
ENVIRONMENTAL AND SOCIAL SCREENING REPORT (ESSR)



**Rehabilitation of Damaged
Water Supply and
Drainage Schemes of
District Larkana, Sindh**



Final Report

MAY, 2023

**SINDH FLOOD EMERGENCY
REHABILITATION PROJECT
(SFERP)**

**PLANNING & DEVELOPMENT DEPARTMENT (P&DD) COMPONENT, GOVERNMENT OF
SINDH**

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This document and its contents have been prepared and intended solely for the information and use of the Government of Sindh, Project Implementation Unit (PIU) concerning the **SINDH FLOOD EMERGENCY REHABILITATION PROJECT (SFERP)**

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Table of Contents

1. PROJECT DESCRIPTION	1
1.1. Sub-Projects Information	7
1.1.1 Brief introduction to the sub-project, its geographical location, components, and benefits.	7
1.1.2 Details about existing conditions of the area/facility and proposed scope of rehabilitation works.	8
1.1.3 Socio-Economic Condition of the Sub-Project Area.....	9
1.1.4 Explain, whether this is purely rehabilitation of existing facilities or will involve any new works	9
1.1.5 Are consultations with stakeholders conducted?.....	9
1.1.6 Will this sub-project involve any ancillary impact/ activity away from the work site?	9
1.1.7 Timeframe for starting and completion of sub-project.....	9
1.1.8 Scenario if there are any alternative designs options of sub-project.....	10
2 ENVIRONMENTAL AND SOCIAL SCREENING TOOLS	11
2.1 Environmental and Social Management Screening	11
3 STAKEHOLDER CONSULTATION	27
3.1 Community Concerns	28
3.2 Institutional Consultation	31
4 ENVIRONMENTAL AND SOCIAL MANAGEMENT & MONITORING PLAN ...	34
5 PICTORIAL PROFILE OF PROJECT SITES	41
5.1 Yar Muhammad Pirzado and adjacent area Water Supply Scheme	41
5.2 Bakrani, Doulat Khokhar Drainage Scheme	41
5.3 Bakrani, Puranabad Drainage Scheme	42
5.4 Bakrani, Nauabad, Drainage Scheme	42

5.5	Bakrani, Hakim Sandillo Drainage Scheme	43
5.6	Bakrani-Pathan Drainage Scheme	43
5.7	Bakrani, Rahim Bughio, Water Supply Scheme	44
6	ENVIRONMENTAL AND SOCIAL IMPLEMENTATION BUDGET	89
7	OPERATION AND MAINTENANCE (O&M)	89
7.1	Key aspects of O&M for WSS and Drainage systems:	89
7.1.1	Operation:	89
7.1.2	Maintenance:	90
7.1.3	Emergency Response	90
7.1.4	Water Conservation	90
7.1.5	Data Management	90
7.1.6	Documentation and Handover:	90
7.1.7	Facilities Management:	91
7.1.8	Staffing and Training:	91
7.1.9	Preventive Maintenance:	91
7.1.10	Repairs and Corrective Maintenance:	91
7.1.11	Safety and Compliance:	91
7.1.12	Energy Efficiency and Sustainability:	91
7.1.13	Asset Management:	91
7.1.14	Stakeholder Communication:	91
7.1.15	Continuous Improvement:	91
7.1.16	Cleaning and maintenance of solar system:	92
7.1.17	Regular maintenance and monitoring of Hypo-chlorinator:	92

7.1.18	PHED Responsibility:	93
7.2	Key benefits of effective O&M of WSS and Drainage Systems.....	93

List of Tables

Table 1: Environmental and Social Screening Checklist	11
Table 2: List of Stakeholders Consulted for Water Supply and Drainage Schemes of Larkana	27
Table 3: SUMMARY OF CONCERNS RAISED BY INSTITUTIONAL STAKEHOLDERS	31
Table 4: Environmental and Social Management and Monitoring Plan (ESMMP)	34
Table 5: Environmental Compliance Cost.....	89
Table 6: Estimated Environmental and Social Cost for 37 Water Supply and Drainage Scheme of Larkana District.....	89

List of Figures

Figure 1: GIS-MAP OF THE PROPOSED SUB-PROJECTS	7
Figure 2 STAKEHOLDERS CONSULTATION	31
Figure 3 INSTITUTIONAL CONSULTATION.....	33

1. PROJECT DESCRIPTION

In District Larkana, there are a total of 37 schemes, comprising 30 drainage schemes and 7 water supply schemes.

Number of Project:	Pakistan P179981: Sindh Flood Emergency Rehabilitation Project-P&DD Component (SFERP-P&DD)
Name of Sub-Projects	Water Supply and Drainage Schemes in District Larkana
Subproject Location:	The location map of subproject is given in Figure 1 and the details of the subproject sites are given below;

No.	Schemes	Coordinates (Meters)	Site Specific E&S Setting
A	Bakrani (Drainage)		
1	Arija Site	E=418862, N=3032490	The proposed site is located in District Larkana, it can be easily accessible by Indus Highway N55 on the right side via dokri road, when moving towards Naudero. The number of household and population is 340 & 1745 respectively. The area is surrounded by the human settlement with some commercial activities. There are some educational and health facility i.e., Shaheed Mohtarma Benazir Bhutto (SMBB) Medical University at a distance of 1300 m on the direction of southeast and Taluka Hospital Arija at a distance of 770 m on north.
2	Bakrani Site	E=419605, N=3035942	The proposed site is located in district Larkana, can be easily accessible by Dokri road when moving towards Moen-Jo-Daro from Larkana. The number household beneficiaries and population are 320 & 1920 respectively. The bakrani colony is present at the northwest of the proposed site. The area surrounded by the agricultural fields and a graveyard is present beside the proposed site at eastward direction. There are commercial activities, educational facilities, Masjid at a distance of 350m at west.
3	Dolat Khokar	E=422775, N=3034594	The site is present in district Larkana. It can be accessible via link road from Bakrani towards Goth Lal Buksh on the direction of southeast. There is settlement namely goth Dolat Khokhar in immediate vicinity of the proposed site. The surrounded area is mostly agricultural land. No tree cutting and resettlements is envisaged during the rehabilitation activities. The household beneficiaries and population are 200 & 1200 respectively.
4	Hakim Sandilo	E=413595, N=3033046	The proposed site is located at right side when moving towards Dokri via Dadu Canal Road. The Dadu Canal is flow at the south of the proposed site. The household beneficiaries and population are 310 & 1860 respectively. There are settlements, graveyard, masjid, petrol pumps etc. within 550m surrounding.
5	Mahrab Sandilo	E=414850 N=4035792	The site is located on the right when moving towards Naseerabad from Larkana. The area is surrounded with agricultural feeds, settlements and few commercial activities. The household beneficiaries and population are 250 & 1500 respectively. A cricket stadium namely Mahrab Sandilo is present at the immediate vicinity of the proposed site. The land is vacant and own by the government, no tree cutting is proposed.

6	Nauaabad	E=426207, N=3039442	The proposed site can be accessible by Bakrani Mad Bahu Road from Bakrani. The river Indus flow at a distance of 900m on the east of the proposed site. The household beneficiaries and population are 330 & 1980 respectively. The area is surrounded with human settlements and agricultural land.
7	New Gud 1&2	E=418802 N=3028459	The site is located at left of the N155 road, towards Moen-jo-Daro via Nai Gud Road. The household beneficiaries and population are 340 & 2040 respectively. There are settlements, agricultural and commercial activity in the immediate vicinity of the proposed site.
8	Pathan	E=416830 N=3035993	The site located near Pathan Goth Larkana, can be access via Pathan-Bakrani Bridge Road from Bakrani. The household beneficiaries and population are 190 & 1330 respectively. There is a Roshan Ice Factory beside the proposed site on the east. The area is surrounded with settlements, commercial shops, mosque and agricultural land.
9	Puranoabad	E=427674, N=3033830	The site is located on the left when moving towards Khairpur via Larkana-Khairpur Bridge. The river Indus flow at a distance of 1150m on the east of the proposed site. The household beneficiaries and population are 300&1850 respectively. There are settlements with some commercial activities in the project surroundings. Education facility i.e., Government Boys Middle School Puranoabad at the distance of 400m on the northeast. SMBB Medical University is present at a distance of 3000m on northwest of the proposed site.
10	Qazi Muhallah Main Disposal	E=410383, N=3028433	The site is present on the left when moving towards Dokri via Dokri Bypass Road. The household beneficiaries and population are 310&1900 respectively. There is settlement, agricultural and commercial activity in the immediate vicinity of the proposed site.
11	Tharecha	E=410043, N=3034502	The site is located on the right when moving towards Nasirabad from Larkana via garello road and canal road. The household beneficiaries and population are 290 & 1750 respectively. There are settlements in the immediate vicinity namely Tharecha Goth and GarelloGoth on the west from the proposed site. The area is surrounded with agricultural land and water Canal at a distance of 1600 m on east.
B Bakrani (Water Supply)			
1	Mahrab Sandilo	E=412630, N=3031654	The site can be accessible via Dadu Canal road on the right when moving from Bakrani to Dokri. The Dadu canal is present at a distance of 640m on the east from the proposed site. The area is surrounded with agricultural land and graveyard on the west. The household beneficiaries and population are 350&1750 respectively.
2	Rahim Bhugio	E=420049 N=3043596	The site is located on the left side when moving from Larkana via Larkana bypass road. The household beneficiaries and population are &2300 respect there are settlement, agricultural and commercial activity in the immediate vicinity of the proposed sit.
3	Yar Muhammad Pirzada	E=407695, N=3038430	The site is present on the right side when moving toward Naseerabad via Larkana-Naseerabad road. The household beneficiaries and population are 200&1150 respectively. There is settlement, agricultural and commercial activity in the immediate vicinity of the proposed site. There is a

			graveyard at the distance of 1260m on the direction of west.
C Dokri (Drainage)			
1	Balhrejee	E=413938 N=3020037	The site is located at larakan, it can be easily accessible when moving towards Vehar from Moen-Jo-Daro. The Historical site namely Moen-Jo-Daro is present at a distance of 2000m on northeast from the proposed site. The Indus River flow at a distance of 1000m on east from the proposed site. The area is surrounded with settlement namely Balhrejee and agricultural land. The household beneficiaries and population are 390 & 2340.
2	Mandhira Site	E=407840 N=3027393	The proposed site is located on the left when moving towards Badah from Dokri Larkana via Dokri-Badah Road. The household beneficiaries and population are 190&1150 respectively. A canal flows in the immediate facility of the proposed site. The area is surrounded with agricultural land with vegetation and settlements namely Goth Mandhira in the immediate vicinity.
D Dokri (Water Supply)			
1	Badah Bhatti Muhallah	E=402884 N=3022406	The proposed site is located at Ghulam Sarwar Kandhro near Faizan E MushkilKhusa Masjid Dawat-e-Islamai, Larkana. The household beneficiaries and population are 150&750 respectively. There is a Kandhra colony on the north of the proposed site. There are commercial shops on the north and northeast, agricultural land with few vegetation within the 1000m surrounding.
E Larkana City (Drainage)			
1	Dhamrah	E=3059161 N=426059	The site is located on main N55 Indus Hwy, District Larkana. The household beneficiaries and population are 340&2040 respectively. The area is surrounded with settlements namely Dhamraha Goth, agricultural land, commercial shops, masjid, schools etc.
2	Fateh Pur	E=424615 N=3055705	The proposed site is located on the left when moving towards Dhamraha via Larkana-Dhamraha Road. The household beneficiaries and population are 330 & 1980 respectively. The Basic Health Unit Fateh Pur is beside the proposed site on west. The Muhammad Mahedi Masjid Imam Bargah and Soomar Fakhir Masjid at a distance of 380m on northeast and 170m on east respectively.
3	Lal Bux Bughti	E=417898 N=3048916	The proposed site is located on the left towards MithoDero via Larkana-MithoDero Road. The household beneficiaries and population are 320 & 1920 respectively. There is Holy place Eid Gah at the distance of 293m on the direction of west. The area is surrounded with human settlement. A colony of Larkana model town and Rais Muhammad Bugti Goth are present within the 500m of the proposed site.
4	Lal Bakhsh Lound	E=417749 N=3051700	The site is located on the left towards Fatih Pur via N55 Indus Hwy. The household beneficiaries and population are 310 & 1860 respectively. A goth Lal Bakhsh Lound Baloch is present in the immediate vicinity of the proposed site. The area is surrounded with agricultural land and educational facility with few commercial shops.

5	Mehmood Dero	E=417608 N=3051036	The proposed site is present on the left of N55 Indus Hwy via link road Larkana-Bero Chandio. New Larkana Hotel & Restaurant is present at a distance of 300m on the northeast. The household beneficiaries and population are 300 & 1800 respectively. The nearest goth is Haq Bahu Goth at a distance of 100m on the north of the proposed site.
6	Panjudero	E=428553 N=3054061	The site is present on the left towards Panjedero Goth when moving from Naudero via Larkana – Naudero (Lakhi Hwy). The household beneficiaries and population are 360 & 2160 respectively. Dadu Canal flows on the south of the proposed site. A famous shrine of Syed Mutlib Shah is present at a distance of 640m at northwest. The area is surrounded with agricultural land, few educational facility, and commercial shops in the immediate vicinity of the site.
7	Syed Ghulam Qadir Shah	E=418081 N=3051679	The site is located on the left towards Fateh Pur via N55 Indus Hwy. The household beneficiaries and population are 400 & 2400 respectively. A goth Syed Ghulam Qadir Shah is present in the immediate vicinity of the proposed site. The area is surrounded with agricultural land and educational facility with few commercial shops.
F Larkana City (Water Supply)			
1	Rais Muhammad Khan Sadilo	E=413344 N=3048232	The site is located on the left of N55 when moving towards Larakana city, opposite to Mitho Dero Goth near Chawra Bricks and Hassnain Luhar Bricks. Yousaf Shah Jeelani Shrine is present at a distance of 650m on southwest from the proposed site. The household beneficiaries and population are 550 & 2750 respectively. The area is surrounded with commercial activities, restaurants and human settlements.
G Rato Dero (Drainage)			
1	Allah Din Silro	E=426789 N=3074681	The site is located on the left towards Miro Khan via Mero Khan-Ratodero Road, Larkana. The household beneficiaries and population are 500 & 3000 respectively. The area is surrounded with human settlement (Shah Jo Dero) on the north. A Masjid Ismail is present at distance of 70m on northwest. The area is mostly vacant land with few agricultural activities.
2	Bosan Wada	E=424818 N=3088370	The site is located at Larkana on the right via link road from Shahdaskot Branch towards M8. The household beneficiaries and population are 490 & 2490 respectively. There is settlement, few agriculture activities and commercial shops in the immediate surrounding of the proposed site. There is a holy place named Masjid and Imam Barghah Wada Bosan at the distance 164m on the North East.
3	Ghanhwr Bhatti	E=432120 N=3062178	The site is located on the left when moving towards Pitafi via Bhutto Road from Naudero Road (N105). The household beneficiaries and population are 450 & 2700 respectively. There is settlement, agricultural and commercial activity in the immediate vicinity of the proposed site. There are some educational facilities i.e., Government Boys school. A masjid shareef is present at the distance of 100m on the direction of north east.

4	Khan Wah	E=435002 N=3066918	The proposed site is located on the left when moving from Ratodero to Naudero via N655 Hwy. The household beneficiaries and population are 430&2580 respectively. The area is surrounded with settlements (Khan Wah Jarwar Goth), agricultural activities, commercial shops, BHU, Masjid, and graveyard etc. HM Sons Fish Farm is present at a distance of 620m on southeast from the site.
5	Phulpota (Sheikh Muhallah)	E=420835 N=3073563	The site is present on the right towards Mero Khan via Mero Khan – Rato Dero Road, Larkana. The household beneficiaries and population are 310&1860 respectively. There are scattered settlements with few commercial shops within the 400m surrounding. Rahib Khan restaurant is present at a distance of 600m on west.
6	Rato Dero City	E=423987 N=4262784	The site is present in main RatoDero City, no agricultural activity within the 1000m surrounding. The area is densely populated with human settlements. The household beneficiaries and population are 400&2400 respectively.
7	Razo Pitafi	E=432120 N=3062178	The proposed site is located a District Larkana on the right of N55 Indus Hwy at 4000m towards Ghanwar Bhatti Colony. The household beneficiaries and population are 410 & 2460 respectively. The area is surrounded with agricultural land with vegetation. The settlements are present in the immediate vicinity of the area and northeast and south from the proposed site.
8	Sawan Khan Gopang	E=429677 N=3058990	The proposed site is located a 3600m east N55, Indus Hwy on the right at Bus Stand Juneja Dhamraha, Larkana. The household beneficiaries and population are 430 & 580 respectively. The settlement is present on the northeast from the proposed site namely Village Sawan Khan Gopang. The area is surrounded with agricultural land.
9	Tayyab	E=430969 N=3072586	The site is located at right of the N655 road, towards Ratodero via Ratodero-Naudero, Larkana. The household beneficiaries and population are 500 & 3000 respectively. There is a colony of Tayab Abro on the north, a government primary school at distance of 200m at northeast, Madarsa Gulzar Hafiz Zafar-a-bad at distance of 950m on southwest. The surrounding area is mostly vacant.
10	Zangeja	E=427885 N=3071571	The proposed site is located on the left at Toll Plaza Larakana Via N55 road towards Rato Dero. There is a canal at a distance of 275m on northwest. The household beneficiaries and population are 390 & 2340 respectively.
H RatoDero (Water Supply)			
1	Kabeer Khan Bozdar	E=417623 N=3086261	The site is located at near Dargha Pir Musafir Shah, district Larkana. The household beneficiaries and population are 450 & 2250. Scattered settlements with few commercial and agricultural activities, Kur Biro Distributary within 1700m surrounding of the proposed site.
2	Kamal Khan Chandio	E=425641 N=3125362	The site located on the right when moving towards Mehar via Nasirabad-Mehar Road. The number of household beneficiaries and population are 550& 2750 respectively. There are Shahi canal at the distance of 778m on the direction of East. No tree cuttings are involved during the rehabilitation work.

Subproject Objectives:

- To rehabilitate the damaged infrastructures of Water Supply and Drainage System.
- To provide uninterrupted and safe drinking water to the community.
- To improve health & hygiene of local communities of surrounding areas.
- To uplift the socio-economic conditions of the areas.

Project description The sub-component “rehabilitation of water supply and drainage schemes” will rehabilitate the selected and prioritized water supply infrastructure that has been destroyed or damaged by the floods. The primary objective of this project is to evaluate the condition of water supply and drainage schemes, which includes assessing filtration techniques, piping, water quality, efficiency and adequacy of equipment, population coverage, and technology employed. This assessment will encompass a comprehensive study of network elements such as pumps, tanks, pipe materials, as well as parameters like diameters, flow rates, and the overall functionality of water supply and drainage systems constructed. The subproject schemes are located in Larkana District of Sindh, Pakistan. The main aim of the said project is to rehabilitate existing sources of water supply and sewerage facilities for the flood effected people in District Larkana.

Environmental and Social Settings

The subproject land is owned by the Government. The proposed activities are the rehabilitation and restoration of damage water supply schemes and drainage facilities. These schemes are the properties of the Government body. There are no major environmental and social impacts of the project activities to the vicinity of the subproject areas. There are no water bodies within the sub-project sites. The subprojects will not affect any flora, fauna and natural habitat of the area and there is no plantation where rehabilitation of water supply and drainage scheme are being rehabilitated. There are few trees at the vicinity of the proposed areas which will not be disturbed during the rehabilitation works. The environmental and social impacts will be kept at minimum by ensuring the mitigation measures and continuous monitoring. All measures will be planned, organized and implemented which are vital for health and safety of the workers. Instrumental Environmental Testing will be conducted on key parameters like air quality, water quality and noise level determination. Local flora is important to provide shelters for the birds, offer fruits and/or timber/fire wood, protect soil erosion and overall keep the environment very friendly to human living. As such damage to flora has wide range of adverse environmental impacts which will not be anticipated. Plantation has been proposed after the completion of the project to enhance the aesthetic beauty of the project vicinity. No sub-projects related socioeconomic issues have been recorded during the baseline surveys of the sub-projects. Community and project beneficiaries are very much enthusiastic about the early rehabilitation and completion of the sub-projects. Settlements, including built-up areas such as homes, shops, mosques, graveyards, and schools, are located in the vicinity of the sub-projects. Community is settled in villages which are actual project beneficiaries. No natural water spring is found in the proposed sub-project area. The site wise detailed of environmental and social setting of the proposed area are presented in the section 1.1.2.

Project Activities/ Scope of Work**Proposed Rehabilitation of Damaged Infrastructures of Water Supply Schemes (WSS)**

- Rehabilitation of Tube wells
- Rehabilitation of Pumping Machinery i.e., Submersible Pumps, Centrifugal Pumps,
- Rehabilitation of Solar System
- Rehabilitation of Storage Tanks
- Rehabilitation of Low Surface Reservoirs (LSRs)

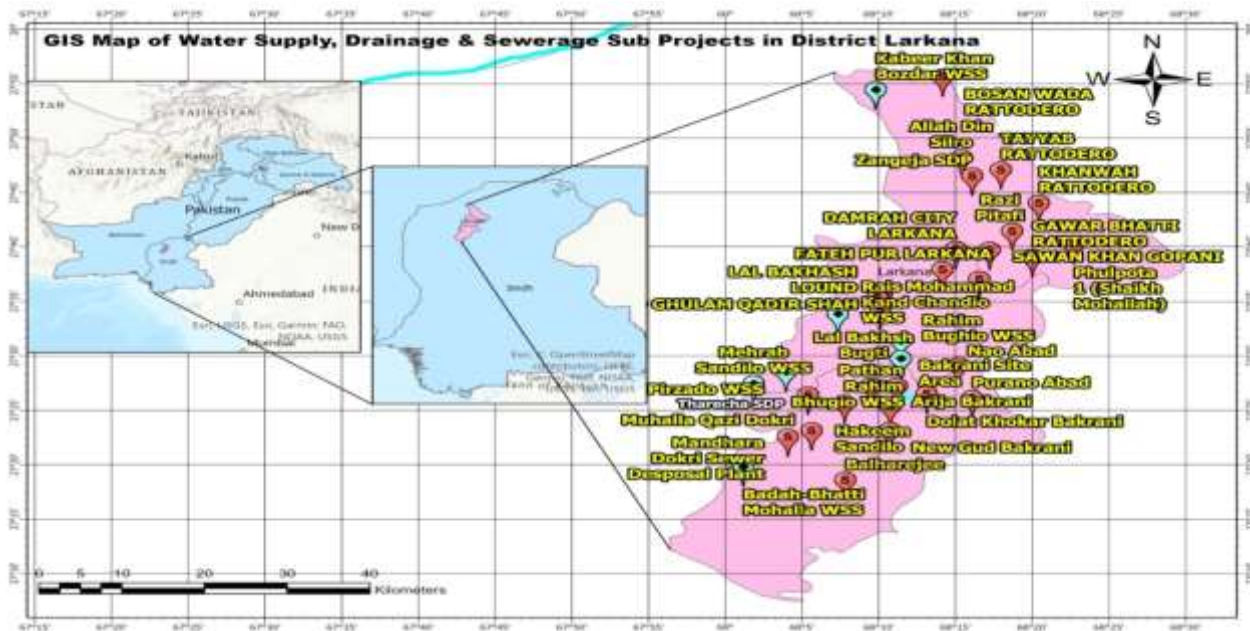
- Rehabilitation of Distribution Network i.e., Pipe network
- Rehabilitation of Pumping Stations/Buildings
- **Rehabilitation and improvement of Electric** Rehabilitation of Electrification and mechanical works transmission
- provision and installation of disinfection system i.e., hypo-chlorinator equipment

Rehabilitation of Damaged Infrastructures of Drainage Schemes

- Rehabilitation of Street drains
- Rehabilitation of Pumping Machinery i.e., sludge Pumps, Motors
- Installation of Solar System for alternative power supply
- Rehabilitation of Screening Chambers
- Rehabilitation of Collecting Tanks
- Rehabilitation of Drainage Pumping Station Building
- Rehabilitation and enhancement of existing Electric system with automation Work
- Rehabilitation of Rising Main network to dispose of the drainage

Proposed Date of Commencement of Work: The Rehabilitation of water supplies and drainage activities will be started in October, 2023 after completion of pre-requisite requirements.

Figure 1: GIS-MAP OF THE PROPOSED SUB-PROJECTS



1.1. Sub-Projects Information

1.1.1 Brief introduction to the sub-project, its geographical location, components, and benefits.

The subproject sites are situated in District Larkana, Sindh, within the Government territory, specifically under the jurisdiction of the Public Health Engineering Department (PHED). The aim is to rehabilitate and restore the water supply and drainage systems that were damaged or destroyed during the 2022 floods. These efforts will prioritize the selected water supply infrastructure, ensuring its recovery. Currently, the community in District Larkana has been suffering from a lack of safe drinking water and living in unhygienic conditions due to inadequate collection and treatment of storm water, which has led to the complete destruction of the drainage system.

The proposed subproject intends to address these issues by rehabilitating the water supply and drainage schemes to a resilient level. This will guarantee a continuous provision of safe drinking water to the community, while also ensuring the proper collection, treatment, and disposal of storm water in an environmentally friendly manner. The primary source of drinking water in the district is underground, which will be extracted using pumps and stored in Low Surface Reservoirs (LSRs) before being distributed to the community. The water will undergo analysis in a recommended laboratory, and precautionary measures will be taken based on the results. It is important to note that there is no surface water available in the areas covered by the subproject.

Overall, the proposed project aims to create a healthier environment in the area and uplift the socioeconomic conditions of the residents by providing them with safe water and employment opportunities for the locals.

1.1.2 Details about existing conditions of the area/facility and proposed scope of rehabilitation

works.

The water supply and drainage schemes were not up to mark as almost all structures have been damaged by flood, 2022. The tube wells, pumping stations, distribution network and LSRs have been badly affected. As a result of which, the people of District Larkana are facing scarcity of safe drinking water. Comprehensive surveys have been conducted by the expert to monitor the sites and assessed the damages and restoration of infrastructures. Rehabilitation of damaged infrastructure will provide the capacity and efficiency for uninterrupted safe drinking water supply to the community.

Currently, community of District Larkana is living in unhygienic condition as drainage system has been broken-down in flood, 2022. The sewage disposal ponds (SDPs) including pumping stations and drainage network have also been affected. The damages have been assessed through proper survey and rehabilitation work is being made part of Sub-projects PC-1 of District.

The flood damaged the Water Supply and Drainage Schemes which affected the community. The community has been deprived by drinking water facility. The stagnant water provides breeding grounds to mosquitoes and flies which serve as vector of many diseases in the area. At some places, water supply lines are passing beside the storm water drains which also affect the quality of drinking water. Due to unavailability of water, community have to fetch water from far flung areas which creates social stress. Security and privacy of the local people has been disturbed as well. There is a need to rehabilitate the existing damaged water supply and drainage schemes in order to resolve the socioeconomic issues of the sub project area. The sub-project areas are located in different areas of District Larkana, the schemes and systems are operated under the Government territory. The activity involves in the subproject is restoration and rehabilitation of damaged Water Supply and Drainage Schemes of District Larkana.

i. Flora of Sub-Project Area

The climate of the District Larkana is arid and subtropical, the original flora of the area consists of tropical thorn forest type vegetation. The district belongs to the Riverine Tract Habitat of Sindh. The dominant plant species found in the areas are wild Sugarcane (*Saccharum officinarum*), Poplar (*Populus ciliata*) and Babul (*Acacia nilotica*).

Other flora includes Jand (*Prosopis cineraria*), Khejri (*Prosopis specigara*), Bahan (*Populus euphratica*), Berry (*Zizyphusnumularia*), and Jhao (*Tamarisk dioca*). On the roadside and in orchards, Indian Fig (*Ficus indica*), Pipal (*Ficus religious*), Siras (*Mumosasirissa*), Neem (*Azadirachta indica*) and Tamarind (*Tamarandus indica*) are also found in the area.

Agricultural fields are mostly plain, and used to grow crops such as wheat (*Triticum aestivum*), maize (*Zea mays*) and Mustard (*Brassica nigra*). Fruit trees are also common mostly found in and around the built-up property. Land use pattern is largely scrubbing forest in the sub-project areas.

ii. Fauna of the Sub-Project Area

The animal species has been disturbed due to increase in population of the subproject areas. Mammal species are found in the District Larkana are Hog Deer (*Axis porcinus*), Wild Boar (*Sus scrofa*), Jackal (*Canis aureus*), Wolves (*Canis lupus-chanco*), Fox (*Vulpes vulpes*) and Porcupine (*Hystrix indica*).

Among birds, Partridges (*Ammoperdix griseogularis*), and the Sandgrouse (*Namaqua sandgrouse*) are common in the forest plantations. Many varieties of Waterfowl (*Anseriformes*) like Cattle egret (*Bubulcus ibis*), Indian Reef Heron (*Egretta garzetta*), and Mongolian sand plover (*Charadrius mongolus*) are also found. Other birds found in the district are Little Brown Dove (*Phapitreron*), koel or cuckoo (*Eudynamis*), Indian Scoop Owl (*Otus scops*), and Indian Horned Owl (*Bubo virginianus*).

1.1.3 Socio-Economic Condition of the Sub-Project Area

Majority of the population of the district is Muslim. The culture life of the Muslims is greatly influenced by the Islamic way of life. URS ceremonies are regularly held at shrines. The Hindus also hold great confidence in Thakurs and Brahmans. The Brahmans usually perform spiritual rituals of Hindus on special occasions as observed during sites visits. The languages mostly spoken in District Larkana are Sindhi, Brohi, Balochi, Siraiki and Urdu. However, Urdu is understood amongst all the population of district Larkana. The economy of Larkana is mainly based on agriculture. Rice and Guava are the major crops. The industry sector comprises a 100 rice mills. The area is believed to have coal deposits in the hilly areas in the south. But there is no mining activity in the district to unearth this natural resource. Broadly, the following sectors contribute to the local economy: a) Agriculture b) Livestock c) Horticulture d) Bakery and sweets e) Trading f) Rice mills g) Fisheries h) Handicrafts

1.1.4 Explain, whether this is purely rehabilitation of existing facilities or will involve any new works

The subproject involves rehabilitation of damaged Water Supply and Drainage Schemes of the existing utilities which are being operated by the PHED. No new work is involved under sub-project work.

1.1.5 Are consultations with stakeholders conducted?

The social and environmental experts held series of consultation meetings with the local community and relevant stakeholders, residents of the sub-project areas in March, 2023.

The field team comprising the Environment and Social Safeguard Specialist visited the nearby communities of the sub-project to get the views of the communities in the sub-project area, who could be affected and beneficiaries. They appreciated for taking up the initiative of rehabilitation and restoration of damaged water supply and drainage schemes. According to the community, the rehabilitation works would provide them safe drinking water and ensure safe disposal of storm water. The detailed concerns of community are described in the section 3 of this ESSR.

The social and environmental team carried out a public consultation with local communities. Participants of public consultation meetings were briefed on salient features of the sub-projects. The team assured that all the concerns raised by them would be addressed. Mitigation measures will be proposed to minimize the impacts during rehabilitation activities. Mitigation measures will be adopted to control noise and air pollution.

The damaged utilities are owned by the PHED of District Larkana. Consultation with Line Department and Community have also been completed. The community was very blissful by the rehabilitation work carried out by the involvement of the Govt. of Sindh. They said that they will take a sigh of relief after completion of these much-needed projects. The subprojects were installed in Government owned land and no land will be acquired for rehabilitating the sub-projects. The community demanded to give jobs particularly unskilled jobs to the locals during construction work. The community was assured that jobs opportunities will be created and locals will be preferred. The detailed concerns of institutional stakeholders are described in the section 3 of this ESSR.

1.1.6 Will this sub-project involve any ancillary impact/ activity away from the work site?

There is no secondary impact in the sub-project areas. All the impacts are minor and temporary during the rehabilitation/restoration phase and the project falls under the category C which creates minor or low adverse environmental impacts with limited to rehabilitation/restoration phase.

1.1.7 Timeframe for starting and completion of sub-project

The subproject will be started in October, 2023 and will be completed in April, 2025.

1.1.8 Scenario if there are any alternative designs options of sub-project

Here are some alternative approaches for water supply and drainage systems:

Rainwater Harvesting: Implementing rainwater harvesting techniques can help collect and store rainwater for later use. This alternative reduces the reliance on underground sources and provides a sustainable water supply.

Grey water Recycling: Instead of disposing of grey water from sinks, showers, and washing machines, it can be treated and reused for non-potable purposes such as toilet flushing or irrigation. This approach reduces the strain on freshwater resources and promotes water conservation.

Decentralized Water Treatment Systems: Instead of relying on a centralized water treatment plant, decentralized systems can be established at the community level. These systems utilize small-scale treatment methods such as filtration, disinfection, and purification to provide safe drinking water to local residents.

Sustainable Drainage Systems (SuDS): SuDS employ environmentally friendly techniques to manage storm water runoff. This includes features like permeable pavements, green roofs, and rain gardens that help absorb and filter rainwater, reducing the burden on drainage systems and preventing flooding.

Water Efficiency Measures: Promoting water-efficient practices and technologies, such as low-flow fixtures, dual-flush toilets, and water-efficient appliances, can significantly reduce water consumption in households, industries, and public facilities.

Desalination: In areas where freshwater resources are scarce, desalination plants can be utilized to convert seawater into potable water. Although this option requires substantial investment and energy, it provides an alternative water source for regions facing severe water shortages.

Water Reuse and Reclamation: Implementing advanced water treatment processes can enable the reuse of treated wastewater for various non-potable applications, such as irrigation, industrial processes, and groundwater replenishment. This approach reduces the demand for freshwater resources.

Aquifer Recharge: Managed aquifer recharge involves intentionally infiltrating excess surface water into underground aquifers, replenishing depleted groundwater resources. This technique helps to stabilize water levels and improve the sustainability of water supply systems.

Community-Based Water Systems: Engaging local communities in the planning, implementation, and maintenance of water supply and drainage systems can foster a sense of ownership and ensure sustainability. This approach empowers communities to take responsibility for their water resources.

Integrated Water Management: Adopting a holistic approach that considers the entire water cycle, including water supply, wastewater treatment, storm-water management, and water conservation, can lead to more efficient and sustainable water management practices.

It's important to assess the specific conditions, needs, and feasibility of each alternative before implementing them in a particular project or region.

2 ENVIRONMENTAL AND SOCIAL SCREENING TOOLS

2.1 Environmental and Social Management Screening

Project Area	Larkana District of Sindh, Pakistan
Project Title	Sindh Flood Emergency Rehabilitation Program (SFERP), P&DD Component, Sindh
Sub-project Title	Rehabilitation of Damaged Water Supply and Drainage Schemes

Table 1: Environmental and Social Screening Checklist

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
A. Project Siting Is the project area							
1. Densely populated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposed schemes are located in a sparsely populated areas of Sindh Districts.
2. Any other development activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No development activity is going on in the surrounding areas.
3. Adjacent to or within any environmentally sensitive areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No environmental sensitive area is around of the project sites.
4. Cultural heritage site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No cultural or heritage site is in the vicinity of this project areas. However, a Chance Finds Mechanism will be proposed and construction contractor will be ensured during construction activities. The contractor will also ensure training of the workers in case a chance find is encountered. This training will be part of the

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							overall training delivered by the contractor. Contractor will also inform the Consultant if any cultural heritage site is discovered.
5. Protected area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, the proposed schemes will be implemented using the existing utilities operated by the PHED. The construction work solely focuses on rehabilitation and improvement.
6. Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No wetland or damage to flora and fauna is envisaged.
7. Mangrove	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No mangroves are present in the vicinity of the project areas.
8. Estuarine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No estuarine area is present around the project areas.
9. Buffer zone of protected area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No buffer zone viz. a river lake, open space, endangered species, in its immediate surroundings. A few wild vegetation and trees were found at outside of the proposed boundaries which will not be disturbed during the project activities.
10. Special area for protecting biodiversity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The area is in use of regular inhabitants and no special area for the protection of biodiversity exists.
11. Forest	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No forest area or a forestation is around in the project surroundings.
12. Bay	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No bay is around in the sub-project vicinity.
B. Potential Environmental Impacts (Construction Phase)							
1. Will construction camp site cause land clearing and tree cutting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be constructed; existing built-in structures will be utilized as camp site. Also, it will not cause any land clearing and tree cutting activity as majority of the subproject areas is devoid of vegetation or vacant land.
2. Will construction campsite interfere with the community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No interference to the community as the facility is enclosed and free from any interference. For the given activity no establishment of construction camp is required. There are existing infrastructures that will be used for camp purposes.
3. Will construction camp site cause soil pollution?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no soil pollution will be occurred.
4. Will construction camp generate domestic solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no domestic solid waste will be generated.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
5. Will construction camp generate hazardous solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no construction camp, therefore, no hazardous will be created.
6. Will construction camp generate sanitary wastewater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no construction camp, therefore, no sanitary wastewater will be created. Labor will be housed in rented places or go back to their homes in the evening.
7. Will fire be a potential safety hazard at construction camp?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no fire risk is anticipated.
8. Will construction camp activities cause air pollution?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no air pollution from camp will be created.
9. Will construction camp activities cause noise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No construction camp will be established; therefore, no noise pollution from camp will be created.
10. Will construction activities require tree cutting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The development is site-specific and limited to the existing specified facility for the rehabilitation of damaged water supply and Drainage schemes, so no tree will be chopped during construction phase.
11. Will construction activities result in damaging existing local roads, bridges or other infrastructure?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Sub-project activities do not involve damage to any nearby and existing road, bridge and any other infrastructure. The rehabilitation activities are limited to existing facilities of WS & DS.
12. Will construction activities involve use of explosives and chemicals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No explosives and chemical will be used during the project activities.
13. Will construction activities disturb natural habitats?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No natural habitats will be disturbed in closed vicinity of the existing area.
14. Will construction activities resulting impairment of historical/cultural monuments/areas and Loss/damage to these sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The construction activities will not harm historical/cultural monuments/areas and loss/damage to these sites.
15. Will construction activities generate noise?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, noise will be generated from various sources such as plumbing, drilling generators, rehabilitation activities and vehicular movement that will be limited to the proposed boundary of the sub-project and nearby community will not be affected. Mitigation Measures:

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<ul style="list-style-type: none"> - The contractors would ensure keeping noise levels from construction vehicles and machinery to be within safe limits. - Construction activities will not be allowed at nighttime. - Noisy machines and vehicles will not be allowed to be used at the sub project sites (noise level will not be more than 85 dBA at 7.5 m distance), properly tuned machinery and vehicles will be allowed only. - Workers will use noise protection equipment when working in a noisy area. - Notifying and coordinating with locals adjacent to project area prior to construction to inform them of the possibility of temporary noise disruption, and how to report noise complaints in accordance with the proposed GRM. - The contractor will adhere to the requirements of the mitigation plan contained in the contract documents with true spirit and regular monitored as per SEQs.
16. Will construction activities generate dust?	√	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	<p>There will be construction vehicles and machines which may generate dust emissions. The machinery used in rehabilitation work will be tractors and trolleys for fetching material.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - Regular water sprinkling will be the responsibility of the contractor at the dust generation points during construction activities. Water will also be sprinkled at vehicular and machinery movement routes to avoid dust spreading to the nearby community.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<p>In addition, the provision of dust masks and ensuring their use by the workers will also be the responsibility of the contractor.</p> <ul style="list-style-type: none"> - All vehicles, machinery, equipment and generators used during construction activities will be kept in good working condition and be properly tuned and maintained to minimize exhaust emissions.
17. Will construction activities cause air pollution due to stack emissions from generators, construction machines and vehicles?	√	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	<p>The activities include rehabilitation of damaged water and drainage schemes in which air pollution at minor extent during the rehabilitation work.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • The emissions from generators, (if used) and vehicular/machinery movement at the site can affect the ambient air quality at sub project sites. It will be the responsibility of the contractor to use well maintained generators and vehicles/machines to keep ambient air quality within the desired level. The contractor will be obliged to provide fitness certificate/maintenance records of the generators, vehicles and machines before deploying them at the construction sites.
18. Will construction activities generate asphalt emissions?	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No asphalt activity is involved in the sub-project.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
19. Will construction activities cause soil pollution?	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<p>During construction work, various mitigation measures can be employed to address soil pollution.</p> <ul style="list-style-type: none"> - Mitigation Measures: Implementing barriers and containment systems to prevent the spread of pollutants from construction sites to surrounding soil. - Ensuring proper disposal of construction waste, including hazardous materials, to prevent soil contamination. This involves following appropriate waste management procedures and regulations. - Implementing spill prevention measures and having protocols in place to quickly respond to any accidental spills of chemicals or pollutants that could contaminate the soil. - Contaminated soil management: If contaminated soil is encountered during construction, proper management procedures would be followed, including containment, removal, and disposal in accordance with local regulations. - Regular monitoring: Conducting regular soil quality monitoring throughout the construction process to detect any signs of pollution and take corrective actions promptly. - Providing training to construction personnel regarding the importance of soil protection and pollution prevention measures to ensure their active participation in maintaining a pollution-free construction site. <p>By implementing these mitigation measures, construction activities can minimize soil pollution and contribute to environmental sustainability.</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
20. Will construction activities generate construction debris?	√	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	Yes, as the sub-project will involve civil works for the development of Water Supply and Drainage Schemes, which may generate a very small quantity of construction debris. Mitigation Measures: <ul style="list-style-type: none"> The debris (rejected material) and WS&DS broken materials produced during construction would be disposed-off in Government approved/allocated disposal sites by engaging third party which is certified from SEPA. Leftover material would not be dumped into storm water drains or watercourses, because such practices can clog these man-made and natural drainage systems and cause many other problems for the residents/Local Commuters.
21. Will construction activities generate hazardous solid waste?	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No hazardous waste will be generated during construction phase of the project
22. Will construction take place near to water bodies?	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No surface water body is present around the proposed sub project sites.
23. Will construction activities cause contamination of the surface water resources?	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It will not cause contamination of the surface water resources as it is the development of Water Supply and Drainage Schemes with the limited scope of the sub-project within their respective enclosed boundary wall.
24. Will construction activities take place near wastewater/storm water drains?	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	The sub-projects are rehabilitation of water supply and drainage schemes.
25. Will construction activities result in damaging the utilities at site?	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No utilities will be affected by the construction activities. However, the sub-project scope is already restoration and rehabilitation of WS&DS of the proposed area.
26. Will construction activities require utilities relocation?	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No utilities relocation is required.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
27. Will construction activities involve excavation?	√	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	<p>The excavation will be done for the foundation works of pump house, disposal stations,/drainage works, boundary walls, collecting tanks and screening chambers.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - The excavation will be done carefully to avoid the damages. - Excavation area will be barricaded. - Contractor will use safety signs to warn and aware the local people during construction activities. - Contractor will be ensured availability of adequate Personal Protective Equipment (PPE) at the sub-project sites. - Risk assessment will be carried out by contractor before initiation of excavation work. - The contractor will ensure that all workers on site will be properly trained and certified to handle an excavation machine.
28. Will construction involve heavy machinery?	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>No, despite few machines like excavators will be used for the civil works on need basis; however, the contractor will ensure safety precautions during construction phase of the sub-projects.</p>
29. Will construction activities increase road traffic at site?	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Few vehicles will be used during construction work which will not increase traffic on road.</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
30. Will construction activities cause traffic congestion/diversion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reduce traffic speeds on all unpaved surfaces to 15 km/ hour or less. Contractor will strictly implement speed limits and defensive driving policies. Traffic control will be maintained work sites. Contractor machinery and equipment will not hamper the traffic at main road near borrow areas and sites. Necessary training, information will be provided to the workers regarding traffic rules.
31. Will construction activities cause mobility and accessibility issue for the residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No such issue of mobility/accessibility will be caused during the sub-project development.
32. Will construction activities/machines be the safety hazards for the workers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the proposed sub-project will involve civil works and infrastructure developmental activities which can pose safety risks for workers. Risk can occur from machinery usage, vehicles, and civil work activities. General occupational hazards that may be encountered (e.g., moving machinery and motorized equipment, working at heights, repetitive motions, falling objects)

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
33. Will constriction activities cause dust generation due to Earth Work?	√	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	Water sprinkling will be carried out whenever required particularly near worksites and local communities to avoid dust pollution. Necessary PPE i.e., face mask will be provided to workers. Contractor will ensure that dust emissions due to vehicular traffic are minimized by reducing the speed.
34. Deterioration of air quality due to machinery and equipment's operation	√	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	Water sprinkling will be carried out whenever required, particularly near work sites and sensitive receptor's location to avoid dust pollution. Well maintained and tuned vehicles will be used for the transportation and disposal of material. Vehicles speed will be kept 30 km/hr. within project vicinity.
35. Community safety	√	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	Necessary PPE i.e., face mask, goggles etc. will be provided to workers. Barricading tapes will be installed around the construction activity to avoid any unauthorized entry. Restrict public to enter construction site through fixing of various warning signs/banners & temporary hard barriers. No machinery will be left unattended, particularly in running condition. Public consultation with the nearby community will be carried out before the start of construction activities.
36. Will rehabilitation work be the safety hazards for the occupational?	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	Yes, Occupational Health & Safety issues are anticipated from the proposed rehabilitation work and mitigation measures have been proposed below.
							Mitigation Measures: <ul style="list-style-type: none"> • The laborers with any transmittable diseases will not be allowed to work. • Ensure and strictly implement the SOPs regarding communicable diseases including daily body temperature check, PPEs, emergency response, and drills.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
							<ul style="list-style-type: none"> • Good hygienic food and safe drinking water will be provided to workers and labors at site. • Skilled and Unskilled workers will be allowed to work at the construction sites. • Assess the hazards associated with the required works and prepare and follow the safety procedures required for the specific works such as electrical works and works at height. • Provision of first aid facilities for workers at site for meeting the emergency needs of workers, and providing basic medical training to specified work staff and basic medical service and supplies to workers. • Observe and maintain standards of Health and Safety towards all employees in line with WB EHS Guidelines along with Sindh Occupational Health and Safety Law. • Ensure that hazards associated with manual lifting are controlled by proper lifting techniques, work rotation system will reduce the chances of being exposed to work- related stress associated with construction activities. • Unauthorized personnel will not be allowed to enter project site without permission and safety permits. • Workers will wear appropriate work specific PPEs. • The contractor will install Physical barrier, to restrict and prevent the entry of persons to any area exposed to a hazard due to his construction/rehabilitation activity. • Contractor will install safety signs and markings to demarcate the construction zone. • Contractor will ensure provision of controlled access points for the prevention of an unauthorized access to the site. • The Contractor will maintain a record of the persons who enter or exit from the sub-project site.
37. Welding creates an extremely bright and intense light that may seriously injure a worker's eyesight. In extreme cases, blindness may result.	√	□	□	□	√	□	<ul style="list-style-type: none"> • Provision of proper eye protection such as welder goggles and/or a full-face eye shield for all personnel involved in or assisting welding operation. • Additional methods may include the use of welding barrier screens

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
Additionally, welding may produce noxious fumes to which prolonged exposure can cause serious chronic diseases.							<p>around the specific work station (a solid piece of light metal, canvas, plywood designed to block welding light from others).</p> <ul style="list-style-type: none"> • Special hot work and fire prevention precautions and Standard Operating Procedures (SOPs) will be implemented if welding or hot cutting is undertaken outside established welding work stations.
38. In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence?	√	□	□	□	√	□	<p>Subsidence may occur as a result of extracting large volumes of water from the ground. In case of subproject, subsidence will be reduced by implementing following mitigation measures as well as awareness must be given during project cycle for careful use of water among public.</p> <p>To mitigate subsidence caused by the extraction of large volumes of water from the ground, the following measures can be implemented:</p> <p>Mitigation measures:</p> <ul style="list-style-type: none"> - Establish comprehensive monitoring systems to track water extraction rates and ground subsidence levels. - Encourage water conservation practices and the efficient use of water resources to reduce the overall demand for groundwater extraction. - Implement artificial recharge techniques such as injecting treated wastewater or surface water into aquifers to replenish the groundwater levels. - Develop managed aquifer recharge (MAR) projects where excess water from rivers, lakes, or reservoirs is intentionally infiltrated into aquifers to replenish groundwater resources. - Avoid heavy extraction in areas prone to subsidence or where the underlying geology is susceptible to subsidence. - Raise public awareness about the importance of responsible groundwater management and the potential consequences of excessive extraction. <p>By implementing these mitigation measures, the adverse effects of subsidence resulting from the extraction of large volumes of water from the ground can be minimized, ensuring the long-term sustainability of groundwater resources and protecting infrastructure and ecosystems.</p>

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
C. Potential Social Impacts							
1. Will the construction cause any labor issues such as labor living and working conditions?	√	<input type="checkbox"/>	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	<p>Labor condition or rights related issues will be complied such as working hours, leaves, benefits, wages, and other related facilities like provision of foods, clean water, transportation etc. However, no labor camps are anticipated as it involves small scale activities which doesn't involve any living conditions.</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - The Workers' Grievance Redress Mechanism (GRM) will be developed communicated among workers to lodge complains. - Workers should be provided with clean drinking water for free.
2. Will construction activities cause community Health and Safety issues? Or any other such impacts.	<input type="checkbox"/>	√	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>No such impacts are anticipated, though following will be applicable to the project activities.</p> <ul style="list-style-type: none"> • GRM must be communicated to the internal staff and the general public. • Close consultation with local communities to identify optimal solutions where needed. • Contractor shall give preference to local community members in the Project Area of Influence, to the extent feasible, with respect to the employment of unskilled labor. • Community grievances will be recorded and responded to on an urgent basis. • No Hazardous and non-hazardous waste will be dumped outside any community. • There should be sufficient signage to warn of dangers and hazards on a construction or worksite. Signs should be clear and accompanied by ropes, cones, and other equipment to cordon off dangerous areas. • Conduct worksite inspections daily to identify any potential dangers or hazards. Dangers and hazards should be cordoned off immediately.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
3. Will the construction activities cause the socio- cultural issues and damage to any cultural heritage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, the construction activities will not cause such impacts.
4. Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Local Stakeholders have been consulted and their comments mentioned in stakeholders' consultation have been noted which will be addressed with true letter and spirit during construction phase.
5. Have alternative plans of the project been examined with social and environmental considerations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Project alternatives have been suggested.
6. Is the project site or discharge area located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project sites or discharge areas are not located in protected areas designated by the country's laws or any international treaties and conventions.
D. Potential Environmental Impacts (Operational Phase)							
1. Leakages in the drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project is established for the rehabilitation of Water Supply and Drainage Schemes within the existing specified sites and no leakages and damage to the drains will be involved in the sub- project.
2. Blockage of drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Drains will be covered with removable precast slabs to prevent fall of Solid Waste in the drains. These removable slabs will be provided on crossways and pathways only. Drains will be cleaned after regular intervals.
3. Damaging of drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project development is on the existing specified facility, therefore, no damage to the drains is involved in the project.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
4. Clogging and over flowing of waste water from the drains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No
5. Chances of contamination of water supply	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No contamination in water supply proposed in the project area.
6. Do noise and vibrations generated from the facilities, such as pumping stations comply with the country's standards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Noise and vibration due to pumping will be kept in permissible limits.
7. Do the project sites or discharge areas encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project sites or discharge areas do not encompass the protected habitats of endangered species designated by the country's laws or any international treaties and conventions?
8. Is there a possibility that the amount of water used (e.g., surface water, groundwater) by the project will adversely affect surface water and groundwater flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The amount of water used (e.g., surface water, groundwater) by the project will not adversely affect surface water and groundwater flows.
9. Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There will be no involuntary resettlement because sub-project sites are located in Government own land.
10. Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There is not possibility that the project will adversely affect the living conditions of inhabitants. However, adequate mitigation measures have also been proposed to reduce impacts.
11. Is there a possibility that the project will adversely affect the local landscape?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Local landscape will not be affected by the project.

SCREENING QUESTIONS	Yes	No	Impact Severity Ranking				Remarks/Mitigation Measures
			NR	1	2	3	
12. Are appropriate measures taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?	√	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Security guards will be deployed to safeguard the project from the happening any untoward condition.
13. If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts?	√	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adequate mitigation measures will be proposed to reduce the impacts on natural environment.
14. If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?	√	<input type="checkbox"/>	√	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adequate mitigation measures will be proposed to reduce the impacts on social environment of the area.
NR: Not Relevant 1. No or Minor Impact 2. Moderate, Short Term, Reversible Impact 3. Severe, Long Term, Irreversible Impact							
Category			A		B		C
Environmental Management Required			NO		N/A		√
Type of Environmental Management Tool to be Used	Social and Environmental Monitoring checklist						

3 STAKEHOLDER CONSULTATION

Stakeholder consultation during a construction project is crucial for ensuring transparency, addressing concerns, and promoting collaborative decision-making.

Table 2: List of Stakeholders Consulted for Water Supply and Drainage Schemes of Larkana

#	Name of the Scheme	Name of the Goth/Community	Date of Consultation
1.	Rahim Bhugio	Abdul Hameed Goth	May 12 th 2023
2.	Badah Bhatti Muhallah	Badah Bahatti	May 6 th 2023
3.	Balhrejee	Chak No.11	May 8 th 2023
4.	Qazi Muhallah Main Disposal	Qaziabad	May 26 th 2023
5.	Arija Site	Saddam Arejo Goth	May 5 th 2023
6.	Dolat Khokar	Dasoori Goth	May 18 th 2023
7.	Dhamrah	Dayal Garh	June 12 th 2023
8.	Tharecha	Deh 333	May 3 rd 2023
9.	Nauabad	Deh Naiki	May 12 th 2023
10.	Hakim Sandilo	Deh 294	May 19 th 2023
11.	Ratodero City	Fazal Muhallah	May 20 th 2023
12.	Lal Bakhsh Lound	Laghari Goth	May 21 st 2023
13.	Kamal Khan Chandio	Jhando Muhalla	May 28 th 2023
14.	Yar Muhammad Pirzada	Jhol	May 24 th 2023
15.	Razo Pitafi	Pitafi	May 30 th 2023
16.	Fateh Pur	Farm	May 7 th 2023
17.	Bosan Wada	Wada Bosan	June 3 rd 2023
18.	Ghanhwr Bhatti	Khadro	May 4 th 2023
19.	Mandhira Site	Kot Ghulam	June 5 th 2023
20.	Allah Din Silro	Silro Goth	May 11 th 2023
21.	Kabeer Khan Bozdar	Massu Bozdar	May 13 th 2023
22.	Zangeja	Mehar Muhammad Boota	May 14 th 2023
23.	Phulpota	Missan Muhalla	May 15 th 2023
24.	Pathan	Mubarak Jarwar	May 19 th 2023
25.	Mahrab Sandilo	Nandi Duberji	May 26 th 2023
26.	Panjudero	Panju Dero	May 28 th 2023
27.	Lal Bux Bughti	Rajput Goth	May 21 st 2023
28.	Rais Muhammad Khan Sadilo	Shahpur Razvi	May 20 th 2023
29.	Syed Ghulam Qadir Shah	Syed Ghulam Qadir Shah	June 6 th 2023
30.	Khan Wah	Wali Muhammad Malkani	June 11 th 2023
31.	Mehmood Dero	Yousuf Lashari	June 8 th 2023

#	Name of the Scheme	Name of the Goth/Community	Date of Consultation
32.	Bakrani Site	Deh 222	June 15 th 2023
33.	Sawan Khan Gopang	Sawan Khan Gopang Village	June 2 nd 2023
34.	Tayyab	Tayyab Abro Goth	June 10 th 2023
35.	Puranoabad	Puranoabad Goth	June 19 th 2023
36.	Tharecha	Tharecha Gareello Goth	June 13 th 2023
37.	New Gud 1&2	Nai Gud Goth	June 7 th 2023

3.1 Community Concerns

Comments /Observations	Action /Response
Discussion regarding the importance and usefulness of rehabilitation of water supplies and drainage schemes was held.	The participants were briefed that the proposed Water Supply & Drainage Schemes will provide safe drinking water and updated drainage system which will uplift the socio-economic condition of the areas.
Community members showed concerns about the overall impact of the water supply and drainage schemes on public health and sanitation.	Community was explained the positive health outcomes associated with improved access to clean water, proper sanitation facilities, and effective drainage systems. Any specific health concerns raised by the community and outline measures taken to ensure public safety will be addressed properly.
Stakeholders/ Local Community members asked about the operations of Water Supply & Drainage Schemes.	The team responded that safe drinking water will be provided to the community without any interruption and storm water will be disposed of in safe manners.
Local Community inquired about the project execution and its completion.	The technical team replied that the project will be commenced in October, 2023 and will be completed in April, 2025. The rehabilitation work will be limited to the existing facilities of the proposed project area and it will be completed in 18 months.
The community urged to provide of semi-skilled and unskilled jobs for local labor.	Unskilled jobs will be given to local's people where possible.
In the sub-project area, women fetch water from a distance of 2-4 km. After completing their morning chores, some of them also bring their livestock to the watercourses for drinking. Some community members showed their reservation that privacy of the local communities might not be compromised.	It was explained that local labor will be hired to execute the project and all employees will be trained to take care of local norms/culture and privacy of people. No interaction of labor with women and children would be happened.

Community members showed reservation about the long-term maintenance and sustainability of the water supply and drainage schemes.

Community was apprised about that PHED is overseeing the project, the Department will ensure operation and maintenance plans, and any measures taken to ensure the infrastructure's long-term viability. All the Schemes under rehabilitation have operational staff hired by the GoS.

Community also raised concerns about the construction activities associated with water supply and drainage schemes can cause disruptions to daily life, including noise, dust, traffic congestion, and temporary service interruptions.

Community was assured that these disruptions will be minimized to the extent possible, provide a clear timeline of the construction activities, and communicate any alternative arrangements made to mitigate inconveniences.

Community had reservations about education initiatives in the area. It was noticed that community was very much worried about the education of their children.

Community was informed that relevant authorities will be approached about the establishment of education facilities in the area which are deprived from education facility.

Community requested to conduct a comprehensive needs assessment to understand the specific education gaps and challenges in the community.

Community was intimated that Community members, local leaders, and education experts will be included in needs assessment. It will provide valuable insights into the current educational landscape, including access, quality, relevance, and barriers to education.







Sr. No	Department
1.	XEN PHED Department
2.	Deputy Director SEPA
3.	Representative of Municipal Administrator

Figure 2 STAKEHOLDERS CONSULTATION

3.2 Institutional Consultation

The Environment and Social team of consultant conducted consultations with concerned Government Department in March, 2023. The team briefed the officers of Government Departments regarding the salient features of the proposed sub-projects. It was informed that the “Detailed Design of the Project, under PIU-SFERP-P&DD being implemented and funded by the World Bank. They were informed that the project intends to rehabilitate the damaged Water Supply and Drainage Schemes destroyed in flood 2022. The primary goal of the project is to meet the present and future requirements regarding provision of safe drinking water and drainage system. It was also briefed that the project will bring positive impacts on the lives of the local population.

According to the officials, the rehabilitation/restoration of the proposed Schemes will be beneficial for the residents of the project regions. The officials expressed their support for the planned project during the meeting and assured their full cooperation as a Line Department.

Table 3: SUMMARY OF CONCERNS RAISED BY INSTITUTIONAL STAKEHOLDERS

<i>Comments/Observations</i>	<i>Actions/ Responses</i>
The majority of the stakeholders showed positive attitudes toward the rehabilitation of water supply and drainage schemes.	In general, the participants were in favor of the project and agreed that it is greatly needed because Water Supply and Drainage Schemes have been dilapidated in devastated floods 2022.
Detailed discussions were held regarding the environmental and social issues of the area due to proposed rehabilitation activity.	The project will not cast adverse impact on population, flora and fauna of the area. The project lies in Govt. owned land and no major social and environmental issues are anticipated during construction phase of the project. However, mitigation measures will be proposed to combat environmental degradation.

The stakeholders suggested that the establishment of the proposed project would uplift the socio-economic condition of the community in the project areas.

The team acknowledged and responded that the proposed Water Supply and Drainage Schemes will be beneficial for community residing in the area. The living standard of the community would be elevated after rehabilitation of the schemes.

The stakeholders suggested that care must be given to protect fauna and flora during the construction phase.

The plantation would be undertaken with the preference of local species; no exotic species will be promoted. No cutting of trees will be involved during the execution of the project activities. Plantation activity will be done around the boundary wall to enhance aesthetic beauty of the project area. It will be monitored to cut minimum number of trees. At few sites, trees will be cut or chopped and 1:10 trees will be planted in compensation and the Line Department would be responsible for caring the newly planted trees after construction phase.

The Stakeholder shows their concern regarding the impacts during the construction stage on waste management and land acquisition

Social and environmental teams briefed about the mitigation measures will be adopted to control dust, noise, health, and safety issues. Excess material will be removed and flattened. There are no issues regarding land acquisition, the land is vacant and owned by the Government. If the issues occur, then these matters will be dealt with Revenue Department.

The stakeholders suggested to engage local people during project activities and considering the women privacy that not be affected.

The teams responded that locals will be considered during construction activities while during operation priority will be given to the locals if not available then will be sourced from other regions. There are no settlements near the proposed projects, therefore, conflicts with the community and women are not expected. It was assured that norms, ethics and traditions of community will not be disturbed.





Figure 3 INSTITUTIONAL CONSULTATION

4 ENVIRONMENTAL AND SOCIAL MANAGEMENT & MONITORING PLAN

The purpose of the ESMMP for the rehabilitation works is to ensure that all necessary identified measures should be adopted during construction and operation phase for all schemes to protect the environment and social situations and to comply with the country's environmental and social legislation and applicable World Bank standards. After the preparation of ESMF, PIU has outlined site-specific EMP for the Contractors and executing agency.

Table 4: Environmental and Social Management and Monitoring Plan (ESMMP)

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
1.	Land Use	Construction Phase Civil Works Operation Phase None	<ul style="list-style-type: none"> - The work will be carried out in the land of PHED which comprised of rehabilitation work only. - No need to clear land or cutting of trees is envisaged. 	NA	None
2.	Dust Emission	Construction Phase Movement of construction vehicles. Operation Phase None	<ul style="list-style-type: none"> - Water will be sprinkled daily or when as required to avoid the dust emission near proposed project vicinity. - For dust control, cordon off the construction area through dust control net. 	Daily during Construction Phase	Construction phase Contractor
3.	Noise Emission	Construction Phase Construction Equipment, Generator, Vehicle Movement Operation Phase None	<ul style="list-style-type: none"> - Proper design, maintenance and repair of construction machinery and equipment will be ensured. 	Twice a month during Construction Phase	Construction phase Contractor
4.	Water Management	Construction Phase Construction activities Water sprinkling for dust minimization	<ul style="list-style-type: none"> - Contractor will handle and manage waste generated from the construction activities without contamination to natural environment/water bodies and it 	Daily during Construction Phase	Construction phase Contractor Operational phase PHED

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
		<p>Operation Phase Supply of water and maintaining its quality will be managed by the PHED</p>	<p>will reduce risk to general public who stay close to sites.</p> <ul style="list-style-type: none"> - Water contamination during construction will be avoided through proper disinfection. - Proper drainage system and waste disposal system will be implemented during construction and operational phase. - Excess use of water will be avoided and monitored in routine basis. - Water Tankers/water bowsers and bore water will be proposed for the utilization of water during project activities. - Clean and safe drinking water will be provided to the workers during working hours. 		
5.	Ecological Impact	<p>Construction Phase Construction activities Clearance of top Soil No habitat loss No tree cutting at site Operation Phase None</p>	<ul style="list-style-type: none"> - Top soil will be removed for preparing the earth works and ground floor. - No ecological impact during construction and operational phase is envisaged. - As the subproject develops, plantation is grown in and around the subproject vicinity as a CSR. 	None	None

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
6.	Solid Waste Management	<p>Construction Phase In construction phase, cement bags, woods remain, debris will be generated.</p> <p>Operation Phase Food Waste and Recyclables Material like; paper, plastic etc.</p>	<ul style="list-style-type: none"> - Waste reduction methodologies will be implemented. - On spot segregation will be ensured. - Covered bins shall be ensured. - Separate Bins for recyclable material and other type of solid waste shall be ensured. - Ensure the disposal of waste properly from the site on daily basis to avoid odor and maintained the site esthetics. - Food waste will be disposed of separately. - Waste inventory of hazardous and non-hazardous waste generated will be prepared and periodically updated. - Scrap metal waste generated from designing and construction activities will be collected and stored separately in a waste yard and sold to local recyclers for reuse purposes. - Solid waste generated during construction and operation activities will be segregated disposed of appropriately. - Waste will be disposed of properly at designated disposal area. - Food waste and recyclables viz. paper, plastic, glass etc. will be stored in designated waste bins/containers. The recyclables will be periodically sold to local recyclers while food waste will be 	Daily during Construction Phase and monthly during operation phase	<p>Construction phase Contractor</p> <p>Operational phase PHED</p>

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
			<p>disposed through proper waste handling mechanism.</p> <ul style="list-style-type: none"> - Separate bins with symbols shall be placed at construction area. - Secondary containment shall be ensured to avoid the leakages and seepages. - Waste disposal will not be allowed in agriculture lands. 		
7.	Soil and Land Contamination	<p>Construction Phase No any chemical or hazardous substance is used in the construction phase therefore there is no chance of soil or land contamination</p> <p>Operation Phase None</p>	<ul style="list-style-type: none"> - Debris, Waste generated from construction material will be properly covered and stored and disposed-off periodically during the construction phase. No leftover construction waste will be left on the site. Maintenance of machinery will only be carried out at designated places to avoid any fuel spill if require. - Reinstate and protect cleared areas as soon as possible. - Cover unused area of disturbed or exposed surfaces immediately with mulch/grass turnings/tree plantations. - Locate stockpiles away from drainage lines. - Remove debris from drainage paths and sediment control structures. - Keep the final or finished surface of all the raised lands free from any kind of depression that causes water logging. - Reinstate the natural landscape of the ancillary construction sites 	Weekly during Construction Phase and monthly during operation phase	<p>Construction phase Contractor</p> <p>Operational phase PHED</p>

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
			after completion of works.		
8.	Waste Water	<p>Construction Phase Water used in the construction material during preparing bed and lean activity, construction of pump house, septic tanks, LSRs and other works</p> <p>Operation Phase Sanitary waste water from the office</p>	<ul style="list-style-type: none"> - Conduct daily inspections at the site to ensure removal of construction debris. - Store construction material containing fine particles in an enclosure so that sediment laden water does not drain into nearby water drains. - Sanitary waste will be drained to the drainage system properly. 	Daily during Construction Phase	Construction phase Contractor
9.	Safety Hazards	<p>Construction Phase Project related vehicular traffic Driving Injuries related with civil works and electrical works Heat Waves Cold Waves Communicable Diseases</p> <p>Operation Phase Injuries during Operational phase</p>	<ul style="list-style-type: none"> - Ensure the World Bank EHS guideline will be followed. - Personal Protective Equipment will be provided during construction and operation phase to the workers. - First Aid kits will be provided at sites. - Road Sign board to reduce safety hazards associated with subproject related routine traffic. - Subproject drivers will be trained of defensive driving. - Strict code of conduct will be followed. - Make safety precautions and display on the notice board of entry gate in both national and local language. - During heat wave, working hours will be revised to make sure that labor work force work only in early hours or late evening hours. 	Daily during Construction and operation phase	Construction phase Contractor Operational phase PHED

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
			<ul style="list-style-type: none"> - Monitoring weather forecasts for outdoor work to provide advance warning of extreme weather and scheduling work accordingly. - Adjustment of work and rest periods according to temperature stress management procedures such as providing easy access to adequate hydration such as drinking water or electrolyte drinks depending on the temperature and workloads. - Providing temporary shelters to protect against the elements during working activities or for use as rest areas. - Use face mask and hand sanitizer as a precautionary measure to mitigate the COVID-19 and communicable diseases. 		
10.	Socio-Economic Environment	<p>Construction Phase Traffic and vehicle movement</p> <p>Noise generated form subproject activities</p> <p>Labor requirement form the nearby area Occupational health & safety issue of working labor</p>	<ul style="list-style-type: none"> - Plan temporary traffic arrangements during construction within the construction area. Review the plan periodically with respect to site conditions. - Give special consideration to local traffic management. - Take adequate precautions to prevent danger from electrical equipment (switches and wiring). - Provide a readily available first aid unit including an adequate supply 	Construction Phase GRM for labor and community	<p>Construction phase Contractor</p> <p>Operational phase PHED</p>

Sr. No.	Activity	Potential Impacts	Mitigation Measures	Monitoring & Reporting Frequency	Responsibility
		Operation Phase Traffic Management Employment opportunities Awareness to local people to emergency situation Gender Issues, Gender inclusion GBS and VAC related impacts	of sterilized dressing material and appliances. - Ensure workers exposed to loud noise wear Ear plugs/ear muffs. - GRM shall be develop and ensure the accessibility to the local community and labor.		

5 PICTORIAL PROFILE OF PROJECT SITES

5.1 Yar Muhammad Pirzado and adjacent area Water Supply Scheme



5.2 Bakrani, Doulat Khokhar Drainage Scheme



5.3 Bakrani, Puranabad Drainage Scheme



5.4 Bakrani, Nauabad, Drainage Scheme



5.5 Bakrani, Hakim Sandillo Drainage Scheme



5.6 Bakrani-Pathan Drainage Scheme



5.7 Bakrani, Rahim Bughio, Water Supply Scheme



6 ENVIRONMENTAL AND SOCIAL IMPLEMENTATION BUDGET

There are total 37 schemes in District Larkana in which 30 are Drainage Schemes and 07 are water supply schemes. Environmental Quality Analysis for Air Quality Monitoring, Testing of Water Quality and Noise Level Determination will be conducted at each sub-project site, during and at completion of the sub-projects. The detail of cost has been given in table below. It is worthy to mention here that sub-projects are in Government owned land and there will be no social issue during the rehabilitation work.

Table 5: Environmental Compliance Cost

Table 6: Estimated Environmental and Social Cost for 37 Water Supply and Drainage Scheme of Larkana District								
Item No.	Item	Rational	Frequency	Average Rate (Rs./unit*	Site-wise Quantity	No of units/sites	Total Quantity	Estimated Amount (Rs.)
A. Environmental Analysis at Start of Civil Works*								
1	Drinking Water	One Sample from each water supply scheme	Once at the Start of Construction	15,000	1	7	7	105,000
2	Ambient Air	1 Sample from each subproject scheme		15,000	1	37	37	555,000
3	Ambient Noise	1 Sample from each subproject scheme		1,000	1	37	37	37,000
Sub Total - A								697,000
B. Environmental Analysis Cost at Completion Phase								
1	Drinking Water	One from camp area at each water supply scheme site	The frequency will vary case to case; where deemed appropriate during construction phase	15,000	1	7	7	105,000
2	Generators/Stack Emission (If available)	One Sample from construction site		10,000	1	37	37	370,000
3	Ambient Air	One from the camp area		15,000	1	37	37	555,000
4	Ambient Noise	One from the camp area		1,000	1	37	37	37,000
5	Mobilization Charges	At each water supply and drainage scheme		10,000	1	37	37	370,000

Sub Total - B							1,437,000
C. EHS Management							
1	Personal Protective Equipment	Bi annual	6,000	1	37	37	222,000
2	Waste Disposal from Construction Sites					Lump sum	100,000
3	Project dissemination materials such as banners, flayers, notice board etc.		10000	1	37	37	370,000
Sub Total - C							692,000
D. EHS Administrative Cost							
1	Training/Capacity Building (Environment, Social, Gender, & OHS)	50 persons	20,000	1	37	37	740,000
2	Social Expert (for social compliance & GRM implementation) Salary		120,000	18	1	18	2,160,000
3	GRM running & General Community support needs (if any)					Lump sum	500,000
4	Environmental & OHS Expert Salaries (120 thousand for each person)		120,000	18	1	18	2,160,000
Sub Total - D							5,560,000
TOTAL OF (A TO D)							8,386,000

* Schemes wise testing will be performed at start of civil works

7 OPERATION AND MAINTENANCE (O&M)

Operation and maintenance (O&M) of Water Supply (WS) and Drainage Systems is a critical task that ensures the continued provision of safe and reliable water and drainage services to communities. O&M activities can be divided into two main categories: preventive maintenance and corrective maintenance.

Preventive maintenance is carried out on a regular basis to prevent problems from occurring. This includes activities such as cleaning and inspecting pipes, valves, and other equipment; lubricating the moving machines etc. Corrective maintenance is carried out to address problems that have already occurred. This includes activities such as repairing broken pipes, replacing damaged equipment, and clearing blockages in drainage systems. In addition, the PHED should also ensure timely procurement of disinfectant chemicals for disinfection of the water and keep a sufficient stock of such chemicals so that there is no interruption in making the water safe for human consumption.

O&M of WS and Drainage Systems is a complex and challenging task. It requires a skilled workforce, a well-maintained inventory of spare parts, and a comprehensive set of procedures and documentation. However, the benefits of effective O&M are significant. By preventing problems from occurring and addressing problems quickly, O&M can help to ensure the continued provision of safe and reliable water services to communities. After completion of rehabilitation work, the project will be handed over to the PHED who will operate and maintain the project. PHED department has technical staff for operation and maintenance of proposed rehabilitation schemes. Moreover, GoS yearly allocates substantial budget for operation and maintenance of these schemes. After rehabilitation these schemes will be operationalized under PHED through its O&M section which is adequately staffed with required skills and expertise. Training of these staff would be required to operate new machinery installed during rehabilitation.

7.1 Key aspects of O&M for WSS and Drainage systems:

7.1.1 Operation:

- i. Regular monitoring of water sources, such as reservoirs, wells, or treatment plants, to ensure a consistent water supply.
- ii. Operation of pumps, valves, and control systems to regulate the flow of water through the distribution network.
- iii. Monitoring and maintaining water pressure levels within acceptable limits.
- iv. Disinfecting the water all the times prior to supplying to the consumers.
- v. Managing water quality, including regular testing and treatment to ensure compliance with health and safety standards.

- vi. Coordinating with the local community and consumers to address their water supply needs and concerns.

7.1.2 Maintenance:

- I. Routine inspection of pipelines, valves, and fittings to identify and repair leaks, cracks, or any other damages.
- II. Clearing blockages in pipelines, channels, and drains to maintain an unobstructed flow of water.
- III. Cleaning and desilting of reservoirs, tanks, and drainage channels to prevent sedimentation and maintain capacity. After every cleanup operation, the tanks, reservoirs and / or pipelines must be disinfected prior to putting them back to use.
- IV. Repair and maintenance of water treatment plants, pumping stations, and other infrastructure components.
- V. Regular calibration and maintenance of measuring instruments and control systems.
- VI. Periodic maintenance of equipment such as pumps, motors, and generators.

7.1.3 Emergency Response

- i. Developing contingency plans and emergency response protocols to address unexpected events such as equipment failures, natural disasters, or water contamination incidents.
- ii. Establishing a communication system to notify the public and relevant authorities in case of emergencies.
- iii. Rapid response and repair of damages during emergencies to restore the system's functionality as quickly as possible.

7.1.4 Water Conservation

- i. Implementing water conservation measures, such as promoting public awareness campaigns, encouraging responsible water usage, and identifying and repairing water wastage points.
- ii. Monitoring and managing water losses and leakages in the distribution network.
- iii. Regular assessment and optimization of the system to reduce energy consumption and improve overall efficiency.

7.1.5 Data Management

- i. Maintaining comprehensive records of system performance, maintenance activities, and water quality data.
- ii. Utilizing data analysis and predictive modeling to optimize the operation and maintenance activities.
- iii. Incorporating modern technologies, such as remote sensing, real-time monitoring systems, and data analytics, to improve decision-making and efficiency.

7.1.6 Documentation and Handover:

- i. Compile project documentation (operation and maintenance manuals, as-built drawings, warranties).

- ii. Hand over documentation to the PHED for future reference.

7.1.7 Facilities Management:

- i. Establish a comprehensive facilities management plan.
- ii. Outline responsibilities, protocols, and schedules for maintenance, inspections, repairs, and upgrades.

7.1.8 Staffing and Training:

- i. Increase adequate staffing.
- ii. Provide necessary training for personnel deputed for O&M.
- iii. Increase maintenance technicians, engineers, custodial staff, security personnel, and administrative support.

7.1.9 Preventive Maintenance:

- i. Implement a preventive maintenance program.
- ii. Conduct regular inspections, cleaning, lubrication, adjustments, and equipment testing.

7.1.10 Repairs and Corrective Maintenance:

- i. Respond promptly to issues and conduct repairs.
- ii. Establish an inventory of spare parts.
- iii. Maintain relationships with reliable contractors or suppliers.

7.1.11 Safety and Compliance:

- i. Enforce safety protocols.
- ii. Conduct regular inspections and provide safety training.
- iii. Ensure compliance with relevant codes and regulations.

7.1.12 Energy Efficiency and Sustainability:

- i. Promote energy efficiency and sustainable practices.
- ii. Implement energy management systems.
- iii. Optimize equipment performance.
- iv. Utilize renewable energy sources and green building practices.

7.1.13 Asset Management:

- i. Track and monitor equipment and systems.
- ii. Maintain an asset inventory.
- iii. Conduct periodic assessments and plan for replacements or upgrades.

7.1.14 Stakeholder Communication:

- i. Establish clear communication channels.
- ii. Receive and address maintenance requests.
- iii. Maintain effective communication with stakeholders.

7.1.15 Continuous Improvement:

- i. Regularly evaluate and seek feedback.
- ii. Analyze maintenance records.
- iii. Conduct user surveys.

- iv. Involve the maintenance team in identifying areas for improvement.

7.1.16 Cleaning and maintenance of solar system:

- i. Regularly clean solar panels to remove dust, debris, and dirt.
- ii. Inspect for any damage or wear and tear on the panels.
- iii. Check the wiring and connections for any loose or damaged parts.
- iv. Monitor the performance of the solar system to ensure it is generating the expected amount of energy.
- v. Conduct preventive maintenance such as tightening bolts and screws, and replacing faulty components.
- vi. Schedule professional inspections and maintenance by qualified solar technicians.
- vii. Keep records of cleaning and maintenance activities for future reference.
- viii. Follow manufacturer's guidelines and recommendations for cleaning and maintenance.
- ix. Consider scheduling cleaning during periods of low sunlight or in cooler temperatures for safety reasons.
- x. Ensure the safety of personnel when performing maintenance tasks on the solar system.

7.1.17 Regular maintenance and monitoring of Hypo-chlorinator:

- i. Routine inspections: Conduct regular inspections of the hypo-chlorinator system to identify any visible signs of damage, leaks, or malfunctions. Inspect all components, including injection systems, pipes, valves, and storage tanks.
- ii. Calibration of equipment: Calibrate the hypo-chlorinator equipment periodically to ensure accurate dosing or injection of chlorine. Follow the manufacturer's guidelines for calibration procedures and frequency.
- iii. Replacement of parts: Replace worn-out or damaged parts of the hypo-chlorinator system as needed. This may include valves, seals, gaskets, tubing, or other components. Use genuine manufacturer-approved parts for replacements.
- iv. Monitoring chlorine levels: Regularly monitor chlorine levels in the water supply to ensure that the desired disinfection levels are being maintained. This can be done through manual sampling and testing or by using automated monitoring systems. Adjust the hypo-chlorinator settings if necessary to achieve the desired chlorine concentration.
- v. System optimization: Continuously assess the performance of the hypo-chlorinator system and optimize its operation for efficiency and effectiveness. This may involve adjusting dosing rates, ensuring proper mixing of chlorine, optimizing contact time, and considering factors such as water temperature and flow rate.
- vi. Documentation: Maintain detailed records of maintenance activities, inspections, calibrations, and chlorine monitoring results. This documentation serves as a reference for future maintenance, helps track system performance, and aids in regulatory compliance.

- vii. **Training and awareness:** Regularly train and update the personnel responsible for operating and maintaining the hypo-chlorinator system. Ensure they are aware of proper maintenance procedures, safety protocols, emergency response measures, and any updates or changes in regulations.

7.1.18 PHED Responsibility:

- i. PHED solely responsible for operation and maintenance.
- ii. Customize O&M plans for long-term success.

Overall, O&M of WSS and Drainage System requires a combination of technical expertise, regular monitoring, preventive maintenance, and prompt response to ensure the uninterrupted supply of clean water and effective wastewater management. The Public Health Engineering Division (PHED) would typically be responsible for the operation and maintenance of public infrastructure projects related to Water Supply and Drainage System. They would be the primary entity overseeing the operation and maintenance activities to ensure the functionality and sustainability of the constructed assets. By considering these aspects and implementing effective O&M practices, the project can function optimally and provide long-term benefits to its users and stakeholders.

7.2 Key benefits of effective O&M of WSS and Drainage Systems

- i. **Improved water quality:** O&M activities can help to prevent the contamination of water supplies, which can lead to waterborne diseases.
- ii. **Increased water availability:** O&M activities can help to reduce leakages and improve the efficiency of water distribution systems, which can lead to increased water availability for communities.
- iii. **Reduced flooding:** O&M activities can help to prevent flooding by clearing blockages in drainage systems and improving the capacity of storm water management systems.
- iv. **Improved public health:** O&M activities can help to prevent the spread of waterborne diseases by improving the quality of water supplies and reducing the risk of flooding.
- v. **Increased property values:** Communities with well-maintained WSS and drainage systems typically have higher property values.

The cost of O&M can be significant, but the benefits far outweigh the costs. By investing in effective O&M, communities can ensure the continued provision of safe and reliable water services to their residents.

Annexure 1: Environmental & Social Screening Checklist of All Schemes of District Larkana

SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP) ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Allah Din Silro (Rato Dero Drainage Scheme) Coordinates: E=426789 m, N=3074681 m
Date: 11th May 2023

Screening Question	Yes	No	Remarks
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	The site is devoid of vegetation. No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems , and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community requested to conduct a comprehensive needs assessment to understand the specific education gaps and challenges in the community.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to the unavailability of a drainage network especially during monsoon and after it.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Arija Site Coordinates: E=418862, N=3032490
Date: 5th May 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Minor impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Minor impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community asked about the operations and how they will be benefited by the subproject.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women of the subproject area were taken onboard also.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Badah Bhatti Muhallah (Dokri Water Supply Scheme) Coordinates: E=402884 m, N=3022406 m
Date: May 6th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Will community Health and Safety be impacted due to construction?
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, females were happy that sufficient supply of water will be available to the subproject area.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Bakrani Site Coordinates: E=419605 m, N=3035942 m
Date: June 15th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Minor impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Minor impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?		✓	Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community requested to conduct a comprehensive needs assessment to understand the specific education gaps and challenges in the community.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women of the subproject area were taken onboard also.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Balhrejee (Dokri Drainage Scheme) Coordinates: E=413938 m, N=3020037 m
Date: May 8th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community members asked about the operations of the drainage Scheme and the benefits from it.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, there is no attention to the literacy rate and education system of children.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Bosan Wada (Rato Dero Drainage Coordinates: E=424818 m, N=3088370 m Scheme)
Date: June 3rd 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community requested to conduct a comprehensive needs assessment to understand the specific education gaps and challenges in the community.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to the unavailability of a drainage network especially during monsoon and after it.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Dhamrah (Larkana City Drainage Scheme) Coordinates: E=3059161 m, N=426059 m
Date: June 12th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community pointed out that drainage networks are not available and if available are in bad condition or blocked.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women of the subproject area were taken onboard also.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Dhamrah (Larkana City Drainage Scheme) Coordinates: E=3059161 m, N=426059 m
Date: June 12th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

Screening Question	Yes	No	Remarks
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community pointed out that drainage networks are not available and if available are in bad condition or blocked.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women of the subproject area were taken onboard also.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Fateh Pur (Larkana City Drainage Scheme) Coordinates: E=424615 m, N=3055705 m
Date: May 7th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community pointed out that drainage networks are not available and if available are in bad condition or blocked.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Ghanhwr Bhatti (Rato Dero Drainage Scheme) Coordinates: E=432120 m, N=3062178 m
Date: May 4th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas, including national parks and protected areas ?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community requested to conduct a comprehensive needs assessment to understand the specific education gaps and challenges in the community.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to the unavailability of a drainage network especially during monsoon and after it.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Hakim Sandilo Coordinates: E=413595 m, N=3033046 m
Date: May 19th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community members expressed concern about the overall impact of the water supply and drainage system on public health and sanitation.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes,. Their main concern was how they will be benefited by the schemes.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Kabeer Khan Bozdar (Rato Dero Water Supply Scheme) Coordinates: E=417623 m, N=3086261 m
Date: May 13th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community also raised concerns about the construction activities associated with water supply and drainage schemes can cause disruptions to daily life, including noise, dust, traffic congestion, and temporary service interruptions.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. They were concerned about health and hygiene issues due to unavailability or improper supply of water.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Kamal Khan Chandio (Rato Dero Water Supply Scheme) Coordinates: E=425641 m, N=3125362 m
Date: May 28th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings. Shahi Khan Canal is on the east and Chandar Shakh is flowing on the southwest at a distance of approx. 800 m and 1000 m respectively but it would not be affected the subproject interventions.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community was happy as the associated subproject works will improve access to clean water, proper sanitation facilities, and effective drainage systems in the area.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. They were concerned about health and hygiene issues due to unavailability or improper supply of water.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Khan Wah (Rato Dero Drainage Scheme) Coordinates: E=435002 m, N=3066918 m
Date: June 11th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community requested to conduct a comprehensive needs assessment to understand the specific education gaps and challenges in the community.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. Females were concerned about their mobility for daily purposes during construction.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Lal Bakhsh Lound (Larkana City Drainage Scheme) Coordinates: E=417749 m, N=3051700 m
Date: May 21st 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community members showed concerns about the overall impact of the water supply and drainage schemes on public health and sanitation.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Lal Bux Bughti (Larkana City Drainage Scheme) Coordinates: E=417898 m, N=3048916 m
Date: May 21st 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

Screening Question	Yes	No	Remarks
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community pointed out that drainage networks are not available and if available are in bad condition or blocked.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Mahrab Sandilo Coordinates: E=414850 m N=4035792 m
Date: May 26th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

Screening Question	Yes	No	Remarks
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community urged to provide semi-skilled and unskilled jobs for local labor first.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members showed their reservations about their privacy during construction.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Mahrab Sandilo (water Supply Scheme) Coordinates: E=410043 m, N=3034502 m
Date: May 26th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		How disruptions to daily life, including noise, dust, traffic congestion, and temporary service interruptions will be mitigated.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, engaging local people during project activities and considering the women's privacy not be affected.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Mandhira Site (Dokri Drainage Scheme) Coordinates: E=407840 m, N=3027393 m
Date: June 5th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No. A canal is flowing on the eastern side but it will not pose any impact as the rehabilitation activities are confined to the existing boundary.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The Stakeholder shows their concern regarding the impacts during the construction stage on waste management and land acquisition.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, there is no attention to the literacy rate and education system of children.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Mehmood Dero (Larkana City Drainage Scheme) Coordinates: E=417608 m, N=3051036 m
Date: June 8th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community members showed concerns about the overall impact of the water supply and drainage schemes on public health and sanitation.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Nauaabad Coordinates: E=426207 m, N=3039442 m
Date: May 12th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

Screening Question	Yes	No	Remarks
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		How the maintenance and sustainability of drainage schemes will be ensured.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to unavailability of drainage network.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: New Gud 1&2 Coordinates: E=418802 m N=3028459 m
Date: June 7th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems , and/or ecosystem services?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Will the drainage scheme require long-term maintenance? How sustainability will be ensured?
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to unavailability of drainage network.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Panjudero (Larkana City Drainage Scheme) Coordinates: E=428553 m, N=3054061 m
Date: May 28th 2023

Screening Question	Yes	No	Remarks
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies
Will the proposed subproject interventions pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		negligible impacts only during construction
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts only during construction
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, Dadu Canal is flowing on the eastern side but it will not pose any impact as the rehabilitation activities are confined to the existing boundary.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities which exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community members showed concerns about the overall impact of the water supply and drainage schemes on public health and sanitation.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, women shared that stagnant water or wastewater causes skin irritations and other diseases.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Pathan Coordinates: E=416830 m N=3035993 m
Date: May 19th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	The site is devoid of vegetation. No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Will the drainage scheme require long-term maintenance? How sustainability will be ensured?
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to unavailability of drainage network.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Phulpota(Sheikh Muhallah) (Rato Dero Coordinates: E=420835 m, N=3073563 m Drainage Scheme)
Date: May 15th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities or in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community requested to conduct a comprehensive needs assessment to understand the specific education gaps and challenges in the community.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. Females were concerned about their mobility for daily purposes during construction.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Puranoabad Coordinates: E=427674 m, N=3033830 m
Date: June 19th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	The site is devoid of vegetation. No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Will the drainage scheme require long-term maintenance?
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage network.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Qazi Muhallah Main Disposal Coordinates: E=410383 m , N=3028433 m
Date: May 26th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Stakeholders showed a positive attitude and said that it would uplift the socio-economic condition of the community as the drainage system was very old and ineffective.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Rahim Bhugio (water Supply Scheme) Coordinates: E=420049 m, N=3043596 m
Date: May 12th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Will the construction activities cause traffic mobility and accessibility issues?
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, there is no attention on the literacy rate and education system of children.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Rais Muhammad Khan Sadilo (Larkana City water Supply Scheme) Coordinates: E=413344 m, N=3048232 m
Date: May 20th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		How disruptions to daily life, including noise, dust, traffic congestion, and temporary service interruptions will be mitigated.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, engaging local people during project activities and considering the women's privacy not be affected.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Rato Dero City (Rato Dero Drainage Scheme) Coordinates: E=423987 m, N=4262784 m
Date: May 20th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community was concerned about the environmental and social issues in the area due to the proposed rehabilitation activity.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. Females were concerned about their mobility for daily purposes during construction as the subproject area is surrounded by social receptors like schools, hospitals, religious places etc.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Razo Pitafi (Rato Dero Drainage Scheme) Coordinates: E=432120 m, N=3062178 m
Date: May 30th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community was concerned about the environmental and social issues in the area due to the proposed rehabilitation activity.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. Females were concerned about their mobility for daily purposes during construction as the subproject area is surrounded by social receptors like schools, hospitals, religious places etc.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Sawan Khan Gopang (Rato Dero Drainage Scheme) Coordinates: E=429677 m, N=3058990 m
Date: June 2nd 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community was concerned about the environmental and social issues in the area due to the proposed rehabilitation activity.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. Females were concerned about their mobility for daily purposes during construction as the subproject area is surrounded by social receptors like schools, hospitals, religious places etc.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Syed Ghulam Qadir Shah (Larkana City Drainage Scheme) Coordinates: E=418081 m, N=3051679 m
Date: June 6th 2023

Screening Question	Yes	No	Remarks
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	The site is devoid of vegetation. No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Will the drainage scheme require long-term maintenance? How sustainability will be ensured?
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to unavailability of drainage network.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Tayyab (Rato Dero Drainage Scheme) Coordinates: E=430969 m, N=3072586 m
Date: June 10th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

Screening Question	Yes	No	Remarks
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community was concerned about the environmental and social issues in the area due to the proposed rehabilitation activity.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes. Females were concerned about their mobility for daily purposes during construction as the subproject area is surrounded by social receptors like schools, hospitals, religious places etc.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Tharecha Coordinates: E=410043 m, N=3034502 m
Date: June 13th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community urged to provide of semi-skilled and unskilled jobs for local labor.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, some female members shared hygiene and health issues due to damaged drainage networks especially during and after monsoon season.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Yar Muhammad Pirzada (Water Supply Coordinates: E=407695 m, N=3038430 m Scheme)
Date: May 24th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes the disposal of suspended solids in nearby water bodies.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No, there are no protected areas situated in nearby surroundings.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		Community members asked about the operations of the Water Supply Scheme and the benefits from it.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes, there is no attention to the literacy rate and education system of children.

**SINDH FLOOD EMERGENCY REHABILITATION SUBPROJECT (SFERP)
ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST OF SUB-SUBPROJECT**

Name of Subproject: Rehabilitation of Damaged Water Supply & Drainage Schemes
Sector: Public Health Engineering Department (PHED)
Subproject Location: Larkana, Sindh
Schemes Location: Zangeja (Rato Dero Drainage Scheme) Coordinates: E=427885 m, N=3071571 m
Date: May 14th 2023

<i>Screening Question</i>	<i>Yes</i>	<i>No</i>	<i>Remarks</i>
PHYSICAL ENVIRONMENT			
Will the proposed subproject activities pose the risk of clearance of vegetation that may result in an increase in the level of suspended solids washing into nearby water bodies?		✓	No such activity will take place that causes this risk.
Will the proposed subproject activities pose a risk of contaminating drinking water sources due to construction activities?		✓	The risk of contaminating drinking water sources would be short-term as the primary objective of water supply and drainage scheme rehabilitation work is to rehabilitate the existing system and its associated facilities.
Will the proposed subproject interventions deplete groundwater because of the water used during rehabilitation activities?		✓	Water from tankers and bowsers will be utilized during construction.
Will the proposed subproject interventions result in an increase in ambient air pollution , including chemical and particulate matter due to the construction and operation of related machinery?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will the proposed subproject interventions result in an increase in ambient noise levels and vibrations due to the operation of construction machinery/vehicles?	✓		Negligible impacts will be posed only during the construction phase that will be mitigated.
Will these ambient noise levels be beyond the specifications in the SEQS ?		✓	No, proper implementation of mitigations and maintenance of equipment, and machinery will be done to keep levels within limits.
Will the proposed subproject activities lead to increased soil erosion ?		✓	Rehabilitation works do not involve any activity that will increase soil erosion.
Will the proposed subproject interventions result in the generation of hazardous and/or non-hazardous waste ?	✓		Less quantity of debris and construction waste will be generated which will be handed over to the waste contractor for safe disposal.
Will the proposed subproject interventions result in potentially increased health risks for subproject workers and communities (e.g., communicable diseases)?		✓	Workers from nearby localities will be commuted daily for a specific duration so it would not increase health risks.
Are the proposed subproject interventions being implemented in an area with high natural hazard risk ? (e.g., floods, earthquakes, droughts, etc.)		✓	The Subproject area does not come under the category of high hazard risk.
ECOLOGICAL ENVIRONMENT			
Will the proposed subproject interventions potentially cause any adverse impacts on habitats, ecosystems, and/or ecosystem services ?		✓	No, as it will be limited to the specified areas of urban settlements.
Will any rehabilitation work be located in areas that would promote the conversion of natural habitats ?		✓	Rehabilitation work does not include the conversion of natural habitat as it will only upgrade the existing damaged utilities.

Screening Question	Yes	No	Remarks
Will any proposed subproject interventions be located on or near sensitive environmental areas , including national parks and protected areas?		✓	No. There is a canal flowing at a distance of 300m approx. but it will not be affected by the subproject activities due to the limited nature of the work of existing facilities.
Are the proposed subproject interventions activities likely to pose risks to any endangered species ?		✓	Fauna of urban nature is found around subproject area that comes under the least concern status of the IUCN Red List.
SOCIAL ENVIRONMENT			
Will the proposed subproject activities involve land acquisition ?		✓	Subproject land is owned by GoS.
Are there any forced labor or child labor risks associated with contractors or other third parties involved in implementing this proposed subproject intervention?		✓	There would not be any forced or child labor risk as the contractor is bound to hire only those people who have valid CNIC or are at least 18 years old.
Is labor influx (outside labor force) expected during the construction of the proposed subproject?		✓	No, locals of the area would be given preference for skilled and non-skilled jobs.
Will local labor be used for the proposed subproject construction activities?	✓		Yes, locals of the area will be given preference first.
Will there be any temporary or permanent displacement as a result of the proposed subproject construction or operation activities?		✓	Rehabilitation works will be done for existing utilities that exist in a demarcated area.
Are there expected to be any traffic-related issues as a result of the proposed subproject intervention activities, particularly during the construction phase?	✓		Minor impacts only during construction. Proper mitigations must be implemented so that social receptors would not get disturbed.
Are there any recognized Indigenous Peoples present in the proposed subproject area, and are they likely to be impacted by the subproject, either positively or negatively ?		✓	No such category is present in the subproject area.
Are the proposed subproject activities likely to have impacts on important religious/cultural heritage sites ?		✓	No, as the rehabilitation work involves the upgradation or restoration of existing facilities in a close periphery.
Have there been any past security-related issues at the proposed subproject sites?		✓	No, the subproject area is situated in an urban settlement and on government-owned land.
Has stakeholder engagement taken place in the proposed subproject areas?	✓		The community showed positive attitude and said that the establishment of the proposed subproject would uplift the socio-economic condition of the community in the area.
Were vulnerable and indigenous groups involved in stakeholder consultations? (e.g., women, minorities, economically disadvantaged individuals, etc.)	✓		Yes.