quality will be monitored</li> </ul> </li> </ul>					
		<p>h) Employees must be properly trained and/or instructed before working with fertilizers and other chemicals.</p> <p>i) Managers (contractor, grantee) will develop, implement and monitor the effectiveness of risk management procedures:</p> <p>j) Managers (contractor, grantee) will develop, implement and monitor the effectiveness of risk management procedures:</p> <ul style="list-style-type: none"> <li>• Provide proper equipment and materials to clean up the leak.</li> </ul>					

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		<ul style="list-style-type: none"> <li>• cover loads when transporting fertilizer;</li> <li>• Ensure that fertilizer deliveries are made at the proper time;</li> <li>• do not accept fertilizer containers that are damaged or leaking;</li> <li>• keep fertilizers covered or sealed. Clean leaks properly;</li> <li>• Ensure that the movement of dust from the storage areas and/or room beyond the perimeter is minimized.</li> <li>• <span style="float: right;">Keep the surface of</span> the fertilizer clean to prevent people or vehicles from spreading it over the perimeter;</li> <li>• sweep and install leaks in a timely and proper manner;</li> <li>• it is necessary to keep a neat storage registry/list;</li> <li>• Store products and mixes separately at all times;</li> <li>• Ensure that storage containers and boxes are clearly labeled;</li> <li>• Ensure that storage, loading and mixing tanks and equipment are cleaned of all residues after changing from one product to another;</li> <li>• Do not store the product in bags that are not properly stamped;</li> <li>• contact between fertilizers, humans and animals should be minimized;</li> <li>• risk assessments should be performed when purchasing, storing, and handling fertilizers;</li> <li>• all persons using fertilizer must follow risk management procedures and adopt safe working practices and ensure that direct contact with fertilizer and inhalation of fertilizer dust is minimized;</li> <li>• Employees must be provided with LZOs when using fertilizers;</li> <li>• Managers must ensure that appropriate warning signs and/or information are posted/available regarding the nature of the hazards and risk controls;</li> <li>• All employees are responsible for implementing sound business practices in storage areas and maintaining regular maintenance practices for all equipment used;</li> <li>• Conduct regular inspections and testing of equipment and infrastructure to establish repair requirements;</li> <li>• fertilizer mixtures must be prepared using the correct raw materials in the correct proportions. All products will be loaded onto spreaders, etc. in the correct condition and the correct weight;</li> <li>• all relevant records and documentation must be kept and maintained, e.g. training records, risk assessments, repair schedules, fertilizer mix registry and recipes, health and safety, etc.</li> </ul>				
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**Grantee/Contractor:Signature:Date:**

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**PART 3 ENVIRONMENTAL MONITORING PLAN**

Phase	What parameters should be monitored?	Where it will be held parameter monitoring?	How will be is the parameter to be monitored?	When will the monitoring of the parameter?	Why will the parameter be monitored?	Expenses		Institutional responsibility	
						Chiefs	Operations	Initial	Operative
Source	1. environmental screening	At the anticipated projected site	According to the OP on protective measures environmental safety VB 4.01 EA, 4.36 LH et al.	After the selection of the CCS investment project proposals	To determine categories A, B, C. Whether an EIA is required.			PPR IULE	
	2. Design. Design and estimate documentation (DED) is described in detail in paragraph J above.	Reports and finished DDS, prepared by the design company.	An overview of the reports and the finished DCP, State EIA and other permitting licenses, etc.	At the stages of the presented The design company's approval of the design documentation and other approvals.	For Ensuring that all necessary requirements are included in the tender documentation.			Project company for the preparation of the design documentation and other permits GE	At the expense of The budget of the project.
	3. Drafting forest crops	At sites 1,2,3,4,5,6, Frunzensky leskhoz	On the presence of forest crops project	Before Investments	For efficiency and afforestation			PPR IULE	
Construction	1.Fencing the area of sites 1,2,3,4,5,6, during construction work on the objects of construction								

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<p>2. Availability of information boards with contact information for local community complaints.</p>	<p>-/-</p>	<p>On the availability of booths</p>	<p>At the beginning and during the construction of the</p>	<p>For Ensuring that the local population is informed</p>			<p>Contractor</p>	<p>Podder</p>
<p>3. Proper personal protective equipment for the Contractor's personnel.</p>	<p>-/-</p>	<p>On the availability of personal protective equipment</p>	<p>-/-</p>	<p>For safety precautions</p>			<p>Contractor</p>	



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	4. Prohibit the use of ACM and proper disposal, burial of ACM must be accompanied by the relevant certificates and photos	-//-	On the absence of the ACM in the construction. In the case of burial for the presence of acts and photos	During construction and at the end of construction	For to ensure the safety of human health and the protection of the environment environments			Contractor	
	5. Preventing soil erosion and wastewater runoff into the adjoining streams and rivers.	-//-	On the absence of traces of erosion and sewage	-//-	To protect environments			Contractor	
	6. Proper collection and removal of construction waste.	-//-	For presence/absence of construction waste	During and at the end of construction	To protect the environment			Contractor	
	7. The Contractor shall have an agreement with the local utility company regarding the dumping of construction debris and ACM burial.	-//-	On the existence of a contract	In the course of construction	To protect the environment			Contractor/P SD Comp.	
	8. Prevention of dust formation.	-//-	On the availability of measures to dust prevention	In the course of construction	For life safety			Contractor	
	9. Reduction and limitation in time (from 8:00 to 18:00) of noise interference.	-//-	On the absence of complaints from the local residents	In the course of construction	For ensuring the tranquility of the local population and animals, plants.			Contractor	
	10. Report on the implementation of the EMP.	For all cordon construction sites	Providing reports on implementation of the EMP	During construction and at the end of the facility delivery	For minimizing harmful effects OS			Leskhoz, contractor, PPR	

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<i>Operation</i>	1. Proper removal or disposal of waste.	-//-	On the presence of special pits	At the time of commissioning of the facility in	To protect the environment			Leskhoz	<b>Lesc h oz.</b>
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			For compost and recycling	operation					
	2. Conducting instructions, trainings for leskhoz employees	-//-	Photo and video materials on training	After the construction of the	For instruction on facility operation			ORP PIULE, Contractor	
	3. State acceptance of objects	-//-	Certificate of Acceptance	After the construction of the	For commissioning			ORP PIULE, Contractor, leskhoz	
	4. Monitoring the survival rate of seedlings.	-//_	On planted seedlings	After turning in operation	To improve the area and increase the forested area in the subsequent.			Leskhoz	

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## **Constructionwaste management**

*(to be determined after the decision, obtaining permits)*

## **Occupational health and safety**

In accordance with GOST 1 2.0.004-90, employees undergo introductory, primary workplace, repeated, unscheduled and current briefings, which are one of the types of theoretical and practical training. Introductory briefing is conducted by an engineer for labor protection; primary briefing at the workplace, repeated, unscheduled and current briefing - the direct supervisor of works.

Program of induction training:

1. General information about the company.
2. Legislation on labor protection. Labor protection of women and youth. Procedure for investigation of accidents at work. Registration of relevant acts. Rules of internal regulations.
3. Occupational Health and Safety:
  - 3.1 The main hazardous production factors and causes of accidents. The main methods and technical means of preventing accidents. Characteristic causes of accidents, explosions, fires, cases of Occupational injuries. Requirements for production equipment and production processes in the standards of the System of Occupational Safety Standards (SOSS) and industry regulations.
  - 3.2 Safety, guarding and signaling devices. Colors and safety signs.
  - 3.3 Electrical Safety. Effects of electric current on the human body. Types of injuries. Conditions that increase the risk of electrocution, prevention of electrical injuries, rules for the operation of electrical equipment.
  - 3.4 Safe organization and maintenance of the workplace (checking that the equipment, starting devices, tools and appliances, interlocks, grounding and other protective equipment are in good working order).
4. Industrial sanitation: lighting; sound pressure and vibration levels; ventilation.
5. Personal protective equipment: protective clothing and footwear, protective equipment for hands, head, eyes and face, respiratory organs, noise and vibration protection, safety equipment.
6. Fire Safety. The main causes of fires and explosions. Measures to ensure fire safety. The primary actions and means of extinguishing fires. Ways to use available on-site fire-fighting, emergency protection and alarm systems, their location.
7. Intrinsic transport lifting equipment and machinery. Safety requirements for loading and unloading work and transportation of goods.
8. First aid to the injured. The worker who has undergone water instruction, a mark is made in the control sheet or in the logbook of the introductory briefing.

The other types of briefings for the relevant profession are carried out in the workplace in order to teach the employee specific safety measures and rules in the work environment.

### **Oversight and reporting**

The PIU will be responsible for the entire implementation of the EMP. During implementation The PPR subproject will be responsible for oversight to ensure that grantees implement mitigation measures specific to the plan.

The PIU will ensure that project activities are evaluated from an environmental perspective. In this regard, they will be responsible for:

- (a) Coordination of issues related to the environment and environmental assessment (EA);
- (b) monitoring of environmental impacts as part of the overall monitoring of the implementation of grant investments;
- (c) Ensuring compliance with all necessary requirements included in the individual grant investments, i.e., for supporting the proper implementation of the conditions specified in the EIA as part of the implementation of the grant investments.

Specifically, the ORP will be responsible for:

- (a) environmental screening of grant investments;
- (b) conducting an assessment of the acceptability of grant investments from an environmental point of view;
- (c) Providing grant applicants with the necessary information on environmental issues (especially, informing them about the environmental criteria to be used, explaining all obligations regarding the EIA procedure, etc.).
- (d) Determination of project-specific environmental requirements (mitigation measures, monitoring, etc.)
- (e) oversight of environmental mitigation and protection measures envisioned for environmental protection in subprojects/microprojects (PP/MP).

The PIU can coordinate and/or utilize supervision/inspection capacities and results of local environmental authorities responsible by law for environmental protection. The PIU will submit a report every 6 months to the World Bank on the implementation of the EP and the environmental performance and activities of the specific PP/MP.

The actual sub-projects will be implemented by the PIU/grantee or contractors hired by the grantee. The subproject owner must require contractors to comply with all applicable requirements of health and safety related legal provisions; environmental protection, World Bank safeguard policies. Contractors must designate a person responsible for environmental, health and safety issues during construction and operations.

Every 3-6 months, the grantee/contractor will submit a report on the implementation of the EMP.

**Grievance**

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1. Each site during construction work will be equipped with an information board with contact information for representatives of all parties involved (Contractor, Customer, LGBT Institution, local authorities, PIU), where everyone can file a complaint.
2. Consideration of proposals, applications and complaints:
  - in the line of Project management:
    - 1) Contractor - immediate decision, if not, the complaint goes to the next instance;
    - 2) in the PIULE- a decision within 30 days, if not, the complaint is transferred to the next instance;
    - 3) to the Consultative Coordinating Council (CC), and if not, the complaint is sent to SAEPF for review.
3. All complaints are registered in a specially created "Complaints and Answers" Register, indicating the name of the complainant, the essence of the issue, the parties to the dispute or conflict. Complaints without a return address and the name of the complainant will not be considered, except in cases where the subject of the complaint is a procurement procedure.

**Supported and unsupported project proposals**

This

Project provides funding for microprojects and subprojects in 14 pilot leskhozoes and investment projects in 7 municipalities of LGB in the following areas (in the table).

Social (collective) infrastructure	Forest protection and reforestation	Economic infrastructure and revenue-generating activities
<ul style="list-style-type: none"> <li>• Development of pasture infrastructure (i.e., sources of water supply, infrastructure to provide access to summer grazing, etc.) except for roads;</li> <li>• Effective management of forest ecosystems;</li> <li>• Construction and repair of forest cordons;</li> <li>• Construction/repair of leskhoz offices, if this is part of a major subproject;</li> <li>• Construction of additional facilities at the offices of the Forestry, to meet economic needs (for drying and storage of forest products, garages for machinery, demonstration sites, etc.);</li> <li>• Organization of recreational and tourist facilities, recreation areas (picnic/camping, garbage cans, signs, places for tourist accommodation, etc.);</li> <li>• Fencing of forest areas;</li> <li>• Irrigation systems on the territory of LH;</li> <li>• Repair, reconstruction and construction of bridges on the</li> </ul>	<ul style="list-style-type: none"> <li>• Forest thinning and selective reforestation of existing forests and plantations;</li> <li>• Effective management of municipal forests (including thinning, reforestation, and more active management);</li> <li>• Improving seed procurement, seedling production, nursery management and reforestation;</li> <li>• Promoting natural regeneration of the forest and pastures;</li> <li>• Improvement of rangelands by sowing perennial grass seeds;</li> <li>• Reconstruction of low-value plantations;</li> <li>• Creation of avalanche-proof, and landslide-proof and other anti-erosion forest plantations;</li> <li>• Acquisition of small mini-agricultural special equipment aimed at</li> </ul>	<ul style="list-style-type: none"> <li>• Forest nurseries;</li> <li>• Greenhouses;</li> <li>• Gardens (intensive, fruit gardens)</li> <li>• Fast-growing forest plantations;</li> <li>• Investments in value chains - such as logging/timber processing, nut/fruit harvesting and processing, drying facilities, etc.</li> <li>• Investment in tourism (including light picnic/camping infrastructure, garbage collection, signage, sites for tourist accommodation, etc.)</li> <li>• Beekeeping;</li> <li>• Forage production (purchase of seeds or haymaking equipment)</li> <li>• Improvement of fodder production and harvesting, pasture agrotechnics</li> <li>• Investments aimed at promoting natural regeneration of natural</li> </ul>

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LH territory;		
<b>Social (collective) infrastructure</b>	<b>Forest protection and reforestation</b>	<b>Economic infrastructure and revenue-generating activities</b>
<ul style="list-style-type: none"> <li>Repair, reconstruction and construction of storage facilities for forest products.</li> </ul>	the implementation of the measures of the ISRP.	resources (forest, pastures, biodiversity, etc.); <ul style="list-style-type: none"> <li>Repair, reconstruction and construction of storage facilities for forest products.</li> </ul>

Under Project restrictions, the following project proposals will not be funded:

- purchase of farm animals;
- purchase of vehicles;
- purchase of used equipment;
- organization of orchards on an area of more than 500 hectares;
- planting of alien trees and shrubs on an area of more than 10 hectares;
- any investments that are not relevant to forestry and community development;
- dam construction;
- activities related to involuntary resettlement;
- any activity that directly or indirectly destroys the soil over an area of more than 200 m2 without restoration;
- activities that consume large quantities of wood without rehabilitation;
- Production, sale, or use of hazardous substances, pesticides, or herbicides;
- tobacco production and processing;



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- any activities that contribute to land degradation;
- activities that put pressure on pastures (increasing the number of livestock);
- investments related to the illegal production of drugs or crops and other materials, the production and sale of rare or harmful plant species, the illegal cutting and sale of timber, and the sale of products whose production is detrimental to reforestation or the preservation of rangelands;
- sale of natural products from the CITES application list;
- associated with existing or proposed storage facilities for explosive or hazardous materials;
- Production or sale of hazardous substances that contain, for example, carcinogenic, mutagenic or teratogenic properties, including creosote and chlorinated solvents;
- Any activity involving radioactive materials, chlor-, fluorocarbons (CFCs), polychlorinated biphenyls (PCBs);
- mining and mineral extraction;
- implementation of activities in protected areas and other nationally recognized sensitive areas and wetlands;
- use of agricultural land for non-agricultural purposes;
- support for the development of thermal energy facilities;

## List of Banned Pesticides in the Kyrgyz Republic

In accordance with the Decree of the Government of the Kyrgyz Republic, July 27, 2001 № 376 "On measures to protect the environment and public health from the adverse effects of certain hazardous chemicals and pesticides". (as amended by CCPD 06.06.2011 № 289), to protect public health and the environment from the adverse effects of certain hazardous industrial chemicals and pesticide formulations, prevent their illegal trade, and taking into account the provisions of the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade and the Stockholm Convention on Persistent Organic Pollutants the Government of the Kyrgyz Republic has approved the following list

Table 1. List of pesticides whose use is banned or severely restricted

№	Pesticides	C.A.S. Number(s).	The reason for the decision (reason)
1	2,4,5-T	93-76-5	Teratogen, carcinogen, mutagen, contains dibenzodioxin impurities
2	Aldrin	309-00-2	Highly toxic
3	Binapacryl	485-31-4	Highly toxic
4	Captafol	2425-06-1	Highly toxic
5	Chlordane	57-74-9	Sustainability and bioaccumulation in the environment
6	Chlordimeform	6164-98-3	Carcinogen
7	Chlorobenzylate	510-15-6	Highly toxic
8	DDT	50-29-3	Persistent, highly cumulative, carcinogenic
9	Dildrin	60-57-1	Carcinogen
10	Dinoseb and Dinoseb Salts	88-85-7	Highly toxic, pronounced skin resorptive effect
11	1,2-dibromethane	106-93-4	Highly toxic
12	Fluoroacetamide	640-19-7	Highly toxic
13	NSH (mixed isomers)	608-73-1	High toxicity, bioaccumulation
14	Heptachlor	76-44-8	Highly toxic, persistent, carcinogenic
15	Hexachlorobenzene	118-74-1	Highly toxic
16	Lindane	58-89-9	Highly toxic
17	Mercury compounds, including inorganic mercury compounds, alkylmercury compounds, and alkyloxyalkyl and arylated mercury compounds		Highly toxic substances
18	Pentachlorophenol	87-86-5	Dermatoresorptive and irritant effects, poisonings have been described working

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19	Monocrotophos (soluble liquid formulations of the substance containing of the active ingredient exceeding 600 g/l)	6923-22-4	Highly toxic, highly hazardous pesticide compound
20	Metamidophos (soluble liquid formulations of the substance containing of the active ingredient exceeding 600 g/l)	10265-92-6	Highly toxic, highly hazardous pesticide compound
21	Fosfamidone (soluble liquid formulations of the substance containing of the active ingredient exceeding 1000 g/l)	13171-21-6 (mixture, E- and Z-isomers) 23783-98-4 (Z-isomer) 297-99-4 (E isomer)	Highly toxic, highly hazardous pesticide formulations
22	Methyl parathion (emulsifiable concentrates (EC) with 19.5-, 40-, 50-, 60-percent active ingredient content and powder formulations with 1.5-, 2-, and 3-percent active ingredient content)	298-00-0	Sharp skin-corrosive and embryotoxic properties, teratogen, affects reproductive function
23	Parathion (all compositions of this substance - aerosols, sprayable powders (PP), emulsifiable concentrates (EC) - are included, granules (G) and wettable powders (WP), except capsule suspensions (SC))	56-38-2	Highly toxic, highly hazardous pesticide compound
24	Ethylene dichloride	107-06-2	Carcinogen
25	Ethylene Oxide	75-21-8	Highly toxic, carcinogenic
26	Toxafen	8001-35-2	Persistent organic pollutant (POP), active carcinogen
27	Tributyltin compounds, including: tributyltin oxide tributyltin benzoate tributyltin chloride tributyltin fluoride tributyltin linoleate tributyltin methacrylate tributyltin naphthenate	56-35-9 4342-36-3 1461-22-9 1983-10-4 24124-25-2 2155-70-6 85409-17-2	Stoic, bioaccumulation in aquatic organisms
28	Dinitro-ortho-cresol and its salts (ammonium, potassium, and sodium salts)	534-52-1 2980-64-5 5787-96-2 2312-76-7	Highly toxic
29	Sprayable powder formulations containing a combination of: benomyl concentration of 7 percent or more, carbofuran concentration of 10 or more than percent, thiram concentration of 15 percent or more (in combination)	17804-35-2 1763-66-2 137-26-8	Highly toxic, highly hazardous pesticide compound
37	Endrin	72-20-8	POP, highly toxic
38	Mirex	2385-85-5	POP, active carcinogen
39	Alpha-hexachlorocyclohexane	319-84-6	POP, highly carcinogenic
40	Beta-hexachlorocyclohexane	319-85-7	POP, highly carcinogenic
41	Chlordecone	143-50-0	POP, highly carcinogenic, toxic
44	Pentachlorobenzene	608-93-5	POPs, stoic, bioaccumulation