

PROJECT MANAGEMENT UNIT “FERGANA VALLEY WATER RESOURCES MANAGEMENT PROJECT”



STRENGTHENING CRITICAL INFRASTRUCTURE AGAINST NATURAL HAZARDS PROJECT

MID-TERM REVIEW OF SUB-COMPONENT ACHIEVEMENTS 2.2.



The Republic of Tajikistan			
Name of the project	<i>"Strengthening Critical Infrastructure Against Natural Hazards Project" (SCINHP)</i>		
International Development Association (IDA) Project ID: P158298			
Financing	GRANT No. D205-TJ CREDIT No. 6089-TJ		
Approval by the WB Board of Executive Directors	July 10, 2017		
Date of signing the agreement	August 15, 2017		
Effective date	February 8, 2018		
Project closing date	December 31, 2023		
Subcomponent 2.2.	<i>"Strengthening flood protection and riverbank erosion protection infrastructure "</i>		
Executive Agency	Agency for Land Reclamation and Irrigation under the Government of the Republic of Tajikistan (ALRI under the GoT).		
Implementing Agency	Project Management Unit, Fergana Valley Water Resources Management (FVWRMP)		
Project districts	Vose, Kulyab, Shaartuz, Kabiđıyan		
EA Category of the Project - "B"			
Cost of Subcomponent 2.2.	17.5 million (\$ USD)	Disbursement of funds as of 01.04. 2021	9.6 million (\$ USD) (55,1%)
WB Mission to Support Project Implementation	April 8-24, 2019	Assessment of the WB Mission for Component 2.2.	satisfactorily
	September 10-19, 2019		satisfactorily
	April 20-24, 2020		satisfactorily
	September 14-25, 2020 April 19-23, 2021		satisfactorily

PROJECT DEVELOPMENT OBJECTIVES

- ❖ Strengthening the Recipient's capacity in disaster risk management;
- ❖ Improving the resilience of critical infrastructure to natural disasters;
- ❖ Improving the ability to respond to natural disasters.

SUB-COMPONENT 2.2 IMPLEMENTATION AREA.

Project districts: Kulyab, Vose, Kabadiyan and Shaartuz.

Rehabilitation sites: destroyed flood protection infrastructure of the Kyzylsu, Yakhsu, Kafirnigan and sai Dahan.

The total length of bank protection structures to be restored is **L = 28.7 km**, including:

- *Kulyab zone - L= 11.8 km;*
- *Bokhtar zone - L= 16.9 km...*

Of them:

- **21.9 km** - construction of new embankments (embankments that were completely destroyed after the passage of mudflows);
- **6.8 km**- rehabilitation of embankments (embankments , which were partially destroyed during the passage of mudflows).

EXPECTED BENEFITS OF THE PROJECT BY SUB-COMPONENT 2.2.

- *Protection from flooding of adjacent irrigated lands and settlements, prevention of loss of homes;*
- *Improving the agricultural productivity of arable land, increasing their area, increasing crop yields, increasing the income of farms and households;*
- *Improving employment opportunities, i.e. ensuring the level of employment and income of the population - the use of local goods and services during construction work;*
- *Reducing poverty in rural areas of the project area.*

IMPLEMENTATION STATUS OF THE SUB-COMPONENT 2.2.

KULYAB ZONE

Completed activities:

Bank protection, construction and rehabilitation works have been completed at sites No. 1 (Kulyab), No. 2, No. 6 (Vose), at an additional facility in the Vose district, which is near the village of Kaftarkhona.

During the construction and rehabilitation works in the Kulyab zone, in the length of **11.78 km** the infrastructure of the flood control system was restored, of which in the Vose district- **7.25 km** (*construction of new embankments*) and the city of Kulyab - **4.53 km** (*1.7-rehabilitated embankments, 2.83-new embankments*). The volume of work performed in the Kulyab zone amounted to **100%**.

Current activities:

Bokhtar zone, Site No. 4, Kabadiyan, bank protection on the Kafirnigan river.

District Kabadiyan - bank protection - **15, 74 km, of which:**

construction of new embankments - 10.63 km;

rehabilitation of existing embankments - 5.11 km...

Bank protection works are underway on site No. 1, located in the jamoat U. Nazarov, total length **3 383m** taking into account the rehabilitation of the channel escape Katta. At this stage, the excavation and installation work on the end discharge of the canal has been fully completed. Katta, from PK + 00 to PK1 + 90 with a length of 190m. Excavation work was completed on the construction of a bank protection embankment and the excavation of an apron from PK2 + 87 to PK35 + 00 with a length of 3,213 m., Installation with reinforced concrete slabs in size 2x1x0.2 **75%** has been executed of the total the length of the section.

Fig. 1. Layout of sites No. 2 and No. 6, Vose district

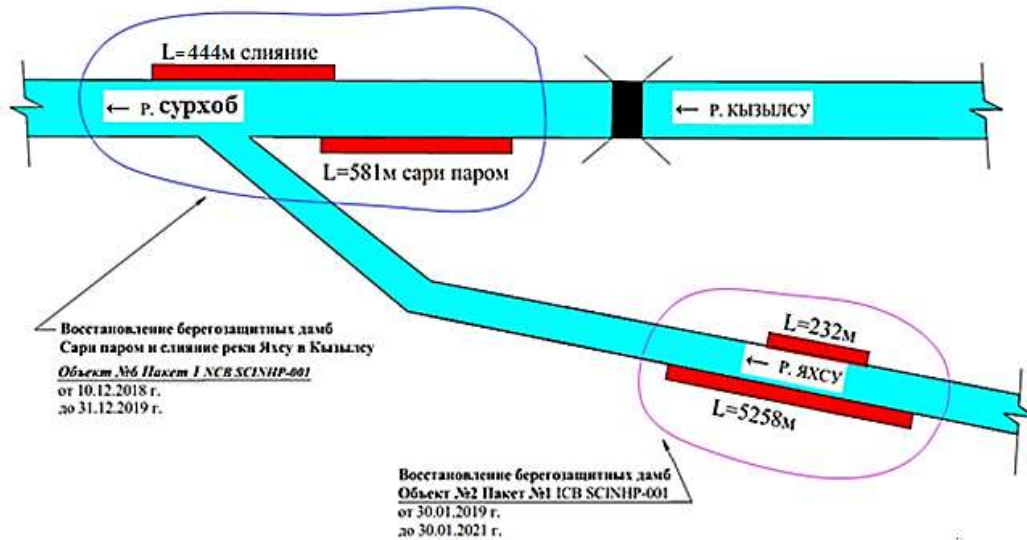
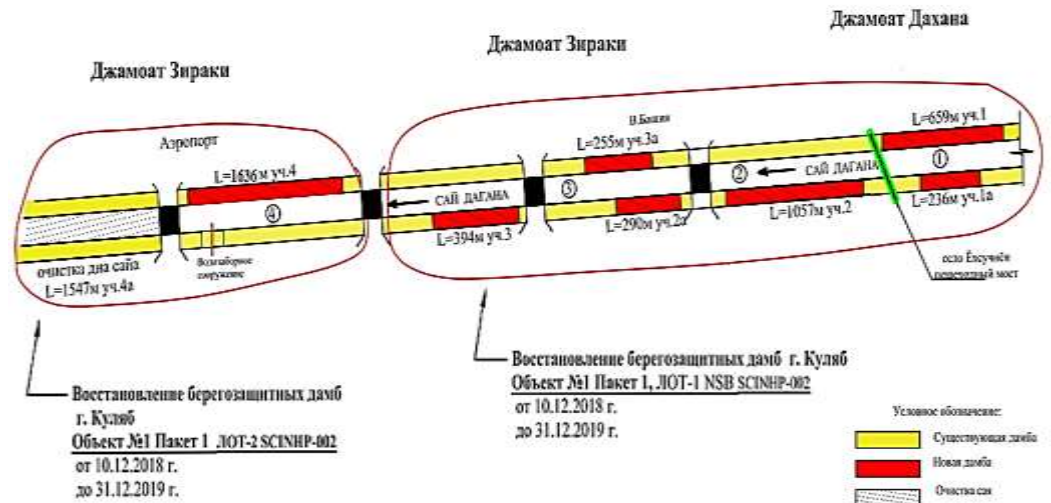


Fig. 2. Layout of the Site №1. Section Dahana sai, Kulyab city



Photomonitoring of target design objects

Site number 6. Rehabilitation of bank protection embankments, Vose district
General overview of the embankment at the Sari Parom section, L-581m. The left bank of the Kizil-su river...

Site condition before construction



Site condition during construction



Site condition after construction



Site condition after construction



General overview of the embankment at the site near the village Mehrobod, L
-444, Vose.

Site condition before construction



Site condition during construction



Site condition after construction



Newly added Site on the territory of the village of Kaftarkhona L-735m, Vose.

General overview of the mudflow protection embankment before the start of construction and its close location with the asphalt concrete plant.



Condition of the Site after construction

Rehabilitation of the destroyed section of the mudflow protection embankment on the right bank of the Yakhsu River with a length of 735 meters, suspended the destructive effects of water and created optimal conditions for a uniform flood flow, stopped the processes of general erosion of the banks, protected the territories of the settlements of the jamoat Rudaki (villages Mehnatobod, Sari Angur, Gofilobod, Anoriston) and Kh.Rajabov (Kaftarkhona village), protected the asphalt-concrete plant one from the largest production facilities of the Vose district, which activities are aimed at improving the conditions of the road and transport infrastructure in rural areas of the Kulyab zone.



**Site number 1. Rehabilitation of bank protection embankments L-4.5
km, Kulyab.**

General overview of the condition of the site Zarkaala - 2 before and after construction.



SOCIO-ECOLOGICAL ASPECTS OF THE SUB-COMPONENT

Social and environmental protection measures Subcomponent 2.2. are held in accordance with the requirements and laws of the Republic of Tajikistan and the World Bank's operational policy on protective measures.

WB requirement:

- ◆ Evaluation impact on the environment and social environment;
- ◆ Environmental and social management Plan ESMP.

World Bank Operating Procedures Involved.

According to the Operating Procedures of the World Bank, the Project belongs to the category "B" from "Moderate" estimated risk and the WB's operational policy on protective measures is being activated: OP 4.01 "Environmental Assessment", OP 4.12 "Involuntary Resettlement", OP 4.37 "Embankment Safety" and OP 7.50 "Projects on International Waterways".

OP / VB-4.12 for Subcomponent 2.2. does not apply, because resettlement and land use activities are not affected. All construction and rehabilitation work is / has been carried out at existing facilities, i.e. on the territory of lands that are on the balance sheet of the local state water management organization and are used as operational sites for bank protection, repair and maintenance works.

The activities of the Project are regulated by the legislative and regulatory framework of the Republic of Tajikistan: articles of the Constitution of the Republic of Tajikistan, Law on Environmental Protection, Law on State Ecological Expertise, which includes provisions on the process of environmental impact assessment in Tajikistan, laws on Environmental Monitoring, Atmospheric Air Protection, Environmental Audit, Law on the Treatment of Industrial and Domestic Waste, Water Code, etc.

Environmental management plans for Vose, Kulyab, Kabadiyan and Shaartuz project districts have been coordinated and approved by the district environmental protection departments.

Licenses and other permits for Subcomponent 2.2. not required because inert materials used in bank protection (crushed stone, sand and gravel) are purchased by the contractor from the local gravel sorting plants.

Risks and negative impacts of the project

No significant social and environmental risks are involved under the Subcomponent 2.2 . Minor risks and impacts associated with construction activities are temporary and avoided to an acceptable level.

General social and ecological elements

- *temporary formation of dust, noise and shaking during the construction period;*
- *temporary inconvenience on off -farm roads;*
- *pollution of water, air and soil, soil erosion;*
- *construction waste generation;*
- *violation of safety measures and health risks for workers (injuries, accidents and infectious diseases, including COVID-19);*
- *possible health risks for the local population.*

Social elements

- *inflow of labor from the outside and infringement of the interests of the local community in terms of employment opportunities;*
- *limited opportunities for ethnic minorities to access project benefits;*
- *the occurrence of disputes and misunderstandings.*

Institutional support and main tasks of safeguard consultants

Local consultants are hired for providing technical support and resolving issues on social and environmental aspects, providing advice and recommendations, from the PMU / AMI on a contract basis,.

Main goals:

- ✓ Establishing close interaction with all stakeholders throughout the entire life cycle of the project;
- ✓ Revealing positive and negative impacts of the Project on the ecology and social environment. Development of measures aimed at preventing, eliminating and mitigating any negative consequences. In close cooperation with contractors, taking corrective measures during construction and rehabilitation works, if necessary;
- ✓ Monitoring and confirming the compliance of project activities with the requirements of the ESMP conditions (Environmental and Social Management Plan);
- ✓ Monitoring the involvement of the local community in project activities, i.e. ensuring compliance with equal access to the benefits of the Project. Based on selection criteria, granting recommendations to contractors on local labor recruitment in the following categories:
 - *Hiring labor force from socially vulnerable segments of the population;*
 - *more active involvement of women in activities project;*
 - *Involvement of ethnic minorities to project activities.*
- ✓ Implementation and management of the information system of requests and feedback (GRM);
- ✓ Monitoring of social and environmental performance of the Project and reporting.

Accepted measures to comply with the terms of the ESMP

Outreach activities

- ✓ Information boards were installed at each facility to inform the local population about the work carried out by the project, indicating the names of the project, all involved structures and technical parameters of construction sites, including data on the deadlines;
- ✓ For visual information, banners with photographs were installed, displaying the state of the sites before the start of construction, during and after the completion of construction work;
- ✓ Installed boxes for filing complaints, suggestions and other types of appeals.

Construction camps and workers' rights

- ✓ At the work sites, the contractors organized small temporary construction sections, where the equipment is located and caravans were installed for the workers to live. For the manufacture and storage of construction materials, contractors lease a territory with the appropriate infrastructure: construction base (Site No. 6), an abandoned school (Site No. 4), with a house with an adjacent yard infrastructure (Site No. 2);
- ✓ Conditions for rest and places for workers to have meals were created by the contractor
- ✓ Additionally, auxiliary premises, shower room and lavatory were built;
- ✓ Vehicles for servicing workers are allocated.
- ✓ No injuries or deaths in the workplace were recorded at construction sites. Contracts of contractors provides minimum insurance coverage or accident deductions during the production activities.

Compliance with safety measures

- ✓ Carried out appropriate fencing at work sites;
- ✓ Personnel are provided with special protective clothing;
- ✓ On a quarterly basis, contractors instruct workers in compliance with safety and labor protection. Before the start of construction and rehabilitation work held general familiarization, taking into account the specifics of the work performed, introductory instruction and initial instruction at the workplace. Are undertaken. There is a registration log on the sites
- ✓ There is first aid kit, fire shield installed on the sites

Mitigation measures

- ✓ Carrying out the main construction works during the winter-spring season, during the precipitation season, prevented the formation of dust. In the summer, the contractor uses the sprinkling method to prevent or minimize the spread of dust, there are specialized irrigation machines;
- ✓ At the facilities, machineries are involved, the technical parameters of which correspond to the maximum permissible values of the noise level, besides, the equipment, according to the schedule, works only during the daytime, at the set hours;

Transport regulation

- ✓ The movement of construction equipment and machineries does not interfere with the internal movement of the local population, because all work is carried out in the exclusion zone, i.e. outside the territory of the settlement and do not lead to the destruction of the road to the village.
- ✓ A Site No. 6 (Vose), is located near the settlement and a bypass road was used for the movement of construction equipment and machineries. Additionally, in the areas of completed works, measures were taken to improve the condition of access roads.

Photo monitoring on observance of the ESMP requirements



Фотомониторинг соблюдения условий ПУОСС подрядчиком, объект №6 район Восе

Защитная одежда рабочих



Информационный баннер для информирования местного населения о мероприятиях проекта.



Информационный щит.
Ящик для подачи жалоб и предложений.



Профилирование гравием подъездной дороги.



Organization of temporary construction sites



CIVIL PARTICIPATION. LOCAL LABOR INVOLVEMENT.

For Subcomponent 2.2. all participants in construction and rehabilitation work are citizens of Tajikistan.. Basically, residents from the same region, where construction takes place, there is not a single worker attracted from outside, i.e. from other countries. As of **04/01/2021** number of workers employed locally by Subcomponent 2.2. is **278** man or **71.3%** of the total number of workers involved in construction.

PROJECT INTERMEDIATE INDICATOR

20% of jobs created locally, of which 51% are women.

Contributing factors:

- *The policy and experience of the PMU, the requirements of local authorities interested in creating additional jobs for the employment of the unemployed part of the local population and the corresponding tax allocations to the district development fund;*
- *Some contractors / subcontractors are hired locally i.e. is residents of the same district where project activities are carried out;*
- *There is no need to create large-scale labor camps, which is especially relevant in the context of the spread of the new coronavirus infection in the world and the region.*

Photomonitoring of women involved in Sites# 1 (Kulyab), # 2 and # 6 (Vose).



**Планировка откосов дамб и сбор крупных камней, для последующей укладки железобетонных плит.
Район Весе, Джамоат М.Вайсов, село Ходжа-Галтон**



Photomonitoring of women involved in Site No.№ 4, Kabadiyan.



Фотомониторинг женщин, работающих на объектах в период пандемии



Маматмуродова Сановбар – повар,
Объект №4, Кабадиян



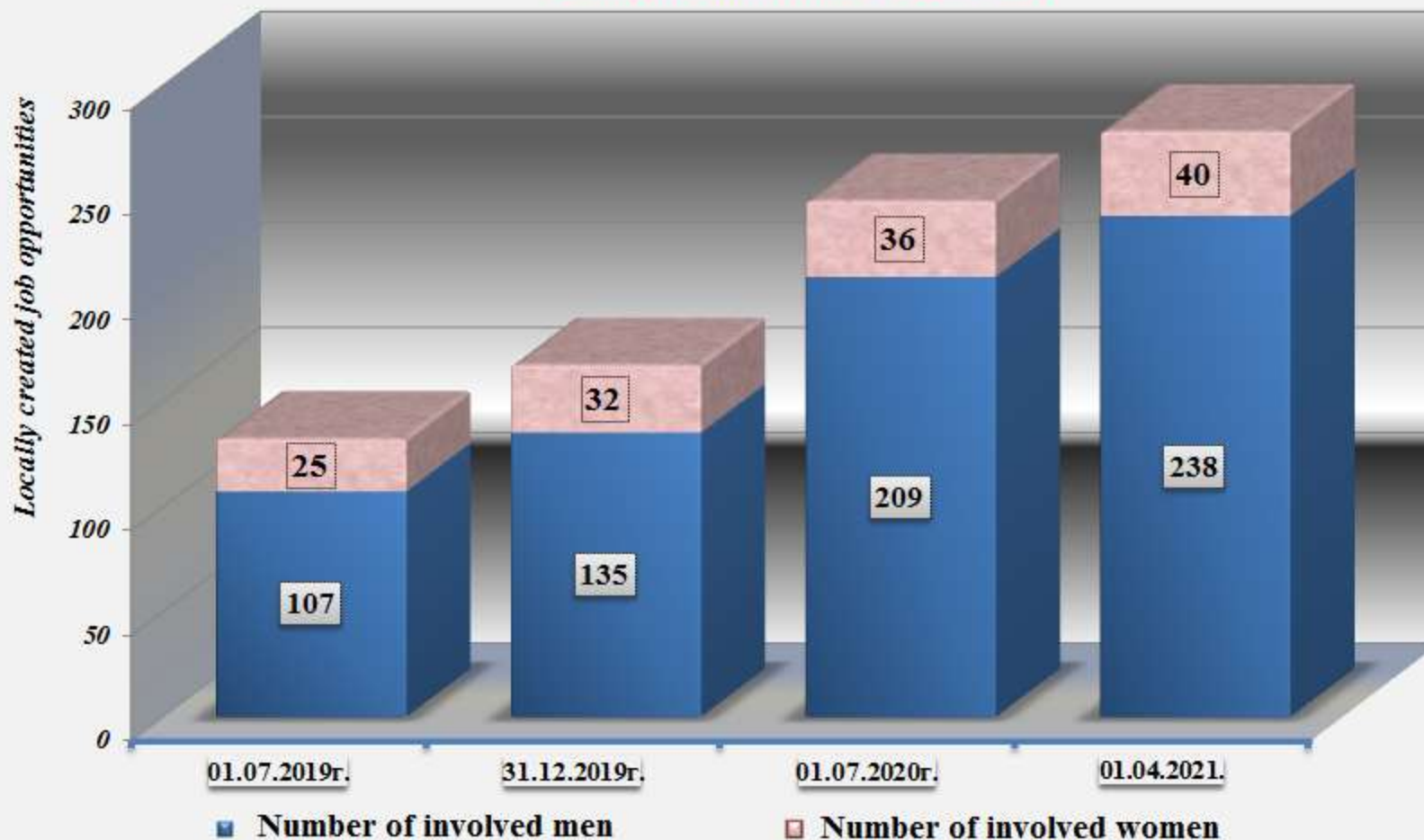
Олимова Рукья – повар/уборка территории
Объект №2, Восе



Собирова Ситора - повар,
объект Кафтархона, Восе

Gender aspects are of prime importance in job creation that is increased participation of women in rehabilitation work and their benefit from the project activities. During the reporting period, 40 women were involved in the project activities at the local level, for light types of works.

Comparative analysis of the dynamics of labor force growth at the local level with a gender breakdown as of 01.04.2021



Participation in Subcomponent 2.2. national minorities.

Observing the principles of equal access to the benefits of the Project, during the reporting period, construction and rehabilitation works were attracted **36** workers, local Uzbeks from jamoats U. Nazarov and 20 solagias istikloliyat, Site No. 4, Kabadiyan district and **40** local Gypsies living near facility No. 6, Sari Parom site, Vose district.



Culture of the Uzbek people, history and religious lifestyle are identical to the culture of the Tajik people. There are no religious or cultural differences. The families of Tajiks and Uzbeks do not live in isolation. There are mixed marriages and families.

Tied to their customs, Lyuli Roma (Gypsis) have little integration into society, especially in terms of employment. As practice shows, psychology and foundations change if there is any threat to one's own safety, the safety of loved ones and the loss of acquired property, moreover, if this is secured by financial gain.



The involvement of local Roma in public works positively influenced their understanding of employment issues and this fact can be noted as a positive moment in the process of the Project implementation.

Stakeholders Engagement

Main goal: development and maintenance of constructive relationships throughout the entire life cycle of the project.



Preventive mitigation measures and approaches to prevent / contain the spread of COVID-19.

Purchase of personal protective equipment and other disinfectants.



Placement of memos in public places.

Placement of information materials on the symptoms of a new coronavirus infection (COVID-19) and measures to prevent infection at the office bill board.



Daily cleaning and wiping with disinfectants of all contact surfaces



Project beneficiaries

Beneficiaries is an population, who will directly benefit from project activities.

In accordance with **Indicators of the Project Objective Development**, final target value: *by number of people subject to lower disaster risk through improved flood control and river bank infrastructure must make up 556,900 persons.*

Accounting table of the beneficiaries of the FVWRMP Project under Subcomponent 2.2.

District	PROJECT BENEFICIARIES	
	Population by jamoats	Population by districts
Vose 01/04/2021		221,800 from them: <i>112000 women (50.5%)</i> <i>109800 men (49.5%)</i>
Kulyab 01/04/2021		219300 of them: <i>111843 - women (51%)</i> <i>107457 - men (49%)</i>
Kabadiyan 01/04/2021	110892 of them: <i>58296 - women (52.6%)</i> <i>52,596 - men (47.4%)</i>	
Total number of beneficiaries for Subcomponent 2.2. - <u>551992</u> persons, of them: 282139 - women (51.1%); 269853- men (48.9%).		

The total number of beneficiaries in the Kulyab zone, taking into account the entire population project districts Vose and Kulyab, is **441100** human. In district Kabadiyan, under 4 project jamoats is **110892** persons. Taking into account the above factors, the total number of beneficiaries as on **04/01/2021** under the Subcomponent 2.2. is **551992** peresons or **99.1%**.

MONITORING OF SOCIAL AND ENVIRONMENTAL EFFICIENCY OF THE PROJECT.

Achievements of FVWRMP Project under Subcomponent 2.2

Flood control actions at completed sites No.1 (Kulyab), No. 2, No.6 and at an additional site near the village of Kaftarkhona (Vose), have made positive changes in the sites of the economy and the social sectors. Preventing the further destruction of the territory of adjacent irrigated lands and settlements by flood waters, the risk of loss of shelter and acquired property, failure of agricultural land, the risk of re-flooding and damage to public infrastructure, industrial (asphalt-concrete plant) and strategic (airport) facilities. There was an opportunity to stay in their inhabited territories, thereby, excluding the costly resettlement measure, which, from a socio-psychological point of view, could negatively affect the population being resettled and adapted to local conditions. Additionally, the following features have appeared:

- ❖ *Use the embankment as a public transit road;*
- ❖ *Form new lands in silted areas suitable for growing agricultural products, forming new gardens;*
- ❖ *Reduce the costs of local government agencies to carry out annual maintenance and protective measures to strengthen damaged infrastructure before the onset of the heavy rainfall season.*
- ❖ *Farmer confidence reborn in tomorrow day and the possibility of increasing sowing areas;*
- ❖ *There is hope and calmness among the local population to save their lives, life of their loved ones, homestead plots and acquired property.*

Formation of new gardens

Thanks to the construction of spurs, on the site near the village of Mehrobod, Vose, siltation was formed, which allowed the local population to form a garden on an area of about 1.5 hectares, with the planting of fruit and ornamental trees, as well as wild plants that are used as wood, root system which protects the soil against the erosion.



Using the embankment as a transport road.

Embankment on a site near the village of Mehrobod, Vose. The condition of the site before and after construction.



Reviving farmers' confidence in the future.

Protection of farmland from re-flooding.

Rehabilitation of flood protection infrastructure at completed sites and some completed plots of the existing sections in the Vose and Kulyab project districts provided an opportunity for local farmers to effectively use every piece of land, plant, harvest and form gardens with full confidence that their work will be compensated for by benefits, protected from losses after seasonal floods.

Site number 2, jamoat Tugarak, Vose.

Rehabilitation of the completely destroyed embankment and the "Shobika" canal in length of 260 meters, allowed the farmers of 10 dekhan farms to reuse the land that had been inactive for years for agricultural needs: to sow, grow agricultural products and collect harvest. On the territory of 90 hectares of irrigated lands cotton, vegetables and melons are produced, as well as garden plantings and collected good harvest.



Site No.6, Vose.

Section near the village Mehrobod, L= 444m

After construction and rehabilitation activities of the Project, irrigated lands of 5 farms, on an area of 16 hectares, are completely sown with popular agricultural crops: cotton, wheat, corn and melons. After harvesting wheat the second sowing is carried out. Earlier, before the implementation of the project activities, that part of the land that was close to the destroyed embankment was not used by farmers, for fear of losing their harvest and incur losses, has been inactive for years. Currently, in addition, local dehkan farms have increased the sowing area by 2.5ha.



Section Sari Parom

Rehabilitation of the destroyed embankment in length 581m. has protected agricultural lands of the dehkan farm "Karim" on an area of 26 hectares, specializing in the cultivation of cotton and additionally helped to increase the sowing area by 2 hectares.



Reducing costs.

New additional site before and after rehabilitation, Kaftarkhona, Vose



Site No.1, Kulyab. Area of airport

Rehabilitation of the embankment, with a length of 1,636 meters, allowed farmers to reuse the land for their agricultural needs. The 35 hectare site, which had been inactive for years, has been sown again.



Awakening the hope and confidence of the local population to save their lives, the lives of their loved ones, household plots and acquired property

Appreciation of the local community to the SCHINHP Project

Site No.6, Vose. According to the SCINHP Project Appraisal Document, this Site was prone to flooding, which could lead to the loss of housing and required intensive erosion control works.

Hafizova Oygul (58 years old) - a resident of the village Mehrobod, Guliston jamoat, Vose district, expressed her deep gratitude to the FVWRMP Project for strengthening the destroyed section of the bank, next to which her house with a personal plot is located:



"Every year, in the spring season, after the passage of mudflows, the land on which my house and the houses of my neighbors are located trembled during the passage of the floods, constantly crumbled in pieces, and the river was getting closer to our houses. My family, as well as other households-neighbors, were in constant fear due to the fear of losing their loved ones and property. Many thanks to the Project for your kind and noble deed, thanks to which our houses and all the property acquired over the years have been preserved. Now there is no need to leave the native place where my children grew up and now grandchildren are growing up". 08/20/2020, Vose district...

Local residents living near hazardous areas began to show great interest in project activities even during construction. As part of the monitoring of bank protection construction and restoration, a conversation was held with a local resident, who expressed her gratitude to the Project for the work carried out to strengthen the section of the river bank where her house is located.:

"Last year, in the month of May, during a flood, my neighbor above was demolished half of the household plot. I was afraid that this year the water would reach me, and I would be left homeless. Thank you for the help you provide in protecting our lands and homes. " (Sharipova Safargul, 54 years old, village Javrez-1, jamoat A. Avazov, Sari Parom). 13/2/2019



Local activist **Abdulloev Khayrullo (68 years old)** - a teacher of secondary school No. 27, Vose district, also, during the construction and rehabilitation works on the Site No. 6, expressed his deep gratitude to the Project for understanding and support in restoring the local, destroyed bank infrastructure:

"Our houses are located next to the river, the soil is loose and is constantly washed away during heavy rains and mudflows. Earlier, various organizations came and inspected our site, but no specific measures were taken. I want to express my deep gratitude from myself and from the villagers Mehrobod for help and support in solving our problem ". April 2019 jamoat Guliston, village Mehrobod

It should be noted that Abdulloev Khayrullo took an active part in attracting f the local communities to project work. Using the method of "Hashar" (communit joint work), the contractor, together with the local workforce, organized work to improve the local access road by graveling it.



The project activities at the completed sites strengthened the local bank infrastructure, prevented the further spread of erosion processes, preserved the property of the population living near the project sites, prevented costly resettlement activities and positively influenced the morale of the population living near hazardous areas.

PS.: It should be noted that even before the start of the implementation of the SCIHNP Project, some residents of the village Mehrobod, the people living in the immediate vicinity of hazardous areas were provided with land plots for resettlement. Thanks to the Project, the resettlement process has been put on hold, as they did not want to leave their comfortable homes and lose the link with their homes.



Success story of the beneficiaries of the SCINHP Project under the Subcomponent 2.2

In compiling the success story of the project beneficiary, locally recruited workers were selected who carry out construction and rehabilitation works at the project's flood control sites. The selection was carried out according to two criteria: at the level of a specialist and at the level of socially vulnerable segments of the population.

At the specialist level:

Olimov Hikmatullo, 35 years old, lives on the territory of the village Khoja Galton, jamoat Vaysov, Vose district, involved in Site No. 2 as a machine operator-excavator operator of the 6th category, receives a salary of 3 thousand somoni per month. He is married, has four minor children of different ages, and lives with his parents.

Hikmatullo, like his father, a hereditary machine operator. His father -Olimov Said, has been working as an excavator mechanic for over 40 years, is appreciated in the region as an experienced and qualified specialist of his business, has 4 sons, two of whom followed in the footsteps of their father.



Previously Hikmatullo worked as a mechanic in the district SDLRI of Vose, received a salary of 480 somoni per month. For good and quality work, he was hired by a contractor to participate in the construction activities of the Project.

Good qualifications and earnings from project activities helped to implement plans set by Hikmatullo: a house was completed, a small reservoir for fish breeding was created.

Also, at the expense of the wages received, seeds and seedlings were purchased to grow the necessary agricultural products on their own household land plot.