

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

for the subproject

**"Creation of 80 hectares of forest
plantations on the territory of At-Bashi
forestry".**

Environmental Management Consultant

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BISHKEK -2019

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Abbreviation

AAAA	Ail Aimak	
AOA	iyI okmotu	
ASMA	Asbestos-containing materials	
WB	World Bank	
SAEPF	State Agency for Environmental Protection and Forestry	GOST State Standard
	State Forest Fund	
	State Environmental Expertise	State
	Environmental Expertise	State Environmental Expertise
	Housing and communal services	KBU
	Containers of safe destruction	
	Advisory and Coordination Council	
	EIA Environmental Impact Assessment	
	OOPTN Protected Natural Areas	OOPO
	Operational Policy	
	Project Implementation Unit	
	PIULE Project for integrated forest ecosystem management	
	POO Plan for environmental protection	
	PP/MPP subprojects/microprojects	
	PHCPP primary health care PRSP soil and	
	vegetation slice	
	Design and	
	estimated documentation SanPin Sanitary rules	
	and norms SNI PP stroitelny norms and rules	
	c/Agricultural	
	Municipal solid waste	
	TU Territorial Administration	
	EE Electricity	
	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 Project implementer is the State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic (Department of Forest Ecosystems Development, State Institution

"The Kyrgyz Forestry Department, territorial department of SAEPF, 14 pilot leskhozses).

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 is aimed at ensuring 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

Subproject name: Creation of 80 hectares of forest plantations on the territory of At-Bashi forestry

Location: At-Bashinsky leskhoz is located in the administrative territory of At-Bashinsky district of Naryn province.

Site 1 in At-Bashinskoye lesnichestvo kvartal № 3, sec. 2, sec. 4, sec. 13 on the area of 14 ha, Tokoy site.

Site 2 in At-Bashinskoye lesnichestvo in a square № 4 ditch № 16, a square № 5 ditch № 8, a square № 10 ditch № 3, a square № 11 ditch № 2 in the area of 46 ha, "Chon-Achyk".

Plot 3 in At-Bashinskoye lesnichestvo kvartal #23, plot #1 area of forest crops 8 hectares, plot "Eki Chat".

Plot 4 in the forestry division of Bosogo kvartal #40, sec. 2,6, area of forest cultures 12 ha, plot "To-Oldu".

Brief description of the project: Naryn oblast is located in the south-east of Kyrgyzstan and is a region with a complex mountainous terrain, located at an altitude of 1500 m and above, about 70% of its territory is occupied by mountain ranges. In this regard, the region is characterized by harsh climatic conditions such as long, cold winters.

The goal of this project is to increase the forested area. At present, foresters face many problems in the course of silvicultural works associated with the lack of necessary equipment for planting and digging up the planting material, difficulties in transporting the planting material to the planting site and elementary tools for work on silvicultural works. In our area, most of the local population is engaged in cattle breeding. In connection with this (cattle grazing of forest crops), there are difficulties in reforestation. For good growth and establishment of forest crops, it is necessary to fence forest crops plantations before transferring them to a forested area. It should be noted that:

- Plot 1- "Tokoi" 14 ha in At-Bashi forestry is located in the valley zone. Much earlier the site was covered by forest, later it was used as pasture. At this site it is necessary to reforest, planting is planned from local species of rose hips and buckthorn and mugwort on the place of the glade and radish. Planting method: mechanized furrowing with digging of holes by hand.

- Site 2- on an area of 46 hectares, the site "Chon-Achyk" is located in the valley zone. The site was also previously a forest, later used as pasture. And here, too, reforestation is required at the place of the glade and radish. In the framework of the Project, afforestation is planned from Pyramidal Poplar, Weeping Willow, I.

Turfan and small-leaved Elm. Planting method: mechanized furrows with digging of holes by hand.

- Site 3- "Eki-Chat" is located in a mountainous area (north western slope of 20 degrees). Forest planting of Siberian larch (aged in practice introduced) and/or Tianshan spruce (native species). Method of planting: on the site by hand under the Kolesov sword. It is a mountain slope (20-25 degrees) vegetation from shrub communities. Forest plantations of conifers will play an anti-erosion, anti-sedimentation and anti-avalanche role.

- Site 4-"To-Oldu" is located in a mountainous area (north slope of 15 degrees). Forest planting of Siberian Larch/ Tianshan spruce. Planting method: on the site by hand under the Kolesov's sword. Forest plantations of conifers will play an anti-erosion, anti-sedimentation and anti-avalanche role.

Forest crops project

More detailed information about forest planting of each plot is reflected in the Project of forestry crops of At-Bashy pilot leskhoz, developed by K.Toitukov (2019), the consultant of FRA IULE on forest-cultural activities. The project of forest crops for the pilot leskhoz, developed as part of the WB IUE Project was approved by the order of the SAEFP under the PCR dated 10.07.2019. Recommendations for afforestation are given on the basis of the material on forest management (GUKLOU, 2008), taking into account physical, geographical and ecological conditions of the area. The consultant for afforestation recommends local species of rose hips and sea buckthorn for the plain zone, conifers for the mountainous area, namely Tianshan spruce, including methods of pest control.

At present, Larch is much more affordable for the leskhoz than Spruce Tianshan. The method of planting for mountainous terrain by hand under the sword of Kolesov. Mountain areas are difficult to access and forest planting without the participation of machinery, transport. For afforestation of the plain zone mechanized furrowing with digging of holes in the place of forest degradation.

Siberian larch is an introductory species, introduced into Kyrgyzstan back in 1930-40-ies and successfully adapted, introduced into culture. The species is not aggressive. From the seeds of larches grown in the mountainous area, forestry farms grow planting materials. Forests from Siberian larch make up 1702 hectares (from 853072 hectares) of the forested area of the Forest Fund of KR.

Type of project - forest protection and reforestation.

The environmental value of the project is reforestation.

Expected results: After the project is completed, the area of At-Bashi Forestry will increase by 80 hectares with deciduous and coniferous tree species, and there will be a fruit and berry plantation of 14 hectares, processing and releasing to the market a completely new quality

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mountain berry product. And also local residents will be interested to protect floodplain forests to get quality berries in sufficient quantity.

Possible Risks: Cattle grazing, dry hot summer.

Expected activities of the project after the completion of funding:

Forest crops followed by conversion to forested area

Analysis of alternatives: Possible options to increase the forested area by promoting natural regeneration of the forest by fencing forest areas and limiting cattle grazing.

Planting forest crops in pastures and glades.

Reclamation of low-value tree and shrub plantations.

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LEGISLATIVE SUPPORT

- Law of the Kyrgyz Republic "On Environmental Protection".
- Law of the Kyrgyz Republic "On Environmental Expertise".
- Republic "General Technical Regulation on Ensuring Environmental Safety in the Kyrgyz Republic".
- Law of the Kyrgyz Republic "On Protecting the Fertility of 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 field 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

General information about the facility/site

Current activities and site history:

The total area of the entire site and the area allocated for subproject activities?	<p><u>Site-1</u> - kv 3 ditch 2 total area -14.1 hectares of them 6 hectares, kv 4 ditch 13 total area -24.5 hectares of them 8 hectares of the total area for subproject activities - 14 hectares.</p> <p><u>Site- 2</u> - kv 4 outlet 16 total area -17,8 hectares of which 17,8 hectares, kv 5 outlet 8 total area of 15.6 hectares of which 15.5 hectares, kv 10 Exit 3 total area -2.9 hectares of which 2.9 ha, kv 11 Exit 2 total area -8.9 ha of which 8.9 ha, the total area for the activities of the subproject - 46 ha.</p> <p><u>Site-3</u> - kv23 otd12 total area of 25.3 hectares of which 8 hectares, the total area for subproject activities - 8 hectares.</p> <p><u>Site-4</u> - kv 40 ditch 2 total area -133.3 hectares of them 7 hectares, kv 40 ditch 6 total area -37.5 hectares of them 5 ha.obschaya area for subproject activities - 12 hectares.</p>
Belonging of the site to the territory of the GLF, AA, AO, city, PA, tenant, private person or others.	Lands of the state forest fund
Technical certificate, certificate of land use, number, who and when issued (if not required, specify the grounds)	<p><u>Section 1</u>- State Act ¹ 002323 Forestry At-Bashy, <u>Section 2</u> - State Act ¹ 002323 Forestry At-Bashy, <u>Section 3</u> State Act ¹ 002323 Forestry At-Bashy, <u>Section- 4</u> State Act ¹ 002324 Forestry Bosogo State act issued on 17.01. 2006- in the State Register of At-Bashinsky district</p>
Type of use of the site and surrounding area and land users	Forestry fund
How was the site used before? Who were the previous users of the site? <i>Specify the dates, if possible.</i>	<p><u>Site 1</u> - previously used for grazing on the site of an old degraded forest.</p> <p><u>Site 2</u> - previously used for grazing on the site of an old degraded forest.</p> <p><u>Site 3</u> - previously used for grazing on the site of an old degraded forest.</p> <p><u>Site 4</u> - previously used for grazing on the site of an old degraded forest.</p>

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Socio-environmental situation :

Problems	Description	Possible environmental risks
The presence of any specifics, of vulnerable objects in the vicinity of this site (protected areas, cultural monuments, historical landmarks).	<u>Site 1</u> no <u>Site 2</u> no <u>Site 3</u> no <u>Site 4</u> no.	Not expected
Are there any other facilities nearby: (<i>with indication of distance</i>) schools, kindergartens, residential buildings, medical, resort and recreational facilities, industrial enterprises, etc.	<u>Plot 1</u> - is located near the village At-Bashi, a distance of 500 meters. <u>Plot 2</u> - located in the village. At-Bashi, distance from 4 km <u>Site 3</u> - located in the village of Acha-Kaiyndy, a distance of 10 km. <u>Plot 4</u> - is located in the village of. Taldy-Suu, a distance of about 15 km	Various natural cataclysms such as mudslides, avalanches, etc.
The presence of nearby bodies of water, or on the site.	<u>Site 1</u> - nearby body of water - At-Bashy River <u>Site 2</u> - nearby body of water - At-Bashy River <u>Site 3</u> - nearby water body - Acha-Kaiyndy river	Coastal erosions
Site topography	<u>Site 1</u> - Mountainous terrain, northern mountain slopes from 0.5 degrees. <u>Site 2</u> - Mountainous terrain, northern mountain slopes from 0.5 degrees. <u>Site 3</u> Mountainous terrain, northern slopes From 20 degrees. <u>Site 4</u> - Mountainous terrain, northern slopes From 15 degrees.	Various disasters (drought, hot summer, forest fires, mudslides, avalanches, etc.)
Are there any flooding or landslides on the site? Are there any signs of soil erosion?	<u>Site 1</u> -no. <u>Plot 2</u> not significant <u>Plot 3</u> not large <u>Site 4</u> no.	Flooding of the lower villages

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Would the proposed site impact transportation or utility infrastructure?	<u>Site 1</u> no <u>Site 2</u> no	no
	<u>Site 3</u> - no <u>Site 4</u> - no	
Water Resources. Will the project impact the watershed?	<u>Site 1</u> no <u>Site 2</u> no <u>Site 3</u> no <u>Site 4</u> no	no
Will the project affect the quality of surface and ground water?	Yes, only a positive impact. The afforestation project will discourage surface and ground water pollution in all plots.	No
Does the project provide for the use of water for any other purposes? goals, needs?	<u>On plot 1</u> - for irrigation <u>On plot 2</u> - for irrigation	no
Whether a water permit is required (<i>Hr: AO, schools, etc.</i>)	no	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	no	no
Water quality control	no	no
Does the project provide for work on the water?	No	no
Soil and vegetation cover. Will there be an ORS, cutting of green areas of the site during the project works?	No	no
Describe briefly the ground surface (<i>asphalt, concrete, earth, sand, rocks, etc.</i>). What is the purpose of the land (<i>farmland, pasture, undeveloped land, etc.</i>)?	Vegetative herbaceous cover, forest land intended for planting forest crops	On the spot of a degraded forest
Is there a possibility of damage to the soil by project work?	Yes, but it will have a positive effect (there will be dense and high grass growth, favorable microclimate, amelioration for the development of biodiversity in the forest)	There may be minor damage to the soil for planting new forest in place old degraded forest.
The possibility of a significant impact of design work on the landscape?	Only in a positive way.	No
Does the project provide for excavation work?	Preparation of the furrow and site for planting of foliage and hvoynas breeds	Minor, temporary damage soil.

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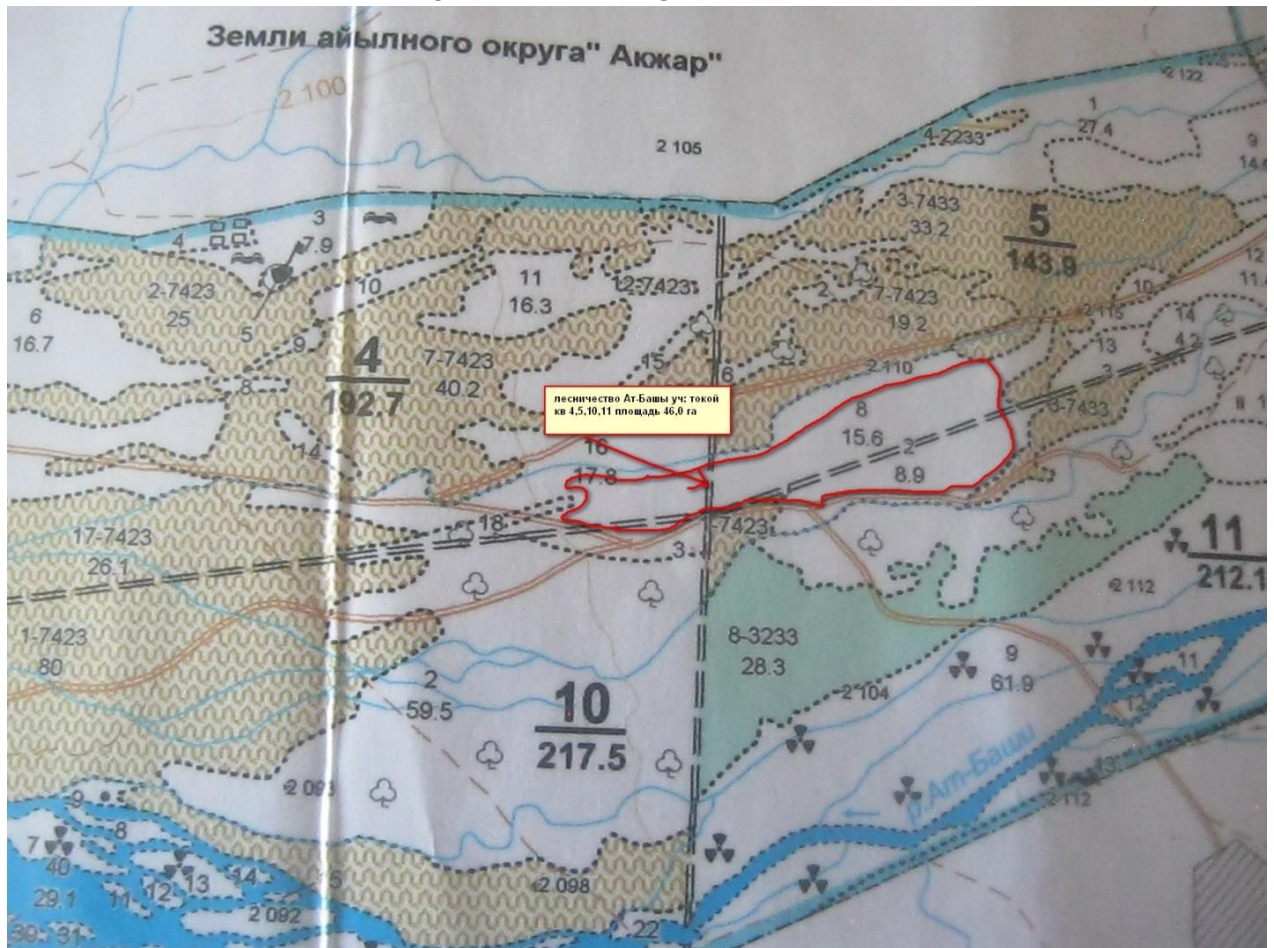
Does the project envisage use of pesticides/fertilizers.	The use of pesticides is not foreseen, perhaps	no
	use of fertilizers, biohumus as necessity.	
Biological Habitat. Describe briefly the vegetation cover on the site (state of grass cover, dendroflora).	Typical forest vegetation of sites	no
Whether 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
Air Environment. 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

Scheme of the site in its current state



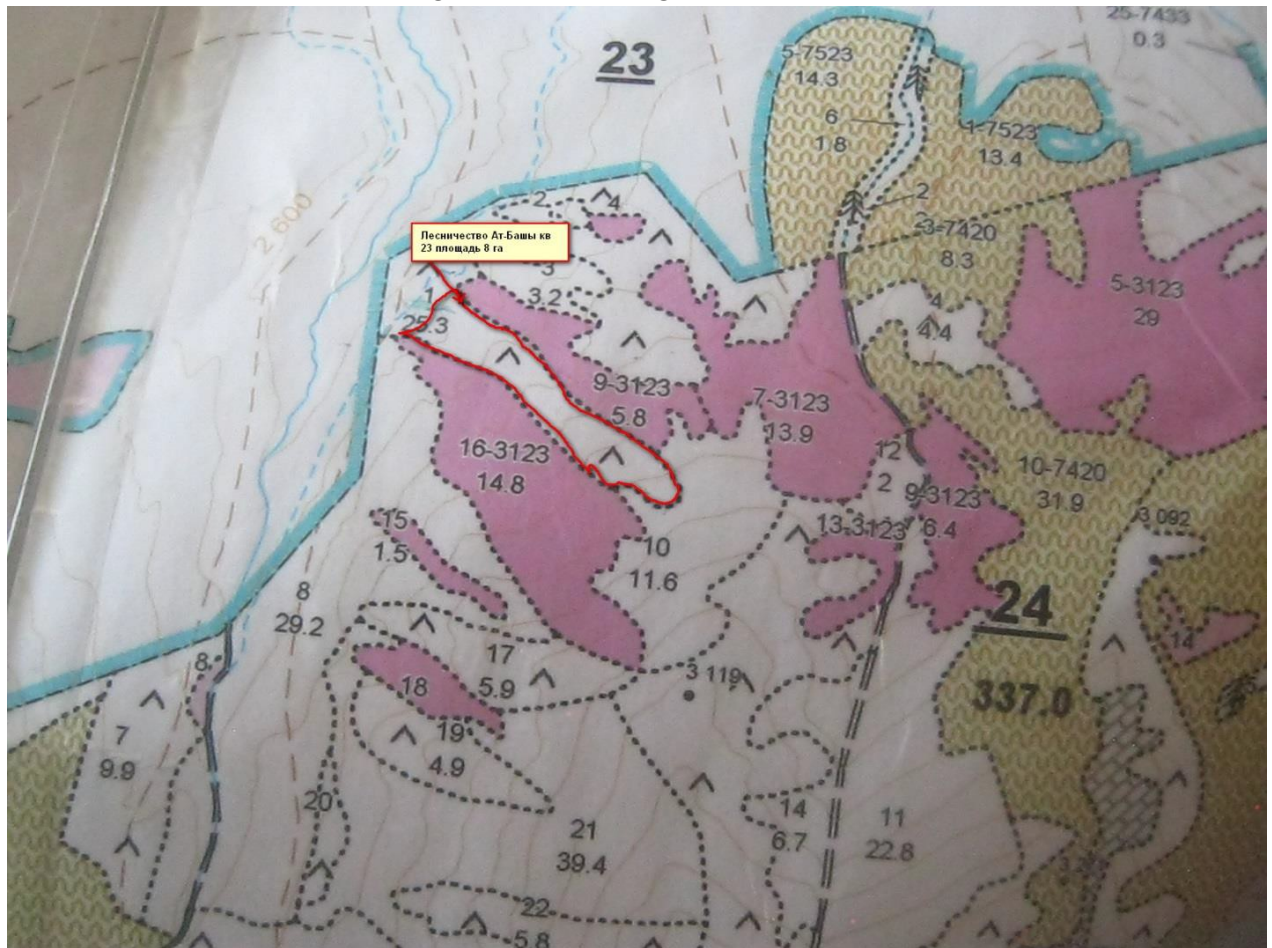
Map of Site 1 scheme

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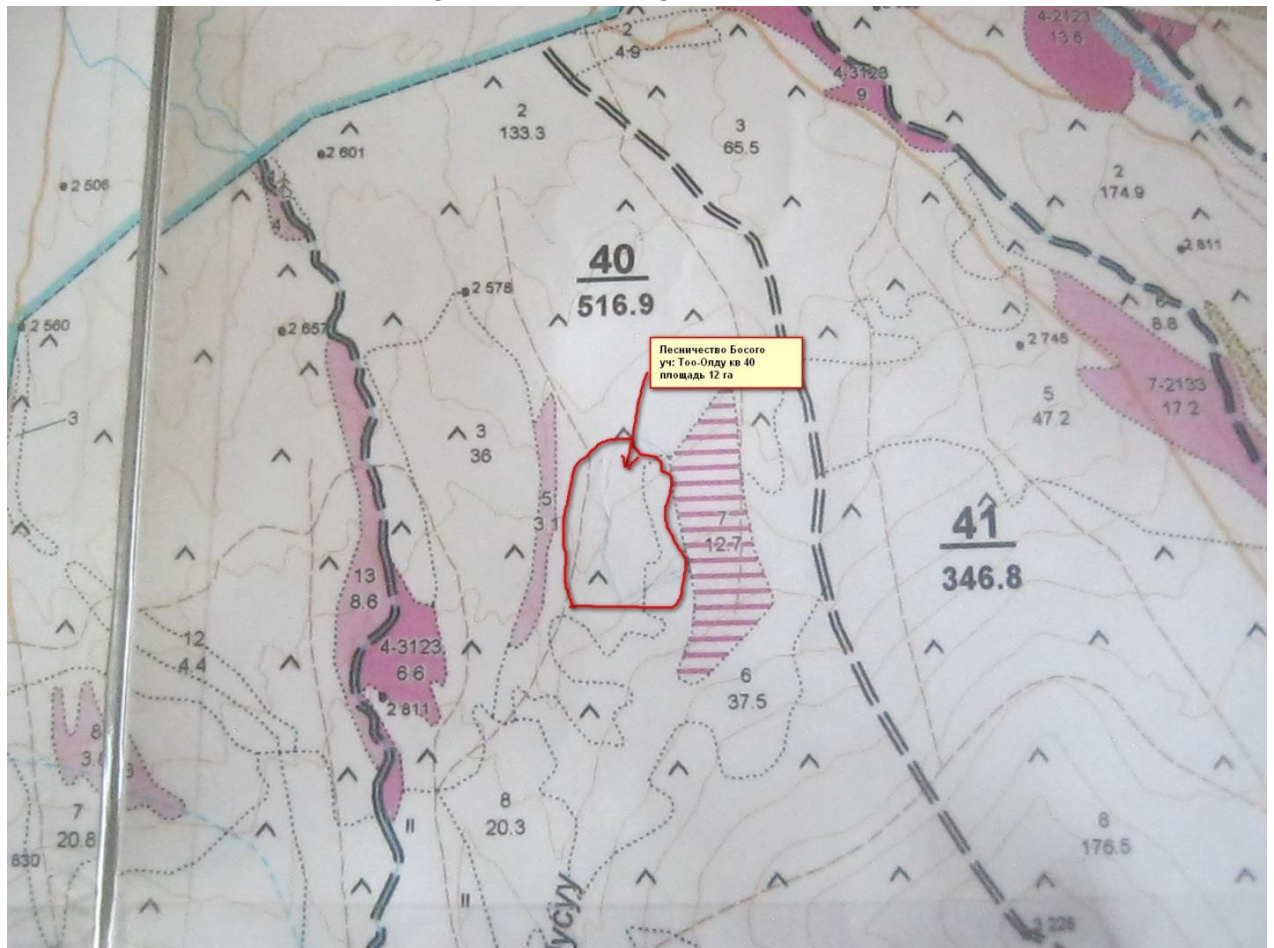
Map of the layout of Site 2

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Map of the layout of Site 3

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Map of the layout of Site 4

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Type of Site- 1



Site View -2

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View of area 3

Considering **the type of work and examples of possible problems and/or impacts on environmental components to be included during the construction (C) or operation (E) phase of the project or both (O). Typical mitigation measures can be found in Part 1, below.**

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PART 1: MITIGATION PLAN

Environmental component Types of work and examples of possible problems and/or impacts	Phase (C, E or O)	Mitigation Measures
Pest control equipment	3	<p>Where possible, the following alternatives to pesticides should be considered:</p> <ul style="list-style-type: none"> 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; <p>Use mechanical controls such as: manual removal, traps, barriers, lights and sound to destroy, relocate and repelling agricultural pests.</p>
When working with fertilizers and/or pesticides	3	<ul style="list-style-type: none"> a) Proper storage space/room must be provided: <ul style="list-style-type: none"> • all fertilizer/pesticide storage areas and/or facilities must be suitable and safe; • storage areas/premises must be protected from weather conditions and must be able to exclude runoff from other areas; b) Proper storage conditions must be ensured: <ul style="list-style-type: none"> • Do not store near heat sources such as open flames, steam pipes, radiators or other combustible materials; • Fertilizer/pesticide stocks should not be stored in contact with the ground; • do not store with urea; • Do not contaminate fertilizers and pesticides with other substances; • In case of fire, fill the area with water; • if a screw conveyor is used to move material, ensure that no residue is left in the immediate vicinity and that everything is removed. Dispose of empty bags properly; • Store fertilizer/pesticides in minimal quantities and covered to avoid contact with open air; • Keep spreaders and air sprays that are left closed overnight; • Keep spreaders and air sprays closed between jobs; • ensure that the planter, spreader and air sprayer and/or fertilizer box are completely empty at the end of the day;

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		<ul style="list-style-type: none"> • If the planter, spreader and air sprayer and/or fertilizer box cannot be completely empty, fill them to capacity before you leave them overnight; • Do not store dry urea with dry nitrate; • keep the minimum required amount of fertilizer and soil conditioner for use; • Store each fertilizer in a separate storage container and/or position indoors and/or outdoors. Using less harmful (non-persistent) pesticides <p>c) Proper fertilizer/pesticide application is necessary</p> <ul style="list-style-type: none"> • Do not apply more fertilizer/pesticides than necessary. • 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.). • seed quality control will be established • If necessary, timely treatment with approved drugs (see Appendix) • Water and soil quality will be monitored <p>d) Employees must be properly trained and/or instructed before working with fertilizers and other chemicals.</p> <p>Managers (contractor, grantee) will develop, implement and monitor the effectiveness of procedures risk management.</p>
General conditions of work Alerting, instructing and ensuring the safety of employees	C	<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, permission to use the land, use of natural resources, waste dumping, permission from the sanitary inspection, etc.) to carry out construction or restoration work on this 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>(h) If the Contractor engages guest personnel to carry out repair and construction work, who will be on site permanently, he must be provided with all the necessary living conditions, including rooms for sleeping and eating, showers, toilets, as well as normal food.</p>
	O	<ul style="list-style-type: none"> • Avoid creating new terraces as this causes loss of topsoil, etc.

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Impact on biodiversity		<ul style="list-style-type: none"> • 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. • Minimize loss of natural vegetation/maximize preservation of vegetation during construction. • Where possible, fence off the area for construction to reduce incidental impacts on habitats and biodiversity. • Where possible, create (or maintain) green corridors to ensure movement of terrestrial fauna). Avoid introducing non-native species into natural water bodies

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PART 2. ENVIRONMENTAL PLAN

phase	Environm ental impact	Mitigating Measures	Expenses		Institutional responsibility		Note я
			hid	OP acitio nd	hid	Operative	
Fenci ng forest areas cul tour	General conditio ns of work	<ul style="list-style-type: none"> Local inspections, supervisors of construction work and environmental safety, as well as local residents, are duly notified of the impending project work. The local public is duly notified of the work by means of proper publications and/or messages in the media and/or signs in public areas (including the work site). Proper fencing around the construction site has been installed to guarantee the safety of the public and children. All permits required by law have been obtained (in particular, permits for use of a land plot, use of natural resources, and waste dumping, permission from the sanitary inspection, etc.) to perform construction or restoration work on this site. All work must be performed in the safest and most disciplined manner and be organized so as to minimize the negative impact of the production process on local residents and the natural environment. Personal protective equipment for workers must meet international best safety standards (with mandatory wearing of helmets, safety masks where necessary, safety glasses, safety harnesses and protective gear at all times) shoes). 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. If the Contractor engages guest personnel for repair and construction work, who will stay at the site permanently, all the necessary living conditions must be provided for him, including rooms for overnight stays and meals, showers, toilets, and normal food. 	To accou nt	To acco unt Subr. The nucle ar body of the organi zation	Podde r	Contracto rs to	

ENVIRONMENTAL MANAGEMENT PLAN

	Impact on biodiversity plants	<ul style="list-style-type: none"> • Avoid creating new terraces as this causes loss of topsoil, etc. • 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. • Minimize loss of natural vegetation/maximize preservation of vegetation during construction. • Where possible, fence off the area for construction to reduce incidental impacts on habitats and biodiversity. • Where possible, create (or maintain) green corridors to ensure the movement of terrestrial fauna). • Avoid introducing non-native species into natural water bodies 			Podder	Contractors to	
Care of forest cultures	At anti-agriculture ham	<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 repelling agricultural pests.</p>			Leskhodz	Leskhoz	
	When working with fertilizer/pesticide mi	<p>e) Proper storage space/room must be provided:</p> <ul style="list-style-type: none"> • all fertilizer/pesticide storage areas and/or facilities must be suitable and safe; • storage areas/premises must be protected from weather conditions and must be able to exclude runoff from other areas; <p>f) Proper storage conditions must be ensured:</p> <ul style="list-style-type: none"> • Do not store near heat sources such as open flames, steam pipes, radiators or other combustible materials; • Fertilizer/pesticide stocks should not be stored in contact with the ground; • do not store with urea; 			Leskhodz	Leskhoz	

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- Do not contaminate fertilizers and pesticides with other substances;
 - In case of fire, fill the area with water;
 - if a screw conveyor is used to move material, ensure that no residue is left in the immediate vicinity and that everything is removed. Dispose of empty bags properly;
 - Store fertilizer/pesticides in minimal quantities and covered to avoid contact with open air;
 - Keep spreaders and air sprays that are left closed overnight;
 - Keep spreaders and air sprays closed between jobs;
 - ensure that the planter, spreader and air sprayer and/or fertilizer box are completely empty at the end of the day;
 - If the planter, spreader and air sprayer and/or fertilizer box cannot be completely empty, fill them to capacity before you leave them overnight;
 - Do not store dry urea with dry nitrate;
 - keep the minimum required amount of fertilizer and soil conditioner for use;
 - Store each fertilizer in a separate storage container and/or position indoors and/or outdoors. Using less harmful (non-persistent) pesticides
- g) Proper fertilizer/pesticide application is necessary
- Do not apply more fertilizer/pesticides than necessary.
 - 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.).
 - seed quality control will be established
 - If necessary, timely treatment with approved drugs (see Appendix)
 - Water and soil quality will be monitored
- h) Employees must be properly trained and/or instructed before working with fertilizers and other chemicals.
- i) Managers (contractor, grantee) will develop, implement and monitor the effectiveness of risk management procedures:
- j) Managers (contractor, grantee) will develop, implement and monitor the effectiveness of risk management procedures:
- Provide proper equipment and materials to clean up the leak.
 - cover loads when transporting fertilizer;
 - Ensure that fertilizer deliveries are made at the proper time;

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- do not accept fertilizer containers that are damaged or leaking;
- keep fertilizers covered or sealed. Clean leaks properly;
- Ensure that the movement of dust from the storage areas and/or room beyond the perimeter is minimized.
- keep the floor surface clean of fertilizer to prevent people or vehicles from spreading it over the perimeter;
- sweep and install leaks in a timely and proper manner;
- it is necessary to keep a neat storage registry/list;
- Store products and mixes separately at all times;
- Ensure that storage containers and boxes are clearly labeled;
- Ensure that storage, loading and mixing tanks and equipment are cleaned of all residues after changing from one product to another;
- Do not store the product in bags that are not properly stamped;
- contact between fertilizers, humans and animals should be minimized;
- Risk assessments must be performed when purchasing, storing, and handling fertilizers;
- 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;
- Employees must be provided with LZO's when using fertilizers;
- Managers must ensure that appropriate warning signs and/or information are posted/available regarding the nature of the hazards and risk controls;
- All employees are responsible for implementing sound business practices in storage areas and maintaining regular maintenance practices for all equipment used;
- Conduct regular inspections and testing of equipment and infrastructure to establish repair requirements;
- 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;
- 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.

Grantee/Contractor:Signature:Date:

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PART 3: ENVIRONMENTAL MONITORING

PLAN

Phase	What parameters should be monitored?	Where will the parameter be monitored?	How will the parameter be monitored?	When will the parameter be monitored?	Why will the parameter be monitored?	Expenses		Institutional Responsibility	
						Chief	Operating	Initial	Operative
Source	1. environmental screening	At the proposed project site	According to the OP on protective measures of environmental WB security 4.01 EA, 4.36 LC, etc.	After the selection of the CCS investment project proposals.	For definitions of 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.	In the stages of The design company's submission of the DDS and other approvals.	For ensuring that all necessary requirements are included in the bidding documents.			Project enterprise Preparation of design and other permits for the SE	At the expense of Project budget.
	3. Drafting forest crops	At plots 1,2,3,4 in At-Bashinskiy leskhoz	On the presence of forest crops project	Before inventory	For forest planting efficiency			PPR IULE	
Construction o	1. Fencing the area of sites 1,2,3,4 during construction work on the building facilities	In all areas.	On the presence of a fence	At the beginning of construction	For life safety			Contractor	
	2. the presence of information boards with contact information for complaints from the local population.	-/-	On the availability of booths	At the beginning and in the course of construction	For provisioning informed of the local population			Contractor	Contractor
	3. Proper personal protective equipment for the Contractor's personnel.	-/-	On the presence of personal protective equipment	-/-	For technical support security			Contractor	

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	4.Prohibit the use of ACM and proper disposal, burial of ACM must be accompanied by the relevant acts and photographs	-//-	On the absence of the ACM in the construction. In the case of burial for the presence of acts and photos	In the course of construction and at the end of construction	For safeguards human health and protections environments			Contractor	
	5.Preventing soil erosion and of wastewater entering the adjacent streams and rivers.	-//-	On the absence of traces of erosion and wastewater	-//-	To protect the environment environments			Contractor	
	6.Proper collection and removal of construction waste.	-//-	At presence/absence of construction garbage	During and at the end of construction	To protect the environment			Contractor	
	7. the Contractor has a contract with a local utility company regarding dumping of construction debris and dumping of ASM.	-//-	On the existence of a contract	During construction	To protect the environment			Contractor/PSD Comp.	
	8.Prevention of dust formation.	-//-	On the existence of measures to prevent dust	During construction	For life safety и			Contractor	
	9.Reduction and limitation in time (from 8:00 to 18:00) of noise interference.	-//-	On the absence of complaints from local residents	During construction	For ensuring the tranquility of the local population			Contractor	
	10. Report on the implementation of the EMP.	For all construction projects cordons	Providing reports on implementation of the EMP	During construction and at the end of delivery of the object	To minimize the harmful effects of the OS			Leskhoz, contractor, PPR	
Operation	1.Proper removal or disposal of waste.	-//-	On the presence of special compost pits and recycling	At the time of commissioning of the facility in operation	To protect the environment			Leskhoz	Leskhoz

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	2. Conducting instructions, trainings for leskhoz employees	-//-	Photo and video materials on training	After construction is complete	For operating instructions of the object			ORP PIULE, Contractor	
	3. State acceptance of objects	-//-	Certificate of Acceptance	After the completion of the construction	To turn in operation			ORP PIULE, Contractor, leskhoz	
	4. Performing landscaping work.	All four sites	On planted seedlings	After commissioning	For landscaping Territories			Leskhoz	

Grantee/Contractor: Signature: Date:

Print

Constructionwaste management

(to be determined after obtaining permits, public hearing)

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 is made a mark 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 the The PPR will be responsible for overseeing subproject implementation to ensure that grantees implement plan-specific mitigation measures.

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 system

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), if not, the complaint is sent to SAEPF.
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 local self-government 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"> • Development of pasture infrastructure (i.e., sources of water supply, infrastructure to provide access to summer grazing, etc.) except for roads; • Effective management of forest ecosystems; • Construction and repair of forest cordons; • Construction/repair of leskhoz offices, if this is part of a major subproject; • 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.); • Organization of recreational and tourist facilities, recreation areas (picnic/camping, garbage cans, signs, places for tourist accommodation, etc.); • Fencing of forest areas; 	<ul style="list-style-type: none"> • Forest thinning and selective reforestation of existing forests and plantations; • Effective management of municipal forests (including thinning, reforestation, and more active management); • Improving seed procurement, seedling production, nursery management and reforestation; • Promoting natural regeneration of the forest and pastures; • Improvement of rangelands by sowing perennial grass seeds; • Reconstruction of low-value plantations; • Creation of avalanche-proof and landslide-proof and other erosion-proof forest plantations; 	<ul style="list-style-type: none"> • Forest nurseries; • Greenhouses; • Gardens (intensive, fruit gardens) • Fast-growing forest plantations; • Investments in value chains - such as logging/timber processing, nut/fruit harvesting and processing, drying facilities, etc. • Investment in tourism (including light picnic/camping infrastructure, garbage collection, signage, sites for tourist accommodation, etc.) • Beekeeping; • Fodder production (purchase of seeds or haymaking equipment) • Improvement of fodder production and harvesting, pasture agrotechnics • Investments aimed at promoting

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Social (collective) infrastructure	Forest protection and reforestation	Economic infrastructure and revenue-generating activities
<ul style="list-style-type: none"> • Irrigation systems on the territory of LH; • Repair, reconstruction and construction of bridges on the territory of LH; • Repair, reconstruction and construction of storage facilities for forest products. 	<ul style="list-style-type: none"> • Acquisition of small mini-agricultural special equipment aimed at the implementation of IWRM measures. 	<ul style="list-style-type: none"> • natural renewal of natural resources (forest, pastures, biodiversity, etc.); • Repair, reconstruction and construction of storage facilities for forest products.

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;
- 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 Kyrgyz Republic Government 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	Diltrin	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

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18	Pentachlorophenol	87-86-5	Dermatoresorptive and irritant effects, poisoning of workers has been described
19	Monocrotophos (soluble liquid formulations of the substance with an active ingredient content exceeding 600 g/l)	6923-22-4	Highly toxic, highly hazardous pesticide compound
20	Metamidophos (soluble liquid formulations of the substance with an active ingredient content exceeding 600 g/l)	10265-92-6	Highly toxic, highly hazardous pesticide compound
21	Fosfamidone (soluble liquid formulations of the substance containing 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 and powders 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 are included - aerosols, sprayable powders (PP), emulsifiable concentrates (EC), granules (G) and wettable powders (SP), 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 percent or more	17804-35-2 1763-66-2 137-26-8	Highly toxic, highly hazardous pesticide compound

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	percent, thiram concentration 15 percent or more (in combination)		
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