

KYRGYZ REPUBLIC



**MINISTRY OF AGRICULTURE, FOOD PROCESSING AND LAND IMPROVEMENT
OF THE KYRGYZ REPUBLIC**

DEPARTMENT OF WATER RESOURCES AND LAND IMPROVEMENT

AGRICULTURAL PRODUCTIVITY AND NUTRITION IMPROVEMENT PROJECT

ENVIRONMENTAL MANAGEMENT PLAN

for subproject WUA “Sulayman-Suu”, Ala-Buka rayon, Djalal-Abad oblast

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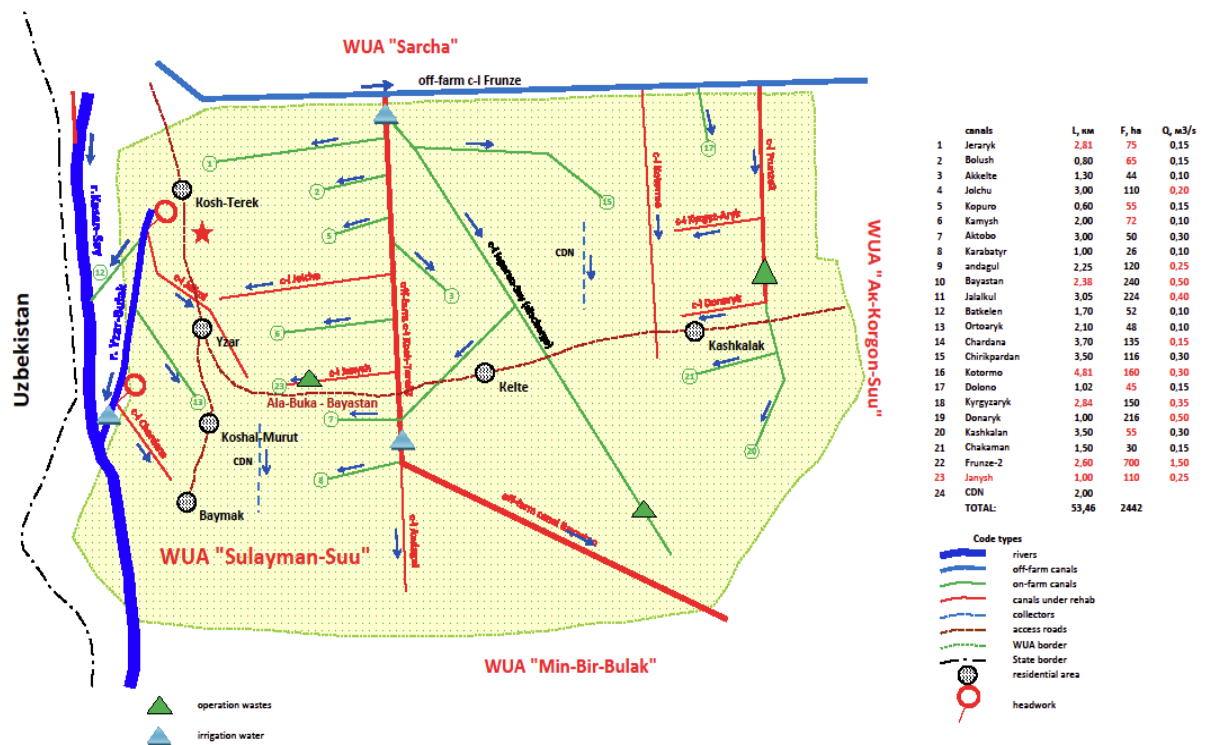
Acronyms

WUA	Waterusers association
NSR	Night storage reservoir
SAEPF	State Agency for Environmental Protection and Forestry
GPAFS	Global Program for Agricultural and Food Security
POL	Petroleum, oil, lubricants
SETI	State Environmental and Technical Inspectorate
DWRLI	Department of Water Resources and Land Improvement
OIP-2 AF	Additional Financing for OIP-2
CDN	Collector&drainage network
ER	Efficiency ratio
KR	the Kyrgyz Republic
IDA	International Development Association
AHS	Ameliorative Hydrogeological Survey
LSGA	Local self-governing authorities
EA	Environmental Assessment
E	Environment
PIU	Project Implementation Unit
OIP-2	Second On-farm Irrigation Project
ISF	Irrigation Service Fee
TS	Topsoil
AISP	Agricultural investments and services Project
APNIP	Agricultural Productivity and Nutrition Improvement Project
RSU	Rayon Support Unit
RVK	Rayon Irrigation Department (Rayvodkhoz)
SanPin	Sanitary Regulations and Rules
WBSMQRS	World Bank safety measures quality rating system
AAS	Agricultural Advisory Services
GWT	Ground Water table
O&M	Operation&Management
HP	Hydropost
HTS	Hydro-technical structures
SVL	Soil-vegetation layer
FRP	Forced resettlement plan

Introduction

The Agricultural Productivity and Nutrition Improvement Project (APNIP) for the Kyrgyz Republic is being implemented with the support of the International Development Association (IDA) and financed by the Trust Fund, provided by the Global Agricultural and Food Security Program. The general Environmental Management Plan (EMP) was prepared under APNIP. The EMP is addressed to ensure compliance of the Project with the environmental management principles and practice and, therefore, with the requirements of environmental protection policy and laws of the Government of the Kyrgyz Republic, as well as the IDA environmental safeguards. The objectives of environmental assessment (EA) is to identify the significant impact(s) of the proposed Project on the environment (positive and negative), identify appropriate preventive and mitigation interventions aimed at preventing, minimizing or eliminating any expected irreversible impact(s). The EMP serves as a management tool that ensures proper implementation of interventions to prevent and mitigate the environmental impact(s), as well as monitoring and institutional acknowledgement of recommended activities during the implementation of the proposed Project. The EMP also establishes the necessary institutional obligations, proposes the implementation timing of such activities and cost estimates for their implementation within the budget proposed by the Project.

APNIP in the World Bank safety measures quality rating system (WBSMQRS) is classified as "B". No irreversible or significant impact(s) on the surrounding environment is expected. Based on the general EMP, the Environmental Management Plan (EMP) for the WUA "Sulayman-Suu" rehabilitation has been developed, taking into account the specifics of this particular subproject.



Picture 1. Layout map of WUA "Sulayman-Suu" irrigation network

1. Description of the subproject under rehab

The WUA "Sulayman-Suu" is located in Ala-Buka rayon, Djalal-Abad oblast, 250 km off the city Djalal-Abad, at the territories of Baltagul AA. In certain sections the irrigation network passes through the residential areas, where economic facilities/buildings and trees are located. The irrigation network is crisscrossed by motorways of rayons importance and electricity power lines. Certain roads of the on-farm network are asphalted and in earthbed that can be used by vehicles and machinery for the rehabilitation of canals. Certain sections of a canal under rehab are difficult to access in winter and spring periods (December-March). The total length of on-farm canals is 53.46 km, of which 9.45 km flumed, remaining 44.01 km in earthbed. The command area is 2442 ha. The NSR and dams are not within the WUA's territories. The CDN length is 2.0 km, which is clogged and not executing its role. The irrigation network built in 1960th and mainly in earthbed, that is why sufficient water filtration losses observed as result of which 400 ha of arable lands are not irrigated. Currently, the irrigation network capacity is 0.58%. The water outlets, metering stations, bridges and pipe-crossings are in the state of emergency.

The motorway "Jalakul" passes through the r. Yzar. During surveying of the territories it was found that alongside of the motorway "Janysh" there are multiple waterlogged areas that indicative for near-surface GWT (shallow water) and enormous water losses from an earthbed canal. The rehab of WUA "Sulayman-Suu" on-farm irrigation network will increase the efficiency of entire irrigation network and agri crops productivity, and improve water allocation and water metering.

2. Salient features of the rehab subproject

The subproject plans to rehabilitate following canals: «Kosh-Terek-2», «Bayastan», «Jalalkul», «Chardana», «Jolchu», «Andagul», «Kotormo», «Kyrgyz-Aryk», «Don-Aryk», «Frunze-2», «Janysh».

2.1. Canal “Kosh-Terek-2” is on the balance of Ala-Buka RVK, water abstraction is carried from off-farm canal “Frunze”. Commissioning date 1981, the total length of canal is 6.476 km, of which 0.40 km lined, 6.076 in reinforced flumes and 0.970 km require rehab. The command area 1016 ha, throughput efficiency 2.0 m³/s. To prevent water losses, the subproject plans concrete lining, as well as replacement of reinforced flumes with concrete lining on 970 meters. To improve water distribution, construction of a water intake structure, a turning-water cushion chamber and two turning wells are planned. To improve water metering, construction of a “fixed-bed” hydropost and pipe-crossing with turning well is also provided.

2.2. Canal “Bayastan” is on the balance of Ala-Buka RVK, water abstraction is carried from off-farm canal “Kosh-Terek2”. The canal commissioned in 1981, length of which is 2.38 km in reinforced flumes and 0.287 km require rehabilitation. The command area 240 ha, throughput efficiency 0.50 m³/s. To prevent water losses, the subproject plans concrete lining instead of reinforced flumes and embedding steel pipelines d=530 mm at 287 meters length, at the tail reach of the canal. To improve water distribution construction of a distribution chamber and water outlet provided.

2.3. On-farm canal “Jalalkul” abstracts water from the r. “Yzar-Bulak” through water abstraction spur. The canal commissioned in 1955 and in earthbed, the total length is 3.05 km, rehab required at the length 1.349 km. the command area 224 ha, throughput efficiency 0.40 m³/s. to prevent water losses the subproject provides concrete lining at the length 1349 meters. To ensure continuous and reliable water supply from the r. “Yzyr-Bulak”, construction of one headwork with a side-water-intake planned. To improve water distribution, construction of 12 water outlets and one aqueduct, three pipe-crossings and the “fixed-bed” hydropost are also planned. Cleaning of CDN, at the length of 2 km that passes alongside of the river, below of the canal “Jalakul” will be executed.

2.4. On-farm canal “Chardana” abstracts water from the r. “Yzyr-Bulak” via water abstraction spur. The canal commissioned in 1955 and in earthbed, the length of canal is 3.70 km, of which 0.020 km require rehabilitation, the command area 135 ha, throughput efficiency 0.15 m³/s. to prevent water losses the subproject planned lining with monolithic reinforced concrete in a rectangular section at length of 20 m on slope of the canal, with the follow-up reinforcement of slopes with gabion nets.

2.5. On-farm canal “Jolchu” abstracts water from off-farm canal «Kosh-Terek2” and commissioned in 1965 in earthbed. The length is 1.454 km, the command area 110 ha, throughput efficiency 0.20 m³/s. To prevent water losses, the subproject planned concrete lining of the canal’s head section at the length of 1454 meters. To improve water distribution, construction of 5 water outlets provided.

2.6. On-farm canal “Andagul” abstracts water from off-farm canal «Kosh-Terek2” and commissioned in 1975 in reinforced concrete flumes, the length is 2.25 km, of which 0.514 km require rehabilitation. The command area is 120 ha, throughput efficiency 0.25 m³/s. to prevent water losses the subproject provides replacement of concrete flumes with monolithic concrete at the length of 514 meters. To improve water distribution, construction of water outlet with the turning well and planned and for improved water metering purposes, construction of the “fixed-bed” HP is also planned.

2.7. On-farm canal ‘Kotormo’ abstracts water from off-farm canal “Frunze”, commissioned in 1965, the length 4.81 km, of which 1.531 km require rehabilitation. The command area is 160 km, throughput efficiency is 0.30m³/s. To prevent water losses, the subproject provides concrete lining of 1531 meters. To improve water distribution, construction of 4 water outlets and pipe-crossing at the HM6+97 is also planned.

2.8. On-farm canal “Kyrgyzaryk” abstracts water from on-farm canal «Frunze2”, commissioned in 1965 in earthbed. The total length is 2.84 km, of which 2.149 km require rehabilitation. The command area is 150 ha, throughput efficiency is 0.35m³/s. To prevent water erosion and filtration losses, the subproject provides concrete lining at length of 2149 meters. To improve water distribution, construction of 8 water outlets, a turning well and distribution chamber is also planned. To improve water metering, construction of the “fixed-bed” HP and bridge crossing is provided.

2.9. On-farm canal “Donaryk” abstracts water from on-farm canal “Kashkalak”, commissioned in 1965 in earthbed. The length of canal is 1.0 km, of which 0.901 km require rehabilitation. The command area is 216 ha, throughput efficiency 0.50 m³/s. To prevent water losses, the subproject provides concrete lining of 901 meters. To improve water distribution, construction of 3 water outlets with pipe-crossing is also planned. To improve water metering, construction of the “fixed-bed” HP is also planned.

2.10. On-farm canal «Frunze-2” abstracts water from off-farm canal “Frunze”, commissioned in 1965, the length is 2.60 km, of which require rehabilitation 1.802 km. The command area is 700 ha, throughput efficiency 1.50 m³/s. To prevent water filtration losses and water erosion, the subproject provides concrete lining of 1802 meters. To improve water distribution, construction of 3 water outlets with pipe-crossing is also planned. To improve water metering, construction of the “fixed-bed” HP is also planned. To prevent water erosion and filtration losses, the Project planned concrete lining of the canal at the length of 1802 m. For improvement of water delivery, it is also planned construction of a distribution facility, 4 water outlets and a distribution well. To improve water metering, construction of the "fixed-bed" HP and pipe-crossing planned.

2.11. On-farm canal «Janysh” abstracts water from off-farm canal «Kosh-Terek-2”, commission year 1965, earthbed, the total length is 1.0 km, of which 0.586 km require rehabilitation. The command area 110 ha, throughput efficiency 0.25m³/s. To prevent water filtration losses and water erosion, the subproject provides concrete lining of 0.586 meters. To improve water distribution, construction of 2 water outlets with bridge crossing is also planned.

Rehab for reservoirs, dams and spillovers is not planned, that is why the Policy on irrigation dams and reservoirs (Safety of Dams – OP 4.37) is not applicable.

To ensure permanent and reliable water delivery from the r. “Yzar-BULak” into canal “Jalalkul”, construction of the headwork with a side water abstraction is also planned. The r. “Yzak-Bulak passes through the residential area and the river’s ecosystem does not represent a habitat for specially protected birds species and animals. In this regard, the policy of the WB OP 4.04 Natural habitats is not applicable.

Construction and rehab workload deadlines: July 2018-2020.

3. Description of environmental parameters at the site

3.1. Climate

The rayon's climatic features are introduced according to the meteostation "Karavan". The rayon is characterized by extensive hot summer and moderately cold and short winter:

• Average annual air T°	+8,0°C
• Average annual air T° during the vegetation season	+20,5°C
• Absolute air T° maximum	+35,2°C
• Absolute air T° minimum	-21,3°C
• Average T° of the hottest month	+25,0°C
• Average T° of the coldest month	-4,4°C
• Average long-term annual precipitation volume	300 mm
• Volume of precipitation during the vegetation period	290 mm
• Daily precipitation maximum	70 mm
• Average height of snow cover	50 sm
• Weight of snow cover per 1m ² of the ground	50,0 kgf/m ²
• Max wind speed	30,5 m/s

3.2. Landscape

The current WUA "Sulayman-Suu" landscape nature is attributed to the southeastern spurs of the Chatkal range and partly to the Priferganskiy adyrs. The surface of the WUA is a geomorphological zone of the piedmont plains, which is genetically related to the erosion-accumulative activity of rivers, streams and temporary runoffs. In the WUA's landscape slopes are 0.012452%. GWT is at the depth of 1 to 1.5 m from the ground surface¹. The landscape of the WUA is indicative with waterlogging and flooding.

Construction of concrete lined canals will increase efficiency throughput and reduce water losses, impacting on waterlogging reduction. Moreover, to prevent waterlogging it is also necessary application of the best practices of agro-ameliorative interventions. The EMP introduces mentioned interventions for the period of the HTS operation. The construction works will not affect the GWT and on waterlogging. To prevent waterlogging during irrigation, on the existing irrigation network there is also functional discharge canal built.

3.3. Hydrology

The irrigation sources for Baltagul AA, Ala-Buka rayon, are the rr. Ala-Buka-Say and Yzyr-Bulak. The r. Ala-Buka-Say is the left tributary of the r. Kasan-Say, which originates from the south-east slope of the Chatkal ridge. The length is 40 km, water catchment area is 225m². The water is fresh, mineralization type is bicarbonate-calcium-magnesium. The main source of the river are the rain and thawed snow water. According to the water regime it belongs to the Altay type rivers with a high water in the spring (late March - early June). The average long-term water flow rate is 2.4 m³/sec². The Irrigation water is delivered to the WUA "Sulayman-Suu" lands via off-farm canal "Frunze".

The irrigation water into canal "Jalalkul" flows from the r. "Yzyr-Bulak". The riverbed of "Yzyr-Bulak" is the type of river where flooding and mudslides pass through. Water discharge varies from 100 to 180 L/s, depending on the time of a year. Erosion processes are obvious. The landscape is free of economic entities that discharge hazardous chemicals and drain waters into the irrigation source.

¹ Data of ameliorative lands cadaster, year 2016, AHS DWRLI data.

² Ramazan M. C. "Certain features of the hydrological regime and hydro-technical classification of the KR's rivers".

3.4. Geo-engineering conditions

Geo-lithological structure alongside of the WUA's on-farm canals route is represented by alluvial-proluvial deposits. The surface is a thick soil layer of loess-like clays - loams. Loams of light gray color, dry, macroporous, solid, with carbonate deposits inclusion. Ground thickness from 0,6 to 2,0 m. The gravel soils located below loamy soil.

The physical characteristics of loam are as follows:

• Natural moisture weight	7,87%
• Specific weight	2,71 gr/sm ³
• Volume weight	1,61 gr/sm ³
• Volumetric weight of the soil	1,49 gr/sm ³
• Plasticity index	9,2
• Maximum molecular moisture capacity	15,79%
• Porosity ratio	0,815

According to construction development perplexity, the loamy soils belong to the II-building category. The standard pressure is up to 2.0 kg/cm² (SNiP IV-5-82). Gravel soil with sandy aggregates up to 40% and pebble content up to 10%. The volume weight of the soil is 1.85 t/m³. The manual development perplexity of the gravel soils belongs to the III-building category. The thickness of gravel soil is more than 10.0 m. The area seismicity is IX points³.

3.5. Vegetation cover

The vegetation cover is represented by a tree-shrubbery and grass vegetation. Alongside of the canals, it is necessary to execute tree felling and shrubbery uprooting that hamper course of workloads, and are in the alienation zone of water facilities/structures. According to the requirements of the Water Code of the Kyrgyz Republic, Art. 80 p.3, while executing repair and rehabilitation works, the shrubbery cutting and forest felling within the alienation zones of water management structures and canals, as well as sanitary cutting and deadwood cutting, do not require permission from the specially authorized state agencies/bodies. Prior to commencement of works, the contractor will inform the environmental protection agency of forthcoming tree and shrubbery uprooting to be conducted. If construction workloads to-be-conducted on the sections that are not within alienation water management zones, then tree and shrubbery uprooting is the subject to approval with the environmental protection agencies/bodies. The workloads will not be executed at the agricultural lands, as all construction and rehab sites are located beyond their boundaries.

4. Description of procedures related to regular operation workloads

4.1. Technical surveillance on canals and HTS condition

In the operational scheme activities, the paramount importance is paid to the timely conduct of preventive and rehab workloads that exclude probability of a system failure, while complying to the rules of its operation. The main indicators of a normal technical condition and a reliable operation of the on-farm irrigation network are provision of designed canal's capacity, minimum filtration and performance specification water losses, absence of sedimentation, greenery overgrowing, collapse and canal's erosion. If the actual canal's capacity corresponds to the estimated throughput, then the technical condition of a canal is good and considered as reliable. If there are 20 -25% throughput deviations, then a canal's reliability is reduced, and the technical condition is average. If the deviations are more than 25%, then a canal's performance considered

³ Geo-engineering data provided by the workloads documentation of the subproject "The WUA "Sary-Talaa-Suu" irrigation network rehab, Ala-Buka rayon, Jalal-Abad oblast", (PIU, OIP-2).

as unreliable and its technical condition is below the average. To ensure a canal's throughput, it is necessary to conduct a careful monitoring over water regulating structures. The water volumes regulating structures must be easily and reliably (re)adjusted and controlled. While operating water regulating structures, it is necessary to ensure that there is no water leakage through the water outlet/inlet gates and no canals' erosion and destruction observed on its structural parts. Expansion and (re)construction of a canal's lined sections and joint sections are the subject of constant surveillance. The damaged lining must be reworked immediately. A canal's lined and unlined sections and HTS daily maintenance (cleaning, desilting) must be executed on a permanent daily basis to prevent cracking, to ensure proper performance and removal of floating debris that hinder a canal's performance. A particular attention must be paid to subsiding soils, as concrete lining on those soils is prone to cracks formations, leading to irreparable damages, if lining failure appears it should be reworked without any delay.

The joint sections of a canal, with prefabricated reinforced concrete slabs, are the subject of particular attention. Constant surveillance of which is necessary and, if there any urgency, must be treated with resilient watertight materials that can withstand a vegetation impact.

Within the concrete flumes it is prohibited to dissolve various types of fertilizers that may cause destruction of concrete. It is also not recommended to operate concrete flumed network if water flow temperature is below $-5 - 10^{\circ}\text{C}$. Therefore, in the process of preparing the network for the winter, the whole canal's route must be completely absent of water. The livestock crossing and pasturing on canal's dams and slopes is strictly prohibited. The livestock drinking and dipping allowed on a special canal's sections only. To monitor the quality of irrigation water and prevent a canal's sedimentation, the water samples must be regularly inspected for the following indicators: turbidity, temperature, hydrogen index and mineralization.

4.2. Preparing on-farm network for the winter period

In the winter period, the on-farm irrigation network can be used for water charging irrigation, washing off and other types winter watering, as well as for supplying water to the residential areas and livestock farms, filling up reservoirs. The control over canals and structures operation, in the winter, should be paid a particular attention, as to prevent formation of ice jams near bridges, crossings, etc. The trash racks that were set for the summer in front of water structures, must be removed for the winter. When frosts are formed and HTS are covered with the ice, in this case the ice must be chipped without disturbing integrity of the structures and canal's lining/coating.

4.3. Looking after wood lines and access roads

Forest plantations alongside of a canal are designed to protect a canal from vegetation overgrowing, lowering the level of groundwater alongside a canal's route and reducing the adverse effect of wind force on agri crops. Alongside of permanently embedded canals within the farm network that require constant desilting interventions, it is recommended to create, on the one side two-row or three-row strips of fast-growing trees and shrubbery. The distances between trees in the strip is 1-3 m, between bushes - 0.75 - 1 m with a distance between greenery strips of 1.5 - 3 m. The field and on-farm roads on irrigated area, as a rule, are ground roads. If they pass through silty loams and solonchaks, then a road is made of gravel or other coating. A road maintenance is reduced to keeping the upper layer in good condition. The thickness of gravel coated roads is maintained within 8 - 10 cm. The roadbed condition is also the subject of maintenance and must be periodically planned and compacted. Roadside cuvettes and canals must be cleaned off dirt and vegetation. To improve the water flow into cuvettes, the roadways must be made with slopes and with a slight lateral inclination from the middle to the cuvettes.

4.4. Repair workloads

The irrigation schemes are subject to repair workloads according to the annually developed and approved plans. In the irrigation and drainage systems operation practice, the current, major and emergency repair workloads are executed.

The current repair works carried out annually including desilting of canals, removal of vegetation, strengthening and widening dams, cleaning berms, eliminating small landslides, collapses, rifts and sandspits, repairing damaged anchorages and canals' lining, repairing small damages of a structural parts. While carrying out current repair works, a complex technical upgrading and modifying a structural construction is not included. The preventive (prophylactic) repair workloads include:

- Patching ratholes;
- Structural cracks maintenance after ice impact;
- Tightening fixing bolts;
- Drainage structures winterization etc.

The preventive repair and a significant part of the current repair, including desilting of canals, vegetation and landslides removal, a minor canal repair(s), repair of structures, buildings and other devices are performed annually without stopping the scheme's operation.

The major repair is executed, as required, within a few years' period and includes: repair workloads on a canal's sections, dams and parts of a structure attrition and destruction, structural modification or replacement of certain elements and structural units.

The emergency repair is rehabilitation of canals, dams and structures or parts of them, destroyed as a result of natural phenomena (mudslides, floods, etc.), or violations of the technical operation rules, execution of which carried out 24/7, and all available material and technical resources and labor resources are mobilized for the execution of emergency repair.

Rehab and (re)construction workloads on the on-farm network canals performed by WUAs contracting a construction company. Repair works expenses and operation of the on-farm network are annually provided by the WUA's budget.

4.5. Desilting of canals and vegetation removal

The solid particles of soil form sedimentation that moved around by water flow. The content of solid particles, per water volume unit, characterizes the water flow saturation with sediments, or its turbidity. Sediments, often, are formed as a result of soil wash-away in the catchment basin via snow/glaciers melting and rain waters. Partly the sedimentation is a product of a canal/river bed and banks erosion. The largest bed's sedimentation with pebbles and coarse sand observed and remain at the head section of a bulk water supply canal. The average sized sediment particles washed into a canal's distribution network and even into on-farm irrigation network. On average, about 80% of sediments remains in the off-farm canals network and about 20% inflows into on-farm irrigation network. A canal's slopes have an impact on sedimentation process, if an inclination is too steep then about 60% of sediments washed in on-farm network and fields. Desilting executed on an annual basis and, if necessary, more often.

5. Environmental impact

Implementation of APNIP is addressed to provide economic, social and environmental benefits to farmers, farming entities and local communities through WUA's development, the rehabilitation and modernization of irrigation and drainage infrastructures in projected areas. The best practices of previous Projects demonstrate positive impacts on the environment. Namely, this Project is aimed at reducing water losses in irrigation schemes, improving water resources management, scaling up agricultural productivity and improving soil fertility. The Project workloads require compliance with a number of mandatory requirements, including strict compliance with noise reduction, air quality, timely removal of solid and liquid domestic waste, construction debris. The requirements for the prevention of environmental pollution and negative impact on the population are provided by the Law of the Kyrgyz Republic "General Technical Regulations for Ensuring Environmental Safety in the Kyrgyz Republic", the Law "On Production and Consumption Wastes", the Law "On Protection of Atmospheric Air", SanPin "Noise in the workplaces, in premises of residential, public buildings and on the territory of residential buildings" the Governmental decree of the KR, dated 11/04/2016. №201,

5.1. Expected positive environmental impact

The positive impact consists of:

- Water losses reduction;
- Improved water resources management, consisting of construction and rehabilitation of water distribution and water-metering structures;
- Scaling up agricultural productivity;
- Improved soil fertility by increasing humus while applying an efficient irrigation schedules.

5.2. Potential negative environmental impact

At the same time, while carrying out irrigation network (re)construction works, there may be some potentially negative impacts on environmental conditions in the projected areas that require attention, preventive actions, and appropriate mitigation measures during planning, development, construction, operation and maintenance. While performing the planned irrigation networks rehabilitation works, no asbestos-containing materials will be used. It is necessary to mention that previously asbestos cement pipe crossings were used. But they were replaced with structures of more inert materials and, at the moment, problems with asbestos-containing materials are not foreseen. Thus, no issues concerning asbestos-containing materials are expected. In the case(s) if asbestos-cement pipes will be detected, asbestos-containing materials will be stockpiled, transported and finally disposed, and specific protective interventions will be carried executed in accordance with the hazardous wastes standards handling and disposal. For detailed information concerning the asbestos-containing materials removal, see section 10. The potential negative impacts are relatively minor, and positive economic, social and environmental benefits far outweigh them in environmental assessment. The consideration of these impacts is given below.

5.3. Impact on climate change

The irrigation and drainage schemes rehab will enhance the agricultural and farming practices, improve materially-technical procurement, land owning, pastures and water management resulting on productivity increase and adaptation to climate change, and sustainable use of natural resources.

Table 1. Assessment and ranking of environmental risks

Activities	Impact	Type	Duration	Term	Degree	Risk	Reversibility	Probability
construction phase								
Construction site location	Soil contamination at a construction site as a result of storage, construction and household waste, including liquid wastes.	direct	short-term	immediate	low	low	reversible	average
	surface water and ground water contamination at a construction site, as a result of stockpiling of construction and household waste, including liquid waste	direct	mid-term	immediate or delayed	low	low	reversible	low
uploading of excavated soil during construction of a new canal's bed	the landscape degradation, destruction of the animal world habitat	Direct	Mid-term	Immediate	Low	Low	Reversible	Average
construction materials transportation, heavy machinery use	air pollution and noise impacting the population/workers while heavy machinery and vehicles use	Direct	short-term	Immediate	Low	moderate	Reversible	High
canals rehab	1) Damage and trees felling and shrubbery cutting; 2) SVL degradation	Direct	long-term	Immediate	High	Low	Reversible	High
	contamination of the r. Yzyr-Bulak during (re)construction works	direct	short-term	immediate	low	low	reversible	low
	1) surface water runoff disruption: 2)hydro-geological regime disruption at the (re)construction site	direct	short-term	immediate	moderate	moderate	reversible	average
Operation and maintenance phase								
earth-bed canals and drains cleaning while in operation	landscape and animals' natural habitat degradation	Direct	Mid-term	Immediate	Low	Low	Reversible	Average
increase in irrigation water delivery, which increases the volumes of waste water	surface water pollution with agrochemicals, as a result of excessive application of pesticides and mineral fertilizers	indirect	Mid-term	delayed	moderate	moderate	Reversible	Average
increase in irrigation water volumes increase affects the surface water filtration and GWT	GWT increase as result of excessive irrigation and leads to waterlogging and soils mineralization	indirect	long-term	delayed	moderate	moderate /low	reversible	high

increase in irrigation water volumes supply that leads to water speed increase	soil erosion related to existing agricultural production practices	indirect	long-term	delayed	moderate	moderate	Reversible	Low
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6. Environmental management and monitoring plan (EMP)

The EMP is composed for each of the HTS under rehab to prevent or mitigate the negative impact of the (re)construction. It includes a mitigation and monitoring plan, both for the construction phase, and for the operation and management phase.

All the construction phase risks are easily monitored and eliminated. They can be minimized by properly designing mitigation measures and monitoring the Contractor, while executing workloads. Among the O&M risks, the risk of landscape and animals' natural habitat degradation, while cleaning earth-bed canals and drains, is clear and easily controlled. The risks of surface and groundwater pollution by agrochemicals, due to excessive use of pesticides and mineral fertilizers, soil erosion associated with the existing practices of agricultural production, increase of near-surface (shallow) groundwater table, due to excessive irrigation and, as a consequence, soil salinization, require a specific monitoring. The need for environmental mitigation interventions, while on O&M phase, is determined exactly in the process of environmental monitoring.

Table 2: Mitigation plan

Phase	Issue	Preventive/ Mitigation interventions	Cost, US \$		Institutional responsibility		Control
			implementation	operation	implementa tion	operation	
Construction	organizing a construction site	1) it is prohibited to locate a construction site in the water protection zones and canals; 2) to ensure removal of all waste and construction rubble from (re) construction sites to dispose on the authorized municipal landfills, with the permission of local authorities 3) to execute planning and restoration interventions to restore troubled lands during and after completing (re)construction	n/a	Part of the (re)construction works 743890	PIU/Contractor	contractor	1) A Contractor bears responsibility to execute environmental mitigation interventions; 2) A construction site inspections executed by PIU; 3) SAEPF
	earthbed after desilting of a canal	executing rehab and planning works	n/a		PIU/Contractor	contractor	1) A Contractor bears responsibility to execute environmental mitigation interventions; 2) A construction site inspections executed by PIU; 3) SAEPF
	trees and shrubbery	coordinating with the specially authorized environmental protection body on trees and shrubbery felling/cutting located beyond the alienation zones of a canal;	n/a	Part of the (re)construction works	PIU/ Contractor	contractor	1) A Contractor bears responsibility to execute environmental mitigation interventions; 2) A construction site inspections executed by PIU; 3) SAEPF
	contamination of the r. Yzyr-Bulak	1)to prevent penetration of petrol and lubricants into a water object; 2)to use construction machinery with MOT; 3) to prohibit a machinery washing off at the construction site	n/a	Part of the (re)construction works	PIU/ Contractor	contractor	1) A Contractor bears responsibility to execute environmental mitigation interventions;

							2) A construction site inspections executed by PIU; 3) SAEPF
	1) surface runoff disruption; 2) hydro-geological regime disruption at a construction site	1) to perform works before flooding starts with a minimum of low water flow; 2) In order to maintain the natural water flow regime, to restore a riverbed throughput efficiency after completion of (re)construction works, construction waste will be removed.	n/a	Part of the (re)construction works	PIU/ Contractor	contractor	1) A Contractor bears responsibility to execute environmental mitigation interventions; 2) A construction site inspections executed by PIU; 3) SAEPF
	vehicular emissions into the atmosphere	1) vehicular exhaust systems and construction machinery should be in good condition, in order to minimize air pollution; 2) Limiting the speed of vehicles and selecting suitable transportation routes to minimize dust emissions; 3) Moisturizing the road surface while driving through the residential area territories	n/a	Part of the (re)construction works	PIU/CONTRACTOR	contractor	1) A Contractor bears responsibility to execute environmental mitigation interventions; 2) A construction site inspections executed by PIU; 3) SAEPF
	noise impact within labor area	machinery and equipment operation	n/a	Part of the (re)construction works	PIU/CONTRACTOR	contractor	1) a contractor bear responsibility to execute workers' health and safety activities; 2) SAEPF
	Workers' and rural population health and safety	1) construction sites will be equipped with information and designator boards concerning working regulations and requirements; 2) easily accessible and complete first aid kit to treat an injury.	n/a	Part of the (re)construction works	PIU/CONTRACTOR	contractor	1) a contractor bear responsibility to execute workers' health and safety activities; 2) SAEPF

		3) ensuring personal protection equipment (helmets, protected shoes, gloves); 4) limiting access to (re)construction sites, zones, equipment locations and other potentially dangerous places by local citizens.					
operation	threats to water quality due to water contamination with agrochemicals	- conducting training(s) on improved pest control/pesticides application practice. - Application of agrochemicals in accordance with recommended standards - Prevention of waste water ingress into canals and surface water bodies	n/a	n/a	AAS/AISP	WUA members	RSU on-site check, compliance and coordination with SAEPF RSU on-site check, compliance and coordination with SAEPF
	increase of soil erosion	- training(s) on water use and soil management. - awareness raising campaign; - adequate use of irrigation water and irrigation in accordance with irrigation schedule; - lining up of irrigation furrows on the lowest slopes (transverse furrows); - shortened furrows length; - change or irrigation technology (sprinklers, drip irrigation). - climate change mitigation measures training; - compliance to irrigation norms and regimes	n/a	n/a	AAS/AISP	WUA members	RSU on-site check
	climate change impact		n/a	n/a	AAS/AISP	WUA members	RSU on-site check,

Table 3. Environmental monitoring plan

Project Phase	Parameter	Location	Method/Equipment	Frequency	Objective	Costs		Responsibility	
						Organization	Performance	Organization	Performance
baseline	salinity, concentration of hydrogen ions (pH), water turbidity	on off-farm canal Kaiyrma, below canal Priaryk-Kaiyrma and below off-farm canal Komsomolsky; on off-farm canal Kunduy; on tailreach of canals	Field equipment for parameters measurement	At the beginning, in the middle and at the end of vegetation season	Rehabilitation works and agricultural activities impact assessment	0	insignificant	RSU takes samples	water sampling and analysis
construction	Site-specific EMP	subProjects under rehabilitation	Visual inspection of subProject	Before, during and after completion of construction	Compliance with environmental protection measures	0	Insignificant	PIU/Contractor	PIU/Contractor
	Salinity, concentration of hydrogen ions, turbidity	Canals under rehabilitation, located upstream and downstream of the rehabilitation site	Field equipment for parameters measurement	prior and after construction workload completion	assessment of construction works impact	0	insignificant	RSU	water sampling and analysis. Introduction of results to PIU
	Pollution of watercourses by petroleum, oil and lubricants	Selectively for subProjects when suspected of contamination. Downstream of rehabilitation subProject	Sample for laboratory analysis	During construction	Civil works impact assessment	0	100 USD	Contractor	Accredited laboratory Water sampling and analysis. Introduction of results to PIU
	GWT	hydro-geological surveying within Jalakul canal's zone	necessary equipment for surveying Company	during (re)construction	impact assessment of hydro-geological status within a canal's zone	0	insignificant	Contractor	Contractor

operation	the salty content in the soil	problematic locations	soil sampling /analysis	quarterly	soil quality ratio	0	USD 300	AHS	AHS
	GWT in wells	near surface (shallow) GWT	level gage	monthly	impact on GWT	0	insignificant	DWRLI	AHS
	Salinity, concentration of hydrogen ions, turbidity	at the head and tailreach of a canal's irrigation scheme	Field equipment for parameters measurement	prior and at the end of the vegetation season	irrigation and waste waters quality grading	0	Insignificant	RSU	RSU

7. 7. Stockpiling, transportation and disposal of asbestos containing materials

Asbestos-containing materials disposal will be executed in accordance with the local legislation, including construction standards, occupational health and safety regulations, emissions of harmful substances into the atmosphere, disposal/removal of construction and hazardous wastes (in cases of a specific domestic legislation absence, the European Parliament Directive 2003/18/EU, which amends and updates the EU Directive 83/477/EEC on protection of workers against workplace exposure to hazards from asbestos and asbestos containing materials: the air pollution thresholds are 0.1 fiber/cm³, and also use the recommended standards Notes: Asbestos: "Health problems at the workplace and in the community", the World Bank). The asbestos materials are subject to immediate unconditional disposal/entombment in special conditions.

In accordance with the Government of the Kyrgyz Republic's Order No. 885 "On Management of Hazardous Wastes in the Kyrgyz Republic, December 28, 2015," asbestos-containing wastes should be disposed the following order:

In accordance with the Government of the Kyrgyz Republic's Order No. 885 "On Management of Hazardous Wastes in the Kyrgyz Republic, December 28, 2015," asbestos-containing wastes should be disposed the following order:

- The process of handling hazardous wastes (waste lifecycle) consists of the following stages: generation, accumulation (collection, temporary storage, stockpiling), transportation, neutralization, recycling, reuse of processed products and disposal/entombment.
- If there is asbestos on a construction site, it should be clearly marked as a hazardous material. Asbestos-containing materials should not be cut or destroyed, as this leads to dust formation. During the (re)construction, all workers should avoid crushing/destroying the asbestos-containing waste, store such waste(s) in designated areas on a construction site and properly dispose thereafter in a special place or landfill.
- When asbestos-containing wastes are to be temporarily stored at a designated area(s)/construction site, they should be properly placed in sealed containers and marked appropriately as a hazardous material. Precautions must be taken to prevent unauthorized disposal of such wastes from a designated area/site.

7.1. 7.1. Storage and stockpiling

- The asbestos containing materials extraction should be minimized through the use of efficient technologies
- All asbestos containing materials should be recycled and disposed by the experienced specialists. The specialists are obliged to wear protective outfit (face masks, gloves, uniform)
- The stockpiled wastes, on a designated area(s), should not exceed established volumes/requirements.
- The access roads for removal of industrial and construction wastes from a designated area(s) should not be obstructed.
- While handling asbestos containing wastes, all operating staff members should wear protective outfit (facemask, gloves etc.). Prior to removal of asbestos waste (if necessary) the stockpiled area should be treated with a moisturizing agent to minimize emission of asbestos containing dust. Disposed asbestos should not be reused.
- Storage of inappropriate items, individual protective or working outfit is strictly prohibited at the designated asbestos waste(s) locations.
- During handling operations, all workers should strictly follow the asbestos treatment requirements, and health and safety requirements. All operations should be executed with the use of mechanized machinery, elevating and transportation equipment.

- Hazardous waste(s) should be transported by the superficially equipped Vehicles to the landfill locations, either contracted, or owned. The Vehicles should be designed and used in such a way, as to prevent possible incidents, losses and pollution of the environment, both on the way to the disposal site location, and during the (re)loading of waste from one vehicle onto another. All types of handling and transportation of waste operations from/to the main and supporting facilities should be mechanized, and an airtight equipment used. It is strictly prohibited, during the transportation, to open the hazardous waste containers.
- Solid and dusty wastes are the subject of transportation in a specially designed containers, equipped with gripping devices for (un)loading by cranes. The transportation of asbestos wastes on the open-bed vehicles and railway cars is strictly prohibited.
- The use of hooks and other sharp tools, while processing the waste, is strictly prohibited.
- The driver of the Vehicle, transporting hazardous waste and authorized accompanying staff only, are allowed on the Vehicle(s). the Driver(s) must be aware of the safe transportation requirements.
- All handling, transportation, (un)loading and disposal of waste must be mechanized. The waste must be transported in such a way, as to prevent transport losses and impact on environment.

7.2. Disposal of asbestos containing wastes

- The asbestos-containing wastes must be disposed in solid waste dumps, or non-recyclable industrial solid waste.

8. Legislative support

In the Kyrgyz Republic, there are a number of environmental protection laws, regulations and requirements, which address specific issues of environmental protection. Table 5 summarizes the legal norms relevant to this Project.

Table 5: The main subordinate legislations, regulations and requirements

Legal authority	Legal mandate
Constitution (2010)	The state's ownership of natural resources, rights and duties of citizens.
Water Code of the Kyrgyz Republic (2005)	It identifies the state policy, legislative and institutional basics on water resources management and protection
Law on environmental protection (1999)	It identifies state policy on environmental protection, legislative and institutional basics on water resources management and environmental protection
Law "General technical regulation on ensuring environmental safety in the Kyrgyz Republic" (2009)	The Regulation determines the main provisions of technical regulation in the field of environmental safety and establishes general requirements for ensuring environmental safety while designing and implementing of interventions within economic and other types of production activities, storage, transportation and production disposal.
Law on environmental expertize (1999)	It requires review of environmental protection issues (environmental appraisal) and prevents negative environmental impacts and human health as a result of economic and other activities

Law on specifically protected natural reservations (2011)	It establishes regulations for specially protected natural areas, various types and/or levels of economic activity.
Law on protection of atmosphere (1999)	It regulates emissions to atmosphere and specific obligations on protection of atmosphere
SanPin "Noise on the workplaces, in premises of residential, public buildings and on the territory of residential buildings" the Governmental decree of the KR, dated 11/04/2016. №201,	Establishes a sanitary-epidemiological requirements, standardized parameters and maximum permissible noise levels at (re)construction sites, noise classification, permissible noise levels in the Projected rooms, (re)construction sites, (re)constructed and operated residential, public buildings and on the territory of residential buildings.
the GovKR. Provision No.224 of 03/05/2013. "On approval of fees for calculating the amount of penalties for damages caused to objects of animal and plant life, mumijo-containing mineral materials and mushrooms by legal entities and individuals"	Fees designed to ensure preservation of biodiversity, proper protection of flora and fauna

The Government of the Kyrgyz Republic ratified a series of international conventions on environmental protection and agreements, related to this Project:

- Convention on environmental impact assessment of the transboundary territories Espoo(2001);
- Agreement on cooperation in environmental protection and efficient use of natural resources (Kyrgyz Republic, Kazakhstan, Uzbekistan) (1998),
- Convention on wetlands, representing the international importance for the waterfowls main habitat (Ramsar Convention) (2002);
- Convention on right to use international watercourses as transport routes (1997), Agreement on the use of water structures for interstate purposes on the Chu and Talas Rivers (Kyrgyz Republic and Kazakhstan) (2000);
- the United Nations Framework Convention on Climate Change (2000 r.);
- Kyoto Protocol (2003).

9. Awareness rising campaign, consultations and public attendance

9.1. Public consultations

In accordance with Operational Procedures OP4.01.⁴ The WB has special requirements for disclosure of information and public consultations. The disclosure includes introduction of information about the Project affected population (PAP) and other stakeholders, from the Project's early implementation cycle, and throughout lifecycle of the Project. The information disclosure is intended to facilitate comprehensive interaction with the Project affected population, and stakeholders throughout the lifecycle of the Project. Moreover, the Kyrgyz Republic is a member of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the United Nations Economic Commission for Europe, which also contains provisions for ensuring the disclosure of the objectives and environmental considerations of the Project.

⁴ The World Bank operational procedures 4.01, "Environmental Assessment", Para. 3.

The 45 attendees (local authorities, farmers, RSU, design engineers, the PIU) participated the public hearings of WUA “Sulayman-Suu”, Ala-Buka rayon, Djalal-Abad oblast. The agenda of public hearings included information concerning the Project’s technical solutions and environmental impact(s), as well as the interventions that would be taken to prevent and mitigate the impact. Participants asked a number of questions concerning the interventions that stipulated in the EMP. The minutes of the public hearings and the list of participants, and photos are attached.

9.2. Grievance redress mechanism (GRM)

Objective. The primary target of GRM and population’s statements is identification, registry and assistance in solving complaints that were stressed during the Project activities.

The GRM main principles are:

- (i) Protection of Citizens’ rights;
- (ii) Transparency;
- (iii) Accessibility to a free GRM mechanism and without follow-up prosecution;
- (iv) Appropriateness, from the point of local cultural sensitivities view;
- (v) Personal responsibility for the performance duties;
- (vi) Accountability of during the GRM consideration and applications by the PIU.

Complaints and applications filed in accordance with the established procedure are subject to a mandatory review, refusal to admit is not allowed. Complaints and applications of citizens, without indication of the name and postal address, to which the reply should be sent, are considered anonymous and are not subjected to revision.

The GRM does not hinder the right of citizens to applying into the Judiciary authorities. Citizens have the right to apply to the court, or other state bodies for the resolution of emerging issues related to the violation of their rights, emerged under the Project.

For the GRM implementation, the PIU and WUA created a register of complaints and statements from the population. Moreover, anyone can apply to the PIU in an online format at:

<https://mail.rambler.ru/m/redirect?url=http%3A/apnip.water.kg/%25D0%25BE%25D0%25B1%25D1%2580%25D0%25B0%25D1%2589%25D0%25B5%25D0%25BD%25D0%25B8%25D1%258F-%25D0%25B8-%25D0%25B6%25D0%25B0%25D0%25BB%25D0%25BE%25D0%25B1%25D1%258B/&hash=8ef50d487d10168e5d891f2d9dd443cd>

9.2.1. General GRM process

- In the process of the assets assessment, PAP will be introduced to the information concerning filing and reviewing procedure.
- The first step in the process of handling complaints will be a personal verbal appeal to the Project representative, AO’s authority, or by phone (the mobile phone number will be provided on the information board of AO’s office, and also posted in ads in places frequented by the population). If the problem cannot be resolved within 5 days, consideration of the complaint will be done at the next level.
- An aggrieved person can file a complaint on the issue related to the process of resettlement or compensation, in written form, to the PIU APNIP Director. A complaint must be signed and dated by an aggrieved party. The APNIP social affairs consultant will maintain a direct link with the PAP. The PIU will determine the validity of a complaint and notify an aggrieved person that he/she will be assisted. The answer will be provided within 14 working days, during which meetings and discussions will be held with an aggrieved person.
- If a complaint concerns an asset assessment at the expense of the Project, a secondary or even a third assessment of an asset will be carried forward, until it is accepted by both parties. The follow-up assessments can also be carried forward by and independent appraiser(s) at the

expense of an aggrieved party. The PIU will assist to an aggrieved party at all stages to resolve a complaint and ensure that a complaint is treated the best-of-breed.

- If, after receiving a response from the PIU, an aggrieved party remains unsatisfied, then a complaint is considered in the working group of the Project under AO, which will be established by the head of AO's resolution, from the members of the Local AO deputies, WUAs representatives, local dignitaries and the PIU specialists.
- In case of an objection, regarding to the working group decision, which is provided within 30 working days, the PAP may appeal to the court.

9.2.2. A registered complaint management

A local representative of the Project should ensure a weekly transfer of received complaints from the PAP to the PIU, as well as the first instance consideration result(s). The local authorities should work with complaints in accordance with the established order and should file the complaints and proposals in the processing registry. The PIU upon receipt of an information, the social consultant should ensure that each complaint has an individual identification number and a progress report in reviewing each complaint reflected in the FRP, which identifies a person(s) responsible for each individual complaint and recording the dates of the following events:

- the date of filing a complaint;
- the date of entering a Complaint(s) Registry in the Project database;
- the date when the information on the proposed solution measure(s) was sent to an aggrieved party (if applicable);
- the response date to an aggrieved party.

The general information on complaints received (number, type of complaint), progress in resolving it and problems encountered, should be included in the Project's periodic reporting submitted to the World Bank.

Annex 1. The minutes of Public hearings

The Minutes of public hearings in WUA “Sulayman-Suu”, Ala-Buka rayon, Djalal-Abad Oblast, on environmental and social issues, as part of the World Bank project "Agricultural Productivity and Nutrition Improvement"

AA named after Baltagulov

March 23, 2018.

Attendees:

Sadykov B. J – Head of AA, named after Baltagulov;
Kalykov A.A – Head of Ala-Buka RVK, Djalal-Abad oblast;
Neronova T.I. – the PIU APNIP National environmental consultant;
Orozalieva S.M – the PIU APNIP Consultant on social issues;
Jeenaliev K. – the PIU design engineer;
Nadyrov J.N – WUA “Sulayman-Suu” Chairperson;
Rakhmatov A.A – Senior specialist of WUA RSU, Ala-Buka rayon;
Torokulov B. M – WUA “Sulayman-Suu” Director.

The Public hearing was attended by 62 representatives, of them 24 females from farming entities, WUAs and other stakeholders. The list of attendees is applied below.

The Chairperson: Nadyrov J.N – the WUA Council Chairperson.

Jeenaliev. K. – the PIU design engineer, spoke about the Project «Agricultural Productivity and Nutrition Improvement\APNIP» and on-farm rehabilitation works to be executed under it.

Neronova T. - the PIU APNIP National environmental consultant, has explained about the Kyrgyz Republic’s environmental legislation requirements and the World Bank's policy on environmental protection under the Project. The task of environmental assessment is to identify the Project’s significant impact(s) on the environment (positive and negative), identify appropriate preventive measures and mitigation measures addressed to prevent, minimize or eliminate any expected irreversible impact(s). The experience of previous projects has demonstrated the positive impact of a project on the environment. In fact, many positive impacts of projects have been identified during the environmental assessment. Namely, this Project is aimed at reducing water losses in irrigation schemes, improving water management, improving agricultural productivity and improving soil fertility.

At the same time, while carrying out civil works on reconstruction of irrigation networks, there may be some potentially negative impacts on environmental protection conditions in projected areas that need attention, to accept preventive actions and appropriate mitigation measures during planning, development, construction, operation and maintenance.

- No asbestos-containing materials will be used for the planned rehab of irrigation networks, noting that previously prefabricated asbestos-cement pipe crossings were used. But even in the past years they were disassembled and replaced with structures of more inert materials. Thus, no problems with asbestos-containing materials are expected.

- Potentially negative impacts are relatively small, but positive economic, social and environmental benefits far outweigh them under the environmental assessment. Consideration of these impacts is given below.

The main impact(s) that can be seen as a result of the civil works:

- 1) Soil pollution on construction site.
- 2) Groundwater pollution on construction site.
- 3) Deterioration of the landscape, destruction of the natural habitat of the animal world, changing the local drainage network.
- 4) Air pollution and impact on workers/population during traffic and heavy equipment operation.

The site specific EMP is composed for each of the rehab subproject to prevent or mitigate the negative impact(s) of the construction works. It includes a mitigation and monitoring plan, both for the construction phase, and for the O&M phase.

All the risks of the construction phase are easily controlled and eliminated. They can be minimized by properly designing mitigation measures and controlling the Contractor, while carrying out the works.

Among the risks of O&M phase, the risk of degradation of the landscape and destruction of the animal world's natural habitat, while cleaning unlined canals and drains is obvious and easily controlled. The risks of surface and groundwater pollution by agrochemicals, due to excessive use of pesticides and mineral fertilizers, soil erosion, associated with existing practices of agricultural production, groundwater table rising in the shallow zone due to excessive irrigation and, as a consequence, salinization of soils, require a special monitoring. The need for mitigating measures at the stage of O&M is determined precisely during the process of environmental monitoring.

Orozaliev S. - the PIU APNIP Public affairs and social issues Consultant, delivered the message concerning social aspects under the Project to the participants of the WUA "Sulayman-Suu" public hearing. In particular, she spoke in detail about the World Bank policy 4.12 "Forced Relocation", the Policy is aimed at eliminating the risks associated with involuntary resettlement, and by addressing the issues of reducing risks to a minimum. She also stressed that WUA members and councils that are the subject to rehabilitation, should be aware of their options and rights related to resettlement, and take part in consultations concerning possible options for compensation, and would have had the right to choose and be provided with technically and economically feasible alternatives for resettlement. She also noted that during the resettlement, attention should be paid on socially vulnerable population, such as ethnic minorities, female-headed households, the elderly, etc., with appropriate assistance to improve their living standards. In the interest of resettled persons, necessary and accessible mechanisms should be established to review and resolve their complaints either at the spot, or in the PIU office. Each WUA, included in the rehab program, should maintain a register of complaints and currently almost all WUAs have such a register. Moreover, all WUAs have a complaint form and GRM. The ecological and social issues were also discussed, the main goals of which are constant surveillance on public opinion, awareness raising campaign to deliver a message to the stakeholders, while under rehab and modernization of irrigation network. In addition, the PIU site (www.apnip.water.kg) has a separate section on appeals and complaints, where anyone can send their appeal or complaint about the Project's activities. For effective monitoring and management of complaints of the population and GRM, the PIU maintains a database of appeals and complaints.

Questions:

WUA "Sulaiman-Suu" Director – Who is in charge for construction works monitoring?

Neronova. T. – the Contractor will mobilize an Environmental specialist. The overall control will be executed by the PIU APNIP Environmental specialist. The Governmental control will be executed by the State Inspection of Technical and Environmental Control.

Sadykov B. – All types of construction wastes accumulated during (re)construction works, will it be relocated and disposed and where?

Rakhmatov A. – Anyone in charge for water quality monitoring?

Neronova. T. – a canal's water monitoring will be executed by the RSU at the monitoring spots that are defined in the EMP. Also, during a canal's operation period the water monitoring will be executed continuously; such data as mineralization, concentration of hydrogen ions (pH), water turbidity.

Myrzabaev A. – What do we need the GRM for?

Orozalieva S. – the GRM objectives to strengthen accountability to the Project beneficiaries, we are talking about farmers, waterusers and ensuring adequate water level in a canal, as well as obtaining feedbacks from all parties concerning (re)construction works under the Project. The GRM can be used as a tool by any ethnic, religious, gender and minorities.

Yuldashev I. – Who can apply to the GRM?

Orozalieva S. – Anyone member of the WUA and local inhabitant is eligible to apply to GRM. A complaint could be addressed either in verbal or written form, while under the Project activities.

Narbaeva M. – How minorities or vulnerable strata will be defined?

Orozalieva S. – This issue will be solved based on social benefits (disability benefits, pensioners, widows, female-headed households and low income households), and through hearings.

Bikirova A. – Who is in charge to disseminate an information concerning consultations on nutrition quality?

Orozalieva S. – The main communication canal that spreads out an information concerning nutrition quality is laid upon doctors, nurses and paramedics.

Jumagulov Z. - Who are the target households?

Orozalieva S. – The target households are vulnerable households, especially those run by women and families with underage children.

Karabaev I. – Talking about nutrition, the micronutrients and capsules – do we have to pay for it?

Orozaleiva S. – The aid within Component 3 framework in form of vitamins, capsules, extension services on nutrition quality is based a grant basis.

Usmanov R. - Stressed that the proposed rehabilitation works, will help to reduce filtration losses in a canal and reduce flooding on farmers' land and household plots, and houses, thanked all the speakers and spoke in support of the Project.

At the end of the meeting all attendees have supported implementation of the Project.

Narbaev A. – the WUA Council Chairperson, on behalf of all attendees expressed his acknowledgment for support and information introduced.

Chairperson

Nadyrov J. N.

the PIU APNIP National environmental consultant

Neronova T.I.

the PIU APNIP Consultant on social issues

Orozalieva S.M.

Протокол общественных слушаний по охране окружающей среды и социальным вопросам в АВП «СулайманСуу» Ала-Букинского района Джалал-Абадской области в рамках проекта Всемирного Банка «Улучшения сельскохозяйственной производительности и питания»

а/о им. Балтагулова

23 марта 2018г.

Присутствовали:

Садыков Б.Ж. - глава айылного аймака им. Т. Балтагулова
Калыков А. А. - начальник Ала-Букинского РУВХ Жалал-Абадской области
Неронова Т.И. – консультант по охране окружающей среды ОРП УСПП;
Орозалиева С.М. – консультант по социальным вопросам ОРП УСПП;
Жееналиев К. – инженер-проектировщик ОРП;
Рахматов А.А. - гл. специалист РОП АВП Ала-Букинского района;
Надыров Ж.Н. – председатель совета АВП «Сулайман-Суу»;
Торокулов Б.М. – директор АВП Сулайман-Суу.

В общественных слушаниях приняли участие 62 человека, из них 24 женщины-водопользователи, представители крестьянских хозяйств, фермеры, члены АВП. Список участников общественных слушаний прилагается.

Председатель собрания – Надыров Ж.Н. председатель совета АВП.

В начале собрания выступил глава айылного аймака Садыков Б.Ж и рассказал участникам о цели общественных слушаний, представил докладчиков.

Жееналиев К. – инженер проектировщик проекта АВП «Сулайман Суу» ОРП УСПП выступил с информацией о проекте, в которой рассказал о предполагаемых работах по реабилитации внутрихозяйственной сети в рамках проекта «Повышение производительности в сельском хозяйстве и улучшение питания».

Неронова Т.И. - консультант по охране окружающей среды ОРП УСПП рассказала о требованиях природоохранного законодательства Кыргызской Республики и политике Всемирного Банка по охране окружающей среды при реализации проекта.

Задача оценки окружающей среды заключается в том, чтобы выявить существенно воздействие предлагаемого проекта на окружающую среду (позитивное и негативное), определить соответствующие превентивные меры и меры по смягчению воздействия направленные на предупреждение, минимизацию или устранение любого ожидаемого необратимого воздействия.

Опыт предыдущих проектов показывает положительное воздействие предлагаемого проекта на окружающую среду. В действительности, в ходе оценки окружающей среды выявлено много положительных воздействий проектов. А именно, данный проект направлен на сокращение водопотерь в ирригационных системах, улучшение управления водными ресурсами, повышение сельскохозяйственной производительности и улучшение плодородия почв.

В ходе обследования участков реабилитации установлено большое количество древесно-кустарниковой растительности вдоль каналов. Для ее вырубki потребуются согласование с территориальным органом по охране окружающей среды.

Кроме того, при обследовании каналов установлены стихийные свалки бытовых отходов, которые необходимо убрать и вывезти в специально отведенные места до начала ведения работ.

Большую проблему в данном АВП представляет близкий к поверхности уровень грунтовых вод, что при огромных фильтрационных потерях воды в канале ведет к подтоплению части сельскохозяйственных угодий и даже земельных наделов фермеров. В этой связи проект будет способствовать уменьшению фильтрационных потерь и, соответственно, уменьшатся процессы заболачивания земель.

Вместе с тем, при проведении строительных работ по реконструкции оросительных сетей, возможны проявления некоторых потенциально негативных воздействий на условия охраны окружающей среды в проектных площадях, на которые необходимо обратить внимание, принять превентивные действия и соответствующие меры по их смягчению во время планирования, разработки, строительства, эксплуатации и технического обслуживания.

- При выполнении планируемых работ по реабилитации оросительных сетей не будут применяться никакие асбестосодержащие материалы. Отметим, что ранее применялись асбестоцементные трубчатые переезды. Но еще в прошлые годы они были демонтированы и заменены на сооружения из более инертных материалов. Соответственно никаких проблем с асбестосодержащими материалами не ожидается.
- Потенциальные негативные воздействия являются относительно незначительными, а позитивные экономические, социальные и экологические выгоды значительно перевешивают их в оценке окружающей среды. Рассмотрение этих воздействий приводится ниже.

Основное воздействие, которое может быть оказано в результате ведения строительных работ:

- 1) Загрязнение почвы на строительной площадке
- 2) Загрязнение поверхностных вод при ведении работ вблизи поверхностного природного водного объекта, реки
- 3) Ухудшение ландшафта, разрушение естественной среды обитания животного мира, изменение локальной дренажной сети
- 4) Загрязнение воздуха и воздействие на рабочих/население при движении транспорта и работе тяжелой техники

Для предотвращения или смягчения негативного воздействия строительства для каждого объекта реабилитации составляется ПУОС. Он включает в себя план смягчающих мер и мониторинга, как для фазы строительства, так и для фазы Э и ТО.

Все риски фазы строительства легко контролируются и устраняются. Они могут быть сведены к минимуму при должном проектировании смягчающих мер и контроле над Подрядчиком при выполнении работ.

Из рисков фазы эксплуатации и технического обслуживания (Э и ТО) риск ухудшения ландшафта и разрушения естественной среды обитания животного мира при чистке земляных каналов и дрен является явным и легко контролируемым. Риски загрязнения поверхностных и подземных вод агрохимикатами вследствие избыточного использования пестицидов и минеральных удобрений, эрозии почв, связанной с существующей практикой ведения сельского производства, повышения уровней грунтовых вод в зоне их не глубокого залегания в связи с избыточным орошением и, как следствие, засоления почв, требуют специального мониторинга. Необходимость в смягчающих мерах на стадии Э и ТО определяется именно в процессе экологического мониторинга.

Орозалиева С.М. -Орозалиева С. – специалист по коммуникациям и связям общественностью/специалист по социальным вопросам ОРП ознакомила участников общественного слушания с целью проведения общественных слушаний по экологическим и социальным вопросам. Она отметила, что нашей основной задачей являются изучение общественного мнения, информирование населения и заинтересованных сторон о возможных экологических и социальных воздействиях при восстановлении и модернизации объектов ирригационной и дренажной инфраструктуры.

Подробно рассказала участникам общественного слушания о деятельности проекта «Улучшение сельскохозяйственной производительности и питания» (ПУСПП). Вкратце проинформировала о мероприятиях, проводимых в рамках 3-х компонентов: компонент 1 – Реабилитация и модернизация внутрихозяйственных ирригационных систем, компонент 2 – Сельскохозяйственные консультационные услуги и компонент 3 – Улучшение качества питания. Особо отметила важность компонента 3 для местного населения, в частности женщин и детей. Вручила директору АВП и главе айылкочмону изготовленные проектом информационные плакаты и календари.

Кроме этого, специалист по социальным вопросам подробно рассказала о мероприятиях, проводимых проектом по социальным аспектам. В частности, подробно рассказала о политике Всемирного банка 4.12 «Вынужденное переселение», где данная политика направлена на устранение рисков, связанных с вынужденным переселением, путем решения вопросов о сведении рисков к минимуму.

Она подчеркнула, что лица, подверженные воздействию проекта (ЛПВП) должны быть осведомлены о своих вариантах выбора и правах, связанных с переселением, принимали участие в консультациях по вопросам возможных вариантов компенсаций, получали право выбора и были обеспечены технически и экономически осуществимыми альтернативами переселения. Отметила также, что во время процесса переселения следует уделять внимание социально уязвимым слоям населения, таким, как этнические меньшинства, домохозяйства, возглавляемые женщинами, престарелые и т. д., и предоставлением им надлежащей помощи для улучшения уровня жизни. В интересах переселяемых лиц, должны быть созданы необходимые и доступные механизмы рассмотрения и удовлетворения их жалоб на местах и в офисе ОРП.

Каждая АВП, вошедшая в программу реабилитации должна вести журнал регистрации жалоб. На сегодняшний день почти во всех АВП имеется такой журнал. Кроме этого во всех АВП есть форма предоставления жалоб и матрица управления жалобами.

В дополнении к этому, на сайте ОРП (www.apnip.water.kg) есть отдельный раздел по обращениям и жалобам, куда бенефициары проекта могут направить свое обращение или жалобу по проводимым проектом мероприятиям.

Для эффективного осуществления мониторинга и управления обращениями и жалобами населения, ОРП ведет базу данных по обращениям и жалобам.

Вопросы:

Директор АВП «СулайманСуу» - Кто будет вести контроль за строительством?

Неронова Т.И.: подрядчик наймет специалиста по охране окружающей среды, надзор будет вести также консультант по ООС ОРПУСПП. Со стороны государства – Госэкотехинспекция.

Садыков Б.Ж. - Куда будут вывозиться отходы, которые будут образовываться в ходе ведения работ, строительные и бытовые?

Неронова Т.И.: Строительные и бытовые отходы, которые будут образовываться в ходе ведения работ, подрядчик будет вывозить в специально отведенные места по согласованию с айылокмону.

А. Рахматов - Кто будет проводить мониторинг воды в канале?

Неронова Т.: Мониторинг будет проводить районный отдел поддержки АВП в точках мониторинга, которые будут указаны в ПУОС. Также мониторинг будет проводиться постоянно в период эксплуатации: Минерализация, концентрация ионов водорода (рН), мутность воды.

Мырзабаев А. – В чем заключается цель МРЖ?

Орозалиева С.: Цель МРЖ заключается в усилении подотчетности перед бенефициарами проекта, в нашем случае перед фермерами-водопользователями и обеспечении каналов для обратной связи с заинтересованными сторонами проекта в вопросах, касающихся проектных мероприятий. МРЖ доступен для всех, в том числе различных этнических, религиозных, гендерных и прочих специальных групп.

Юлдашев И. - Кто может обратиться с жалобой?

Орозалиева С.: С жалобой может обратиться любой член АВП и житель. Жалобы можно подать в любой момент в устной или письменной форме в ходе подготовки и реализации проекта.

Нарбаева М. - Как определяют уязвимые слои населения?

Орозалиева С.: Уязвимые слои населения определяются как на основе социальных пособий (пособия по инвалидности, пенсионеры, вдовы, домохозяйства, возглавляемые женщинами и бедные домохозяйства), так и посредством проведения слушаний.

Бикирова А. Через кого женщины, матери получают информацию и консультацию по качеству питания?

Орозалиева С.: Главным каналом передачи информации и консультаций по качеству питания являются ПМСО (доктора, медсестры и фельдшеры).

Жумагулов З. - Кто относится к целевым домохозяйствам?

Орозалиева С.: К целевым домохозяйствам относятся уязвимые домохозяйства, особенно домохозяйства, управляемые женщинами и семьями с маленькими детьми.

Карабаев И. – Все, что касается питания, выделение витаминов, капсул – должны ли мы отдавать деньги?

Орозалиева С. – Вся помощь (выделение витаминов, капсул, проведение образовательных обучений по качеству питания) оказываемая в рамках 3 компонента, выделяется на грантовой основе.

Усманов Р. Подчеркнул, что предполагаемые реабилитационные работы, помогут уменьшив фильтрацию каналов и снизить подтопление участков фермеров, в т.ч. их приусадебные участки и дом, поблагодарил докладчиков и выступил в поддержку проекта.

В заключении, все собравшиеся поддержали реализацию данного проекта.

Нарбаев председатель совета АВП, от имени всех присутствующих поблагодарил за поддержку и предоставленную информацию.

Председатель



Надыров Ж.

Консультант по охране окружающей среды

Неронова Т.

Консультант по социальным вопросам

Орозалиева С.

the list of the Public hearing attendees

Список участников общественных слушаний по экологическим и социальным вопросам в рамках проекта ВБ "Улучшение сельскохозяйственной производительности и питания"

А/о им. Т. Балтагулова
С. Ызар

23 марта 2018г.

№№ п/п	Фамилия, имя, отчество	Телефон	Подпись
1.	Алиев А.	0773624835	[Signature]
2.	Маманов К.	0551-29-35-85	[Signature]
3.	Кашиков А.	0772 060608	[Signature]
4.	Надыров И.	0778 33 09 24	[Signature]
5.	Саванов И.	0778 6161 36	[Signature]
6.	Давидов Б.	0779784341	[Signature]
7.	Мухамедов С.	0778 067970	[Signature]
8.	Бекматова А.	0778 548227	[Signature]
9.	Чаймачева С.	0770 693195	[Signature]
10.	Ботобеков А.	0771216473	[Signature]
11.	Жумагулов З.	0771070031	[Signature]
12.	Жаманбетова Ж.	0771567136	[Signature]
13.	Эрмеева А.	0773706052	[Signature]
14.	Усманов Р.	0778505241	[Signature]
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17.	Ахмедов Р.	0777616617	[Signature]
18.	Аракеев Б. М.	0778 77 24 07	[Signature]

43.	Алимов Баир		
44.	Орджоникидзе	0772256236	
45.	Габриелова Г.	0779621397	
46.	Садиков Бободил	0705030980	
47.	Орджоникидзе	0776834970	
48.	Политковская Н.	077526423	
49.	Бикбаева А.	0771900661	
50.	Мухомов Игорь	0771612552/43035727	
51.	Фигурнова З.	077972-58-09	
52.	Мардаева И.	077156-04-61	
53.	Чинкеева И.	0772223276	
54.	Морочков Б.	0550752610	
55.	Молодцова С.	0778633764	
56.	Орджоникидзе	077140024	
57.	Камболова Н.	0776990754	
58.	Чинкеева Нарин И.	0777515207	
59.	Самеева Райхан В.	0772406840	
60.	Мухомедов С.	0777836100	
61.	Орджоникидзе С.	0707488288	
62.	Алимов Н.	0772335451	
63.			
64.			

Annex 2. Complaints processing registry



Annex 3. On-line application for registering a complaint


A complaint application form ФОРМА ПРЕДОСТАВЛЕНИЯ ЖАЛОБ

Информация о заявителе	
ФИО	Name :
Адрес:	Address:
Contact info	
Контактные данные:	Phone
тел :	E-mail
эл. почта:	
Содержание жалобы/обращения/предложения:	
Essence of a complaint	
Дата подачи жалобы:	Complaint date:
Дата рассмотрения жалобы:	Complaint considered/date
Результат рассмотрения:	Consideration(s) result
Подпись	Дата
Signed	date

Обращения и жалобы – x

← → ↺ apnip.kg/обращения-и-жалобы/

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ГЛАВНАЯ О НАС ▾ ПРОЕКТЫ ▾ ТЕНДЕРЫ ▾ ОТЧЕТЫ ▾ НОВОСТИ ПУБЛИКАЦИИ ▾ КАРТА САЙТА ОБРАЩЕНИЯ И ЖАЛОБЫ  РУССКИЙ

Обращения и жалобы

Complaints

Напишите нам и мы Вам обязательно ответим

Поля, помеченные символом *, обязательны к заполнению

Имя * name

Email * e-mail

Сообщение *

write to us and we will reply

Категории

- Объявления
- Без рубрики
- Новости

Архивы

- Ноябрь 2017
- Октябрь 2017
- Сентябрь 2017
- Август 2017
- Июль 2017
- Июнь 2017

10. Images



Picture 1. “Jalalkul” canal, March 22, 2018.



Picture №2. River. Yzyk-Bulak March 22, 2018.



Picture №3. Canal “Avtandil” March 22, 2018.



Picture №4. The Public hearing, March 23, 2018.



Picture №5. The Public hearing, March 23, 2018.