State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz 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 142 hectares of forest plantations on the territory of the Kara-Kulja forestry".

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BISHKEK -2019

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Abbreviation

AAAAil Aimak	
AOAiylokmotu	
ASMAsbestos-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	
CCS Advisory and CoordinationCouncil EIA	
Environmental Impact Assessment	
OOPTNProtected Natural Areas OOPO Operational Policy	
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	
estimatedocumentation SanPinSanitaryrules	
and norms SNiPPstroiteInyenorms 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 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 leskhozes).

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: Componentl - Institutional Reform;

ComponentII - 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

Name of subproject:

Creation and fencing of forest crops on an area of 142 hectares on the territory of the Kara-Kulzhinsky leskhoz

Location:

Kara-Kulzhinsky leskhoz belongs to Kara-Kulzhinsky district of Osh region.

Forest plantations are planned in the following areas of the Kara-Kulzhinsky leskhoz:

Site #1. -Kara-Kyia uchcha, fencing of 20 ha of forest cultivation fund, including creation of forest cultures on the area of 4 ha in square № 2, secession 2 of Kara-Kulzhin forestry.

Site #2. -Kalpak uchast, creation and fencing of 20 hectares of forest cultivation fund, including creation of forest cultures on the area of 7.0 hectares on the square № 1, division 1,2 of the Kara-Kulzhin forestry.

Site #3. -Oy-Alma brook, creation and fencing of the created forest cultures on the area of 40,0 hectares of square №24, division 1, Ak-Tash forestry.

Site № 4, Kok-Agyn district, creation and protection of created forest cultures on an area of 8.0 hectares in a square № 21, division 9 of the Ak-Tash forestry.

Alot No.5, Chalkan settlement, creation and fencing of the forest cultures on the area of 25 ha in square No.14, bay 7 of the Ak-Tash forestry.

Plot No.6 - Tenes uch., creation and fencing of the created forest cultures on the area of 8,0 hectares in the square No.15, division 6, Ak-Tash forestry.

Cluster No.7 of Arday uch., creation and fencing of the forest cultures in the area of 10,0 ha, kvartal No.13, delimitation 14. Buigin forestry.

Cluster № 8 - uch.Ordosh, the creation and protection of forest cultures in the area of 17 hectares in kvartal № 14 division 1. Buigin forestry.

Site № 9, Konur-Dobo uch., creation and fencing of the forest cultures in the area of 10.0 ha, kvartal № 5, cluster 5, Buigin forestry.

Alot No.10 Uch.Chaar-Archa, creation and fencing of forest cultures on the area of 13,0 ha in square No.7, subdivision 14. Buigin forestry.

The total area of fenced forest crops is 171 hectares, created forest crops 142 hectares.

Brief description of the project

The Kara-Kulja District of Osh Province is located in the Pamir-Alai and Western Tenir-Too Mountains, in the basin of the Amu-Darya and Syr-Darya Rivers.

The relief of the region has a mountainous character with variations of heights from 500 m in the north to 7000 m above sea level in the south. Intermountain valleys and depressions are located at an altitude of 900 to 3000 m above sea level. A distinctive feature of the relief is a complex combination of high mountains, low hills - adyrs and mountain hollows, located at different absolute altitudes above sea level. Ridges (Lenin Peak -7134m), composed mainly of sandy-clay sediments, limestone and eruptive rocks, have alpine forms of relief, their slopes are cut by river valleys, and the highest parts of the mountains are covered by eternal snows and glaciers.

Such a relief structure generates, in turn, a vertical climatic and, in general, physicalgeographical zoning.

In general, the climate is continental, characterized by mild winters with little snow and dry hot summers in the lower zone, moderately cold and cold winters in the upper zone.

Semi-desert, mountain-steppe, and meadow vegetation prevails here.

The forest belt in the territory of Kara-Kulzhinsky is located mainly in the mountainous and high-mountain zone, as well as along the floodplains of rivers. The insignificant amount of forests has caused land degradation processes, especially on mountain slopes, reduced biodiversity and increased the risks of natural disasters such as landslides, mudflows, floods, as well as the impact of climate change.

In addition, it should be noted that Osh oblast is one of the large territorial units and the most densely populated region of the republic. This leads to an excessive anthropogenic load on natural resources and the environment.

So, several factors influence the survival rate of forest crops: climatic, soil and anthropogenic factors. One of the main and widespread factors of low survival rate is cattle grazing. Because of the large number of livestock, and without controlled grazing, the survival rate of forest crops created by the leskhoz is low, requiring constant monitoring by the forest guard. This often leads to private conflicts with the local population. In addition, the leskhoz is unable to increase this volume due to the lack of the necessary amount of planting material, special equipment, finances, and the absence of a fence against cattle grazing on the areas designated for the creation of forest crops.

One of the effective ways to increase survival rate in conditions of increasing livestock numbers is to fence in the created forest crops. Therefore, it is necessary to provide support for the fencing of created forest crops to expand planting activities by the leskhoz, in the future the walnut fruits will be one of the sources of income for the local population. The fencing of planting areas will increase the survival rate of newly created and previously planted crops on an area of 20 hectares. The purpose of this project is to increase the forest covered area in the territory of the Kara-Kulja forestry.

At present, foresters face many problems in the course of silvicultural work 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 planting. 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-**"Kara-Kyia" 4 ha in the Kara-Kulja forestry is located in the mountain zone. The plot was used as pastures. At this site it is necessary to reforest, planting is planned from walnut. Planting method: by holes with digging of holes by hand.

Site №2-"Kalpak" is located in the valley zone, the site was used as rainfed cropland, it requires reforestation. It is planned within the framework of the Project to plant 3.0 hectares of almond and 4.0 hectares of walnut, as well as - drip irrigation. Method of planting: holes with digging holes by hand.

Plot №3 - "Oy-Alma", located in the mountain zone, the plot was used as pastures, the created plot of forest crops on the area of 40,0 hectares with planting of walnut. Planting method: by holes with digging of holes by hand.

Site №4-"Kok-Agyn", located in the mountain zone, the site was used as pastures, the created plot of forest crops on an area of 8.0 hectares with planting of walnut. Planting method: by holes with digging of holes by hand.

Site №5 - "Chalkan", located in the mountain zone, the site was used as pastures, the created plot of forest crops on an area of 25.0 hectares with planting of walnut. Planting method: by holes with digging of holes by hand.

Plot #6-"Tenes", located in the mountain zone, the plot was used as pasture, the created plot of forest crops on an area of 8.0 hectares with planting of walnut. Planting method: by holes with digging of holes by hand.

Plot #7-"Arday", located in the mountain zone, previously the plot was used as pasture, the created plot of forest crops on an area of 10.0 ha with planting of walnut. Planting method: by holes with digging of holes by hand.

Plot No. 8 - "Ordosh", located in the mountain zone, the plot was used as pasture, the created plot of forest crops on the area of 17,0 ha with planting of walnut. Planting method: by holes with digging of holes by hand.

Plot No. 9 - "Konur-Dobo", located in the mountain zone, the plot was used as pasture, the created plot of forest crops on the area of 10.0 ha with planting of walnut. Planting method: by holes with digging of holes by hand.

Site № 10-"Chaar-Archa", located in the mountain zone, the site was used as pasture, the created plot of forest crops on an area of 13.0 hectares with planting of walnut. Planting method: by holes with digging of holes by hand.

Forest crops project

More detailed information about afforestation of each plot is reflected in the Project of forest crops of Kara-Kulja pilot leskhoz. Project of forest crops for the pilot leskhoz, developed as part of the WB Project implementation

"IUE" was approved by the order of SAEPF at PKR from 10.07.2019. Recommendations for afforestation are given on the basis of forest management material (GUKLOU, 2018), taking into account physical, geographical and ecological conditions of the area. Forest inventory materials for afforestation are recommended for mountainous areas mainly walnut.

Method of planting for mountainous terrain by hand under the sword Kolesov. Mountain areas difficult to access and forest planting without the participation of machinery, transport.

Type of project-forest protection and reforestation.

Environmental value of the project-forest regeneration,

avalanche protection, mudflow prevention.

Expected results: Organization of walnut crops on an area of 142 hectares with the support of the FLE Project while ensuring the survival of crops will create favorable conditions for the livelihood of the local population and the leskhoz. Such an area of forest crops contributes to the improvement of the environment and the development of biodiversity of a particular section of the forest fund. Also in the short term with the fruiting of walnut and almond crops will create additional sources of income for both the local population and the leskhoz. That is, in 10-15 years such crops will give real income and open up new horizons to other areas of the economy as processing of nut and almond products that will create favorable conditions for the development of forestry and the interest of local communities to preserve forest resources.

Possible Risks: Cattle grazing, hot dry summers, and other unforeseen natural disasters.

Expected activities of the project after the completion of funding:

- Increase in forested area by 142 hectares of GLF.
- Promoting biodiversity

of income for

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Creation of additional sources

- production
- Reducing the risk of natural disasters.
- Mitigating climate change by planting resistant varieties of forest crops.

Analysis of alternatives: Possible options are to increase the forested area by promoting natural regeneration of the forest by fencing forest areas and limiting grazing, planting forest crops on pastures and openings, reclamation of low-value tree and shrub plantations. But, after a long period of time as 30-50 years.

walnut

LEGISLATIVE SUPPORT

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- Law of the Kyrgyz Republic "On Environmental Protection".
- Law of the Kyrgyz Republic "On Environmental Expertise".

Republic"General Technical Regulation on Ensuring Kyrgyz Republic".

Law of the Kyrgyz Environmental Safety in the

Law of the Kyrgyz Republic"On Land

Protecting the Fertility of Agricultural

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?	 Plot #1 - 20 hectares. Plot #2 - 20 hectares. Site № 3 - 300.8 hectares, the area allocated for the subproject activities on an area of 40.0 hectares Site № 4 - the total area of the site 18.2 hectares, allocated for the activities of the subproject area of 8.0 hectares. Site № 5 - the total area of 36.3 hectares, allocated to the subproject activities on an area of 25 hectares. Site number 6 - the total area of 8.0 hectares. Site Nº 7 - the total area of the site 10.7 hectares, allocated to the subproject activities on an area of 10.0 hectares. Site № 7 - the total area of the site 45.0 hectares. Site № 8 - the total area of the site 45.0 hectares. Site 9 - the total area of the site 18.8 hectares, allocated for the activities of the subproject area of 10.0 hectares.
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)	All lands fenced and created forest crops are in the state certificate issued by the Kara-Kulja Forestry 14-July 2006 № 2194.
Type of use of the site and surrounding area and land users	Used for grazing by local residents
How was the site used before? Who were the previous users of the site? <i>Specify the dates, if</i> <i>possible.</i>	As pasture. The users were local AA residents.

Socio-environmentalsituation:

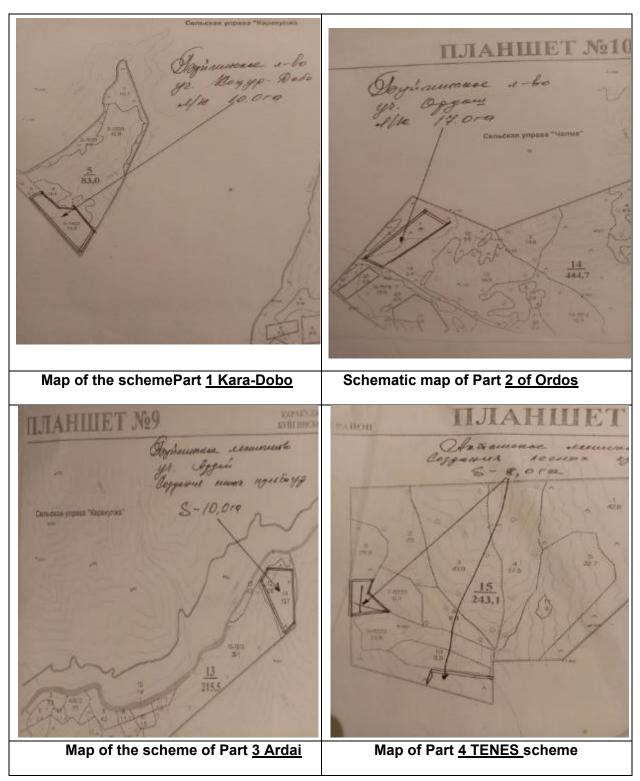
Problems	Descriptio n	Possible environmental risks
The presence of any specific, vulnerable objects in the vicinity of the site (protected areas, cultural monuments, historical sites).	Site 1-no Site 2-no Site 3-no Site 4-no Site 5-no Site 6-no Site 7-no Site 8-no Site 9-no Site 10-no	Not expected
Are there any other facilities nearby: (<i>with indication of</i> <i>distance</i>) schools, kindergartens, residential buildings, medical, health and wellness institutions, industrial enterprises, etc.	On all plots there are no other objects nearby	Various natural cataclysms such as mudslides, avalanches, etc.
The presence of nearby bodies of water, or on the site.	Site 1-natural irrigation(frequent rains).Plot 2drip irrigation from the canalKalpak, a distance of 200 m.Site 3 installation of irrigation network fromthe river Oy-Alma distance of 100 m.Plot 4drip irrigation from the river Kok-Agyndistance of 200 m.Plot 5are not available.Site6participantsThere are no sourceson the sitePlot 7 - are not available.Site 8- there are no sources of water bodieson the site.Uchakstok9-not availableSite 10 At the site there are no sources	Coastal erosions

Site topography	<u>Site 1</u> - mountainous terrain, northern slopes of mountains 20-25 degrees. <u>Site 2</u> - valley terrain, and southern slopes5-7 degrees <u>Site 3-mountainous</u> terrain, the southern slopes of 10 degrees. <u>Site 4</u> - mountainous terrain, northern slopes from 5 degrees. <u>Site 5</u> - mountainous terrain, western slopes From 25 degrees. <u>Site 6</u> - mountainous terrain, northern slopes 18 degrees.	Various disasters (dry, hot summer, forest fires, mudflows, avalanches, etc.)
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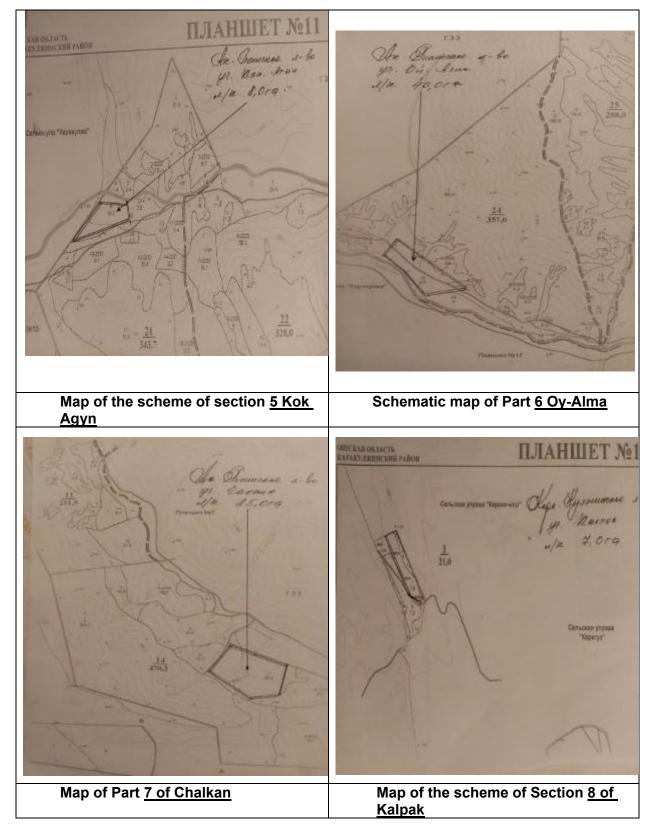
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	<u>Site 7</u> - mountainous terrain, northern slopes From 15 degrees. <u>Site 8</u> - mountainous terrain, northern slopes From 22 degrees. <u>Site 9 - mountainous terrain, southern</u> slopes of 17 degrees. <u>Site 10</u> - mountainous terrain, eastern slopes from 25 degrees.	
Are there any flooding or landslides on the site? Are there any signs of soil erosion?	<u>Site</u> 1-no. <u>Plot</u> 2 not significant <u>Plot</u> 3 not large <u>Site</u> 4-no <u>Site</u> 5-no <u>Site 6-no</u> <u>Site 7-no Site</u> <u>8-no</u> <u>Site 9-no Site</u> <u>10-no</u>	Flooding of the lower villages
Will the proposed site have an impact on transportation or utility infrastructure?	<u>no</u>	no
Water Resources. Will the project have an impact on the watershed pool?	<u>no</u>	no
Will the project have an impact on the quality of of surface water and groundwater?	Yes, only a positive impact. The afforestation project will prevent surface and groundwater contamination in all areas.	No
Does the project envisage use of water for any other purposes, needs?	<u>Site</u> 1-no. <u>Plot</u> 2- for irrigation <u>Plot 3-for</u> irrigation <u>Plot</u> 4-for irrigation <u>Plot</u> 5-no <u>Site 6-no Site</u> <u>7-no Site 8-no</u> <u>Site 9-no</u> Site 10-no	no
Whether a water permit is required (<i>H r: AO, schools, etc.</i>)	no	no
Will any wastewater be produced as part of the proposed of the project	no	no
Is there a drainage system on the site for	no	no

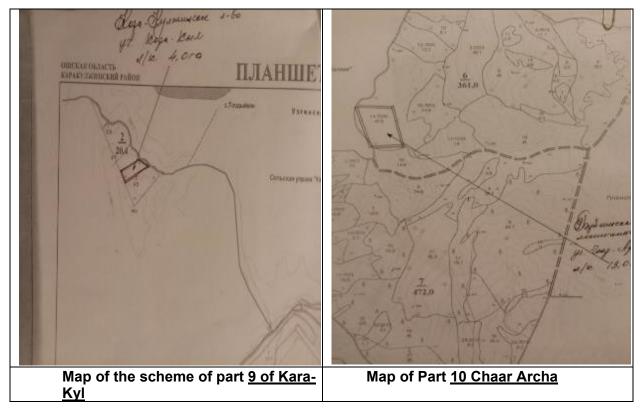
of surface water or		
wastewater? Availability of a water	no	no
reserve tank Water quality control	no	no
Does it provide for a project to work on the water?	no	no
Soil and vegetation cover. Will the Are the ORS, cutting down the green areas of the site during the design work?	no	no
Describe briefly the surface of the earth (<i>asphalt, concrete, earth,</i> <i>sand, stones, etc.</i>). What is the purpose of the land (<i>agricultural land, pasture,</i> <i>undeveloped land, etc.</i>)?	Vegetative grass cover, forest land intended for planting forest crops	On pasture plots
Is there a possibility of soil damage design work?	Planting forest crops and installing fences	0.5mx0.5mx0.5m and the same size fence installation
The possibility of significant the impact of design work on the landscape?	Only in a positive way.	No
Does the project provide for excavation work?	Soil preparation	Not significant
Does it provide for pesticide/fertilizer use project.	The use of pesticides is not foreseen	no
Biological Habitat. Describe briefly the vegetation cover on the of the territory of the facility, the site (the condition of the herbaceous cover, dendroflora).	Typical forest vegetation of sites	no
Does not require cutting down green spaces or uprooting dendroflora (specify quantity)?	no	no
Presence of rare, red-listed, endemic or other valuable plant and animal species on the site or close by?	no	no
The presence of nests of migratory birds, 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 it provide for project of other physical influences (<i>radiation,</i> <i>electricity, heating, etc.</i>) on the environment?	no	no



Scheme of the site in its current state





Type of Site- 1 Konur -Dobo





Type of Site- 2 Ordosh



Type of Site- 3 Ardai



Type of Site- 4 Tenes



Type of Site- 5 Kok-Agyn



Type of Site- 6 Oy-Alma



Type of Site- 7 Chalkan



Type of Site- 8 Kalpak



Type of Site- 9 Kara-Kyl



Type of Site- 10 Chaar Archa

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.

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	Э	 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 destroy, relocate and repelling agricultural pests.
When working with fertilizers and/or pesticides	Э	 a) Proper storage space/room must be provided: 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: 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 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 c) 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 d) Employees must be properly trained and/or instructed before working with fertilizers and other chemicals.
General conditions of work Alerting, instructing and ensuring the safety of employees	C	 (a) Local inspections that control construction work and environmental safety, as well as local residents, are duly notified of the upcoming project work. (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). (c) Proper fencing around the construction site has been installed to guarantee the safety of the public and children. (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. (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. (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). (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. (h) If the Contractor engages guest personnel to carry out repair and construction work, who will be on site The person must have all the necessary living conditions, including rooms for overnight stays and reception. food, showers, toilets, as well as normal meals.
Impact on biodiversity	0	 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 movement of terrestrial fauna). Avoid introducing non-native species into natural water bodies

PART 2. ENVIRONMENTAL PLAN

phase	Environm ental impact	act Mitigating — Measures	Expenses		Institutional responsibility		Note я
			Begi nnin gs e	Oper atio n	Initial	Operative	
Fenci ng forest areas cul tour	General conditio ns of work	 Local inspections, supervisors of construction work and environmental safety, as well as local residents, are duly notified of the upcoming 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 land, use of natural resources, waste dumping, permission from the sanitary inspection, etc.) for the production of construction or of the restoration work at this site. All work must be performed in the safest and most disciplined manner and be are 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, he must be provided with all the necessary living conditions, including rooms for overnight stays and meals, showers, toilets, and normal Nutrition. 	To accou nt	To acco unt Subr. The nucle ar body of the organi zation	Podde r	Contracto rs to	

	Impact on biodiver sity plants	 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 	Podde r	Contracto rs to	
Care of forest cultur es	At anti- agricultur e ham	 Where possible, the following alternatives to pesticides should be considered: e) Use pest-resistant crop species; f) Use mechanical weed control and/or thermal weed control; g) Maintain and use beneficial organisms such as: insects, birds, mites and microbial agents for biological pest control; 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; Use mechanical controls such as: manual removal, traps, barriers, lights and sound to kill, relocate and repel agricultural pests. 	Leskh O z	Leskhoz	

	 e) Proper storage space/room must be provided: 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; f) Proper storage conditions must be ensured: 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; If the planter, spreader and air sprayer and/or fertilizer box cannot be completely empty, fill them to 			
	 In the planter, spreader and all 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. 			
When	• Ensure proper handling of fertilizers and pesticides in order to avoid contamination of surface runoff			
working	and health safety of greenhouse workers (protective clothing, masks, sprayers, etc.).			
with	seed quality control will be established			
fertilizer/		Leskh	Leskhoz	
pesticide mi		O Z	LESKIIOZ	
		02		

h) i) j)	 If necessary, timely treatment with approved drugs (see Appendix) Water and soil quality will be monitored Employees must be properly trained and/or instructed before working with fertilizers and other chemicals. Managers (contractor, grantee) will develop, implement and monitor the effectiveness of risk management procedures: 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; do not accept fertilizer containers that are damaged or leaking; keep fertilizers covered or seeled. Clean leaks property; 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 an 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 baxes 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 should 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 down signs and/or information are posted/available regarding the nature of the hazards and risk controls; All employees are responsible for implement and infrastructure to establish repair requirements; fertilizer mixtures must be prepared u

 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. 					
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Grantee/Contractor:Signature:Date:

PART 3: ENVIRONMENTALMONITORING

Phas e	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	
						Chiefs	Operational	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	
	 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 awareness 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	

PLAN

4. Prohibit the use of ACM and	-//-	On the	In the course of	For		Contractor	
properly dispose of it,		absence of	construction	safeguards			
		the ACM in					
		the					
		construction.					

	The disposal of ACM must be accompanied by the relevant acts and photographs		In the case of burial for the presence of the acts and photos	and at the end of construction	health people and the protection of the environment environments		
	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 peace of mind local communiti es	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
	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	After the	To turn in	ORP PIULE,	
		Acceptance	completion	operation	Contractor,	
			of the		leskhoz	
			construction			

4.Performing landscaping work.	In all 10	On planted	After	For		Leskhoz	
	precincts.	seedlings	commissioning	landscaping		1	
				Territories			

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, 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 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 leskhozes 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
 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; Irrigation systems on the territory of LH; 	 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 anti-erosion forest plantations; 	 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; Forage production (purchase of seeds or haymaking equipment) Improvement of fodder production and harvesting, pasture agrotechnics Investments aimed at promoting

Social (collective) infrastructure	Forest protection and reforestation	Economic infrastructure and income-generating activities
 Repair, reconstruction and construction of bridges on the territory of LH; Repair, reconstruction and construction of storage facilities for forest products. 	 Acquisition of small mini- agricultural special equipment aimed at the implementation of the of the activities of the ISRP. 	 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;
- hazardous substances,pesticides, or

Production,sale, or use of 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

Nº	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

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

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 benzoattributyltinol tributyltin chloride tributyltin fluoride tributyltin linoleate methacrylate tributyltinol 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 7 or more than percent, carbofuran concentration of 10 or more	17804-35-2 1763-66-2 137-26-8	Highly toxic, highly hazardous pesticide compound

	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